

# **CH. CHHABIL DASS PUBLIC SCHOOL**



## **WORKSHEETS SESSION 2025-2026 CLASS XII**

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**FLAMINGO**  
**THE LAST LESSON**

1. Who was Wachter? Why did the narrator feel that he was making fun of him?
2. Why did Wachter call after Franz?
3. "It was funny to hear him that we all wanted to laugh and cry". Comment.
4. What does the author emphasize in the first paragraph?
5. By using the first-person point of view, what has the author tried to do?
6. What is the imagery that illuminates the mood in the classroom?
7. When Franz is introduced in the first paragraph, what is his most prominent characteristic?
8. A contrast of imagery is found in which statement in the first paragraph?
9. The mention of the 'great ruler' and of the 'terrible iron ruler' introduces the possibility of which emotions?
10. What do M. Hamel's attire and the presence of the people at the back of the classroom reinforce?
11. What is the effect of the words spoken by M. Hamel "I won't scold you, little Franz" on Franz?
12. The author implies a sarcastic tone towards the end of the story. Which statement supports the tone?
13. What happened when the church clock struck 12?
14. What sense is being invoked by the author by repeating France, Alasce, France, Alsace?
15. What values does the writer appeal to towards the end?
16. What words does M. Hamel ask the students to copy as part of their penmanship practice? What final words does he write on the board?

**Critical Thinking Questions**

(1) You are Hauser. M. Hamel has left the school. German language is being enforced on everyone. Being an elder, one day you gather all the villagers including children to talk to them. Prepare this talk for him.

- (2) M Hamel has left his home and is settled now away from Alsace. But he still misses his home and school. He lets out his feelings in his personal diary. Write his diary page.
- (3) Chauvinism is anti society and anti-progress. You have read about linguistic chauvinism in The Last Lesson. You are upset after noticing male chauvinism still prevalent in society. Write an article expressing your views.
- (4) The Last Lesson highlights procrastination as a common human weakness. After reading this you realised that you also suffer from this habit. Write a letter to your friend sharing your feelings.

## **LOST SPRING**

- 1 “ But promises like mine abound in every corner of his bleak world.” What promise does the author recall? In what context was it made? Was it fulfilled?
2. Where does the narrator encounter Saheb and why?
3. 'Food is more important for survival than identity for the rag pickers of Seemapuri.' Justify this statement.
4. How do children grow up in Seemapuri to become partners in survival?
5. What change occurs in Saheb’ s life? Is it a change for better or for the worst? Give reasons in support of your answer.
6. Describe the life and work of about 10,000 rag pickers in Seemapuri, particularly the role of barefoot army of children.
7. ‘ Mukesh insists on being his own master’ . How?
8. What impression do you form about Mukesh's family after having a glimpse of their ‘ house’ ?
9. Give a thumb-nail sketch of the “ frail young woman” .
10. “ Savita is a symbol of innocence and efficiency.” Comment.
11. ‘ Little has with time in Firozabad;, says Anees Jung. Why does she say so?
12. “ I see two distinct worlds-----” says the author. Draw a contrast between the two.
13. “ The young men echo the lament of their elders. What do you think is the common complaint? How has it affected their life?

## **Critical Thinking Questions**

1. Why do you think Mukesh is content to dream of cars and doesn't dream of flying a plane ?

2. Do you believe that God given lineage can be broken? Support your view point with a rationale.
  3. How do you think the author's life might have been impacted after her interactions with the children and their families mentioned in 'Lost Spring'?
  4. How does the story 'Lost Spring' highlight the apathy of society and those in power to end the victim cycle of poverty? Support your answer with textual evidence.
  5. Certain traditions and lineage, condemn thousands of children to a life of abject poverty and choke their aspirations.
- \* Do you agree? Explain.
- \* How can we change this? Suggest some ways to tackle this issue.

### **DEEP WATER**

- Q.1. Why was Douglas determined to get over his fear of water?
- Q.2. How did the misadventure at YMCA pool affect Douglas?
- Q.3. What were the series of emotions and fear that Douglas experienced when he was thrown into the pool? What plans did he make to come to the surface?
- Q.4. How did Douglas make sure that he had conquered the old terror?
- Q.5. What happened when Douglas started going down for the third time?
- Q.6. Did the panic resurface occasionally? What was Douglas's reaction?
- Q.7. Why did Douglas have aversion to water from his childhood?
- Q.8. "There is terror only in the fear of death." Comment.
- Q.9. Why did Douglas's mother warn him against river Yakima?
- Q.10. In what way was the YMCA pool safe for those who wished to learn swimming?
- Q.11. Douglas compares his use of strength to that of someone during the time he almost drowned in the pool? Explain.
- Q.12. What did Douglas experience just before reaching the bottom the second time?
- Q.13. Why did Douglas grow panicky?
- Q.14. "And then in the midst of the terror came a touch of reason." What was that and did it succeed?
- Q.15. What happened when all efforts ceased?
- Q.16. How did the instructor make Douglas a perfect swimmer?
- Q.17. "The experience had a deep meaning for me", says William. Elucidate.
- Q.18. How did Douglas feel when he had conquered his fear of water?
- Q.19. Describe the big bully who plunged into the pool? Why do you think he threw him?
- Q.20. What method did the instructor use to teach the author how to swim?

### **CRITICAL THINKING QUESTIONS**

1. 'Success of learning a skill, depends a lot on your teacher.' Comment on the given statement with reference to the chapter- 'Deep Water'.
2. 'A little fear sometimes is a great motivator. It motivates you to learn new skills to overcome your fear'. Discuss how it brought about a change in the life of William Douglas.
3. 'Frivolous acts may scar people for life.' Imagine yourself to be William Douglas. Make a diary entry expressing how the 'big bruiser's' act impacted you.
4. William Douglas says, "The instructor was finished but I was not." Explain the given statement in light of Douglas' experience of learning swimming.
5. Fear is mankind's greatest handicap. Do you agree? Give reasons to support your views.

## THE RATTRAP

- Que.1 How did the peddler of ratttraps manage to survive?
- Que.2 Why did the peddler have to resort to both begging and petty thievery?
- Que.3 How does the author employ the metaphor of 'rattrap' effectively in the story?
- Que.4 What did the old crofter do with the pouch and why?
- Que.5 ' The old man was just as generous with his confidences as with his porridge and tobacco' . What personal information did he impart to his guest?
- Que.6 How did the peddler feel after robbing the crofter? Why did he discontinue walking on the public highway?
- Que.7 Why did the peddler recall his thoughts about the world and the rattrap when he was lost in the big and confusing forest?
- Que. 8 What do you learn about the Ramsjo Ironworks from ' The Rattraps' ?
- Que. 9 ' The blacksmith glanced only casually and indifferently at the intruder' . What prompted him to do so?
- Que.10 Why did the old man not want to undeceive the ironmaster all at once?
- Que.11 What did the ironmaster assume to be the reason behind his old comrade' s refusal? How did he try to reassure him?
- Que.12 What reason did the ironmaster advance in support of his invitation to the stranger?
- Que. 13 'The ironmaster saw that he must give in.' What made him give in? What did he say? What did the blacksmith think about the ironmaster?
- Que.14 How did the ironmaster' s daughter intercede for the vagabond when her father asked him to leave the place at once?
- Que.15 The peddler enjoys the sympathy of readers' right from the beginning. Draw a character sketch of the peddler justifying the sympathy he generates among the readers.
- Que.16 Describe Miss Edla Wilmanson and her role in awakening the essential human goodness in the man with the ratttraps.
- Que.17 The story ' The Rattrap' focuses on human loneliness and the need to bond with others. Justify the statement by giving examples from the text.
- Que.18 Describe how the story, ' The Rattrap' shows that basic human goodness can be brought out by understanding and love?
- Que.19 Do you think one act of kindness can really change a person' s view of the world? Discuss.
- Que.20 What are the instances in the story that show that the character of the ironmaster is different from that of his daughter in many ways?
- Que.21 But for Edla' s intercession, the peddler would never have been able to redeem himself from dishonest ways?

### CRITICAL THINKING QUESTIONS

1. How does the metaphor of rattrap highlight the human predicament today?
2. Imagine yourself to be the crofter who gave shelter to a poor peddler one night but he stole all the money you had. Write a letter to your friend sharing your learnings from the incident.
3. There is a saying "Kindness pays, ruthlessness never". In the story, 'The Rattrap' Edla's attitude towards men and matters is different from her father's attitude. How are the values of concern and compassion brought out in the story, 'The Rattrap'?

4. Imagine yourself to be the vagabond peddler. After meeting the kind Edla and receiving a compassionate treatment from her, you realised your mistake. Write a letter of regret to the crofter whose money you stole, sharing the reasons that tempted you to commit the crime.
5. With reference to the chapter 'The Rattrap', explain if a sense of guilt after committing a crime is a punishment in its own way for the crime or not.

### **INDIGO**

1. What strategy did Gandhi ji follow in solving the problems of sharecroppers?
2. Why did Gandhi ji feel that it was useless for the peasants to go to law courts?
3. Why did the British landlords free the sharecroppers from growing Indigo? What did they want instead?
4. Why did Gandhi ji agree for the 25% refund by the British landlords?
5. What was the important lesson taught by Gandhi ji to his disciples ?
6. Why did Gandhi ji consider freedom from fear more important than legal justice for the poor peasants of Champaran?
7. What made Gandhi ji urge the departure of the British?
8. How was Gandhi ji received in Motihari?
9. What made Mahatma Gandhi declare "The battle of Champaran is won"?
10. How did the Champaran episode change the plight of the peasants?
11. How do we know that ordinary people too contributed to the freedom movement?
12. What argument did Gandhi ji give for not complying with the official orders to quit Champaran?
13. How were the British shown that their dreaded and unquestioned authority could be challenged by the Indians?
14. Why did Gandhi ji's casual visit to Champaran get extended to over a year?
15. How did civil disobedience triumph?
16. What idea do you form about the British from the chapter "Indigo"?
17. How did the peasants learn courage?
18. Are Gandhi ji's social, economic and political ideals relevant today? Discuss with reference to the Champaran episode.
19. Why did the landlords want to be released from the 15% arrangement?
20. Which incident in the lesson is the beginning of the peasants' liberation from the fear of British?
21. Why did Gandhi ji receive summons to appear in court?
22. How was Gandhi ji's style of politics different from the usual politicians?

### **CRITICAL THINKING QUESTIONS**

1. Patience and good leadership can bring about holistic changes. Write a letter to your friend sharing your feelings.
2. Imagine Gandhi were to deliver a speech to students in present day India showing them the path to become responsible world leaders. Based on your understanding of

Gandhi's own leadership skills , write a speech , as Gandhi addressing the students about the qualities that every leader and politician should nurture.

3. Let us assume it was Rajendra Prasad who informed Charles Freer Andrews of Gandhi's decision and the reasons for other leaders' support of him. Thinking creatively of how Andrews would have responded, pen down the discussion you think would have taken place between Rajendra Prasad and Andrews.

4. Dialogue and not violence can resolve situation of conflict and injustice. Do you agree? Write an article and share your views for the same.

5. Gandhi ji , Father of our nation , is a great leader whose values have been admired by one and all. Describe at least three characteristics of Gandhi ji you get to know from ' Indigo' , which you wish to adopt into your own life quoting suitable instances from the story.

### **POETS AND PANCAKES**

1. Describe the make-up department of Gemini Studios.

2. What views does the author express about prose-writing? Does he actually mean what he says?

3. What idea do you get about Stephen Spender from the chapter?

4. Bring about the humour in Stephen Spender's visit to Gemini Studios.

5. Give a character sketch of the lawyer.

6. What idea do you get about the narrator from the chapter?

7. ' Such a charitable and improvident man, and yet he (Subbu) had enemies'. Comment.

8. What work did the 'office boy' do in the Gemini Studios? Why did he join the studios and why was he disappointed?

9. How did the author discover who the English visitor to the studios was?

10. The author has used humour to point out human foibles. Put out instances to show how this serves to make the piece interesting.

11. Subbu is described as many sided- genius. Give an account of his multi-faceted abilities.

12. Describe the Moral Re-Armament Army's visit to Gemini Studios.

13. The boss of Gemini Studios had nothing to do with Spender's poetry but not with his 'God that failed'. Bring out the significance of this line.

### **CRITICAL THINKING QUESTIONS**

1. Cosmetics industry has witnessed a remarkable change. After reading about the brand Pancake, you thought about the popular brands of cosmetics nowadays. You surfed the Internet and collected information to write an article discussing cosmetics then and now. Write the article.

2. Prose and poetry are two different ways of expression but both satisfy the writer aesthetically. Critically analyse these two forms of expression and write your views to share with people through social media.

3. You went to a barber's shop for a haircut. You remembered the description given in the chapter. Compare the shop with the description given in the chapter and write a letter to your friend expressing your views.
4. The modern lifestyle is taking its toll on values. After reading about MRA, you plan to stage a skit in your society's club to bring a change in people's attitude. Make a poster to invite people to watch the skit.
5. After knowing about the office boy, you realise that there are such people around you also. Write a diary page sharing your feelings.

### **THE INTERVIEW**

1. What are some of the positive views on interviews?
2. Why do most celebrity writers despise being interviewed?
3. What do you understand by the expression "thumbprints on his windpipe"?
4. Do you think Umberto Eco likes being interviewed? Give reasons for your opinion.
5. What is the reason for the huge success of the novel, *The Name of the Rose*?
6. What was distinctive about Eco's academic writing style?
7. How does Eco find the time to write so much?
8. The writer says that it is hardly surprising that opinions of the interview vary considerably. Elaborate with reference to the essay "The Interview" by Christopher Silvester.
9. An interview is an apt tool for eliciting information from the interviewee through a process of questions and answers. Discuss with reference to the interview of Umberto Eco by Mukund Padmanabhan.
10. What were the salient points that emerged about Umberto Eco and his writing through his interview by Mukund Padmanabhan?

### **CRITICAL THINKING QUESTIONS**

- Q1-You recently read about interstices in the chapter -The Interview. Being motivated, you decide to use your interstices. Share your decision with your friend. Write an informal letter to him/her.
- Q2-Write your opinion about interview and its impact on common man.
- Q3-Critically analyse- how can interview be a source of truth?
- Q4-Give expression to your thoughts about the factors of success of a movie, a series, a book or a play.
- Q5-Usually celebrities see themselves as victims of interviews. Would you like to be interviewed? Why/why not?

## GOING PLACES

1. What does Sophie dream of doing after she passes out of school?
2. How does Sophie include her brother Geoff in her fantasy of her future?
3. Why was Sophie jealous of Geoff's silence?
4. Sophie did not approve of her own world. What kind of world did she dream of?
5. Does Sophie's father believe her story?
6. Does Geoff believe what Sophie says about her meeting with Danny Casey?
7. Sophie is a typical adolescent hero-worshipper who carries her fantasizing too far. Comment.
8. What job is Geoff engaged in? How does he differ from his sister?
9. Why did Sophie wriggle when Geoff told her father that she had met Danny Casey?
10. Who was Danny Casey? How did the members of Sophie's family react towards him?
11. Where did Sophie meet Danny Casey and what transpired between them?
12. What socio-economic background did Sophie belong to? What are the indicators of her family's financial status?
13. How did Jansie react at Sophie's story of her meeting with Danny Casey?
14. What place did Sophie choose to date Danny Casey and why?
15. "Resignation was no sudden thing." What is the implication of this remark in the context of Sophie's character?
16. Coming back home from the canal Sophie once again starts picturing Casey outside Royce's. What does the incident show about her nature?
17. Why didn't Sophie want Jansie to know about her story with Danny?
18. Which was the only occasion when Sophie got to see Danny in person?

## CRITICAL THINKING QUESTIONS

1. Your younger sister is staying as a paying guest in Mumbai as she is doing a professional course. After reading Going Places, you are worried for her. Write a letter to her guiding her about her career and the problems which the youth of today is likely to face.
2. One day you watched a video on Facebook of some teenagers doing pranks and stunts. You were upset at the waste of the energy of youngsters that could have been used to polish their skills and talents. Post your views to express your feelings.
3. Teenage is a very sensitive age and susceptible to falling prey to evils. Prepare a talk to be given in the morning assembly.
4. Imagine yourself to be Sophie's brother Geoff. You are upset to see your sister dreaming about Danny Casey. Write a diary entry sharing your worries.
5. Imagine yourself to be Sophie's mother. You are very timid and shy of speaking. But you have one friend who is your next door neighbour. Write the conversation with her that you had when your family had gone to see the match and you were alone at home.

## MY MOTHER AT SIXTY SIX

1. Why are the young trees described as sprinting in the poem 'My Mother at Sixty-six'?
2. What did Kamala Das think when she looked at her mother?

3. Why does Kamala Das compare her mother to a late winter's moon?
4. How does Kamala Das try to put away the thoughts of her ageing mother?
5. Read the extract given below and answer the questions that follow.

.....and  
 looked but soon  
 put that thought away and looked out at young  
 trees sprinting,  
 the merry children spilling out of their homes,.....

- (a) Which thought did she put away?
- (b) What did the poet realise? How did she feel?
- (c) What did she do then?
- (d) What did she notice in the world outside?
- 6) What were the poet's parting words?
- 7) Explain 'pale as a late winter's moon.'
- 8) Why did the poet promise her mother of a meeting in the near future?
- 9) Name the figure of speech used in ' trees sprinting'.
- 10) What different images does the poet use to convey the idea of her mother's old age?

**CRITICAL THINKING QUESTIONS**

1. The pain of separation is expressed both literally and metaphorically in the poem 'My Mother at Sixty six'. Elucidate.
2. How do you think that Imagery was an effective literary device to bring out the contrast between 'merry children' and 'mother'? Elucidate.
3. The poet does not directly mention the fear of her mother's death and yet she is successfully able to convey the same through different poetic techniques. Discuss.
4. Imagine the mother gets to know of the poet's fears. Write a letter, as the mother, telling the daughter why she must not dwell on these fears.

You may begin this way:  
 Pallipuram Cochin, Kerala

August 22, 2023  
 My dear Kamala  
 I am writing to you because when you left me at the airport, I felt something wasn't right.  
 Judging by how little you spoke that day.....  
 .....(continue).....  
 With love  
 Amma

5. Imagine you are the poet's friend.  
 Write a dialogue exchange between yourself and the poet where the latter confides in you about her fears and asks for your advice.  
 What would your advice be- to face her fears, to ignore them or something else?

## KEEPING QUIET

Question.1. Read the extract given below and answer the questions that follow. "If we were not so single-minded

about keeping our lives moving, and for once could do nothing, perhaps a huge silence might interrupt this sadness

of never understanding ourselves

and of threatening ourselves with death

- (a) Whom does 'we' refer to in the above lines?
- (b) Why does the poet want us to 'do nothing' for once?
- (c) What is the 'sadness' that the poet refers to in the poem?
- (d) How can a huge silence do good to us?

Question.2. Read the extract given below and answer the questions that follow.

Perhaps the Earth can teach us as when everything seems dead and later proves to be alive

Now I'll count up to twelve

and you keep quiet and I will go.

- (a) What does the Earth teach us?
  - (b) What does the poet mean to achieve by counting up to twelve?
  - (c) What is the significance of 'keeping quiet'?
  - (d) What is always alive, even when everything seems to be dead? or
- (a) What does the Earth teach us?
  - (b) Why does the poet count up to twelve?
  - (c) What will keeping quiet help us achieve?

(d) How does the Earth teach us that there is activity even in apparent stillness?

(e) Question.3. Read the extract given below and answer the questions that follow.

For once on the face of the Earth let's not speak in any language, let's stop for one second, and not move our arms so much.

(a) Why does the poet want us to keep quiet?

(b) What does he want us to do for one second?

(c) What does he mean by "not move our arms"?

(d) How can this moment of stillness help us?

Question.4. Read the extract given below and answer the questions that follow.

It would be an exotic moment without rush, without engines, we would all be together in a sudden strangeness.

(a) What will happen if there is no rush or running of engines?

(b) Why would it be called an exotic moment?

(c) How would we feel at that moment?

(d) Name the figure of speech used in the last line.

Question.5. Read the extract given below and answer the questions that follow. Now we will count to twelve,

and we will all keep still.

For once on the face of the Earth, let's not speak in any language, let's stop for one second, and not move our arms so much.

(a) How long does the poet want to stay still?

(b) What does he hope to achieve by keeping quiet?

(c) Name the figure of speech used in 'arms'.

(d) Why does the poet suggest us not to speak in any language?

Question.6. Read the extract given below and answer the questions that follow.  
Fishermen in the cold sea would not harm whales and the man gathering salt  
would look at his hurt hands.

- (a) What does the poet expect of the fishermen and why?
- (b) While gathering salt, what will the man do?
- (c) What do the hurt hands imply?
- (d) How would man and nature benefit in this moment of silence?

7. Why does the poet give the message of keeping quiet?

8. Why does the poet say ' we will count to twelve'?

9. Why is the poet against languages?

10. Explain - not move our arms so much.

11. What will be the exotic moment? Why would it be exotic?

12. What will bring all of us together?

13. Why is the sea called cold?

15. Why does the poet want the salt maker to look at his hands?

16. What does the poet mean by green wars?

17. How is the victory with no survivors ironical?

18. 18. What does the expression ' clean clothes' mean?

19. What does 'walk about with their brothers' mean?

20. What does 'in the shade' refer to?

21. What confusion does the poet not want?

22. What will be the total inactivity?

23. What is life according to the poet?

**24.** Name the figures of speech in the following:

. We will

. Now we will count to twelve and we will all keep still

- . Arms
- . Without rush, without engines
- . Sudden strangeness
- . We would all be together in a sudden strangeness
- . Cold sea Hurt hands
- . Wars with gas, wars with fire
- . Victory with no survivors
- . Clean clothes
- . If we were

### **CRITICAL THINKING QUESTIONS**

1. In a world that is constantly running after 'more' chasing the next new thing, would it be fair to think of Neruda's call as merely a fanciful idea? Elucidate.
2. The world has become a global village, and people across boundaries, nationalities and communities are now connected to one another. With the advancement of technology, and the advent of social media, do you think that the task of keeping quiet, as envisaged by Neruda, has become easier or more complicated? Justify your stance.
3. It could be said that the poem 'Keeping Quiet' presents the poet's philosophy for a different kind of world. If you were asked to highlight elements of Neruda's vision that resonate in your specific social, political and cultural context, which three main ideas would you engage with? Use relevant ideas to support your analysis.
4. Why do you think the poet employs words like "exotic" and "strangeness"?
5. "What I want should not be confused with total inactivity." Elucidate.

### **A THING OF BEAUTY**

- Q1. What kind of a joy does a beautiful thing provide?
- Q2. How does the loveliness of beauty increase?
- Q3. What does quiet breathing imply?
- Q4. What is a 'flowery band'?
- Q5. What does the expression 'spite of despondence' imply?
- Q6. Why is there an 'inhuman dearth of noble nature'?
- Q7. Explain: 'unhealthy and o'er-darkened ways.'
- Q8. What does 'in spite of all' refer to?
- Q9. How does the poet celebrate the beauty of a 'tree'?
- Q10. How do the rills sooth us?
- Q11. What does 'grandeur of the dooms' imply?
- Q12. Who are the mighty dead & how are they mighty?

Q13. What lovely tales have we read or heard?

Q14. What does the 'endless fountain' refer to?

Q15. How does the beauty grow?

Q16. Analyse the poem critically.

Q17. Discuss the poetic devices used in the poem.

### **CRITICAL THINKING QUESTIONS**

1. One day you met aunt Jennifer who was feeling very disturbed because of her unhappy married life. You told her that life is beautiful and she must find the beauty around her. Write the conversation that you had with her.

2. Your brother who studies in class VIII has not been able to speak well in the debate competition for which he had been preparing for many days. He is feeling dejected because of this failure. Prepare the talk that you will share with him telling him that failure is also beautiful as it is just one step away from success.

3. You have observed that the young generation runs behind materialistic things and thinks that happiness lies in achieving them. Once they achieve a thing of their choice, they soon realise that their happiness was only for a short time. Prepare a speech to be given in the morning assembly to share your views on this theme.

4. "Beauty lies in the eyes of the beholder." You have understood the meaning of this saying after reading this poem. Post your views on social media.

5. Write a paragraph describing the beauty of a garden that is in front of your flat.

### **A ROADSIDE STAND**

#### **EXTRACTS**

**The little old house was out with a little new shed  
In front at the edge of the road where the traffic sped,  
A roadside stand that too pathetically pled...**

- Why was the 'little old house' extended towards the road?
- Which traffic is referred to here? Why are they 'speeding'?
- Why is the Stand's existence said to be 'pathetic'?

**It would not be fair to say for a dole of bread  
But for some of the city money, the cash, whose flow supports  
The flower of cities from sinking and withering faint...**

- Why is it unfair to say that these people are begging for a 'dole of bread'?
- What do the poor people really expect from the rich?
- How do the poor people look at the city money?

**The polished traffic passed with a mind ahead  
Or, if ever aside a moment, then out of sorts  
At having the landscape marred with the artless paint  
Of signs with S turned wrong and N  
turned wrong...**

- What do you mean by 'polished traffic'?
- Explain, 'passed with a mind ahead.'
- What are the usual complaints made by the city men when they stop at the roadside stand?

Q.1. What are the two significant roles of money in the lives of the poor people?

Q.2. Why can't the poet bear the childish longing of the poor people?

- Q.3 The government and other social service agencies appear to help the poor rural people, but actually do them no good. Pick out the words and phrases that the poet uses to show their double standards.
- Q.4. Comment on the symbolic significance of the roadside stand.
- Q.5. Which things irritated the passersby who stopped at the roadside stand?
- Q.6. How do the city men plow up grass in the yard of the roadside stand?
- Q.7. What is the most queer demand of the rich man at the roadside stand? How is it queer?
- Q.8. Why are the poor people angry with the city men when they ask for gas?
- Q.9. Why is it unfair to say that these people are begging for a 'dole of bread'?
- Q.10. How do the poor people look at the city money?
- Q.11. What is the flower of the cities? How?
- Q.12. Explain 'passed with a mind ahead.'
- Q.13. How did the poor people "mar" the landscape?
- Q.14. What does, 'beauty rest in a mountain scene' mean?
- Q.15. Why is the poet's complaint different from that of the rich city men?
- Q.16. What do you mean by the trusting sorrow of the poor people?
- Q.17. What are moving pictures? What kind of life is promised by the 'moving pictures'?
- Q.18. How are the rich politicians responsible for the misery of the poor people?
- Q.19. What is the good news for the poor people?
- Q.20. Do you think the 'good news' for the poor people ever come true? Why?
- Q.21. Who are the greedy good doers? What is the irony in the 'greedy good-doers'?
- Q.22. What does 'beneficent beast of prey' imply?
- Q.23. Who teaches the poor people to sleep? How?
- Q.24. Are the poor able to sleep? Why?

Q.25. What is the childish longing? Why is it in vain? **CRITICAL THINKING QUESTIONS**

1 Imagine a car stops and actually buys from the roadside stand. Keeping in mind the reaction you think the peasants would have, write a diary entry as the farmer describing not only your immediate experience but also your after-thoughts on being able to earn 'city-money'.

2 Imagine a child from the farmer's family migrates to the city for his education. As the child, write back to your family telling them whether you would or would not want to turn into a city person. Use the context of the poem 'A Roadside Stand' in mind to pen down this letter.

3 Write a descriptive paragraph on 'A Tea Stall'.

4 Urbanisation destroys cottage and indigenous Industries. Express your views for or against the motion.

5 You and your friend are travelling in the car on the highway. You see roadside shops. You have read a poem on A Roadside Stand and understood the poet's feelings. Write the conversation with your friend to stop the car and help the shopkeeper.

### **AUNT JENNIFER' TIGERS**

1. What lies heavily on Aunt Jennifer's hand? How is it associated with her husband?
2. Why has Aunt Jennifer made 'prancing, proud and unafraid' tigers?
3. Do you sympathise with Aunt Jennifer? Why?

4. What will happen when Aunt Jennifer is dead?
5. How does Aunt Jennifer express her bitterness and anger against male domination?
6. How are Aunt Jennifer's tigers different from her?
7. What are the difficulties that Aunt Jennifer faced in her life?
8. How do the words 'denizens' and 'chivalric' add to our understanding of Aunt Jennifer's tigers?
9. Why did Aunt Jennifer choose to embroider tigers on the panel?
10. Why does Aunt Jennifer create animals that are so different from her own character?
11. 'The tigers represent Aunt Jennifer's spirit and her hands represent her reality.' How?
12. Why does Aunt Jennifer seek refuge in art?
13. What impression do you gather regarding Aunt Jennifer's husband?
14. Explain the irony at the end of the poem.
15. What message does the poet want to convey through this poem?

### **CRITICAL THINKING QUESTIONS**

1. Aunt Jennifer represents the agony of many married women who suffer physically and emotionally in their unhappy married life. Lacking any support they continue with their life accepting it as their destiny. After reading the poem, you understand their pain and want to draw the attention of the society towards this issue. Write a blog post.
2. Money can make our life comfortable but it can't make us happy as love and affection can not be bought. There are many married women enjoying a luxurious life but they shed tears of loneliness. Write a letter to your friend sharing your feelings.
3. After knowing about the unhappy married life of Aunt Jennifer and her helplessness you have started observing the aunts living in your neighbourhood. Write a critical analysis comparing the women of the 20th and 21st century.
4. "Art is a language meant to speak the things that can't be said." Write a comment expressing your views on this quote.
5. The society talks about women empowerment but still chauvinism prevails. You are upset at the hypocrisy of the people around you. Write a diary page letting out your frustration.

### **THE THIRD LEVEL**

1. What does the third level refer to?
2. Would Charley ever go back to the ticket-counter on the third level to buy tickets to Galesburg for himself and his wife?
3. Do you think that the third level was a medium of escape for Charley? Why?
4. What do you infer from Sam's letter to Charley?
5. 'The modern world is full of insecurity, fear, war, worry and stress.' What are the ways in which we attempt to overcome them?

6. Do you see an intersection of time and space in the story?
7. Apparent illogicality sometimes turns out to be futuristic projection. Discuss.
8. Philately helps keep the past alive. Discuss other ways in which this is done. What do you think of the human tendency to constantly move between the past, the present and the future?
9. You have read, 'Adventure' by Jayant Narlikar in Hornbill Class XI. Compare the interweaving of fantasy and reality in the two stories.
10. What will the President of the New York Central and the New York, New Haven and Hartford railroads swear? What did the narrator claim?
11. Why did the narrator talk to a psychiatrist friend of his and what did he say about the third level?
12. How did the narrator's psychiatrist friend analyze his claim of being at the third level of Grand Central Station?
13. What did the narrator's friends say about him? What did his stamp collecting point to?
14. What did the narrator say about his escapism from the real world?
15. The narrator thinks that the Grand Central is growing like a tree. What makes him think so? Why has it been 'an exit'?
16. How did the narrator get lost when he was heading for the sub-way?
17. How did the narrator come out on the third level at Grand Central Station after he had lost the way?
18. What did the narrator see unusual at the third level?
19. Describe Galesburg Illinois in 1894. Why did the narrator want two tickets to Galesburg, Illinois?
20. "That ain't money, mister" said the clerk to the narrator. Why did he warn the narrator?
21. How did the narrator get the old-style currency? Why couldn't he buy two tickets for Galesburg in spite of having the currency used in 1894?
22. Why was the narrator's wife Louisa worried?
23. What is a first day cover? Explain.

### **CRITICAL THINKING QUESTIONS**

- 1 In the story 'The Third Level', Charley wanted to go to Galesburg, Illinois in the year 1894. If you had an opportunity to go to another time and place, where would you like to go? Write a paragraph about the same.
- 2 Imagine that you have come across Louisa's diary. What might you find in it about the third level? Write a diary entry based on any of the events from the story.
- 3 Imagine yourself to be Sam. You just had your first patient of the day. His name was Charley. His proclamation of the Third Level really surprised you. More importantly the way his wife Louisa took your comment personally is really something

that you didn't see coming. Write a diary page narrating your experience of the counselling session with Charley.

4 Imagination is a temporary refuge from reality. You have understood the meaning of this statement after reading the lesson. Prepare a speech for the morning assembly to share your views.

5 You are a psychiatrist. You were upset to see your parents working day and night. To avoid any negative effect write a paragraph suggesting them the harmful effects of such routine.

### **THE TIGER KING**

1. The story is a satire on the conceit of those in power. How does the author employ the literary device of dramatic irony in the story?
2. What is the author's indirect comment on subjecting innocent animals to the willfulness of human beings?
3. How would you describe the behaviour of the Maharaja's minions towards him? Do you find them truly sincere towards him or are they driven by fear when they obey him? Do we find a similarity in today's political order?
4. What is the matter of vital importance the author wants to disclose at the beginning of the story? Why?
5. What did the astrologers predict about the child when he was born?
6. What was the miracle that happened when the astrologers predicted about the death of the born child?
7. Why did the chief astrologer put his finger on his nose in wonder?
8. What reason did the astrologer give in support of his answers?
9. What happened when the chief astrologer said that the death would come from a tiger?
10. What was the reply of the astrologer, when the Tiger King asked the astrologer what he would do if the hundredth tiger were killed?
11. What did the Maharaja do to realize his ambition of killing one hundred tigers?
12. What did the Maharaja and dewan do to avoid the danger of losing the throne?
13. Why did the Maharaja not agree to the proposal of the British officer's secretary?
14. Why did the Maharaja decide to marry a girl of the royal family from a neighbouring state?
15. What did the dewan do on hearing the Maharaja's threat?
16. What was special about the gift the Maharaja had given to the crown prince on his third birthday?

17. How was the Maharaja hurt and what was the result of the wound?
18. How does the author satirize the upbringing and education of crown princes of Indian States?
19. Do you agree with the Maharaja's statement, 'You may kill even a cow in self-defence'?
20. What were the two restricting outside forces that checked the kings in those days from doing exactly what they wished?

#### CRITICAL THINKING QUESTIONS

1. You read the story of 'The Tiger King' and you are shocked at how rich people are indifferent to wild animals. Write an article expressing your views on the same.
2. After reading the story you realise that evils like superstitions still prevail in our society and sometimes innocent beings become their victims. Pen down your feelings in your personal diary.
3. Through the whimsical behaviour of the king and the subservient attitude adopted by his officials and subjects, the writer makes a dig at the political setup devoid of the essential noble values in the contemporary times. Discuss.
4. Taking ideas from the lesson "The Tiger King", together with your own ideas write a speech to be given in the morning assembly on "Say 'No' to Callousness Towards Wildlife".

In your speech you should emphasise

- the significant role of flora and fauna
- man's callousness towards wildlife
- importance of peaceful co-existence with animals

#### JOURNEY TO THE END OF THE EARTH

- Q1. How do geological phenomena help us to know about the history of human kind?
- Q2. 'The world's geological history is trapped in Antarctica'. How is the study of this region useful to us?
- Q3. What are Geoff Green's reasons for including high school students in the Students on Ice expedition?
- Q4. Why did Tishani Doshi board the 'Akademik Shokalskiy'? What did her journey involve?
- Q5. What was the author's first emotion on setting foot on the Antarctica continent?
- Q6. What do you learn about 'Gondwana' from the chapter?
- Q7. How can a visit to Antarctica be an enlightening experience?
- Q8. How long have the human civilization been around? What is human impact on earth and its resources?

- Q9. What according to the author, are the issues engaging public attention and interest during our time?
- Q10. What does the programme 'Students on Ice' aim at? How is it operated?
- Q11. What do you think is the reason behind the success of the programme "Students on Ice"?
- Q12. What do you understand by phytoplankton? What are their activities? How will a change in their activities affect other creatures and environment?
- Q13. Why could the Shokalskiy not move any further? What did the captain decide then?
- Q14. What were the passengers of the Shokalskiy asked to do before the ship turned round? How did they carry out the instructions?
- Q15. What did the author keep wondering about after spending two weeks at Antarctica?
- Q16. "Take care of the small things and the big things will take care of themselves'. What is the relevance of this statement in the context of the Antarctica environment?
- Q17. Why is Antarctica the place to go to, to understand the earth's present past and future?
- Q18. Why did Tishani Doshi feel a sense of relief as well as wonder, when she actually set foot on the Antarctic continent?
- Q19. How would you compare Tishani Doshi's first reaction on reaching Antarctic region and the ending of the article?
- Q20. "To visit Antarctica now is to be a part of that history; to get a grasp of where we've come from....." says Tishani Doshi. What light does the chapter throw on the 'history of human kind'?

### **CRITICAL THINKING QUESTIONS**

1. How is Antarctica a crucial biomarker in the debate on climate change?
2. Imagine yourself to be Tishani Doshi. You have recently returned from Antarctica. Write a letter to your younger cousin explaining her about your learnings and why we need to work immediately if we really wish to save earth.
3. Why is Antarctica the place to go to if we want to study the earth's past, present and future?
4. Describe the programme 'Students on Ice' and why has it been a great success?
5. Why has Tishani Doshi termed her trip to Antarctica a "Journey to the End of the Earth"? What were the different awakenings that she went through during this expedition?

## **THE ENEMY**

1. What was the General's plan to get rid of the American prisoner? Was it executed?
1. What traits of General's character are highlighted in the lesson?
2. What conflicting ideas arise in Dr Sadao's mind after he has brought the wounded American soldier home? How is the conflict resolved?
3. Do you think Dr Sadao's final decision was the best possible one in the circumstances? Why/Why not? Explain with reference to the story, 'The Enemy'.
4. What impression do you form about Dr Sadao as a man and as a surgeon on your reading of the chapter 'The Enemy'?
5. Why did Sadao help the American soldier to escape? How did he do it?
6. Why did Sadao Hoki go to America? Narrate his experiences there.
7. Dr Sadao was a patriotic Japanese as well as a dedicated surgeon. How could he honour both the values? OR
8. The fog in the story, 'The Enemy' is symbolic. Elucidate.
9. How did Dr Sadao overcome the difficulty that came in his way to save the wounded soldier? How did Hana help her husband? OR  
Dr Sadao faced a dilemma. Should he use his surgical skills to save the life of a wounded person or hand an escaped American R.O.W. over to the Japanese police? How did he resolve this clash of values?
10. What explains the attitude of the General in the matter of the enemy soldier? Was it human consideration, lack of national loyalty, dereliction of duty or simply self-absorption?
11. Dr Sadao was compelled by his duty as a doctor to help the enemy soldier. What made Hana, his wife, sympathise with him in the face of open defiance from the domestic staff?
12. Draw a character sketch of the old General in the lesson, 'The Enemy'.

## **CRITICAL THINKING QUESTIONS**

1. There are moments in life when we have to make hard choices between our roles as private individuals and as citizens with a sense of national loyalty. Write a diary page letting out your feelings.
2. Pen down your views about the indifferent attitude of the General towards the presence of the American prisoner of war in the doctor's house.
3. Imagine you are the American sailor. You managed to get a Korean boat and reach safe. After reaching your destination, you share the entire story with your friend. Write a letter for the same.
4. Highlighting the horrors of war and condemning it, write an article for your school magazine on "The Need for Universal Brotherhood".

## **ON THE FACE OF IT**

1. Both Derry and Lamb are physically impaired and lonely. It is the responsibility of society to understand and support people with infirmities. So that they do not suffer from a sense of alienation. As a responsible citizen, write in 100-150 words what you would do to bring about a change in the lives of such people.

2. 'Inclusive education' is a step to bring the people with deformities into the mainstream so as to build up their confidence and morale. Write a paragraph on 'The Importance of Inclusive Education'.
3. What is the bond that united the two—the old man, Mr Lamb and Derry, the small boy?
4. How does Mr Lamb's brief association with Derry affect the latter?

**Or**

How did Mr Lamb's meeting with Derry become a turning point in his life?

5. What kind of atmosphere is created by Mr Lamb to look welcoming and invite people to him?
6. How do Mr Lamb and Derry differ in their thoughts, traits and attitude to life? Or

Both Derry and Mr Lamb suffer from handicaps, yet their outlook towards life is totally different. Discuss.

7. Justify the title 'On the Face of It'.

### **CRITICAL THINKING QUESTIONS**

Q1-Physically impaired need to be treated normally. Write a blog to aware the people about the needs of these people with reference to the chapter On The Face Of It.

Q2-One drawback of your personality should not affect your entire life, your positive approach to life makes you work hard and get success. Write a speech, motivating audience with your positive thinking.

Q3-You browsed the web about Helen Keller, a famous personality, who was differently abled but her strong will power led her to a successful career. Write an article narrating your experience in the light of the chapter "On The Face Of It".

Q4-The play made you understand the importance of self-acceptance. You realised the need of more such plays to motivate physically impaired people. Write a letter to the editor of a local daily highlighting the issue in 120-150 words.

### **MEMORIES OF CHILDHOOD**

Q1-"Power leads to dominance and reaches oppression and ends up in rebellion & failure". How is this statement true in the case of the rebellion raised by ZitkalaSa & Bama.

Q2- "Humanity is beyond caste, creed & race". Elucidate the thought in the light of the story- Memories of childhood.

Q3-How does Memories of Childhood bring out the plight of marginalised communities in India?

Q4-How does education play an important role in eradicating caste distinction & securing respectable status for marginalized communities in the society?

Q5-"It is through education only, one can understand harsh realities of life". Discuss the role played by Annan in the life of Bama.

### **COMPETENCY BASED QUESTIONS FROM CHAPTERS OF FLAMINGO AND VISTAS**

1) Franz from 'The Last Lesson' and the peddler from 'The Rattrap' demonstrate the Importance of learning from our mistakes to evolve into better people. Imagine that Shubhangi, your friend, feels as if she has made a mistake by not taking her academics seriously. Write a letter to Shubhangi in 120-150 words discussing instances from the two texts to give her an insight into the human tendency to make mistakes and learn from them.

You may begin like this:

Shubhangi, all of us have made mistakes at one point or another in our lives. After all, to err is human....

(2) 'The cry of not having money to do anything except carry on the business of making bangles, not even enough to eat, rings in every home. (The Lost Spring)

"...far from the city we make our roadside stand and ask for some city money to feel in hand'. (A Roadside Stand)

Create a conversation between a bangle maker and the owner of a roadside stand with reference to the above extracts.

You may begin the conversation like this:

Owner of a roadside stand: Your bangles are pretty. Tell me about your experience in this business.

(3) Imagine that a few days after Mr Lamb's fall from the ladder, Derry writes his thoughts on how his meeting with Mr Lamb changed his perspective towards life. Think of yourself as Derry and express these thoughts. You may begin like this:

A few days ago, I met an extraordinary person....

(4) Both the general (The Enemy) and the Maharaja (The Tiger King), deal with death. They are powerful figures confronted by a similar fate. You wish to include both of these characters in an upcoming play. As a part of your research essay, compare and contrast their experiences and their responses to these experiences in 120-150 words. [Clue: Include the similarities and differences of their circumstances - their way of dealing with things - their ultimate fate]

(5) The prose selections, 'Deep water' and 'Indigo' bring out the importance of overcoming fear, in order to be able to lead our lives successfully. Imagine yourself to be a motivational speaker who has to address high school students. Write this address in 120-150 words elaborating on occurrences from the two texts to inspire your audience and to convince them about the importance of overcoming fear. You may begin like this

Good morning, friends!

We all know what it's like to be afraid. Fear is our body's natural response to a perceived threat or danger. But when...

(6) "Their mother sighed.

Sophie watched her back stooped over the sink and wondered at the incongruity of the delicate bow which fastened her apron strings.'

The prose selection, 'Going Places' includes this telling comment about Sophie's mother.

In 'Aunt Jennifer's Tigers,' we are told that - The massive weight of Uncle's wedding band Sits heavily upon Aunt Jennifer's Hand."

Imagine a conversation between Sophie's mother and Aunt Jennifer. Create this exchange with reference to the two extracts given above. You may begin the conversation like this...

Sophie's mother: Your embroidery is so beautiful. Do you love tigers?

(7) On returning home, Tishani Doshi writes her thoughts reflecting on how her decision to enrol for the 'Students on Ice programme' has been the single most important decision of her life that has completely transformed her. Imagine yourself to be Tishani and express these thoughts. You may begin like this:

I can't thank my stars enough for having cashed in on the opportunity of.....

(8) Both Bama and Zitkala Sa experienced the harsh reality of discrimination in their childhood. Instead of letting it pull them down, they both found a way to overcome it. You wish to include a cameo\* of both in your upcoming blog post.

As a part of the research, compare and contrast the experiences faced by the two and their response/s to these experiences, in 120-150 words. [Clue: Include the similarities and differences in the discrimination they faced - their feelings - determination to overcome -success]

(9) Imagine you are Pablo Neruda, the poet of ' Keeping Quiet'.

What advice might you offer to Robert Frost, the poet of A Roadside Stand, in the context of his conflicted emotions, as displayed in the given lines-

The requisite lift of spirit has never been found,  
Or so the voice of the country seems to complain,  
I can't help owning the great relief it would be  
To put these people at one stroke out of their pain.

Pen down your advice, in a letter to Frost.

You may begin this way: Dear Robert

I recently read your poem, "A Roadside Stand," and...

You may end this way:

I hope this advice is helpful to you. Please let me know if there is anything else I can do to support you.

Warmly,

Pablo Neruda

(10) The different portrayals of women in the texts 'Aunt Jennifer's Tigers', 'Going Places', 'Lost Spring', and 'My Mother at Sixty-six', offer insights into the experiences of women in society.

You have been asked to address your peers and share-

-the ways these portrayals highlight the diversity of the female experience.

-the importance of understanding each individual woman's challenges and experiences.

Compose this draft, with reference to any three of these prescribed texts listed above.

You may begin this way:

Good morning, everyone. As I analysed the allotted texts....

You may end this way.

To conclude, I'd like to say that....

(11) In the story, 'The Third Level' by Jack Finney, Charley is obsessed with finding the third level.

In an attempt to thrash out whether this obsession is a good quality or a harmful one, Charley's wife expresses her thoughts in a diary entry. As Louisa, Charley's wife, write this diary entry. Support your response with reference to the story. You may begin this way: I have been married to Charley for a few years now and I have always known him to be an intelligent man with an imaginative mind. However, his recent obsession with finding the Third Level has ...

(12) A grown up Zitkala-Sa, reflects on the incident about cutting of her long hair and is conflicted that she did not do enough to resist and surrendered easily. She also wonders if she could have tried something else to prevent the incident.

As the grown-up Zitkala-Sa, create a diary entry, expressing these thoughts and conclude by absolving yourself of any blame.

You may begin like this:

I find myself reflecting on an event that happened many years ago...

(Memories of Childhood)

## **Unseen Passages For Practice**

### **QUESTION-1**

**(12 MARKS)**

Apollo, the Greek god of music and healing, always maintained that he was the greatest musician in the world, until Marsyas, who was part animal and part human, played the flute. Apollo's jealousy and insecurity drove him to eventually slay Marsyas so that his status as the greatest musician remained unchallenged. One's usual imagination of a god is a being who is all-knowing and pure in every intention. What makes the Greek gods interesting is that they are shown as flawed beings who do not always act like 'Gods'.

In appearance, the gods resemble mortals, whom, however, they far surpass in beauty, grandeur, and strength; they are also more commanding in stature, height being considered by the Greeks an attractive feature in men or women. They resemble human beings in their feelings and habits, marrying and having children with them. They require daily nourishment to maintain their strength, and sleep to restore their energy. Their blood, a bright magical fluid called Ichor, never causes disease, and, when shed, produces new life.

The Greeks believed that the mental qualifications of their gods were much higher than those of men, but, nevertheless, displayed human passions like revenge, deceit, and jealousy. In mythological tales, the gods always punish the evil-doer and administer dire punishments to any mortal who dares to neglect their worship. They often visit mankind and partake of their hospitality, and in many tales, both gods and goddesses become attached to mortals. Although there were so many points of resemblance between gods and men, there remained the one great characteristic distinction: immortality. Still, the gods were not invulnerable, and were often wounded and suffered so much that they'd pray for death. The gods could transport themselves to incredible distances with the speed of thought.

They could be invisible at will, and could take the forms of men or animals as it suited their convenience. They could also transform human beings into trees, stones, or animals. Their robes were like those worn by mortals, but were perfect in form and much finer in texture. Their weapons also resembled those used by mankind. They often used spears, shields, helmets, bows and arrows. Most of these divinities lived on the summit of

Mount Olympus, each having his or her own palace. Magnificent temples were erected to their honour, rich gifts were presented to them, and living creatures were sacrificed on their altars.

In Greek mythology, the gods take every opportunity to reveal and establish their divinity but also fall prey to human impulses. Perhaps the Greeks did so to help generations of readers reflect on important life lessons to avoid tragic downfalls.

Answer the following questions based on the passage above.

i '... they are shown as flawed beings who do not always act like 'Gods'.'. (paragraph 1) 1

Which of these are examples of the above statement?

- I. Gods getting attached and falling in love
  - II. Gods punishing mortals for their wrongdoing
  - III. Gods showing kindness and compassion to all
  - IV. Gods deceiving everyone for their personal gain
  - V. Gods killing a mortal out of jealousy and insecurity
- Select the correct option.

- A. Only I and III
- B. Only II and V
- C. Only I, IV, and V
- D. Only II, IV, and V

ii-Which of these would Apollo most likely say about Marsyas' musical ability? 1

- A. 'Why does everyone think he plays music well? It is obvious that he doesn't have talent.'
- B. 'Why is he challenging me like that? I wonder what is troubling him that I can heal.'
- C. 'How can an animal play the flute? Such creatures must know their place.'
- D. 'How dare he play better than me? I am supposed to be the best in the world.'

iii Why does the author begin the passage with a description of Apollo? 1

- A. to show that the Greek Gods have immense power and influence over the mortals
- B. to emphasise the point that the Greek Gods are based in interesting stories
- C. to highlight the point that the Greek Gods are more human-like in nature
- D. to state that the Greek Gods are also allowed to make mistakes

iv What is ironic about Apollo being the one who slays Marsyas? Answer in about 40 words. 2

v Based on your reading of paragraph 3, explain what 'invulnerable' means. Answer in one sentence. 1

vi In 40 words, state any two ways that the Greek gods are superior to human beings. 2

vii Complete the given sentence with ONE word. From the fact that the Greek gods punish any mortal who neglects their worship, we can infer that they are \_\_\_\_\_.

1

viii Imagine that someone was born from Ichor. In which of these situations would the Ichor be most useful?

1

- A. a natural disaster that causes the earth to split apart
- B. a pandemic that has been caused by a contagious virus
- C. a war that requires transforming into another form quickly
- D. a competitive entrance exam that is very tough to qualify for

ix What does the author mean by 'tragic downfalls' in paragraph 5? Give an example of a tragic downfall in current times in about 40 words. 2

## QUESTION-2

(12 MARKS)

**Line-1**-Arthur lay in his cabin, still trying to piece together the events of the last few hours. He had watched his home planet of Earth be demolished to make way for a hyperspace bypass, been saved by his friend Ford, and then whisked away on a ship that was powered by an "infinite improbability drive." It was all too much for him.

**Line-5**-Just then, Ford stuck his head around the door. "Hey, Earthman," he said, "come and have a look at this." Arthur stumbled after him down a corridor and into the ship's control room. He gazed in amazement at the banks of controls and flashing lights. In the center of the room was a large console covered in buttons and switches, and in the middle of the console was a small, white mouse.

**Line-10**- "What's that?" asked Arthur.

"That's the ship's computer," said Ford.

Arthur stared at the mouse. "That's a computer?" he said.

"Yup," said Ford. "Five-dimensional, biologically-based, super intelligent, and in the form of a white lab mouse. Pretty neat, huh?"

**Line-15**- "I don't know," said Arthur. "I don't think I really understand anything anymore.

Why is a mouse the ship's computer?"

"It's a long story," said Ford. "But the short version is that the mice built the Earth as a giant computer to figure out the Ultimate Question of Life, the Universe, and Everything. Then they ran out of money and had to destroy it to make way for a hyperspace bypass.

**Line-20**- So now they're using the Heart of Gold to finish the calculation."

Arthur was about to say something, but at that moment the ship's intercom crackled to life. "Good evening, Heart of Gold," said a smooth, computerized voice. "This is Eddie, your shipboard computer. I'm feeling a bit depressed today. Would you like me to sing you song?"

"Oh, not again," groaned Ford.

**Line-25**- "Eddie, would you mind shutting up?" said Arthur.

Arthur sighed and leaned back against the console, trying to make sense of everything. But as he closed his eyes, he heard a voice inside his head.

"Hello?" it said.

Arthur jumped, startled. "Who's there?" he said.

**Line-30**- "It's me," said the voice. "Marvin."

"Marvin?" said Arthur. "Who's Marvin?"

-Arthur looked around, but he didn't see anyone.

"Where are you?" he said.

"I'm down here," said the voice.

**Line-35**- Arthur looked down and saw a small, metal figure shuffling across the floor. It was about three feet tall, with a round head and a body that looked like it had been cobbled together from spare parts. Its eyes were a dull red, and its voice was a monotone.

"I've been waiting for someone to talk to me for over two million years," said Marvin.

**Answer the following questions, based on the passage above**

i Select the option that classifies Arthur's confusion about drastic events such as the destruction of his home planet and the introduction of new technologies, correctly. 1

- A. Routine and boredom
- B. Adventure and excitement
- C. Loss and change
- D. Calm and relaxation

ii What is the significance of the white lab mouse in the control room of the Heart of Gold spaceship? 1

- A. It is the captain of the ship
- B. It serves as the ship's computer
- C. It is a pet of the crew
- D. It is used for scientific experiments

iii Share evidence from the text, in about 40 words to support the view that the writer's writing style is descriptive and humorous. 2

iv Complete the sentence appropriately with a characteristic or its description. Based on the information given in the excerpt, one can infer that the mice who built the Earth are \_\_\_\_\_. 1

v Select the option that is similar in meaning to Ford's expression, "Pretty neat, huh?". 1

- A. Easy, isn't it? B. Could be worse, no?
- C. Impressive, yes? D. Too difficult for you?

vi Explain, in about 40 words, why the name "The Paranoid Android" is considered ironic. 2

vii In the line, "...a body that looked like it had been cobbled together from spare parts...", what comparison does the word "cobbled" refer to? 1

viii How does the following, impact the reader, even though they know Marvin is just an android? "I've been

waiting for someone to talk to me for over two million years," said Marvin. Answer in about 40 words.

2

ix Read the five headlines (a) -(e), given below:

1

- (a) HUMANITY'S JOURNEY WITNESSED BY A DEPRESSED ROBOT
- (b) HITCHHIKING THROUGH SPACE: A COMICAL TAKE ON THE END OF THE WORLD
- (c) NEW STUDY FINDS ALIENS LIVING AMONG US
- (d) GROUNDBREAKING TECHNOLOGY WILL SOON ENABLE TIME TRAVEL
- (e) INTERGALACTIC TRAVEL VIA NEW INFINITE IMPROBABILITY DRIVE

Identify the option that displays the headline/s that DOES/ DO NOT correspond with occurrences in the passage.

- A. Only (a) B. (b) (c) and (d) C. Only (e) D. (a) and (e)

**QUESTION -3 (CASE BASED)**

**(10 MARKS)**

ChatGPT has been gaining attention for how closely it mimics human-like responses. Created by OpenAI in 2022, it is a chatbot that has been trained to have knowledge of worldly events and phenomena up till September 2021 and to interpret the context of texts to produce meaningful responses. The tool can provide answers on many topics, and often states disclaimers if it cannot answer a prompt accurately. Unlike a search engine, it cannot browse the internet for information. It also does not collect any personal information of users. A survey was administered to understand the uses of ChatGPT in the fields of education, healthcare and research. There were 420 participants in the study of which 59 respondents were from the medical field, 118 respondents were students and faculty from Page 4 of 16 (2) (3) (4) (5) the research field, 70 respondents identified as administrative staff, and 173 people marked 'other' as their occupation. Of the 420 respondents, only 40% had used ChatGPT before. More medical trainees and students as well as research students had used ChatGPT as compared to medical staff and research faculty.

The survey asked about the viability of ChatGPT for its use within the fields of education, research, and healthcare. The following table summarises the responses.

Question	Statement	Number of respondents
Should ChatGPT be used in Education?	No, it should be banned.	11
	I don't know; it is too early to make a statement.	226
	Yes, it should be actively incorporated	183
Should ChatGPT be used in Research?	No, it should not be used at all.	6
	I don't know; it is too early to make a statement.	75
	Yes, but it should only be used to brainstorm.	68
	Yes, as long as its use is transparently disclosed.	259
	Yes, disclosure is NOT needed.	10
Should ChatGPT be used in Healthcare?	No, it should not be used at all.	15
	I don't know; it is too early to make a statement.	177
	Yes, it can be used for administrative purposes.	176
	Yes, it can be used for any purpose.	51

Based on the responses, there was a greater uncertainty around its use in healthcare and education, compared to using it in research. Regarding the use of ChatGPT in healthcare, a significant portion of respondents (42%) approved of using it for administrative purposes (for example, preparing patient profiles or reports) and a smaller population of respondents (12.2%) felt it could be used for any purpose.

The current application of ChatGPT and its future potential needs to be examined. It can help students understand texts and write more effectively, simplify medical information for patients and automate administrative tasks, and prepare a summary of information which otherwise would require hours of reading

through various resources. However, its negative impact must also be considered before institutions approve its use.

**Answer the following questions, based on the above passage.**

i-Complete the given sentence in ONE word.

Based on the summary table, the \_\_\_\_\_ number of respondents think that ChatGPT should not be used.

1

ii The following was a prompt posted by a user in ChatGPT as their first question: 'What's my name?' Based on information from the passage, which of these is most likely to be ChatGPT's response? 1

A. 'Error 404: page not found.'

B. 'Your name is user 1000004.'

C. 'Sorry, can you repeat the question?'

D. 'Sorry, I don't have access to your data.'

iii Imagine that you have to write a news report on a major landslide that occurred in Manipur on 30 June, 2022. Would using only ChatGPT be useful for your project? State why or why not in 40 words. 2

iv The following are the profiles of some respondents from the survey. Based on the passage, which of these profiles is MOST LIKELY to be a part of the 40% who have used ChatGPT before? 1

A. a manager in a hospital who has done 5 years of administrative work

B. a professor of Psychology who has 30 years of teaching experience

C. a college graduate who is studying in a 2-year Master's course

D. a 25-year-old teacher who is working in a public school

v Which of these is true about the respondents of the survey? 1

A. It had 118 respondents who were employed in the field of education.

B. It had 70 respondents who had administrative roles in educational institutions.

C. It had 173 respondents who were working in the field of research including students.

D. It had 59 respondents who were from the medical field including those who study medicine.

vi Why do you think some respondents feel that ChatGPT should be banned in education? State a reason in 40 words. 1

vii Locate a detail from the passage that shows that we still do not know enough about ChatGPT. Answer in one sentence. 2

viii State TRUE or FALSE. More than half of the respondents think it is ok to use ChatGPT in research if one clearly states its contribution. 1

#### **QUESTION -4 (CASE BASED)**

**(10 MARKS)**

(1) In recent years, there has been a surge in both group and solo travel among young adults in India. A survey conducted among young adults aged 18-25 aimed to explore the reasons behind their travel preferences and recorded the percentage variation for 10 common points that influence travel choices.

(2) Among those who prefer solo travel, the most common reason cited was the desire for independence and freedom (58%), followed closely by the opportunity for introspection and self-discovery (52%). Additionally, solo travellers appreciated the ability to customize their itinerary to their preferences (44%) and the chance to meet new people on their own terms (36%).

(3) On the other hand, those who prefer group travel often cited the desire for socializing and making new friends (61%) as their primary reason. Group travel also provided a sense of security and safety in unfamiliar places (52%) and allowed for shared experiences and memories with others (48%). Additionally, group travellers enjoyed the convenience of having pre-planned itineraries and organized transportation (38%).

(4) Interestingly, both groups had similar levels of interest in exploring new cultures and trying new experiences (40% for solo travellers, 36% for group travellers). Similarly, both groups valued the opportunity to relax and escape from the stresses of everyday life (36% for solo travellers, 32% for group travellers).

(5) However, there were also some notable differences between the two groups. For example, solo travellers placed a higher priority on budget-friendly travel options (38%) compared to group travellers (24%). Conversely, group travellers were more likely to prioritize luxury and comfort during their travels (28%) compared to solo travellers (12%).

(6) Overall, the survey results suggest that both group and solo travel have their own unique advantages and

appeal to different individuals, based on their preferences and priorities.

**Answer the following questions, based on given passage.**

i Infer two possible ways that the survey , mentioned in paragraph (1) could be beneficial. Answer in about 40 words. 2

ii Which travel choice point of the survey would influence tour operators to incorporate group dinners, social events, and shared accommodations in their itinerary? 1

A. Freedom to customise itinerary B. Luxury and comfort

C. Security and safety D. Desire for making new friends

iii What do the top choices in the survey, for traveling solo and in a group suggest about young adults? 1

iv Identify the solo traveller from the following three travellers: 1

(a) Reshma- I don't want to keep hunting for rickshaws or taxis. A pre-booked vehicle is perfect.

(b) Nawaz-I'm happy sharing a room in a hostel. I don't need hotel accommodation.

(c) Deepak-I'm not worried about my well-being , even while exploring remote areas.

v Which of the following is an example of an opportunity for self-discovery, as mentioned in paragraph? 1

A. Trying new cuisine

B. Hiring a tour guide

C. Purchasing local artifacts

D. Advance booking travel tickets

vi How might the differences in budget priorities between solo and group travellers impact the types of accommodations and activities offered by the travel industry in India? 2

vii Complete the sentence appropriately. The similarities in the percentage of both solo and group travellers who are interested in exploring new cultures and trying new experiences may be due to \_\_\_\_\_.

viii State TRUE or FALSE. 1

The title, "Wanderlust: The Solo Travel Trend Among Young Adults in India", is appropriate for this passage.



## SUBJECT CODE: 055

### PART-A

#### Chapter-1: Accounting for Partnership Firm-Fundamental

##### Multiple Choice Questions:

Q1. Interest on partner's capital under 'Fixed Capital Accounts' is credited to

- a. Partner's Capital A/c
- b. Partners Current A/c
- c. Profit and Loss A/c
- d. Profit and Loss Appropriation A/c

Q2. Which of the following items is not recorded in Profit and Loss Appropriation Account?

- a. Rent payable to partner
- b. Interest on Partner's Capital
- c. Partner's Salary
- d. Partner's Commission

Q3. A, B and C are partners sharing profits in the ratio of 3:3:2. As per the partnership agreement, C is to get a minimum amount of Rs.84,000 as his share of profits every year and any deficiency on this account is to be personally borne by A. The net profit for the year ended 31st March, 2022 amounted to Rs.3,12,000.

Calculate the amount of deficiency to be borne by A?

- a. Rs.1,000
- b. Rs.4,000
- c. Rs.8,000
- d. Rs.6,000

Q4. P and Q are partners without any agreement. P has given a loan of Rs. 200000 to the firm. At the end of year firm incurred a loss. How much interest would be paid on P's loan?

- a. Nil
- b. @ 6% p.a.
- c. @ 12% p.a.
- d. @ 10%

Q5. What will be the interest on drawings of R @ 10 % per annum if R withdrew Rs. 12000 per month in the end of every month for 6 months.

- a. Rs. 4200
- b. Rs. 5200
- c. Rs. 1500
- d. None of the above

Q6. Rahul and Rahim are partners having capital balances as Rs. 30000 and 70000 on 01-Apr-2022. Rahul introduced further capital of Rs. 10000 on 01-Jan-2023 and another Rs.10000 on 15-Jan-2023. Interest on capital to be allowed to Rahul assuming the rate of interest to be 6 % per annum will be:

- a. Rs.1875
- b. Rs.2075

c. Rs.1575

d. Rs.3125

Q7. M and N are partners in a firm. M is to get a commission of 10 % of net profit before charging any commission. Net profit before charging any commission was Rs. 770000. Commission of M will be:

a. Rs.10000

b. Rs.7700

c. Rs.7000

d. None of the above

Q8. Pick the odd one out:

a. Salary to employees.

b. Manager's Commission.

c. Interest on Partner's Loan.

d. Interest on Partner's capital.

Q9. Assertion(A): Rent to partner is shown in Profit& Loss Appropriation Account Reason (R): Rent to partner is a charge against profit

(a) Both Assertion(A) and Reason (R) are true and Reason(R) is the correct explanation of Assertion(A)

(b) Both Assertion(A) and Reason (R) are true and Reason(R) is not the correct explanation of Assertion(A)

(c) Assertion(R) is true but the Reason(R) is false

(d) Assertion(R) is false but the Reason(R) is true

Q10. Assertion (A): Raj, a partner in the firm gave a loan of ₹. 45,000 to the firm without an agreement to rate of interest. Interest on Loan by Raj is to be allowed at @6% p.a.

Reason (R): In the absence of the Partnership Deed, Provisions of the Partnership act 1932, apply. Thus, interest on a loan to a Partner should be charged @6% p.a.

(a) Both Assertion(A) and Reason (R) are true and Reason(R) is the correct explanation of Assertion(A)

(b) Both Assertion(A) and Reason (R) are true and Reason(R) is not the correct explanation of Assertion(A)

(c) Assertion(R) is true but the Reason(R) is false

(d) Assertion(R) is false but the Reason(R) is true

Q11. Assertion (A): Interest on Partner's capital may be shown in Profit and Loss Account.

Reason(R): If Partners treat interest on capital as a charge.

- a) Both (A) and (R) are true and (R) is the correct explanation of (A)
- b) Both (A) and (R) are true and (R) is not the correct explanation of (A)
- c) (A) is true, but (R) is false
- d) (A) is false, but (R) is true.

**Short Answer Type Questions:**

Q1. Anil, Sunil and Rajesh entered into partnership on 1st April 2022 with a capital of Rs.3,00,000, Rs.2,00,000 and Rs.1,00,000 respectively. In addition to capital Rajesh has advanced a loan of Rs.1,00,000. Since they had no agreement to guide them, they faced following issues during and at the end of the year.

- 1. Anil wanted interest on capital to be provided @6% pa but Sunil and Rajesh didnot agree.
- 2. Rajesh wanted that interest on loan be paid to him @ 12% pa but Anil and Sunil wanted to pay @ 5% pa.
- 3. Sunil and Rajesh demanded to share profits in the ratio of their capital contribution, Anil is not in agreement with this proposal.
- 4. Sunil, being working partner, demands a lump sum payment of Rs. 50,000 as remuneration for which other others partners are not in agreement.

You are required to suggest and help them resolve these issues.

Q2. A & B are partners in the ratio of 3:2. The firm maintains fluctuating capital accounts and the balance of the same as on 31-03-2022 amounted to Rs.1,60,000 and Rs.1,40,000 for A and B respectively. Their drawings during the year were Rs.20,000 each.

As per partnership deed interest on capital @5% p.a. on opening capitals had been provided to them. Calculate opening capitals of partners given that their profits were Rs.90,000. Show your workings clearly.

Q3. P and Q were partners in a firm sharing profits and losses equally. Their fixed capitals were Rs.2,00,000. and Rs.3,00,000 respectively. The partnership deed provided for interest on capital @12% p.a. For the year ended 31<sup>st</sup> March, 2022, the profits of the firm were distributed without providing interest on capital. Pass necessary adjustment entry to rectify the error.

Q.4 A, B and C were partners in a firm sharing profits in the ratio of 3:2:1. B was guaranteed a profit of Rs.20,000. During the year the firm suffered a loss of Rs.36,000. Calculate the net amount of profit/loss transferred to the capital accounts of partners.

Q5. A and B are partners sharing profits and losses in the ratio of 3:1. Their capitals at the end

of the financial year 2022-23 were 6,00,000 and 3,00,000. During the year 2022-23, A's drawings were Rs.80,000 and the drawings of B were Rs.40,000, which had been duly debited to partner's capital accounts. Profit before charging interest on capital for the year was Rs.80,000. The same had also been credited in their profit-sharing ratio. B had brought additional capital of Rs.70,000 on October 1, 2022. Calculate interest on capital @10% p.a. for the year 2022-23.

Q6. R and S were partners in a firm sharing profits in the ratio of 5:3. Their fixed capitals on 1.4.2022 were: R Rs.6,00,000 and S Rs.8,00,000. They agreed to allow interest on capital @ 6%p.a. and to charge on drawings @ 5%p.a. The profit of the firm for the year ended 31.3.2023 before all above adjustments were Rs.65,000. The drawings made by R were Rs.30,000 and by S Rs.40,000 during the year. Prepare Profit and Loss Appropriation Account. The interest on capital will be allowed even if the firm incurs a loss.

**Long Answer Type Questions:**

Q7. Rohit, Raman and Rajesh are partners in a firm. Their capital accounts on 1st April, 2022, stood at Rs.2,00,000, Rs.1,20,000 and Rs.1,60,000 respectively. Each partner withdrew Rs.15,000 during the financial year 2022-23.

As per the provisions of their partnership deed:

- (a) Interest on capital was to be allowed @ 5% per annum.
- (b) Interest on drawings was to be charged @ 4% per annum.
- (c) Profits and losses were to be shared in the ratio 5:4:1.

The net profit of Rs.72,000 for the year ended 31st March 2023, was divided equally amongst the partners without providing for the terms of the deed.

You are required to pass a single adjustment entry to rectify the error (Show workings clearly).

Q8. A, B and C are partners in a firm. Their capital accounts stood at Rs.1000000; Rs.800000; Rs.600000 respectively on 1<sup>st</sup> April, 2022. They shared profit and losses in the ratio of 2:2:1 respectively. Partners are entitled to salary to A and B Rs.2500 per month and to C Rs.5000 per quarter respectively. Interest on capital allowed to each partner @ 6% p.a. A's share of profit is guaranteed at a minimum of Rs. 86000 p.a. Any deficiency, if any, arising on that account shall be met by remaining partners. The profits, after interest on capital but before salaries allowed to partners, for the year ended 31<sup>st</sup> March, 2023 amounted to Rs.280000. Prepare Profit and loss appropriation account for the year ended 31<sup>st</sup> March, 2023.

Q9. P, Q and R, are partners having fixed capital of Rs.2,00,000, Rs.1,60,000 and Rs.1,20,000 respectively. They share profits in the ratio of 3:1:1. The partnership deed provided for the following:

- 1) Interest on capital @ 5% p.a.

2) Salary to P Rs.1,500 p.m. and Q Rs.1,000p.m.

3) Transfer of profit to general reserve Rs.10,000.

Net profit for the year ended 31<sup>st</sup> March, 2023 was Rs.1,00,000.

Pass necessary Journal entries and prepare Profit and loss appropriation account for the year ended 31<sup>st</sup> March, 2023.

Q10. Abhay and Nikhil, are partners sharing profits and losses in the ratio of 3: 2 with capitals of Rs. 2,50,000 and Rs. 3,50,000 respectively. Each partner is entitled to 6% interest on his capital and charged interest on drawings @ 5% p.a. Abhay withdrew Rs.15,000 during the year and Nikhil withdrew Rs. 500 per month. Abhay is, entitled to a commission of 10% of profit remaining after appropriation of interest on capitals, interest on drawings and salaries to partners. Nikhil is entitled to a salary of Rs. 12,000 per annum. The profits for the year prior to calculation of interest on capital and drawings but after charging salary of Nikhil Rs. 1,65,000. Prepare, profit and loss appropriation account And Partners' Capital Accounts.

## CHAPTER -2: GOODWILL (NATURE AND VALUATION)

### Multiple Choice Question:

Q1. a. Goodwill is a fictitious asset

b. Goodwill is a current asset

c. Goodwill is a wasting asset

d. Goodwill is an intangible asset

Q2. The excess amount which the firm can get on selling its assets over and above the saleable value of its assets is called:

a. Surplus

b. Super profits

c. Reserve

d. Goodwill

Q3. Which of the following is not true in relation to goodwill?

a. It is an intangible asset

b. It is fictitious asset

c. It has a realizable value

d. None of the above

Q4. When goodwill is not purchased goodwill account can:

a. Never be raised in the books

b. Be raised in the books

c. Be partially raised in the books

d. Be raised as per agreement of the partners

Q5. The goodwill of the firm is not affected by:

- a. Location of the firm
- b. Reputation of the firm
- c. Better customer service
- d. None of the above

Q6. Weighted average method of calculating goodwill is used when:

- a. Profits are not equal
- b. Profits show a trend
- c. Profits are fluctuating
- d. None of the above

Q7. Assertion(A): Goodwill is an intangible but not a fictitious asset.

Reason (R): Goodwill is an intangible asset because it does not have a physical existence but it is a valuable asset because it is helpful in earning excess profits.

In the context of the above two statements, which of the following is correct?

- a) A and R both are correct and R correctly explains A.
- b) Both A and R are correct but R does not explain A.
- c) Both A and R are incorrect.
- d) A is correct but R is incorrect.

Q8. Assertion (A): Goodwill exists only when a firm earns more profits than normal profits.

Reason (R): Self-generated goodwill is shown in the books because consideration in money or money's worth has been paid for it.

In the context of the above two statements, which of the following is correct?

- a) A and R both are correct and R correctly explains A.
- b) Both A and R are correct but R does not explain A.
- c) Both A and R are incorrect.
- d) A is correct but R is incorrect.
- e)

### **THEORY BASED QUESTIONS**

Q1. Define Goodwill.

Q2. Why is Goodwill considered as an intangible-assets but not a fictitious-assets?

Q3. If the amount of Super Profit is negative, what does it indicate?

Q4. What is meant by purchased Goodwill?

Q5. How does, the factor location affect the goodwill of a firm?

Q6. How does the factor market situation affect the goodwill of a firm?

Q7. How does the factor efficiency of management affect the goodwill of a firm?

Q 8 How does the nature of business affect the goodwill of a firm?

### NUMERICALS BASED ON PREVIOUS YEARS BOARD EXAMINATION

Q 9. Ajit and Baljit, were sharing of 3:2. They decided to admit Chaman into the partnership for  $\frac{1}{6}$ <sup>th</sup> share of the future profits. Goodwill, valued at 4 times the average super profits of the firm, was Rs.18,000. The firm had Assets worth Rs. 15,00,000 and Liabilities Rs.12,00,000. The normal earning Capacity of such firm is expected to be 10%p.a. Find the average Profits /Actual profits earned by the firm during the last 4 years.

Ans:34,500

Q 10. A business has earned average profits of Rs 2,00,000 during the few years and the normal rate of return in similar business is 10%. Find the value of goodwill by

(a) Capitalization of super profit method &

(b) Super profit method if the goodwill is valued at 3 years purchase of super profit. The assets of the business were Rs. 20,00,000 and its external liabilities Rs 3,60,000

Ans: (a)3,60,000 (b) 1,08,000

Q11. The capital employed in a firm is Rs. 10,00,000 and market rate of interest is 15%. Annual salary of the partners is Rs 80,000. The profits, of the last three years were Rs. 3,00,000; Rs.4,00,000 and Rs. 5,00,000 respectively. Calculate, value of goodwill on the basis of two years purchase of the average super profits of last three years.

Ans: 3,40,000

Q12. A business has earned average profits of Rs 6,00,000 during the last few years. The normal-rate of return in similar business is 10%. The total value of assets of the business were Rs. 22,00,000 and liabilities Rs. 5,60,000. Calculate value of goodwill of the firm by super profit method if the goodwill is valued at two and half years, purchase of super profits.

Ans: 10,90,000

Q13. The average profit earned by a firm is Rs. 75,000 which includes under- valuation of stock of Rs.5,000 on an average basis. The capital invested in the business is Rs.7,00,000 and the normal rate of return is 7%. Calculate, goodwill of the firm on the basis of five times the super profit.

Ans:1,55,000

Q14. The average profit earned by a firm is Rs. 95,000 which includes under- valuation of stock of Rs10,000 on an average basis. The capital invested in the business is Rs.9,00,000 and the normal rate of return is 9%. Calculate, goodwill of the firm on the basis of 8 times the super profit.

Ans: 1,92,000

Q15. On 1<sup>st</sup> April, 2014, an existing firm has assets Rs 1,00,000 excluding stock of Rs20,000. The partners capitals accounts showed a balance of Rs. 60,000. The current liabilities were Rs.10,000 and the balance constituted the reserve. If the normal rate of return is 8% and goodwill of the firm is valued at Rs 60,000 at four years purchase of super profit, find the average profit of the firm.

Ans: 23,800

### High Order Thinking Skill Question

Q 1. Calculate goodwill at one and half years, purchase of the average profit of the last 3 years. The profit, of the first year was Rs.20,000, profits for second year were twice the profits of the first year and in the third year, profits were one and half times of the profit of the second year. Ans:60,000

Q2. From the following information, calculate the value of goodwill of a firm of Chander and Gupta.

- (a) At 3 years purchase of Average Profits.
- (b) At 3 years purchase of Super Profits.
- (c) On the basis of Capitalization of Super Profits.
- (d) On the basis of Capitalization of Average Profits.
- (i) Average capital employed in the business Rs. 7,00,000.
- (ii) Net Trading results of the firm for the past years- Profit 2014:  
Rs.1,47,600; Loss 2015: Rs.1,48,100; Profit 2016: Rs. 4,48,700.
- (iii) Rate of interest expected from capital having regard to the risk  
Involved 18%.
- (iv) Remuneration to each partner for his service Rs. 500 p.m. (to be treated as a charge on profits)
- (v) Assets (excluding goodwill) Rs.7,54,762. Liabilities Rs.31,329.

Ans: (a)4,12,200 (b) 34,200 (c) 63,333 (d) 39,900

Q3. The goodwill of a firm is valued at Rs. 27000 at 3 years' purchase of super profits. Determine the missing values:

Average profits = Rs.108000/3=Rs.24000

Normal Profit = Rs. \_\_\_\_\_ \*15/100= Rs. \_\_\_\_\_

Super profit = Average profit- Normal profit =24,000- \_\_\_\_\_ = Rs. \_\_\_\_\_

Goodwill=Super profit\* No. of years purchase

Goodwill=Rs \_\_\_\_\_ \*3 =Rs. 27,000.

### **CHAPTER-3: CHANGE IN PROFIT SHARING RATIO AMONG THE EXISTING PARTNERS**

#### **Multiple Choice Questions:**

Q1. In case of change in profit sharing ratio, if the question is silent, then accumulated profits and reserves are

- (a) distributed in old ratio
- (b) distributed in new ratio

- (c) adjusted in gaining and sacrificing ratio                      (d) None of these

Q2. Any change in the relationship of existing partners which results in an end of the existing agreement and enforces making of a new agreement is called:

- (a) Revaluation of a partnership.    (b) Reconstitution of a Partnership.  
(c) Realization of Partnership.    (d) None of the above.

Q3. Sacrificing Ratio:

- (a) Old Ratio – Gaining Ratio    (b) New Ratio – Old Ratio  
(c) Gaining Ratio – Old Ratio    (d) Old Ratio – New Ratio

Q4. A and B shared profit and losses in the ratio 3:2. With effect from 1<sup>st</sup> April, they agreed to share profits equally. The goodwill was valued at Rs. 60000. The necessary single adjusting entry will be:

- (a) Debit B and Credit A by Rs. 6000                      (b) Debit A and Credit B with Rs. 6000  
(c) Debit B and Credit A with Rs. 600                      (d) Debit A and Credit B with Rs. 600

Q5. Assertion(A): Change in profit sharing ratio of existing partners does not amount to reconstitution of the partnership.

Reason (R): Dissolution of partnership firm leads to reconstitution of partnership.

In the context of the above two statements, which of the following is correct?

- a) A and R both are correct and R correctly explains A.  
b) Both A and R are correct but R does not explain A.  
c) Both A and R are incorrect.  
d) A is correct but R is incorrect.

Q6. At the time of change in profit sharing ratio, goodwill of the firm is not valued because there is no admission or retirement of a partner.

Reason (R): Goodwill of the firm is valued at the time of change in profit sharing ratio because the gaining partners compensate the sacrificing partners.

In the context of the above two statements, which of the following is correct?

- a) A and R both are correct and R correctly explains A.  
b) Both A and R are correct but R does not explain A.  
c) Only R is correct.  
d) A is correct but R is incorrect.

### Unsolved Practical Problems:

Q1. A, B, C and D were partners in a firm sharing profits in the ratio of 3:2:3:2. On 1.4.2016, their Balance sheet was as follows:

**Balance Sheet of A, B, C and D as on 1.4.2016**

<b>Liabilities</b>	<b>Amount</b>	<b>Assets</b>	<b>Amount</b>
Capitals:		Fixed Assets	8,25,000
A 2,00,000		Current Assets	3,00,000
B 2,50,000			
C 2,50,000			
D 3,10,000	10,10,000		
Sundry creditors	90,000		
Workmen Compensation Reserve	25,000		
	11,25,000		11,25,000

From the above date the partners decided to share the future profits in the ratio of 4:3:2:1. For this purpose the goodwill of the firm was valued at Rs. 2,70,000. It was also considered that:

(i) The claim against workmen compensation reserve has been estimated at Rs.30,000 and fixed assets will be depreciated by Rs. 25,000

(ii) Adjust the capitals of the partners according to the new profit-sharing ratio by opening Current Accounts of the partners.

Prepare Revaluation Account, Partners' Capital account and the balance sheet of the reconstitution firm.

Q1. State any three circumstances other than (1) death of a partner (2) admission of a partner and (3) retirement of a partner when need for valuation of goodwill of firm may arise.

Q2. R, S and T were partners in a firm sharing profits in the ratio of 1:2:3. Their Balance sheet as on 31.3.2015 was as follows

**Balance Sheet Of R, S And T As On 31.3.2015**

<b>Liabilities</b>	<b>Amount</b>	<b>Assets</b>	<b>Amount</b>
Creditors	50,000	Land	50,000
Bills payable	20,000	Building	50,000
General reserve	30,000	Plant	1,00,000
Capitals:		Stock	40,000
R 1,00,000		Debtors	30,000

S	50,000		Bank	5,000
T	25,000	1,75,000		
		2,75,000		2,75,000

R, S and T decided to share the profits equally with effect from 1.4.2015. For this it was agreed that:

- (a) Goodwill of the firm be valued at Rs 1,50,000.
- (b) Land be revalued at Rs 80,000 and building be depreciated by 6%.
- (c) Creditors of Rs 6,000 were not likely to be claimed and hence be written off.

Prepare Revaluation account, partner's capital account and the balance sheet of the reconstituted firm.

Q3. Anant, Gulab and Khushbu were partners in a firm sharing profits in the ratio of 5:3:2. From 1<sup>st</sup> April 2014, they decided to share the profits equally. For this purpose, the goodwill of the firm was valued at Rs 2,40,000. Pass necessary journal entry for the treatment of goodwill on change in the profit-sharing ratio of Anant, Gulab and Khushbu.

Q4. Give the meaning of Reconstitution of a partnership firm.

Q5. State the ratio in which the partners share the accumulated profits when there is a change in the profit-sharing ratio amongst existing partners?

#### **OTHER TOPICS:**

#### **DETERMINATION OF SACRIFICING AND GAINING RATIO**

Q1. Give two circumstances in which sacrificing ratio may be applied?

Q2. A, B and C are partners sharing profits and losses in the ratio of 4:3:2. As per new agreement, C's new share will be 1/3, which he acquires from A & B in the ratio of 1:2. Compute new ratio & sacrifice/gain of the partners.

Ans: 11:7:9; A's sacrifice 1/27; B's sacrifice 2/27; C's gain 3/27

#### **ACCOUNTING TREATMENT OF GOODWILL**

Q 3. Anita, Asha and Amrit are partners sharing profits in the ratio of 3:2:1 respectively. From 1<sup>st</sup> January, 2010 they decide to share profits in the ratio of 2:3:1. The partnership Deed provides that in the event of any change in the profit-sharing ratio, the goodwill should be valued at three years 'purchase of the average of five-year profits. The profits and losses of the preceding five years are: Profit :2005--- Rs 1,20,000 ;2006—Rs 3,00,000; 2007—Rs 3,40,000 ;2008—Rs 380000; 2009 –Rs 140000(Loss). Showing the working clearly, give the necessary journal entry to record the above change.

#### **WORKMEN COMPENSATION RESERVE:**

Q 4. A, B and C sharing profits and losses in the ratio of 4:3:2, decided to share the future profits and losses in the ratio of 2:3:4 with effect from 1<sup>st</sup> April, 2016. An extract of their Balance Sheet as at 31<sup>st</sup> March, 2016 is:

Liabilities	Rs.	Assets	Rs.
Workmen compensation reserve	90,000		

Show the accounting treatment under the following alternative cases:

Case 1: If a claim on account of workmen compensation is estimated at Rs.45,000.

Case 2: If a claim on account of workmen compensation is estimated at Rs.99,000.

Case 3: If a claim on account of workmen compensation is estimated at Rs.90,000.

#### **INVESTMENT FLUCTUATION RESERVE:**

Q5. A, B and C sharing Profit and Losses in the ratio of 4:3:2, decided to share future profits and losses in the ratio of 2:3:4 with effect from 1<sup>st</sup> April, 2016. An extract of their Balance Sheet as at 31<sup>st</sup> March, 2016 is

Liabilities	Rs.	Assets	Rs.
Investments Fluctuation Reserve	18,000	Investments (At Cost)	2,00,000

Show the accounting treatment under the following cases:

Case 1: If the market value of Investment is Rs. 1,91,000.

Case 2: If the market value of Investment is Rs. 2,18,000.

Case 3: If the market value of Investment is Rs. 2,00,000.

### **CHAPTER-4: ADMISSION OF A PARTNER**

#### **Objective Type Questions**

#### **Multiple Choice Questions**

Q1. A new partner may be admitted into a partnership:

- with the consent of any one partner
- with the consent of majority of partners
- with the consent of all old partners
- with the consent of 2/3<sup>rd</sup> of old partners

Q2. On the admission of a new partner:

- a. old firm is dissolved
- b. old partnership is dissolved
- c. both old partnership and firm are dissolved
- d. neither partnership nor firm is dissolved

Q3. A, B and C are partners sharing in the ratio of 5:4:3. They admit D for  $\frac{1}{7}$ <sup>th</sup> share. It is agreed that B would retain his original share. Sacrificing ratio will be:

- a) A, B and C – 5:4:3
- b) A and C- 4:3
- c) A and C – 5:4
- d) A and C – 5:3

Q.4 When the balance sheet is prepared after the new partnership agreement, the assets and liabilities are recorded at:

- a) historical cost
- b) current cost
- c) realizable cost
- d) revalued figures

Q.5 Sacrificing ratio is used to distribute ..... In case of admission of a partner:

- a) Reserves
- b) Goodwill
- c) Revaluation profit
- d) balance in profit and loss Account

Q.6 In case of admission of a partner, the entry for unrecorded investments will be:

- a) Debit partner's capital A/cs and credit investments A/c
- b) Debit revaluation A/c and credit investment a/c
- c) debit investment A/c and credit revaluation A/c
- d) None of the above

Q.7 State whether the following statements are true or false:

- a. A new partner is liable for the past losses of the firm.
- b. If any contingent liability becomes a certain liability at the time of admission of a partner, then it is debited to revaluation account.

c. On revaluation of assets and liabilities, capital accounts of old partners do not change.

d. it is necessary that partners should have capital in their profit-sharing ratio.

Q.8 Fill in the blanks:

a. General reserve at the time of admission of a partner is transferred to ..... accounts of ..... Partners.

b. when there exists any balance in goodwill account at the time of admission of a partner, then the goodwill account is to be written off among ..... partners in ..... Ratio.

c. at the time of admission of a partner profit or loss on revaluation of assets and liabilities is shared by the old partners in the ..... Ratio.

Q9. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R):

Assertion (A): If there are eight partners in a firm, a new partner cannot be admitted even if one partner does not agree to this.

Reason (R): A new partner can be admitted if majority of partners agree on his admission.

In the context of the above two statements, which of the following is correct?

- a) A and R both are correct and R correctly explains A.
- b) Both A and R are correct but R does not explain A.
- c) Both A and R are incorrect.
- d) A is correct but R is incorrect.

Q10. Assertion (A): In case of admission of a partner old firm is dissolved and a new firm comes into existence.

Reason (R): After admission of a new partner, old partners alongwith the new partner, constitute the new firm. As such, old firm is dissolved and a new firm comes into existence.

In the context of the above two statements, which of the following is correct?

- a) A and R both are correct and R correctly explains A.
- b) Both A and R are correct but R does not explain A.
- c) Both A and R are incorrect.
- d) A is correct but R is incorrect.

Q11. Assertion (A): New partner should bring in his share of goodwill in cash so that the sacrificing partners may be compensated.

Reason (R): New partner may or may not bring his share of goodwill in cash. New Partner's Current Account may be debited and sacrificing partner's capital accounts credited to compensate them.

In the context of the above two statements, which of the following is correct?

- a) A and R both are correct and R correctly explains A.
- b) Both A and R are correct but R does not explain A.

- c) Both A and R are incorrect.
- d) A is incorrect but R is correct.

**Very short questions:**

**Determination Of New Profit Sharing**

Q.1 On 1<sup>st</sup> March, 2006, A and C admitted D into the partnership, their profit-sharing ratio being 5:4:3 respectively. Assuming before admission the profit- sharing ratio of A and C was equal, find the sacrificing ratio.

Q.2 A and B are partners in the ratio of 5:4. They admit C for 1/10<sup>th</sup> share, which he acquires, in equal proportions from both. Find new profit-sharing ratio.

Q.3 Das and Sana are partners in a firm sharing profits in the ratio 4:1. They admitted Pal as a new partner for 1/4<sup>th</sup> share in the profits, which he acquired wholly from das. Determine the new profit-sharing ratio of the partners.

Q.4 A and B are partners sharing profits and losses in the ratio of 3:2. C is admitted as a new partner for 1/4<sup>th</sup> share. C acquires 1/5<sup>th</sup> of his share from A and balance from A and B equally. Calculate the new profit-sharing ratio and sacrificing ratio.

Q.5 A, B and C were sharing profits and losses in the ratio of 9:6:5. D was admitted 1/4<sup>th</sup> of the future profits and losses. B sacrifices 1/10<sup>th</sup> from his share in favor of D and rest of the sacrifice was made by A and C in the ratio of 2:1. Calculate new profit-sharing ratio and sacrificing ratio.

**Short questions:**

**Accounting Treatment of Goodwill**

Q.6 Vijay and Sanjay are partners in a firm sharing profits and losses in the ratio in the ratio 3:2. They decide to admit Ajay into partnership with 1/4<sup>th</sup> share in profits. Ajay brings in Rs.30, 000 for capital and the requisite amount of premium in cash. The goodwill of the firm is valued at Rs.20,000. The new profit-sharing ratio is 2:1:1. Vijay and Sanjay withdraw their share of goodwill. Give necessary journal entries.

Q.7 A and B are partners in a firm sharing profits and losses in the ratio of 3:2. Following is their Balance Sheet at 1<sup>st</sup> April,2014:

<b>Liabilities</b>	<b>Amt(Rs.)</b>	<b>Assets</b>	<b>Amt(Rs.)</b>
Sundry Creditors	70,000	Goodwill	10,000
Capital A/cs:		Cash in hand	90,000
A     3,00,000		Stock	80,000
		Debtors	60,000

B	<u>2,00,000</u>	5,00,000	Machinery	1,50,000
			Furniture	1,80,000
		5,70,000		5,70,000

On 1<sup>st</sup> April, 2014, they admitted C as a new partner on the following terms:

- C will bring in Rs. 2,00,000 as his share of capital and the necessary amount of premium for goodwill in cash for 1/4<sup>th</sup> share in the future profits.
- Firm's Goodwill on C's admission be valued at Rs. 80,000.

Pass the necessary journal entries, prepare the Partners' Capital Accounts and Balance Sheet of the firm immediately after C's admission.

Q.8 Hari, Ravi and Kavi were partners in a firm sharing profits in the ratio of 3:2:1. They admitted Guru as a new partner for 1/7<sup>th</sup> share in the profits. The new profit –sharing ratio will be 2:2:2:1 respectively. Guru brought Rs. 3,00,000 for his capital and Rs.45,000 for his 1/7<sup>th</sup> share of goodwill. Showing your working clearly, pass necessary journal entries in the books of the firm for the above-mentioned transactions.

Q.9 A and B are partners sharing profits and losses in the ratio of 5:3. They admit C into the firm for 1/10<sup>th</sup> share in profits, which he acquires from A and B in the ratio of 3:2. C brings Rs.40,000 as goodwill out of his share of Rs. 70,000. No goodwill account appears in the books of the firm. Pass the necessary Journal Entries to record this arrangement.

Q.10 A and B were partners sharing profits and losses in the ratio of 3:2. Their balance sheet as at 1<sup>st</sup> April, 2014 was:

Liabilities	Amt (Rs.)	Assets	Amt (Rs.)
Creditors	30,000	Goodwill	10,000
General Reserve	20,000	Cash at bank	80,000
Profit and Loss A/c	50,000	Debtors	90,000
Capital A/cs:		Machinery	60,000
A 80,000			
B 60,000	1,40,000		
	2,40,000		2,40,000

They admit C as a partner with 1/5<sup>th</sup> share in the profits. C brings in Rs.70,000 as his capital. Give the necessary Journal Entries for the adjustment of Goodwill.

Q.11 X and Y were partners sharing profits and losses in the ration of 3 : 2. They admit Z as a partner for 1/5 share in profits. C bring Rs. 20,000 as his share of capital and Rs. 7,000 out of his share of goodwill which is Rs. 10,000. Compute the missing values in the following Journal Entries.

**JOURNAL**

Date	Particulars	L.F.	Dr.(Rs.)	Cr.(Rs.)
	Cash A/c <span style="float:right">Dr.</span> To Z/s Capital A/c To Premium for Goodwill A/c (Being capital and goodwill brought in cash by new partner)		--	-- --
	Premium for Goodwill A/c <span style="float:right">Dr.</span> Z's Current A/c To A's Capital A/c To B's Capital A/c (Being Z's share in Goodwill credited to old partners in their sacrificing ratio.)		-- --	-- --

**Accounting Treatment of Reserve and Accumulated Profit & Loss**

Q.12 Rajinder and Surinder are partners in a firm sharing profits in the ratio of 4:1. On April 15,2007 they admit Lavender as a new partner. On that date there was a balance of Rs.20,000 in general reserve and a debt balance of Rs.10,000 in the profit and loss account of the firm. Pass necessary journal entries regarding adjustment of accumulated profits/losses and reserves.

**Revaluation of Assets and Reassessment of Liabilities**

Q.13 Pass Journal entries for the following on the admission of C, as a partner in the journal of A and B, who were sharing profits and losses in the ratio of 3:2.

- (a) The value of Furniture is to be increased by Rs.6,000.
- (b) The value of stock to be decreased by Rs.4,000.

- (c) Machinery of the book value of Rs.40,000 is to be depreciated by 20%.
- (d) A provision for doubtful debts @ 5% is to be created on debtors of book value of Rs.20,000.
- (e) Unrecorded Investments worth Rs.12,000
- (f) An item of Rs.1,000 included in Creditors is not likely to be claimed, hence should be written back.

**Long Questions:**

**Capital Adjustment**

Q.14 D and E were partners in a firm sharing profits in the ratio 3:1. On 1-4-2007 they admitted F as a new partner for 1/4<sup>th</sup> share in the firm which he acquired from D. their balance sheet on that date was as follows:

<b>Liabilities</b>	<b>Amt.(Rs.)</b>	<b>Assets</b>	<b>Amt. (Rs)</b>
General Reserve	32,000	Land and Building	50,000
Creditors	54,000	Machinery	60,000
Capital A/cs:		Stock	15,000
D 1,00,000		Sundry Debtors 40,000	
E <u>70,000</u>	1,70,000	Less:	
		Provision for Bad debts3,000	37,000
		Investments	50,000
		Cash	44,000
	<u>2,56,000</u>		<u>2,56,000</u>

F will bring Rs. 40,000 as his capital and the other terms agreed upon were:

- Goodwill of the firm was valued at Rs. 24,000
- Land and Building were valued at Rs.70,000
- Provision for bad debts was found to be in excess by Rs. 800
- A liability for Rs.2,000 included in creditors was not likely to arise.
- The capital of the partners be adjusted on the basis of F's contribution of capital to the firm.
- Excess or shortfall, if any, to be, transferred to current accounts.

Prepare Revaluation Account, Partner's Capital Accounts and the Balance Sheet of the new firm.

Q.15 The following is the Balance Sheet as at 31<sup>st</sup> December 2002 of A and B, who share profits and losses in the ratio of 3:2.

Liabilities	Amt.(Rs.)	Assets	Amt. (Rs)
General Reserve	15,000	Plant and Machinery	10,000
Workmen Compensation Fund	5,000	Land and Building	8,000
Creditors	10,000	Debtors	12,000
Capital A/cs:		Less:	
A	10,000	Provision for Bad debts	11,000
B	<u>10,000</u>	1,000	12,000
	20,000	Stock	9,000
		Cash	
	<u>50,000</u>		<u>50,000</u>

On 1<sup>st</sup> January 2003, they agreed to admit C into partnership on the following terms: Provision for doubtful debts would be increased by Rs. 2,000.

- The value of land and building would be increased to Rs. 18,000.
- The value of stock would be increased by Rs. 4,000.
- The liability against Workmen's Compensation Fund is determined at Rs. 2,000.
- C brought in as his share of goodwill Rs. 10,000 in cash.
- C would bring further cash as would make his capital equal to 20% of the total capital of the new firm after the above revaluation and adjustments are carried out.

Prepare Revaluation Account, Partner's Capital Accounts and Balance Sheet of the firm after C's admission.

Q.16 A, B and C were partners in a firm sharing profits in the ratio 3:2:1. On 1<sup>st</sup> April 2014 their balance sheet was as follows:

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Capital Accounts		Land and Building	3,64,000
A	3,58,000	Plant and Machinery	2,95,000
B	3,00,000	Furniture	2,33,000
C	<u>2,62,000</u>	Bills Receivables	38,000
	9,20,000		

General Reserve		Sundry Debtors	90,000
Creditors	48,000	Stock	1,11,000
Bill payable	1,60,000	Banks	87,000
	90,000		
	<b>12,18,000</b>		<b>12,18,000</b>

On the above date D was admitted on the following terms:

- He will bring Rs. 1,00,000 as his capital and will get 1\10<sup>th</sup> share in the profits.
- He will bring necessary cash for his share of goodwill premium. The goodwill of the firm was valued at Rs. 3,00,000.
- A liability of Rs.18,000 will be created against bills receivables discounted
- The value of Stock and Furniture will be reduced by 20%
- The value of Land and Building will be increased by 10%
- Capital accounts of the partners will be adjusted on the basis of D's Capital in their profit-sharing ration by opening current accounts.

Prepare Revaluation Account and Partner's Capital Accounts.

Q.17 Mohan and Mahesh were partners in a firm sharing profit in the ratio of 3:2. On 1<sup>st</sup> April,2012 they admitted Nursat, as a partner in a firm. The balance sheet of Mohan and Mahesh on that date was as under:

Liabilities	Amt. (Rs)	Assets	Amt. (Rs)
Creditors	2,10,000	Cash in hand	1,40,000
Workmen Compensation fund	2,50,000	Debtors	1,60,000
General Reserve		Stock	1,20,000
Capital A/cs:	1,60,000	Machinery	1,00,000
Mohan 1,00,000		Building	2,80,000
Mahesh <u>80,000</u>	1,80,000		
	<b>8,00,000</b>		<b>8,00,000</b>

It was agreed that:

- a. The value of Building and Stock be appreciated to Rs. 3,80,000 and Rs. 1,60,000 respectively.
- b. The liabilities of workmen's compensation fund, was determined at Rs. 2,30,000.
- c. Nursat brought in her share of goodwill Rs. 1,00,000 in cash.
- d. Nursat was to bring further cash as would make her capital equal to
- e. 20% of the combined capital of Mohan and Mahesh after above revaluation and adjustments are carried out.
- f. The future profit-sharing ratio will be Mohan  $\frac{2}{5}$ <sup>th</sup>, Mahesh  $\frac{2}{5}$ <sup>th</sup>, Nursat  $\frac{1}{5}$ <sup>th</sup>.

Prepare Revaluation Account, Partners' Capital Account and Balance Sheet of the new firm. Also show clearly the calculation of Capital brought by Nursat.

## **CHAPTER-5 & 6: RETIREMENT /DEATH OF A PARTNER**

### **Multiple Choice Questions:**

Q1. 'X', 'Y' and 'Z' were partners sharing profits in the ratio of  $\frac{1}{2}$ ,  $\frac{3}{10}$  and  $\frac{1}{5}$ . 'X' retires. The new ratio will be

- |        |        |
|--------|--------|
| a. 5:2 | c. 3:2 |
| b. 1:1 | d. 5:1 |

Q2. \_\_\_\_\_account is prepared when partners decide to give effect to revaluation of assets and liabilities without affecting their book value.

- (a) Revaluation
- (b) Memorandum revaluation A/c
- (c) Memorandum suspense A/c
- (d) None of these

Q3. Decrease in liability at the time of retirement of partner is

- (a) debited to revaluation account
- (b) credited to revaluation account
- (c) debited to goodwill account
- (d) Both (b) and (c)

Q4. In the absence of any information regarding the acquisition of share in profit of the retiring/ deceased partner by the remaining partners, it is assumed that they will acquire his/ her share

- (a) old profit-sharing ratio
- (b) new profit-sharing ratio
- (c) equal ratio
- (d) None of the above

Q5. On retirement/ death of a partner, the retiring/ deceased partner's capital account will be credited with

- (a) his/ her share of goodwill
- (b) goodwill of the firm
- (c) shares of goodwill of remaining partners
- (d) None of the above

**Very short questions:**

Q.1 How can a partner retire from a firm?

Q 2. Distinguish between Sacrificing Ratio and Gaining Ratio

Q 3. If the retiring partner is not paid the full amount due to him immediately on retirement, how should his capital account be shown in subsequent Balance sheet?

**DETERMINATION OF NEW PROFIT-SHARING RATIO AND GAINING RATIO**

Q.4 Kamal, Kishore and Kunal are partners in a firm sharing profits equally. Kishore retires from the firm. Kamal and Kunal decide to share the profits in future in the ratio 4:3. Calculate the Gaining Ratio.

Q.5 P, Q and R, are partners sharing profits in the ratio of 7:2:1. P retires and the new profit-sharing ratio between Q and R is 2:1. State the Gaining Ratio.

Q.6 A, B and C are partners in a firm sharing profits in the ration of 2:2:1. B retires and his share is acquired by A and C equally. Calculate new profit-sharing ratio of A and C.

Q.7 X, Y and Z are partners sharing profits in the ratio of  $\frac{4}{9}$ ,  $\frac{1}{3}$  and  $\frac{2}{9}$ . X retires and surrenders  $\frac{2}{3}^{\text{rd}}$  of his share in favour of Y and remaining in favour of Z. Calculate new profit-sharing ratio and gaining ratio.

Q.8 X, Y and Z have been sharing profits and losses in the ratio of 3:2:1. Z retires. His share is taken over by X and Y in the ratio of 2:1. Calculate the new profit-sharing ratio.

Q. 9 P, Q and R were partners in a firm sharing profits in 4:5:6 ratio. On 28-02-2016 Q retired and his share of profits was taken over by P and R in 1:2 ratio. Calculate the new profit-sharing ratio of P and R.

**ACCOUNTING TREATMENT OF GOODWILL**

Q 10. Ramesh, Naresh and Suresh were partners in a firm sharing profits in the ratio of 5:3:2. Naresh retired and the new profit-sharing ratio between Ramesh and Suresh was 2:3. On Naresh retirement the goodwill of the firm was valued at Rs. 120000. Pass necessary journal entry.

Q11. X, Y and Z are partners sharing profits in the ratio of 2:3:5. Goodwill is appearing in their books at a value of Rs. 50,000. X retires and on the day of retirement goodwill is valued at Rs. 45,000. Y and Z decided to share the future profits equally.

### HIDDEN GOODWILL

Q12. Riya, Shreya and Niya are partners sharing profits in the ratio of 1:2:3. Niya retires and her capital after making adjustments for reserves and profits on revaluation stands at Rs 4,40,000. Riya and Shreya agreed to pay her Rs.5,00,000 in full settlement of her claim. Record necessary journal entry for the treatment of goodwill, if new profit-sharing ratio is decided at 1:3.

### PREPARATION OF REVALUATION ACCOUNT, PARTNERS CAPITAL ACCOUNT AND BALANCE SHEET

Q13. A, B and C are partners in a firm sharing profits according to their capitals as at 31<sup>st</sup> March, 2014, was as under:

#### BALANCE SHEET

LIABILITIES	AMOUNT (Rs)	ASSETS	AMOUNT(Rs)
General Reserve	20,000	Cash at bank	14,000
Sundry Creditors	21,000	Sundry debtors 20,000	
Capital Accounts:		Less: Provisions 1000	19,000
A 80,000		Stock	18,000
B 40,000		Plant and Machinery	50,000
C 40,000	1,60,000	Buildings	1,00,000
	<u>2,01,000</u>		<u>2,01,000</u>

B retired from the firm on 1<sup>st</sup> April ,2014 and was paid for his share in the firm subject to the following terms:

- 1) 20% depreciation was charged on plant and machinery.
- 2) Provision for doubtful debts to be increased to 15% on debtors.
- 3) Buildings to be appreciated by 20%.
- 4) Goodwill of the firm is valued at Rs. 72,000 and the retiring partners share is adjusted through the capital accounts of the remaining partners.
- 5) Capitals of the new firms be fixed at Rs.1,20,000.

You are required to prepare Revaluation account, Capital accounts of the partners and the Balance-sheet after retirement of B.

### DEATH OF A PARTNER

Q.14 State the journal entry for treatment of deceased partners share of profit for his life period in the year of death.

Q15. Name four items which are credited to the account of a deceased partner while calculating the amount due to his legal heirs.

Q16. State any two deductions that may have to be made from the amount payable to the legal representative of a deceased partner.

Q17. At what rate interest is payable on the amount remaining unpaid to the executor of deceased partner?

Q.18 A, B and C were partners in a firm sharing profits in the ratio of 2:2:1. C dies on 31<sup>st</sup> July, 2007. Sales during the previous year upto 31<sup>st</sup> march, 2007 were Rs. 6,00,000 and profits were Rs. 150000. Sales for the current year upto 31<sup>st</sup> July were Rs. 250000. Calculate C's share of profits upto the date of his death and pass necessary journal entry.

Q. 19. A, B and C were partners in a firm sharing profits in 3:2:1 ratio. The firm closes its books on 31st March every year. B died on 12th June,2015. On B's death, the goodwill of the firm was valued at Rs.60,000. On B's death, his share in the profits of the firm till the time of the death was calculated on the basis of pervious years profit which was Rs. 1,50,000. Calculate B's share in the profit of the firm. Pass necessary Journal Entries for the treatment of Goodwill and B's share of profit at the time of his death.

Q20. X, Y and Z were partners in a firm sharing profits and losses in the ratio of 2:2:1. On 31<sup>st</sup> December 2011, their balance sheet was as follows:

LIABILITIES	AMOUNT (Rs)	ASSETS	AMOUNT(Rs)
Creditors	60,000	Bank	90,000
Bills payable	40,000	Stock	70,000
General Reserve	30,000	Debtors	40,000
Capital A/c s:		Land and Building	5,00,000
X 3,00,000		Profit & Loss A/C	1,60,000
Y 3,00,000			
Z 1,30,000	7,30,000		
	<b><u>8,60,000</u></b>		<b><u>8,60,000</u></b>

Y died on 31<sup>st</sup> March ,2012. The Partnership Deed provided for the following on the death of a partner.

(i)Goodwill of the firm was to be valued at 2 years purchase of the average profit of last 5 years. The profits for the years ended 31<sup>st</sup> December ,2010,31<sup>st</sup>December ,2009 ,31<sup>st</sup> December, 2008 and 31<sup>st</sup> December , 2007 were Rs. 50,000; Rs.80,000; Rs1,10,000; Rs. 2,20,000 respectively.

(ii) Y's share profit or loss till the date of his death was to be calculated on the basis of the profit or loss for the year ended 31<sup>st</sup> December, 2011.

You are required to calculate the following:

- (1) Goodwill of the firm and Y's share of goodwill at the time of his death.
- (2) Y's share in the profit or loss of the firm till the date of death.
- (3) Prepare Y's Capital Account at the time of his death to be presented to his executors.

## **Chapter-7: DISSOLUTION OF PARTNERSHIP FIRM**

### **Multiple Choice Questions:**

Q1. On dissolution of a firm, bank overdraft is transferred to

- (a) Cash account
- (b) Bank account
- (c) Realisation accounts
- (d) Partners' capital accounts

Q2. On dissolution of a firm, partner's loan account is transferred to

- (a) Realisation account
- (b) Partners' Capital accounts
- (c) Partners' Current accounts
- (d) None of the above

Q3. After transferring liabilities like creditors and payables in the Realisation account, in the absence of any information regarding their payment, such liabilities are treated as

- |                 |                   |
|-----------------|-------------------|
| (a) never paid  | (b) fully paid    |
| (c) partly paid | (d) None of these |

Q4. When realisation expenses are paid by the firm on behalf of a partner, such expenses are debited to

- (a) Realisation account
- (b) Partners' Capital accounts
- (c) Partners' Loan accounts
- (d) None of the above

Q5. Unrecorded assets when taken over by a partner are shown in

- (a) Debit of Realisation account
- (b) Debit of Bank account
- (c) Credit of Realisation account
- (d) Credit of Bank account

Q6. Unrecorded liabilities when paid are shown in:

- (a) Debit of Realisation account
- (b) Debit of Bank account
- (c) Credit of Realisation account
- (d) Credit of Bank account

Q7. The accumulated profits and reserves are transferred to

- (a) Realisation account
- (b) Partners' Capital accounts
- (c) Bank account
- (d) None of the above

Q8. **Assertion (A):** On dissolution, goodwill account is transferred to Realisation Account.

**Reason (R):** Goodwill is an Asset which cannot be seen or touched

Both Assertion(A) and Reason (R) are true and Reason(R) is the correct explanation of Assertion(A)

- (a) Both Assertion(A) and Reason (R) are true and Reason(R) is not the correct explanation of Assertion(A)
- (b) Assertion(R) is true but the Reason(R) is false

(c) Assertion(R) is false but the Reason(R) is true

**Q9. Assertion (A):** On the dissolution of a firm the cash-in-hand is not transferred to Realisation Account

**Reason (R):** Realisation Account is Real Account.

(a) Both Assertion(A) and Reason (R) are true and Reason(R) is the correct explanation of Assertion(A)

(b) Both Assertion(A) and Reason (R) are true and Reason(R) is not the correct explanation of Assertion(A)

(c) Assertion(R) is true but the Reason(R) is false

(d) Assertion(R) is false but the Reason(R) is true

**Q10. Assertion (A):** At the time of Dissolution of Partnership Firm, The amount received from realisation of all the assets of the firm is used first of all to pay the external liabilities of the firm

**Reason (R):** As per the Partnership Act, outside liability should be paid first of all at the time of dissolution of partnership firm.

(a) Both Assertion(A) and Reason (R) are true and Reason(R) is the correct explanation of Assertion(A)

(b) Both Assertion(A) and Reason (R) are true and Reason(R) is not the correct explanation of Assertion(A)

(c) Assertion(R) is true but the Reason(R) is false

(d) Assertion(R) is false but the Reason(R) is true

**Short answer type questions:-**

Q1. Distinguish between dissolution of partnership and dissolution of partnership firm. Q2. State the situations in which the court may order to dissolve a partnership firm.

Q2. Pass journal entries from the following:

- a) X, a partner was paid remuneration of Rs.10800 and he was to meet all expenses.
- b) Realisation expenses amounted to Rs. 15000. It was agreed that the firm will pay Rs.10000 and balance by Y, a partner.
- c) Z, a partner, was paid remuneration of Rs.30000 and he was to meet all expenses, firm paid an expense of Rs.10000.
- d) Expenses of Realisation Rs.2000.

**Long answer type questions:-**

Q1. A and B share profits and losses in the ratio of 5:2. They have decided to dissolve the firm. Assets and external liabilities have been transferred to Realisation A/c. Pass the Journal Entries to affect the following:

- (a) Bank Loan of Rs.12,000 is paid off.
- (b) A was to bear all expenses of Realisation for which he is given a commission of Rs.400.
- (c) Deferred Advertisement Expenditure A/c appeared in the book at Rs.28,000.
- (d) Stock worth Rs.1,600 was taken over by B at Rs.1,200.
- (e) As unrecorded Computer realized Rs.7,000.
- (f) There was an outstanding bill for repairs for Rs.2,000. which was paid off.

Q2. What Journal entries would be passed for the following transactions on the dissolution of a firm after various assets (other than cash) and third-party liabilities have been transferred to Realisation Account?

- A.) Bank Loan Rs. 12,000 is paid.
- B.) Stock worth Rs.6,000 is taken over by partner B.
- C.) Expenses on dissolution amounted to Rs.1,500 and were paid by partner A.
- D.) A typewriter completely written off in the books of accounts was sold for Rs.2200. E.) Loss on Realisation Rs.14,000 was to be distributed between A and B in the ratio 5:2.

Q3. Following is the Balance Sheet of X and Y, who share profits and losses in the ratio of 4:1, as at 31st March, 2023:

**Balance Sheet As on 31st March, 2023**

<b>Liabilities</b>	<b>Rs.</b>	<b>Assets</b>	<b>Rs.</b>
Sundry Creditors	8,000	Bank	20,000
Bank Overdraft	6,000	Debtors	17,000
X's Wife Loan	8,000	Less: Provision	(2,000) 15,000
Y's Loan	3,000	Stock	15,000
Investment Fluctuation			
Fund		Investments	25,000

Capital	5,000	Buildings	25,000
X		Goodwill	10,000
		Profit and Loss	
Y	50,000	A/c	10,000
	<u>40,000</u>		
	1,20,000		<u>1,20,000</u>

The firm was dissolved on the above date and the following arrangements were decided upon:

- (i) X agreed to pay off his wife's loan.
- (ii) Debtors of Rs.5,000 proved bad.
- (iii) Others assets realised- Investments 20% less; and Goodwill at 60%
- (iv) One of the creditors for Rs.5,000 was paid only Rs.3,000
- (v) Buildings were auctioned for Rs.30,000 and auctioneer's commission amounted to Rs.1,000.
- (vi) Y took over part for Stock at Rs.4,000 (being 20% less than the book value). Balance stock realised 50%.
- (vii) Realisation expenses amounted to Rs.2,000.

Prepare Realisation A/c, Partners' Capital A/cs and Bank A/c

Q4. A and B were partners in a firm from 1.4.2021 with capitals of Rs.60,000 and Rs.40,000 respectively. They shared profits and losses in the ratio of 3:2. The carried-on business for 2 years. In the first year, they made a profit of Rs.50,000 and in the 2nd year ending on 31st March 2023, they incurred a loss of Rs.20,000. As the business was no longer profitable, they decided to wind up. Creditors on that date were Rs.20,000. The partners withdrew Rs.8,000 each per year for their personal expenses. The assets realised Rs.1,00,000. The expenses on realisation were Rs.3,000. Prepare Realisation A/c and Partner's Capital A/c and show your working clearly.

Q5. The following is the Balance Sheet of Raju and Sanjay sharing profits in the ratio of 3:2 as on March 31, 2023:

**Balance Sheet as at March 31, 2023**

<i>Liabilities</i>	<i>Amount</i>	<i>Assets</i>	<i>Amount</i>
	<i>(Rs.)</i>		<i>(Rs.)</i>
Creditors	19,000	Plant and Machinery	14,000

Raju's wife loan	5,000	Furniture and Fixtures	2,000
Loan by Sanjay	7,500	Investment	5,000
General Reserve	1,250	Stock	3,000
Capitals:		Debtors	10,000
Raju	5,000	Less: provision	<u>500</u>
Sanjay	<u>4,000</u>		9,500
	9,000	Bank	5,750
		Profit and Loss	2,500
<b>Total</b>	<b>41,750</b>	<b>Total</b>	<b>41,750</b>

The firm was dissolved on March 31, 2023. As a result,

- Raju took over investments at an agreed value of Rs. 4,000 and agreed to pay his wife loan.
- Realization of assets is as follows: Stock Rs. 2,500, Debtors Rs. 9,250, Furniture and Fixture Rs. 2,250, Plant and Machinery Rs. 12,500
- Expenses of realisation were Rs. 300
- Creditors allowed 2.5% discount in full settlement.

Record necessary journal entries and close the books of the firm.

Q6. X and Y are partners in a firm with a profit-sharing ratio of 3:2 respectively. They decided to dissolve the partnership on June 1, 2022. On that date their capitals stood as Rs. 20,000 and Rs. 10,000, respectively. Amount owed by Y to the firm was Rs. 6,400 and there was a loan by X for Rs. 8,000; Creditors were Rs. 50,000 and cash Rs. 5,400. The remaining assets other than loan to Y and cash, realized Rs. 59,200. Realization expenses amounted to Rs. 2,000.

Prepare the Balance Sheet of the firm as on June 1, 2022 and necessary ledger accounts to close the books of the firm.

Q7. Following is the Balance Sheet of Raman and Ramesh on March,31, 2022.

<i>Liabilities</i>	<i>Amount</i>	<i>Assets</i>	<i>Amount</i>
	<i>(Rs.)</i>		<i>(Rs.)</i>
Sundry creditors	20,000	Goodwill	10,000
Bills payable	20,000	Building	25,000

Bank overdraft	10,000	Plant and fittings	25,000
Mrs. Raman's loan	20,000	Investment	15,300
Ramesh's loan	10,000	Stock	8,700
Investment fluctuation Fund	2,800	Debtors	17,000
Employee's provident Fund	1,200	Less provision for bad debts	2,000
General reserve	2,000	Bills receivable	10,000
Raman's capital	20,000	Cash at bank	13,000
Ramesh's capital	20,000	Profit and loss	4,000
<b>Total</b>	<b>1,26,000</b>	<b>Total</b>	<b>1,26,000</b>

The firm was dissolved on March,31, 2022 and following was the position:

1. Raman agreed to pay off his wife's loan.
2. Debtors realized Rs. 12,000.
3. Ramesh took away all the investments at Rs. 12,000.
4. Other assets realized as follows:

Plant and Fittings	20,000
Building	50,000
Goodwill	6,000
5. Sundry creditors and Bills payable were settled at 5% discount.
6. Raman accepted stock at Rs 8,000 and Ramesh took over bills receivable at 20% discount.
7. Realisation expenses amounted to Rs. 2,000.

Record journal entries and also prepare various ledger accounts.

Q8. A, B and C are partners, sharing profits equally. Their financial position is as under:

**Balance Sheet as at March 31, 2023**

<i>Liabilities</i>	<i>Amount</i> (Rs.)	<i>Assets</i>	<i>Amount</i> (Rs.)
Accounts Payable	20,000	Land and Buildings	50,000
Bank Loan	7,000	Office Equipment	5,000
B's Loan	20,000	Stock	40,000
General Reserve	18,000	Accounts Receivable	30,000
Capitals:		Investment	18,000
Rs.		Bank	6,000
A	27,000		
Rs.			
B	34,000		
Rs. <u>23,000</u>			
C	84,000		
<b>Total</b>	<b>1,49,000</b>	<b>Total</b>	<b>1,49,000</b>

Partners agreed to dissolve the firm on that date. You are given the following information regarding dissolution:

1. Investment was sold for Rs. 11,500.
2. Office equipment was taken over by C, at book value.
3. Bankers accepted stock worth Rs. 5,000 and the balance in cash.

4. The firm purchased 200 convertible debentures of a company in 2019. After sometime the investment was treated as bad and was written off. These debentures were found to be having a market value of Rs. 8,000 and were accepted by a creditor at this value.

5. Assets realized in the following manner:

Land and Buildings	Rs.	2,00,000
Stock	Rs.	30,000
Accounts Receivable	Rs.	20,000

6. All the liabilities were paid off. Accounts Payable allowed a discount of Rs. 200.

7. Realisation expenses amounted to Rs. 1,800.

You are required to prepare the realisation account, bank account and capital accounts of the partners.

## **CHAPTER-8: COMPANY ACCOUNTS- ACCOUNTING FOR SHARE CAPITAL**

### **Accounting for Share Capital**

#### **Multiple Choice Questions :**

Q1. Which of the following statements is true?

- (A) Authorised Capital = Issued Capital
- (B) Authorised Capital > Issued Capital
- (C) Paid up Capital > Issued Capital
- (D) None of the above

Q2. Nominal Share Capital is

- (A) that part of authorised capital which is issued by the company
- (B) the amount of capital which is subscribed by shareholders
- (C) the amount of capital which is actually paid by the shareholders
- (D) the maximum amount of share capital which a company is authorised to issue

Q3. If vendors are issued fully paid shares of Rs. 1,50,000 in consideration of net assets of Rs.1,75,000, the balance of Rs. 25,000 will be credited to :

- (A) Statement of Profit & Loss
- (B) Goodwill Account
- (C) Security Premium Reserve Account
- (D) Capital Reserve Account

Q4. Amount of Calls in Arrears is shown in the Balance Sheet

- (A) as deduction from issued capital
- (B) as deduction from subscribed capital
- (C) as addition to subscribed capital
- (D) on the assets side

Q5. Pro-rata allotment of shares is made when there is :

- (A) Under subscription
- (B) Oversubscription
- (C) As and when desired by directors
- (D) None of the above

Q6. A Company purchased a Machinery for Rs. 15,00,000 out of which Rs. 3,00,000 were paid in cash. Balance amount was paid by issue of equity shares of Rs. 10 each at 25% premium. How many shares will be issued by the Company:

- (A) 1,00,000 Shares
- (B) 80,000 Shares
- (C) 1,20,000 Shares
- (D) 96,000 Shares

Q7. Preference shareholders have

- (A) Preferential right as to dividend only
- (B) Preferential right in the management
- (C) Preferential right as to repayment of capital at the time of liquidation of the company
- (D) Preferential right as to dividend and repayment of capital at the time of liquidation of the Company

Q8. A company cannot issue:

- (A) Redeemable Equity Shares
- (B) Redeemable Preference Shares
- (C) Redeemable Debentures
- (D) Fully Convertible Debentures

Q9. Which of the following is not shown under the heading 'Share Capital' in a Balance Sheet:

- (A) Subscribed Capital
- (B) Issued Capital

(C) Reserve Capital

(D) Authorised Capital

Q10. If the premium on forfeited shares has already been received, then securities premium reserve account should be:

(A) Credited

(B) Debited

(C) No treatment

(D) Transferred to Capital Reserve A/c

Q11. Assertion: (A) Received amount of securities premium will not debited to securities premium reserve account, on forfeiture of shares.

Reason (R) Received amount of securities premium will be debited while writing off of certain type of capital loss or expenditure.

(a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)

b) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A)

(c) Assertion (A) is false, but Reason (R) is true

(d) Assertion (A) is true, but Reason (R) is false

Q12. Assertion (A) Equity shares does not carry fixed rate of dividend and they are the ultimate risk bearer.

Reason (R) Equity shareholders are getting dividend from residual part of profits and in the case of windup of the company, invested money will be refunded at the last.

(a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)

(b) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A)

(c) Assertion (A) is false, but Reason (R) is true

(d) Assertion (A) is true, but Reason (R) is false

Q13. Assertion (A) Cumulative preference share capital is the share capital in which unpaid amount of dividend to be paid in the next year along with unpaid amount of dividend of previous year.

Reason (R) Participative preference share capital holders have right to participate in the decision making activities relating to their interest.

(a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)

(b) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A)

(c) Assertion (A) is false, but Reason (R) is true

(d) Assertion (A) is true, but Reason (R) is false

**Short answer type questions:**

Q1. X Ltd takeover the business of Y Ltd with the following assets and liabilities:

Sundry Assets: Rs. 6,50,000 Other

Liabilities: Rs. 50,000

X Ltd immediately paid ₹ 1,50,000 by promissory note for two months and the balance by issue of 5,000 equity shares of ₹ 100 each for purchase consideration of running business to Y Ltd. Pass necessary Journal Entries in the books of X.

Q2. 12,000 shares of Rs. 100 each forfeited due to non payment of Rs. 40 per share. First & final call of Rs. 30 per share not yet made. These shares were reissued at Rs. 80 per share for Rs. 70 per share. Pass necessary Journal Entries for forfeiture and reissue of shares.

Q3. Record the journal entries for forfeiture and reissue of shares in the following cases:

(a) R Ltd. forfeited 50 shares of Rs.10 each, Rs.7 called up on which the shareholder had paid application and allotment money of Rs.5 per share. Out of these, 15 shares were reissued to Ramesh as Rs.7 per share, paid up for Rs.8 per share.

(b) S Ltd. forfeited 70 shares of Rs.10 each, Rs.8 called up issued at a premium of Rs.2 per share for non-payment of allotment money of Rs.5 per share (including premium). Out of these, 60 shares were re-issued to Ajay as Rs.8 called up for Rs.10 per share.

Q4. Raj Ltd. is registered with an authorized capital of Rs.5,00,00,000 divided into shares of Rs.100 each. The company issued 3,00,000 shares to the vendor for building purchased and 2,00,000 shares were issued to the public. The amount was payable as follows:

On application and allotment-Rs.20 per share On first call-Rs.50 per share

On second and final call- The balance

All calls were made and were duly received except on 100 shares held by Naresh, who failed to pay the second and final call. Her shares were forfeited.

Present the 'Share Capital' in the Balance Sheet of the company. Also prepare 'Notes to Accounts'

Q5. On 31<sup>st</sup> May,2023, the first call of Rs.2 per share became due on 25,000

equity shares allotted by Mukesh Ltd. 'M' a holder of 5000 shares did not pay the first call money. 'Q' a holder of 1500 shares paid the second and final call of Rs.4 per share along with the first call.

Pass the necessary journal entry for the amount received by opening calls-in-arrears and calls-in-advance account in the books of the company.

**Long answer type questions:**

Q1. Sun Ltd issued 2,50,000 shares of ₹ 100 each at 20% premium through, payable as under:

On Application: ₹ 40 (including 10% premium) per share  
On Allotment: ₹ 40 (including 10% premium) per share  
On First & Final Call: Balance

Share was subscribed for 3,50,000 shares. 50,000 share applications were rejected with letter of regret and pro-rata allotment was made to remaining share applicants. All money was duly received except from Rahim, allotted to whom 15,000 shares failed to pay allotment and calls.

These shares were forfeited and out of which 12,000 shares reissued at ₹ 75 per share fully paid. Pass necessary Journal Entries.

Q2. M Ltd. with an authorised capital of ₹ 1,50,000 divided into 15,000 Shares of Rs. 10 each, issued the entire amount of the shares payable as:

Rs. 5 on application (including premium Rs. 2 per share),  
Rs. 4 on allotment, and the balance  
on call.

All share money is received in full with the exception of the allotment money on 300 shares and the call money on 500 shares (including the 300 shares on which the allotment money has not been paid).

The above 500 shares are duly forfeited and 400 of these (including the 200 shares on which call money has not been paid) are reissued at ₹ 8 per share fully paid-up. Pass journal entries.

Q3. X Ltd.' invited applications for reissuing 10,000 equity shares of Rs.100 each at a premium of Rs.100 per share. The amount was payable as follows: On application and allotment-Rs.100 per share(including Rs.50 premium) On first and final call- The balance

The issue was fully subscribed. A shareholder holding, 500 shares paid the full share money with application. Another shareholder holding 200 shares failed to pay the first and final call money. His shares were forfeited. The forfeited shares were re-issued for Rs.19,000 as fully paid up.

Pass necessary journal entries for the above transactions in the books of the company.

Q4. 'Z Ltd.' invited applications for issuing 25,000 equity shares of Rs.10 each on which Rs.6 per share were called up, which were payable as follows:

On application- Rs.2 per share  
On allotment- Rs.1 per share  
On first call- Rs.3 per share

The issue was fully subscribed and the amount was received as follows: On 18,000 shares- Rs.6 per share

On 5,000 shares- Rs.3 per share  
On 2,000 shares- Rs.2 per share

The directors forfeited those shares on which less than Rs.6 per share were received.

The forfeited shares were re-issued at Rs.9 per share, as Rs.6 per share paid up.

Pass necessary journal entries for the above transactions in the books of the company.

## Chapter-9: ISSUE OF DEBENTURES

### Multiple choice questions:

Q.1 Debenture holders are:

- a) owners of the company
- b) debtors of the company
- c) creditors of the company
- d) promoters of the company

Q.2 Which of the following statements is false?

- a) at maturity, debenture holders get back their money.
- b) debentures can be forfeited for non-payment of call money.
- c) in company's balance sheet, debentures are shown under the head  
long term borrowings
- d) interest on debentures is a charge against profits

Q.3 Discount on issue of debentures is in the nature of:

- a) revenue loss
- b) capital loss
- c) deferred revenue expenditure
- d) none of the above

Q.4 On issue of debentures as a collateral security, which account is credited?

- a) debentures account
- b) bank loan account
- c) debenture holdings account
- d) debenture suspense account

Q.5 Interest on debentures issued as a collateral security is paid on:

- a. nominal value of debentures
- b. no interest is paid
- c. face value of debentures

d. paid up value of debentures

Q.6 Premium on redemption of debentures account is:

- a) personal account
- b) real account
- c) nominal account
- d) all of the above

Q.7 If vendors are issued debentures of rs.4,40,000 in consideration of assets of rs.5,00,000 and liabilities of rs.1,00,000 the balance of rs.40,000 will be debited to:

- a) general reserve account
- b) capital reserve account
- c) goodwill account
- d) statement of profit and loss

Q.8 Globe Ltd. issues 20,000, 9% debentures of rs.100 each at a discount of 5%

Redeemable at the end of 5 years at a premium of 6%. For what amount

‘Loss on issue of debentures account’ will be debited?

- a) rs.1,00,000
- b) rs.1,20,000
- c) rs.2,80,000
- d) rs.2,20,000

Q.9 Fill in the blanks:

- 1) Interest on debentures is calculated on the \_\_\_\_\_ value of debentures.
- 2) Premium of redemption of debentures is a \_\_\_\_\_ account
- 3) Journal entry with respect to premium payable on redemption of debentures is passed at the time of \_\_\_\_\_ of debentures.
- 4) Debentures secured by a charge on the assets or property of the company are known as \_\_\_\_\_ debentures.

Q.10 State true/false:

- 1) debentures cannot be issued at premium.
- 2) Interest on debentures is a charge and not an appropriation.
- 3) The securities premium is a capital receipt and not a revenue receipt.
- 4) The maximum limit of discount on issue of debentures is 10%.

Q11. Assertion(A): Debentures cannot be issued at discount whereas shares can be issued at discount.

Reason(R): The companies Act 2013 does not allow issue of shares at discount unless they are issued as ESOP it does not restrict issue of debenture at discount.

In the context of above statements, which of the following is correct?

- (A) Assertion (A) and Reason (R) are correct, but Reason (R) is not the correct explanation of Assertion (A).
- (B) Both Assertion (A) and Reason(R) are correct, and Reason(R) is the correct explanation of Assertion (A).
- (C) Assertion (A) is incorrect, but R is correct.
- (D) Both Assertion (A) and Reason(R) are incorrect.

**Very short questions:**

- Q.12 What is meant by a debenture?
- Q.13 What is meant by Issue of Debentures for Consideration other than Cash?
- Q.14 What is meant by Issue of Debentures as Collateral Security?
- Q.15 What is the nature of Interest on Debentures?
- Q.16 Give any two points of distinction between a share and a debenture?
- Q.17 Why would an investor prefer to invest in the debentures of a company rather than in its shares?
- Q.18 Mention any two differences between 'Premium on Issue of Debentures' and 'Premium on Redemption of Debentures'.
- Q.19 Why is premium on the issue of debentures considered a capital profit?
- Q.20 What are the alternatives available to a company for the allotment of debentures when there is over-subscription of debentures?

**Short questions:**

Q.21 Govind Ltd. issued 5,000, 12% debentures of Rs.100 each, at par, payable as follows:

On application Rs.20; On allotment Rs.20; On first call Rs.30; and On final call Rs.30.

Public applied for 6,000 debentures. Application for 4,500 debentures were accepted in full. Applications for 800 debentures were allotted 500 debentures and applications for 700 debentures were rejected. Money overpaid on application was utilized towards allotment.

Pass journal entries assuming that all moneys due were duly received, except final call on 200 debentures.

Q.22 Rose Ltd. issued 10,000 at 10% debentures of Rs.100 each, payable as follows:

Rs.10 on application, Rs.20 on allotment, Rs.30 on first call and Rs.40 on second and final call.

Arun, who holds 500 debentures failed to pay the amount due on allotment. He however, pays this amount with the first call money. Dinesh, who holds 800 debentures paid all the calls in advance on allotment. Pass entries.

Q.23 Traditional products Ltd. offered 2,00,000, 8% debentures of Rs.500 each at a premium of 10% payable as Rs.200 on application (including premium) and balance on allotment, redeemable at par after 8 years. But applications are received for 3,00,000 debentures and the allotment is made on pro-rata basis. All the money due on application and allotment is received. Record necessary entries regarding issue of debentures.

Q.24 1) On 15-2-2017 A Ltd. invited applications for issue of 1,00,000 9% debentures of Rs.100 each at a discount of 6% redeemable at par after 3 years. The full amount was payable on application and the debentures were issued on 15-3-2017. Pass the journal entries for the above transactions.

2) R Ltd. issued 10,000, 12% debentures of Rs.100 each at a discount of 5%. Pass journal entries.

Q.25 R Limited took over assets of Rs.5,60,000 and creditors of Rs.80,000 from S Limited. R Limited issued 8% debentures of Rs.20 each at a premium of 20% as purchase consideration, to S Limited.

Calculate the amount of purchase consideration, number of debentures issued by R Limited and pass the necessary journal entries in the books of R Limited from the above mentioned informations.

Q.26 Y Ltd., purchased plant and machinery for Rs.2,00,000 from Z Ltd. 20% of the amount was paid by Y Ltd. by accepting a bill of exchange in favour of Z Ltd. and the balance was paid by issuing 6% debentures of Rs.1,000 each at a premium of 25%. Journalise the above transactions.

Q.27 Meghnath Limited took a loan of Rs.1,20,000 from a bank and deposited 1,400, 8% debentures of Rs.100 each as collateral security along with primary security worth Rs.2 lakhs. Company again took a loan of Rs.80,000 after two months from a bank and deposited 1,000, 8% debentures of Rs.100 each as collateral security. Record necessary journal entries. How will you show the issue of debentures and bank loan in the balance sheet of the company.

Q.28 X Limited issued 5,000, 12% debentures of Rs.100 each on 1<sup>st</sup> April,2010 at par redeemable at a premium of 5%. Interest on these debentures is paid half-yearly, i.e., on 30<sup>th</sup> September and 31<sup>st</sup> March. Pass necessary journal entries for the year ended 31<sup>st</sup> March,2011 assuming income tax is deducted @ 20% on the amount of interest.

Q.29 On 2-3-2016, L and B Ltd. issued 635, 9% debentures of Rs.500 each.

Pass necessary journal entries for the issue of debentures in the following situations.

- a) When debentures were issued at 5% discount, redeemable at 10% premium.
- b) When debentures were issued at 12% premium, redeemable at 6% premium.

Q.30 Beeta Ltd. issued 5,000, 9% debentures of Rs.500 each. Pass the necessary journal entries for the issue of debentures in the books of the company in the following cases:

- 1) When debentures are issued at 10% premium and redeemable at par.

- 2) When the debentures are issued at par and redeemable at 10% premium.
- 3) When debentures are issued at 5% premium and redeemable at 10% premium.
- 4) When debentures are issued at a premium of 25% to the vendors for machinery purchased for Rs.6,25,000.

- Q.31 A company purchased assets of the book value of Rs.6,00,000 and took over liabilities of Rs.1,50,000 from Golden Ltd. it was agreed that the purchase consideration settled at Rs.4,80,000 be paid by issuing debentures of Rs.100 each at a premium of 10%. It was further agreed that any fraction of the debenture be paid in cash. Give journal entries in the books of purchasing company.
- Q.32 X Ltd. took over assets of Rs.5,00,000 and liabilities of Rs. 1,00,000 of another company at an agreed price of Rs.3,80,000. The purchase consideration was discharged by issuing debentures of Rs.100 each at a discount of 10%. It was agreed that any fraction of the debenture be paid in cash. Give journal entries in the books of X Ltd.
- Q.33 On 1<sup>st</sup> April,2012, a limited company issued 11% RS.10,00,000 debentures at a discount of 6%, repayable at the end of 5years at par. Pass journal entries for the issue of debentures and prepare Discount on Issue of Debentures Account for five years. Assume that the accounts are closed on 31<sup>st</sup> March each year.
- Q.34 Fill in the blanks in the following journal entries:

Date	Particulars	L.F.	Dr.(Rs.)	Cr.(Rs.)
	Sundry assets A/c Dr.		18,00,000	
	..... Dr.		—	
	To sundry creditors A/c			2,00,000
	To.....			—
	(business of Rohit and Co. purchased for a consideration of Rs.20,00,000)			
	..... Dr.			
	..... Dr.		20,00,000	
	To 8% debentures A/c		—	
	(Paid to Rohit and Co. by issue of ..... 8% debentures of Rs.150 each at a discount of Rs.50 per debenture)			—
			_____	

## Chapter-1: FINANCIAL STATEMENTS OF A COMPANY

### Multiple Choice Questions:

Q1. Debentures are included in

- (a) current liabilities (b) fixed assets  
(c) current assets (d) None of these

Q2. The financial statements of a business enterprise include

- (a) Balance Sheet  
(b) Statement of Profit and Loss account  
(c) Cash flow statement  
(d) All of the above

Q3. Indicate the item which appears as Short-term Provision:

- (a) Provision for Expenses; (b) Interest Accrued but not due on borrowings  
(c) Employees' Provident Fund; (d) None of the above.

Q4. Dividend is paid on:

- (a) Authorised Capital; (b) Issued Capital;  
(c) Subscribed Capital that is Paid-up; (d) None of the above.

Q5. Debentures are shown in the Balance Sheet under the head of:

- (a) Other Long-term Liabilities; (b) Current Liabilities  
(c) Long term-Borrowings (d) Long-term Provisions

Q6. 'Claims against the Company not acknowledged as debts' is shown under:

- (a) Current Liabilities (b) Contingent Liabilities  
(c) Non-Current Liabilities (d) Capital Commitments

Q7. Which of the following are the sub headings of Current Liabilities?

- i. Short term borrowings  
ii. Trade payables  
iii. Short term provisions  
iv. Short term Investment  
v. Other current liabilities  
vi. Short term loans and advances

Select the correct code:

- (a) i, ii, iii, v (b) i, iv, v, vi  
(c) iii, iv, v, vi (d) ii, iv, v, vi

Q8. Match the following:

1. Short term loan (i) Other current liabilities  
2. Short term loans and advances (ii) Short term borrowing  
3. Debentures (iii) Long term borrowings  
4. Debentures redeemable during current year (iv) Current investments

Select the correct code:

- (a) 1 – iii, 2 – ii, 3 – iv, 4 – i (b) 1 – iii, 2 – iv, 3 – ii, 4 – i  
(c) 1 – ii, 2 – iv, 3 – iii, 4 – i (d) 1 – i, 2 – ii, 3 – iii, 4 – i

Q9. **Assertion (A)** 'Interest accrued but not due on borrowings' is shown under 'Other current liabilities'.

**Reason (R)** All liabilities, of which payment is expected to be made within 12 months from the date of Balance Sheet, shall be treated as Current Liabilities.

- (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
- (b) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A)
- (c) Assertion (A) is false, but Reason (R) is true
- (d) Assertion (A) is true, but Reason (R) is false

**Very short answer Type Questions:**

Q1. How will you show the following items in the Balance sheet of a company.

- (i) Loose tools
- (ii) Unpaid Dividend

Q2. Under what heads the following items on the Liabilities side of the Balance sheet Of a company will be presented

- (i) Provision for taxation.
- (ii) Bills Payable

Q3. State any two items which are shown under the head 'Reserves and Surplus' in company balance sheet.

**Short answer Type Questions:**

Q4. Give the format of the Balance sheet of a company(main headings only) as per the requirement of Schedule VI of the companies Act.1956.

Q5. Give the heading under which the following items will be shown in a company's Balancesheet:

- (i) Patents.
- (ii) Outstanding Salaries
- (iii) Sundry Debtors
- (iv) Securities Premium.
- (v) Railway sliding.

Q6. List any three items that can be shown as contingent Liabilities in a company's Balancesheet.

Q7. Under which major headings and sub headings, the following items will be presented in the balance sheet of a company as per Schedule VI Part I of the Companies Act, 1956?

- (a) Loans provided repayable on demand
- (b) Goodwill
- (c) Copyrights
- (d) Debentures
- (e) Cheques
- (f) General Reserve
- (g) Stock of finished goods

## **CHAPTER 2 & 3: FINANCIAL STATEMENT ANALYSIS AND TOOLS OF FINANCIAL STATEMENT ANALYSIS**

### **Multiple Choice Questions :**

Q1. External users of financial statements are

- (a) Bankers and lenders
- (b) Creditors
- (c) Both (a) and (b)
- (d) Director of company

Q2. The most commonly used tools for financial analysis are:

- (a) Comparative Statements
- (b) Common size Statements
- (c) Ratio analysis
- (d) All of the above

Q3. Dynamic Analysis also known as:

- (a) horizontal analysis
- (b) vertical analysis
- (c) ratio analysis
- (d) all of the above

Q4. **Assertion (A)** In vertical analysis financial statements for a single year or on a particular date are reviewed and analyzed.

**Reason (R)** Such type of analysis is based on data of a single year. As such it is also called static analysis.

(a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of

Assertion (A)

(b) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of

Assertion (A)

(c) Assertion (A) is false, but Reason (R) is true

**(d)** Assertion (A) is true, but Reason (R) is false

### **Very short answer Type Questions:**

1. What is the interest of Shareholders in the analysis of Financial Statements?
2. Name any two tools of Financial Analysis.
3. What is Horizontal Analysis?
4. Give the example of Horizontal Analysis.
5. What is Vertical Analysis?
6. Give the example of Vertical Analysis

### **Short answer Type Questions:**

1. Explain any three objectives of financial statement analysis.

2. State any three limitations of financial statement analysis.

3. Prepare Comparative income statement from the following information for the years ended March 31, 2022 and 2023.

Particulars	2023(Rs.)	2022(Rs.)
1. Net Sales	10,00,000	15,00,000
2. Cost of Goods Sold	60% of sales	60% of sales
3. Direct Expenses	10,000	12,000
3. Indirect Expenses	10% of Gross profit	10% of Gross Profit
4. Income Tax rate	50%	60%

Interest on Investments @ Rs 40,000 p.a

4. Prepare Common Size income statement from the following Information for the year's ended March 31, 2022 and 2023.

Particulars	2023(Rs.)	2022(Rs.)
1. Net Sales	8,00,000	10,00,000
2. Cost of Goods Sold	60% of sales	60% of sales
3. Indirect Expenses	10% of Gross profit	10% of Gross Profit
4. Income Tax rate	50%	60%

## **CHAPTER – 4: ACCOUNTING RATIOS**

### **Multiple Choice Questions :**

Q1. Quick ratio is also known as:

- A) Liquid ratio
- B) Acid test ratio
- C) Working capital ratio
- D) Inventory turnover ratio

**Choose the correct option from following:**

- (a) A and B      (b) A and C
- (c) C and B      (d) C and D

Q2. Current ratio is 2:1 then equal increase in current assets and current liabilities would result in

- (a) no change in current ratio:
- (b) increase in current ratio
- (c) decrease in current ratio
- (d) current ratio will be 1:1.

Q3. If selling price is fixed 25% above the cost, the Gross Profit Ratio will be:

- (a) 15%
- (b) 30%
- (c) 50%
- (d) 20%

Q4. The two basic measures of liquidity are:

- (a) inventory turnover and current ratio
- (b) current ratio and acid test ratio
- (c) gross profit ratio and operating ratio
- (d) current ratio and average collection period

Q5. Equity share capital Rs. 22,50,000 Reserve and Surplus ₹ 7,50,000 Total Assets ₹ 75,00,000.

Proprietary Ratio?

- (a) 40%      (b) 33.3%
- (c) 20%      (d) 60%

Q6. Total Assets Rs. 7,20,000 Total Debt Rs. 2,80,000 Current Liabilities Rs. 40,000.

Total Assets to Debt Ratio is:

- (a) 1:5:1      (b) 2:5:1
- (c) 3:5:1      (d) 3:1

Q7. The \_\_\_\_\_ is a measure of liquidity which excludes \_\_\_\_\_ from liquid asset:

- a. current ratio, trade receivable
- b. liquid ratio, trade receivable
- c. current ratio, inventory
- d. liquid ratio, inventory

Q8. Capital employed means:

- (a) Net Fixed Assets
- (b) Current Asset-Current Liabilities
- (c) Share Capital
- (d) Fixed Assets + Current Assets-Current Liabilities

Q9. **(A)Assertion:** A low current ratio indicates that the business will not be able to pay its short-term debt on time

**Reason:** Current Ratio = Current Assets(Excluding Inventory and Prepaid Expenses)/Current Liabilities

- (a) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (b) Both (A) and (R) are true and (R) is not the correct explanation of A
- (c) (A) is true, but (R) is false
- (d) (A) is false, but (R) is true.

Q10. **(A)Assertion:** Due to cash sale of a computer machinery, the current ratio will increase without any change in the current liabilities.

**(R)Reason:** Current Ratio = Current Assets/Current Liabilities

- (a) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (b) Both (A) and (R) are true and (R) is not the correct explanation of A
- (c) (A) is true, but (R) is false
- (d)** (A) is false, but (R) is true

### Unsolved Practicals :

Q1. Current ratio of Y Ltd. is 1.5 at present. In future it want to improve this ratio to 2. Suggest any two accounting transaction for improving the current ratio.

Q2. State one transaction which results in an increase in 'liquid ratio' and no change in 'current ratio'. Q3.

Why stock is excluded from liquid assets?

Q3. Quick ratio of a company is 1.5 :1. State giving reason whether the ratio will improve, decline or Not change on payment of dividend by the company.

Q4. State one transaction which result in a decrease in 'debt-equity ratio' and no change in 'current Ratio'.

Q5. Suresh Limited has a current ratio 4.5:1 and quick ratio 3:1; if the stock is Rs. 36,000, calculate current liabilities and current assets.

Q6. Cost of Goods Sold is Rs. 1,50,000. Operating expenses are Rs. 60,000. Sales is Rs. 2,60,000 and Sales Return is Rs. 10,000. Calculate Operating Ratio.

Q7. Calculate debt equity ratio from the following information:

Total Assets Rs. 15,00,000  
Current Liabilities Rs. 6,00,000  
Total Debts Rs. 12,00,000

Q8. From the following information, Calculate Current Ratio and Liquid Ratio.

Equity Share Capital Rs. 24,000 , 5% Debentures Rs.9,000 , Buildings Rs.45,000, Profit and Loss Rs.6,000, Bank Overdraft Rs.6,000, Creditor Rs.23,400 , Stock Rs.12,000 , Debtors Rs.9,000 , Cash in Hand Rs.2,280 , Prepaid Expenses Rs.720 , Provision for Taxation Rs.600

Q9. Calculate following ratios from the following information:

(i) Current ratio (ii) Acid test ratio (iii) Operating Ratio (iv) Gross Profit Ratio  
Current Assets Rs. 35,000  
Current Liabilities Rs. 17,500  
Stock Rs. 15,000  
Operating Expenses Rs. 20,000  
Revenue from operation Rs. 60,000  
Cost of Revenue from operation Rs. 30,000

Q10. Compute Gross Profit Ratio, Working Capital Turnover Ratio, Debt Equity Ratio and Proprietary Ratio from the following:

Paid-up Capital Rs. 5,00,000  
Current Assets Rs. 4,00,000  
Revenue from operation Rs. 10,00,000  
13% Debentures Rs. 2,00,000  
Current Liability Rs. 2,80,000  
Cost of Goods Sold Rs. 6,00,000

Q11. From the following information calculate Gross Profit Ratio, Stock Turnover Ratio and Debtors Turnover Ratio.

Revenue from operation Rs. 3,00,000  
Cost of Goods Sold Rs. 2,40,000  
Closing Stock Rs. 62,000  
Gross Profit Rs. 60,000  
Opening Stock Rs. 58,000  
Debtors Rs. 32,000

Q12. From the following information calculate

i. Debt-Equity Ratio

Interest Coverage Ratio

ii. Proprietary Ratio.

Equity Share Capital Rs. 2,00,000, General Reserve Rs.1,20,000  
5% Pref. Share Capital Rs.60,000, Fixed Assets Rs.5,05,000, Current Assets Rs. 1,20,000.  
Current Liability Rs.40,000, 10% Loan Rs. 5,00,000. Tax paid during the year Rs.30,000  
Profit for the current year after interest and tax Rs 90,000

Q13. From the following information calculate Return on investment (or Return on Capital Employed).  
Share Capital Rs. 0,000, Reserve & Surplus Rs.25,000, Net Fixed Assets Rs.2,25,000,  
Non-Current Trade Investment Rs. 25,000,  
12% Long Term Borrowings Rs. 2,00,000, Current Assets Rs.1,10,000. Current Liability  
Rs.85,000. Net Profit before Tax Rs.60,000

## **CHAPTER – 5: CASH FLOW STATEMENT**

### **Multiple Choice Questions :**

Q1. Which of the following is an example of cash flow from Operating Activities?

- (a) Issue of Shares
- (b) Purchase of Machinery
- (c) Purchase of goods for Cash
- (d) Payment of Dividend

Q2. Following is an example of cash flow from financing activity:

- (a) Payment of dividend
- (b) Purchase of fixed asset
- (c) Cash received from costumer
- (d) Receipt of dividend on investment

Q3. Cash deposited in bank will be classified as:

- (a) Cash Flow from Operating Activities
- (b) Cash Flow from Investing Activities
- (c) Cash Flow from Financing Activities
- (d) No Cash Flow

Q4. Which of the following is an investing activity for a financial enterprise?

- (a) Dividend received on investments
- (b) Dividend paid
- (c) Issue of debentures
- (d) Purchase of Land and Building

Q5. Which of the following transactions will result into 'Flow of Cash':

- (a) Deposited Rs. 10000 into bank.
- (b) Withdrew cash from bank Rs. 14500.
- (c) Sale of Machinery of the book value of Rs. 74000 at a loss of Rs. 9000.
- (d) Converted Rs. 200000 9% debentures into equity shares.

Q6. For calculating operating profit which will be added to net profit before tax:

- (a) Preliminary Expenses Written off
- (b) Depreciation
- (c) Loss on Sale of Asset
- (d) All of the Above

Q7. Where will you show purchase of Goodwill in Cash Flow Statement?

- (a) Cash Flow from Operating Activities
- (b) Cash Flow from Investing Activities
- (c) Cash Flow from Financing Activities
- (d) Cash Equivalent

Q8. Interest received by a finance company is classified under which kind of activity while preparing a Cash flow statement?

- (a) Cash Flow from Operating Activities
- (b) Cash Flow from Investing Activities
- (c) Cash Flow from Financing Activities
- (d) No Cash Flow

Q9. Which of the following item is not considered as Cash Equivalents?

- (a) Short term Deposits in Bank
- (b) Commercial Papers
- (c) Treasury Bills
- (d) Debentures

Q 10. Given below are two statements;

Assertion (A) - The income statement and the balance sheet are financial statements that show the cash in flows and out flows of a company.

Reason (R) - The general purpose of financial statements is to show the financial position and performance of a company.

- a) Both A and R are true, and R is the correct explanation of A.
- b) Both A and R are true, but R is not the correct explanation of A
- c) A is true, but R is false.
- d) A is false, but R is true

Q11. Assertion (A) – Depreciation is added to net profit before tax.

Reason (R) – Depreciation is a non cash expense.

- a) Both A and R are true, and R is the correct explanation of A.
- b) Both A and R are true, but R is not the correct explanation of A
- c) A is true, but R is false.
- d) A is false, but R is true

**Very Short answer Type Questions:**

Q1. Under which Accounting Standard , cash flow statement is prepared ?

Q2. Why do we add back depreciation to net profit while calculating cash flow from operating activities?

Q3. How will you classify loans given by Raj Finance Ltd. while preparing cash flow statement?

Q4. How will you classify deposits by customers in ICICI Bank while preparing cash flow statement?

Q5. Where will you show purchase of computer in cash flow statement?

Q6. Give two examples of ‘non cash transactions ‘.

Q7. A company receives a dividend of Rs. 2 Lakhs on its investment in other company's share. Will it be Cash inflow from operating or investing activities in case of a -

- (i) Finance Company.
- (ii) Non-Finance Company.

**Unsolved Practical Problems:**

Q8. From the following information, prepare Cash Flow Statement for Ravi Ltd.

**Balance Sheet of Ravi Ltd., as on March 31, 2023**

<i>Particulars</i>	<i>Not e No .</i>	<i>31st March 2023 (Rs)</i>	<i>31st March 2022 (Rs)</i>
<b>I. Equity and Liabilities</b>			
1. Shareholders' Funds			
a) Share capital	1	7,00,000	5,00,000
b) Reserve and surplus	2	3,50,000	2,00,000
2. Non-current Liabilities			
Long-term borrowings		50,000	1,00,000
3. Current Liabilities			
a) Trade payables		45,000	50,000
b) Other current liabilities		7,000	5,000
c) Short-term provisions(Provision for taxation)		1,20,000	80,000
Total		12,72,000	9,35,000
<b>II. Assets</b>			
1. Non-current assets			
a) Fixed assets			
(i) Tangible assets	3	5,00,000	5,00,000
(ii) Intangible assets	4	95,000	1,00,000
b) Non-current investments		1,00,000	-
2. Current assets			
a) Inventories		1,30,000	50,000
b) Trade receivables		1,20,000	80,000
c) Cash and cash equivalents	5	3,27,000	2,05,000
Total		12,72,000	9,35,000

Notes to Accounts:

<i>Particulars</i>	<i>31st March 2023 (Rs)</i>	<i>31st March 2022 (Rs)</i>
1. Equity Share Capital	7,00,000	5,00,000
2. Reserve and Surplus		
Surplus: i.e., Balance in Statement of Profit and Loss	3,50,000	2,00,000

Machinery	2,30,000	2,00,000
Furniture	2,70,000	3,00,000
	<u>5,00,000</u>	<u>5,00,000</u>
4. Intangible Assets		
Patents	95,000	1,00,000
5. Cash and cash equivalents		
i) Cash	27,000	5,000
ii) Bank balance	3,00,000	2,00,000
	<u>3,27,000</u>	<u>2,05,000</u>

Additional Information:

- Machinery costing Rs 80,000 was purchased.
- Loss on Sale of Machinery amounted to Rs 5,000.
- Depreciation of Rs 15,000 and Rs 3,000 charged on Machinery and furniture.

Q9. From the following Balance Sheets of X Ltd., prepare cash flow statement.

Particulars	Note No.	31st March 2023 (Rs)	31st March 2022 (Rs)
<b>I. Equity and Liabilities</b>			
1. Shareholders' Funds			
a) Share capital		15,00,000	10,00,000
b) Reserve and surplus (Balance in Statement of Profit and Loss)		7,50,000	6,00,000
2. Non-current Liabilities			
Long-term borrowings	1	1,00,000	2,00,000
3. Current Liabilities			
a) Trade payables		1,00,000	1,10,000
b) Short-term provisions (Provision for taxation)		95,000	80,000
<b>Total</b>		<u>25,45,000</u>	<u>19,90,000</u>
<b>II. Assets</b>			
1. Non-current assets			
a) Fixed assets			
(i) Tangible assets	2	10,10,000	12,00,000
(ii) Intangible assets (Goodwill)		1,80,000	2,00,000
b) Non-current investment		6,00,000	-

2. Current assets			
a) Inventories		1,80,000	1,00,000
b) Trade Receivables		2,00,000	1,50,000
c) Cash and cash equivalents	3	3,75,000	3,40,000
Total		25,45,000	19,90,000

Notes to Accounts:

<i>Particulars</i>	<i>31st March 2023 (Rs)</i>	<i>31st March 2022 (Rs)</i>
1. Long-term borrowings:		
i) Debentures	—	2,00,000
ii) Bank loan	1,00,000	2,00,000
	1,00,000	2,00,000
2. Tangible Assets		
i) Land and building	6,50,000	8,00,000
ii) Plant and machinery	3,60,000	4,00,000
	10,10,000	12,00,000
3. Cash and cash equivalents		
i) Cash in hand	70,000	50,000
ii) Bank balance	3,05,000	2,90,000
	3,75,000	3,40,000

Additional information:

- Proposed Dividend for the year 31<sup>st</sup> March,2023 was Rs 1,20,000 and for the year 31<sup>st</sup> March,2022 was Rs 1,50,000
- Income tax paid during the year Rs 15,000 .
- Land and building book value Rs 1,50,000 was sold at a profit of 10%.
- The rate of depreciation on plant and machinery is 10%.

Q10.. From the following Balance Sheet of X Ltd , Prepare Cash Flow Statement.

Particulars	Not e No.	31.03.2023 Rs.	31.03.2022 Rs.
<b>I. EQUITY AND LIABILITIES</b>			
1. Shareholders' Fund			
a) Share Capital	1	1800000	1200000
b) Reserve and Surplus	2	550000	480000
2. Non Current Liabilities:Long term Borrowings			
12% Debentures		450000	400000
3. Current Liabilities			
a) Short – term Borrowings			
b) Trade Payables (Creditors)		60000	110000
c) Short term Provisions ( Provision for Taxation)			
<b>TOTAL</b>		20000	28000
<b>II. ASSETS</b>		10000	12000
1. Non Current AssetsFixed Assets		<b>2890000</b>	<b>2230000</b>
2. Current Assets			
a) Inventories		1980000	1450000
b) Trade Receivables		400000	380000
c) Cash and Cash Equivalents		380000	280000
<b>TOTAL</b>		130000	120000
		<b>2890000</b>	<b>2230000</b>

Notes to Accounts:

Particulars	31.03.2023(Rs)	31.03.2022(Rs)
1. Share Capital:		
Equity Share	150000	1100000
Capital	0	100000
10% Preference Share Capital	300000	<b>1200000</b>
<b>TOTAL</b>	<b>1800000</b>	
2. Reserve and Surplus:General Reserve	180000	120000
Surplus i.e Balance in Statement of Profit and Loss	370000	360000
<b>TOTAL</b>	<b>550000</b>	<b>480000</b>

Additional information:

- Interim Dividend paid during the year for Rs. 60000.
- Tax was paid Rs 5000.
- New 12% Debentures were issued on 1<sup>st</sup> October,2022.

**BUSINESSSTUDIES**  
**CH-1 NATURE AND SIGNIFICANCE OF MANAGEMENT**

**OBJECTIVE TYPE QUESTIONS**

**A. MULTIPLE CHOICE QUESTION**

1. Efficiency is concerned with

- (a) Doing the right thing
- (b) Doing things right
- (c) Achieving end results
- (d) None of the above

2. Effectiveness relates to

- (a) Doing the right task
- (b) Completing activities
- (c) Achieving goals
- (d) All of the above

3. Rohan works as a production manager in Global Enterprises Limited. He has been given the task of getting 1000 units of hand woven table mats manufactured at the cost of ₹150 per unit within 10 days. In order to be acknowledged as an effective manager, he must ensure that

- (a) The cost of production does not exceed ₹150 per unit
- (b) The work is completed within 10 days even at higher cost per unit
- (c) The cost of production is less than ₹150 per unit
- (d) All of the above

4. Jay is working as a marketing manager in a company. Has been given the task of selling 100000 units of a product at the cost of ₹100 per unit within 20 days. He is able to sell all the units within the stipulated time, but had to sell last 1000 units at 20% discount in order to complete the target. In such a situation, he will be considered to be

- (a) An efficient manager
- (b) An effective manager
- (c) Both effective and efficient manager
- (d) None of the above

5. Management is said to be poor if it is

- (a) Efficient but ineffective
- (b) Effective but inefficient
- (c) Both inefficient and ineffective
- (d) All of the above

6. Tarang Enterprises Limited is planning to increase its sales by 30% in the next quarter. Identify the feature of management being highlighted in the given statement.

- (a) Management is all pervasive
- (b) Management is a goal oriented process
- (c) Management is a continuous process
- (d) All of the above

7. Management is equally important to run a political organisation as it is to run an economic organisation. Which feature of management is being reflected in the given statement?

- (a) Management is goal oriented
- (b) Management is multidimensional
- (c) Management is all pervasive
- (d) Management is a group activity

8. Management translates the works to be carried out in terms of goals to be achieved and assigns the means to achieve it. This statement relates to

- (a) Management of work
- (b) Management of people
- (c) Management of operations
- (d) All of the above

9. Which of the following statements highlights that management is a group activity?

- (a) Organisation is a collection of diverse individuals with different needs.
- (b) Achievement of common goal requires teamwork and co-ordination of efforts in a common direction.
- (c) Each member of the organisation may have different individual goals but they must travel together towards common goals.
- (d) All of the above

10. Keeping in view the changes in the consumer demands and preferences 'Tasitemaker Bakery' has reduced the sugar and fat content in its products. This approach of business shows that management is

- (a) An intangible force
- (b) A group activity
- (c) A dynamic function
- (d) A multidimensional activity

11. Management is considered to be an art because

- (a) The principles of management have universal validity
- (b) The principles of management have universal application
- (c) Different principles of management are brought into effect differently by different managers
- (d) It is not important for the practising managers to be a member of a professional association.

12. Which of the following statements is not relevant to the concept of "Management as an inexact science"?

- (a) The principles of management lack universal validity
- (b) The principles of management lack universal applicability
- (c) The principles of management have to be modified according to the given situation
- (d) Management involves dealing with human behaviour and outcomes cannot be predicted with utmost accuracy

13. The authority-responsibility relationships that exist within the organisation give rise to

- (a) Different functions within the organisation
- (b) Different levels in the organisation
- (c) Management as a multidimensional activity
- (d) Management as a group activity

14. Which of the following is not a designation related to top level management?
- President
  - Vice-President
  - Chairman
  - Production Manager
15. Which of the following is not a designation related to middle level management?
- Operations Head
  - Sales Manager
  - Chief Operating Officer
  - Divisional Manager
16. Which of the following is not a designation related to lower level management?
- Plant Superintendent
  - Supervisors
  - Section officers
  - Marketing Manager
17. Which of the following is a function of top level management?
- Ensuring quality of output
  - Assigning necessary duties and responsibilities to their departments
  - Taking responsibility for all the activities of the business and its impact on the society
  - Ensuring that the safety standards are maintained within the organisation.
18. Which of the following statements does not pertain to middle level management?
- They are responsible for all the activities of the operational managers.
  - They are responsible for the welfare and survival of the organisation.
  - The interpreter the policies made by top level managers
  - Co-operate with other departments for the smooth running of the organisation.
19. Which of the following statements is not true for lower level management?
- Analyse the business environment and its implications for the survival of the business.
  - Ensure the quality of the output
  - They strive to reduce the wastage of resources
  - They ensure that the safety standards are maintained within the organisation.
20. Identify the level of management which does not interact with the work force directly.
- Supervisory management
  - Operational management
  - First line managers
  - Middle level management
21. The main task of this level of management is to determine the overall organisational objectives and strategies for their realisation.
- Operational management
  - Middle level management
  - First line managers
  - Top level management
22. This level of management serves as a link between top level managers and first line managers.
- Supervisory level management

- (b) Operational management
- (c) Middle level management
- (d) None of the above

23. Organising as a function of management involves deciding

- (a) What activities and resources are required
- (b) Who will do a particular task
- (c) Where will it be done
- (d) All of the above

24. The function of management related to grouping of activities to be carried out into departments and creating management hierarchy is

- (a) Planning
- (b) Organising
- (c) Controlling
- (d) Directing

25. This function of management relating to laying down the foundation for carrying out the other functions of management successfully is

- (a) Organising
- (b) Staffing
- (c) Planning
- (d) Controlling

## **B. COMPREHENSION SUBJECTIVE TYPE QUESTIONS**

Q1. Josh Enterprises decides to have a meeting of all the key employees of different departments in the organisation. The main motive is to tell the employees to keep the target of 20% increase in sales as the main objective when they work throughout the year. The meeting is full of ideas regarding the employees and processes involved. Various plans are made to harness the potential of the employees and streamline the processes. However with the passage of a few days the external business environment checks the capability of the organisation to adapt to the situations. The company successfully comes out at the end of the year with flying colours.

What are the various characteristics of management you can find highlighted here? Also identify the lines in which these characteristics have been highlighted.

Q2. XYZ Ltd. is a management oriented company. Time and again all the employees learn from their seniors various ways of dealing with diverse situations. They are provided training whenever required. They are also given incentives both financial as well as non financial. The result is employees see their development in the organisation. The organisation tries to behave as a responsible constituent of society and always creates good quality products. It has a very good image in the market. The training modules are superb and the employees always try to find unique ways of providing solutions in the context of rapidly changing business environment. This has helped the organisation to adjust frequently in a very good manner.

Which importance of management is highlighted here? Also identify the lines.

Q3. Gold Land Pvt. Ltd. is a wheat producing company. Daily 5000 bags of wheat weighing 10 kg each are produced here. In comparison to the previous year this year has been less number of bags produced on a per day basis. The number is around 4500 which is less than the target of 5000 set by the company. The company however has been able to reduce the costs involved in comparison to last year's spending on the production and packaging of each bag. The quality of bags has also been up to the mark.

Identify the concept of management ignored here.

Q4. A floor manager of a mall is a very good manager as he utilizes all the functions of management to minimize cost of maintenance of his area. He directs all the staff members under him to follow the targets and advises them to put their efforts in the direction of achievement of these targets. Under his guidance the employees admit that they learn a lot and are able to meet their targets. This has led to the increase in their salaries. Identify the importance of management highlighted above.

Q5. ABCD Inc. is a company which deals with providing car service at home and on road. There are different departments in this company like Human Resources, Marketing, Finance, Research & Development and Operations. The top management of the company tries its level best to synchronize the activities of different departments in the best possible manner. The result is the increased efficiency and attainment of goals. However with the passing of time the size of the company has grown and now there are many branches of this company. The synchronization has turned more important with the increase in the size of the company and the number of employees. The Departmental Heads

of the company are specialists in their respective areas and the top management tries to work with them not with authority but by respecting their views on the subject. Their ego clashes are avoided to ensure smooth functioning of the organisation.

Identify the concept of management highlighted above. Write two benefits highlighted in the above paragraph of this concept.

### **C. ASSERTION AND REASON BASED QUESTION**

**Q.1** Read the following statement carefully – Assertion (A) and Reason (A) and choose the correct alternative:

**Assertion (A):** Management is called an Exact Science.

**Reason(R):** Management deals with complex human behavior, which cannot be determined with accuracy.

- a) Both Assertion (A) and Reason (A) are true and Reason (A) is the correct explanation of Assertion (A).
- b) Both Assertion (A) and Reason (A) are true and Reason (A) is not the correct explanation of Assertion (A).
- c) Assertion (A) is true, but Reason (A) is false.
- d) Assertion (A) is false, but Reason (A) is true.

**Q.2** Read the following statement carefully – Assertion (A) and Reason (A) and choose the correct alternative:

**Assertion (A):** Management is considered as a tangible force.

**Reason(R):** Management cannot be seen, felt and touched.

- a) Both Assertion (A) and Reason (A) are true and Reason (A) is the correct explanation of Assertion (A).
- b) Both Assertion (A) and Reason (A) are true and Reason (A) is not the correct explanation of Assertion (A).
- c) Assertion (A) is true, but Reason (A) is false.
- d) Assertion (A) is false, but Reason (A) is true.

## **CHAPTER 2**

### **PRINCIPLES OF MANAGEMENT**

#### **A. MULTIPLE CHOICE QUESTIONS:**

1. Which of the following statements is true with reference to principles of management?
  - (a) The principles of management have evolved.
  - (b) The principles of management are yet to be evolved.
  - (c) The principles of management are in the continuous process of evolution.
  - (d) None of the above.
2. By profession, F .W Taylor was a
  - (a) Mechanical engineer
  - (b) Mining engineer
  - (c) Psychologist
  - (d) Human resource officer
3. The principles of pure science is considered to be \_\_\_\_\_ in nature.
  - (a) Flexible
  - (b) Rigid
  - (c) Creative
  - (d) None of the above

4. Which of the following statements best defines the techniques of management?
- It is a set of guidelines to take decisions and actions.
  - It is a procedure which involves a series of steps to be taken.
  - They are general rules for behaviour of individuals.
  - None of the above.
5. The principles of management have been developed on the basis of
- Observation
  - Experimentation
  - Personal experiences of the manager
  - All of the above
6. Which of the following statements is/are true with reference to principles of management?
- The principles are guidelines to action.
  - The principles denote a cause and effect relationship.
  - Principles help the manager to take decisions while performing various management functions.
  - All of the above.
7. The principles of management are intended to be applied to all types and sizes of organisations. This statement reflects that the principles of management are
- General guidelines
  - Flexible
  - Universally applicable
  - Mainly behavioural
8. The principles of management do not provide readymade straight jacket solutions to all management problems because
- The real business situations are complex.
  - The real business situations are dynamic.
  - The principles act as general guidelines.
  - All of the above.
9. Principles of management can be modified by the manager when the situation demands.  
This statement implies that the principles of management are
- Rigid
  - Contingent
  - Flexible
  - Universally applicable
10. The principles of management enhance the understanding of relationship between human and material resources for the achievement of organisational goals. Identify the feature of the principles of management being described in the given statement.
- Cause and effect relationships
  - Optimum utilisation of resources and effective administration
  - Formed by practice and experimentation
  - Mainly behavioural
11. The application of the principles of management has to be changed as per the requirements of the prevailing situation at a particular point of time. Which feature of the principles of management is being described in the given statement?
- Contingent
  - Mainly behavioural

- (c) Cause and effect relationship
- (d) General guidelines

12. Principles of management emphasize on logical and rational decision making rather than on the basis of bias and prejudice. The given statement highlights that the knowledge of principles of management leads to

- (a) Providing managers with useful insight into reality
- (b) Scientific decisions
- (c) Meeting changing environmental requirements
- (d) All of the above

13. 'Rule of thumb' refers to

- (a) Use of personal judgement in handling management issues
- (b) Adopting a hit-and-trial approach to resolve management problems
- (c) Both of the above
- (d) None of the above

14. According to Taylor, "even a small production activity like loading figures of iron into boxes can be scientifically planned and managed. This can result in tremendous savings of human energy as well as wastage of time and materials." Identify the related principle of scientific management.

- (a) Harmony, not discord
- (b) Science, not rule of thumb
- (c) Development of each and every person to get his/her greatest efficiency and prosperity
- (d) None of the above

15. According to this principle of scientific management, "Scientific management has for its foundation the firm conviction that true interest of the management and workers are one and the same; the prosperity for the employer cannot exist for a long time unless it is accompanied by prosperity for the employees and vice versa."

- (a) Science, not rule of thumb
- (b) Co-operation, not individualism
- (c) Harmony, not discord
- (d) All of the above

16. According to this principle of scientific management, the employees should be rewarded for their suggestions which results in substantial reduction in the cost.

- (a) Science, not rule of thumb
- (b) Co-operation, not individualism
- (c) Harmony, not discord
- (d) All of the above

17. According to Taylor, "each specialist is to be assigned work according to his/her qualities, the employees who possess technical mastery should be involved in planning work whereas those with energy and good health may be assigned execution work." Name the related principle of scientific management.

- (a) Functional foremanship
- (b) Science, not rule of thumb
- (c) Development of each and every person to his or her greatest efficiency and prosperity
- (d) None of the above

18. Considering the fact that it is difficult to find one single person with all the needed qualities, Taylor suggested appointment of a specialist through this technique of scientific management. Identify the technique.

- (a) Standardisation and simplification of work

- (b) Method study
- (c) Functional foremanship
- (d) Motion study

19. The concept of Work Study techniques includes

- (a) Time study
- (b) Motion study
- (c) Fatigue study
- (d) All of the above

20. The objective of this technique of scientific management is to reduce a given line or a product to fixed type sizes and characteristics. Name the technique.

- (a) Method study
- (b) Differential piece wage system
- (c) Standardisation and simplification of work
- (d) Functional foremanship

21. This technique of scientific management helps in development of the concept of assembly line which is widely used in automobile companies these days as well. Identify the technique.

- (a) Motion study
- (b) Standardisation and simplification of work
- (c) Method study
- (d) Time study

22. Which of the following is an objective of time study?

- (a) To determine the number of workers to be employed
- (b) To formulate suitable incentive schemes
- (c) To calculate the labour costs
- (d) All of the above

23. This technique of scientific management aims to determine the amount and frequency of rest intervals that should be provided to the employees during working hours.

- (a) Time study
- (b) Method study
- (c) Motion study
- (d) None of the above

24. The technique of differential piece rate system was developed by Taylor in order to

- (a) Discriminate between efficient and inefficient workers
- (b) Reward the efficient worker
- (c) Motivate the inefficient workers to perform better
- (d) All of the above

25. The application of this principle of management leads to higher production and better work for the same effort. Identify the related principle of general management.

- (a) Discipline
- (b) Equity
- (c) Division of work
- (d) Order

### **ASSERTION-REASON BASED QUESTIONS**

1. Assertion (A) – Differential. Piece Wage System is a technique which does not differentiate between efficient and less efficient workers

Reason (R) - Differential. Piece Wage System acts as an incentive for less efficient workers to be motivated to perform better.

Alternatives:

- a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
  - b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
  - c) Assertion (A) is True and Reason (R) is False.
  - d) Assertion (A) is False and Reason (R) is True.
2. Assertion (A) – Method Study refers to the study of movements which are undertaken while doing a typical job.
- Reason (R) – On close examination of body motions, it is possible to find out motions which are productive, incidental and unproductive.
- a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
  - b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
  - c) Assertion (A) is True and Reason (R) is False.
  - d) Assertion (A) is False and Reason (R) is True

## **SUBJECTIVE TYPE QUESTIONS**

Q1. Radhika opens a jewellery showroom in Jaipur after completing a course in jewellery designing. She has employed eleven persons in her showroom. For greater productivity, she divides the work into small tasks and each employee is trained to perform his/her specialized job. The sales persons are allowed to close a deal with a buyer by giving a maximum of 10% discount, whereas the decision to give any further discount rests with Radhika as the final authority. In the earlier days of starting of the business, five of her employees were asked to put in extra hours of work. In return she had promised to give them a special incentive within a year. Therefore, after six months when the business was doing well, she awarded a cash bonus to each of these employees to honour her commitment. However, when it comes to settling the conflicts among her employees, she tends to be more biased towards her female employees.

In context of the above case:

1. Identify and explain the various principles of management that are being applied by Radhika by quoting lines from the paragraph.
2. Identify and explain the principle of management which is being violated by Radhika by quoting lines from the paragraph.
3. State any one effect of the violation of the principle of management by Radhika as identified in part (b) of the question.

Q 2. 'Aapka vidyalaya' believes in holistic development of students and encourages team building through a mix of curricular, co-curricular and sports activities. On its founders day a stage performance had to be put up. A committee of ten prefects was constituted to plan different aspect of the function. They all decided to use recycled paper for decoration. There was a spirit of unit and harmony and all members supported each other. With mutual trust and belongingness the programme was systematically planned and executed. Kartik, one of the prefects realized that unknowingly the group had applied one of the principles of management while planning and executing the programme. He was so inspired by the success of the function that he asked his father to apply to same principle in his business. His father replied that he was already using this principle.

1. Identify the principle of management applied for the success of the programme.

2. State any two features of management highlighted in the above para.

Q 3. Gaurika has been appointed as the chief organizer of a weeklong cultural event. Being a staunch follower of scientific management, she decides to execute her work by putting into practice the various techniques of scientific management. On the basis of several observations, she is able to determine that the standard time taken by the security officer at the gate to check the credentials of each visitor is 30 seconds. So she decides to employ two persons on this job for every function along with the other necessary support staff. She considers the fact that every day, the functions will take place in three shifts of four hours each, therefore it is important to give breaks to the support staff even in a single shift to take her/his lunch etc. moreover, on introspection, she determines that the best way to distribute refreshment boxes to the visitors will be to hand it over to them at the exit gate as it would help to save time and eliminate any kind of confusion.

In the context of the above case:

1. Identify and explain the various techniques of work study which have been put into practice by Gaurika.

Q 4. Nutan Tiffin Box service was started in Mumbai by Mumbai dabbawalas. The Dabbawalas who are the soul of entire Mumbai aim to provide prompt and efficient services by providing tasty homemade tiffin to all office goers at right time and place. The service is uninterrupted even on the days of bad weather, political unrest and social disturbances. Recently they have started online booking system through their website 'mydabbawalas.com'. owing to their tremendous popularity amongst the happy and satisfied customers and members, the dabbawalas were invited as guest lecturers by top business schools. The Dabbawalas operate in a group of 25-30 people along with a group pleader. Each group teams up with other groups in order to deliver the tiffin on time. They are not transferred on frequent basis as they have to remember the addresses of their customers. They follow certain rules while doing trade-No alcohol during working hours; No leave without permission; Wearing of white cap & carrying ID cards during business hours. Recently on the suggestion of a few self motivated fellow men, the dabbawalas thought out and executed a plan of providing food left in tiffins by customers to slum

children. They have instructed their customers to place red sticker if food is left in the tiffin, to be fed to poor children later.

1. State any one principle of management given by Fayol & one characteristic of management mentioned in the above case.
2. Given any two values which the Dabbawalas want to communicate to the society.

Q 5. 'Study Buddy Pvt.' Is company dealing in stationery items. In order to establish standards of excellence and quality in materials and in the performance of men and machines, the company adheres to benchmarks during production. Moreover, its products are available in limited varieties, sizes and dimensions thereby eliminating superfluous diversity of products. Identify the technique of scientific management which has been adopted by 'Study Buddy Pvt. Ltd.'

## CHAPTER – 3 BUSINESS ENVIRONMENT

### OBJECTIVE TYPE QUESTIONS

#### A. MULTIPLE CHOICE QUESTION

1. Which of the following is not a part of the business environment of business?
  - (a) Customers
  - (b) Suppliers
  - (c) Competitors
  - (d) None of the above
  
2. Which of the following is not a component of specific forces of business environment?
  - (a) Technological conditions
  - (b) Customers
  - (c) Employees
  - (d) Investors
  
3. The growing awareness about healthcare has led to an increase in the demand for healthcare products and services in the country. Identify the feature of business environment being described in the above case.
  - (a) Dynamic nature
  - (b) Uncertainty
  - (c) Relativity
  - (d) Interrelatedness
  
4. Since more number of people have become more beauty and health conscious, our economy has witnessed an unprecedented surge in the number of health and beauty spas and wellness clinics. Related feature of business environment being described in the above lines is
  - (a) Totality of external forces
  - (b) Dynamic nature
  - (c) Interrelatedness
  - (d) Relativity
  
5. 'Twinkle Stars' is a well-known resort for organising parties, especially for children. However, in past 6 months its popularity has reduced considerably as a new resort with better ambience and facilities has opened within its vicinity. Name the related feature of business environment which has influenced the business of 'Twinkle Stars' adversely.
  - (a) Totality of external forces
  - (b) Dynamic nature
  - (c) Interrelatedness
  - (d) Uncertainty
  
6. Any kind of external devices, like compact discs (CD's) for computer, have become obsolete. Google, with its Google Drive service, Apple with its iCloud offering, enables the users store documents, photos, music and movies on web-based servers. Identify the feature of business environment being described in the above lines.
  - (a) Relativity
  - (b) Dynamic nature
  - (c) Uncertainty
  - (d) Interrelatedness
  
7. According to the United Nations Environmental Agency, the world produces around 300 million tons of plastic each year, half of which constitutes single-use items. Ford is recycling over one billion plastic bottles every year to develop elements of the car's interior, reducing the amount of plastic ending up in a landfill. The American car maker has revealed that their Romanian-built EcoSport SUVs' carpets are made using 470 recycled single-use plastic bottles. The process for making Ford EcoSport carpets involves shredding bottles and their caps into tiny flakes and then heating them to 260° C. Identify the related dimension of business environment.
  - (a) Economic dimension
  - (b) Social dimension

- (c) Technological dimension
- (d) Political dimension

8. DigiLocker is the country's first secured cloud-based platform for the storage, issuance and verification of documents with the Driving Licence & Vehicle Registration System of the Road Transport Ministry. The integration of a government department with DigiLocker since its launch last year is one of the biggest of its kind. It will spare 1 people the trouble of carrying licences & vehicle papers, which can be accessed on phones using the DigiLocker app. Identify the related dimension of business environment.

- (a) Economic dimension
- (b) Technological dimension
- (c) Social dimension
- (d) Political dimension

9. The Uttarakhand government has developed surveillance network using latest satellite technology. Under this system, the state's mining department would be in a position to check illegal mining activities across the state. The state government is also considering the use of drones in its proposed campaign against illegal mining. Identify the related dimensions of business environment.

- (a) Economic dimension and Legal dimension
- (b) Social dimension and Economic dimension
- (c) Technological dimension and Political dimension
- (d) Political dimension and Economic dimension

10. In order to boost and double India's export of goods and services to over USD 1,000 billion by 2025, it is important to lower effective corporate tax rate, bring down cost of capital and simplify regulatory and tax framework. Identify the related dimension of business environment.

- (a) Social dimension and Legal dimension
- (b) Technological dimension and Political dimension
- (c) Political dimension and Social dimension
- (d) Economic dimension and Legal dimension

11. The Economic Survey, 2019 suggests that the psychological biases can be used in the realm of tax compliance. It is in favour of using religious norms such "dying in debt is a sin" to improve tax compliance. Identify the related dimensions of business environment.

- (a) Legal dimension and Social dimension
- (b) Social dimension and Economic dimension
- (c) Technological dimension and Political dimension
- (d) Political dimension and Economic dimension

12. Electric vehicles with zero tail pipe emission are emerging as a good alternative to 'problems like climate change, surging pollution leading to ill health, crude import bill and energy security. Identify the related dimensions of business environment.

- (a) Economic dimension, Legal dimension and Social dimension
- (b) Social dimension, Political dimension and Economic dimension
- (c) Economic dimension, Technological dimension and Social dimension
- (d) Social dimension, Political dimension and Legal dimension

13. 'Yo Tummy' began its business by offering the classic combo of hamburgers and fries. But overtime, their customers wanted healthier foods, so 'Yo Tummy' responded and began offering healthy alternatives such as salads, fruits, wraps and oatmeal. If 'Yo Tummy' hadn't responded, they may have lost customers that wanted to eat healthier foods. The above case highlights one of the points related to the importance of business environment and its understanding by managers. Identify it.

- (a) It helps in coping with rapid changes.

- (b) It helps in improving performance.
- (c) It helps the firm to identify threats and early warning signals.
- (d) It enables the firm to identify opportunities and getting the first mover advantage.

14. As a result of major government initiatives, more and more people are going 'green'. In order to keep in line with the trend, 'Clapaway' a carpet cleaning company has advertised that they only use natural cleaners that come from renewable resources and that all their service vehicles are hybrid vehicles that use both gas and electricity. Identify one of the points related to the importance of business environment and its understanding by managers which is being highlighted in the above case.

- (a) It helps in assisting in planning and policy formulation.
- (b) It helps in coping with rapid changes.
- (c) It helps in improving performance.
- (d) It enables the firm to identify opportunities and getting the first mover advantage.

15. According to the World Health Organization, 39% of adults are overweight. Over the last 40 years, the prevalence of obesity has tripled around the world. With over half of consumers drinking at least one sugary drink on a given day, regulations towards the beverage sector are likely to become increasingly onerous. In the U.K., for example, a sugar tax was introduced in 2018 on beverages containing more than 5% sugar. Identify the related dimensions of business environment.

- (a) Legal dimension and Social dimension
- (b) Social dimension and Technological dimension
- (c) Technological dimension and Legal dimension
- (d) Political dimension and Technological dimension

16. India's population is expected to grow under 0.5 per cent during 2031-41 due to decline in fertility rate and increase in life expectancy. These changes in India's demography will also have implications such as the proportion of elementary school-going children will witness significant declines, lack of hospital beds and increase in retirement age. The related feature of business environment being described in the above lines is

- (a) Totality of external forces
- (b) Dynamic nature
- (c) Interrelatedness
- (d) Relativity

17. India continues to be a lower-middle-income country along with 46 others, while Sri Lanka has climbed to the upper-middle-income group for the fiscal year (FY) 2020, according to the World Bank's classification of countries by income levels, released on July 1, 2019.

Identify the related dimensions of business environment.

- (a) Social dimension
- (b) Technological dimension
- (c) Economic dimension
- (d) Political dimension

18. According to a report by the India Staffing Federation (ISF), India has emerged as the

fifth largest market worldwide in flexi-staffing in 2018 and the country would have 6.1 million flexi-workforce by 2021. It showed that Haryana, Gujarat, Karnataka, Madhya Pradesh and Telangana are the states with high growth potential for flexi-staffing but Andhra Pradesh tops the list of states with favourable business environment. Identify the feature of business environment being discussed above,

- (a) Relativity
- (b) Dynamic nature

- (c) Uncertainty
- (d) Interrelatedness

19. The Union Cabinet has given ‘in-principle’ nod to divest stakes in Air India — a wholly government owned airline. This means the government is willing to shed a substantial portion of its stake and hand over the management of the ailing airline to the private sector. Identify the concept being described in the above lines.

- (a) Liberalisation
- (b) Privatisation
- (c) Globalisation
- (d) Demonetisation

20. The Government of India launched “Make in India” initiative in September, 2014 to increase foreign direct investment (FDI) in 25 sectors. As of April, 2015, FDI inflow in India increased by 48% since the launch of “Make in India” initiative.

Identify the concept being described in the above lines, with regard to inflow of FDI.

- (a) Demonetisation
- (b) Privatisation
- (c) Liberalisation
- (d) Globalisation

21. In today’s world, the flow of goods and services is not only cheap and fast, but reliable and secure. You can order anything you wish from any part of the world. Internet has been connecting people without any limitations or boundaries in the way of doing business. Identify the concept being described in the above lines.

- (a) Liberalisation
- (b) Globalisation
- (c) Demonetisation
- (d) Privatisation

22. On 8th November 2016, with the announcement from Government of India, all the ₹500 and

₹1,000 banknotes of the Mahatma Gandhi series have ceased to be a legal tender. The government also announced the issuance of new ₹500 and ₹2,000 banknotes in exchange for the demonetised banknotes. Identify the concept being described in the above lines.

- (a) Globalisation
- (b) Liberalisation
- (c) Demonetisation
- (d) Privatisation

23. Which of the following is a feature of demonetisation?

- (a) Tax administration measure
- (b) Channelising savings into the formal financial system
- (c) Development of less-cash economy
- (d) All of the above

24. A business has to offer wider choice in purchasing enhanced quality of goods and services in order to maintain an edge over its competitors. The implementation of the new economic policy with liberalisation, privatisation and globalisation has posed various challenges for the corporate sector. One of the important challenges is explained in the above lines. Identify it.

- (a) Increasing competition
- (b) More demanding customers
- (c) Necessity for change
- (d) Market orientation

25. Giving freedom to Indian business and Industries from all necessary government controls and restrictions is an example of :

- (a) Privatisation
- (b) Globalisation
- (c) Liberalisation
- (d) Demonetisation

### **ASSERTION REASON BASED QUESTIONS.**

Given below are two statements (in each question), one marked as Assertion (A) and other marked as Reason (R).

1. Assertion (A): Increase in technology will benefit in expansion of business.

Reason (R): Social environment for business provides freedom of choice to consumer.

- (a) Both Assertion (A) and Reason (R) are True and Reason (R) \* i the correct explanation of Assertion (A)
- (b) Both Assertion (A) and Reason (R) are True but Reason (R) is not the correct explanation of Assertion (A)
- (c) Assertion (A) is True but Reason (R) is False
- (d) Assertion (A) is False but Reason (R) is True

2. Assertion (A): Social, economic, legal, political and technological conditions are the specific forces of business environment.

Reason (R): They have impact on all business enterprises and thus may effect an individual firm only indirectly.

- (a) Both Assertion (A) and Reason (R) are True and Reason (R) \* is the correct explanation of Assertion (A)
- (b) Both Assertion (A) and Reason (R) are True but Reason (R) \* i not the correct explanation of Assertion (A)
- (c) Assertion (A) is True but Reason (R) is False
- (d) Assertion (A) is False but Reason (R) is True.

### **SUBJECTIVE TYPE QUESTIONS**

Q1. 'Raise the Bar' is a sports equipment company. It has different branches in different parts of the world. However, the requirements of the sports equipments are different in different branches. This is due to the change in cultures and lifestyles of people in the different countries. The market in which it is dealing is known for awareness of health. The more the awareness the more is the demand for such equipments. Company knows that the demand for these products is unpredictable as new designs keep on coming and the industry keeps on changing frequently. There is a Research and Development Department which keeps on updating the equipments in material and design. However the outside business environment is characterized by changing customer preferences, entry of new competitors making it change. A meeting was organized recently to understand the external business environment. However, after the meeting it was realised that business environment can't be understood in totality it can only be understood by breaking it into its dimensions. The result of a successful meeting could be seen later in the performance of the company which created record sales in the coming year.

Identify the features of business environment highlighted here.

Q2. GHJ Private Ltd. is concerned about the external environment of business. It is busy analyzing various factors which are going to affect its business. However with a lot of understanding it developed about the business it found two types of factors; one which affected the firm directly and the other which affected all the firms in the business. With the passage of time the challenges for the company have increased. The company finds new competitors and technological challenges which are posing new changes for it. The company at the end of the year decides to have a survey. This survey is about knowing the business environment properly. Even after spending a lot of money on the surveys the company comes

to conclusion that it's not easy to understand the business environment and it is properly understood only in parts. The company is ready to seek advice from experts and is eager to notice changes in the business environment. When a multinational company enters the market the company is eager in taking preventive measures like improving the product, aggressive advertising, etc. A special team of experts have been created. The team observes the changes taking place like changing branding loyalty, more demanding customers, etc. as it knows the pace of change is more important than the change itself. The painstaking efforts of the company don't go unrewarded. The company by the end of the year makes huge profit and by understanding the business environment is able to increase its revenue. Which features of business environment have been highlighted in the above case? Also identify the various importance of business environment highlighted above.

Q3. 'On Your Marks' is a good shoe manufacturing company. The company is the first to start a shoe having a unique technology giving it a long life. However the company knows that it exists in an environment where everything around it counts; so everything around it matters. Therefore, it is trying to observe every small aspect of the business environment. There are various factors which are closely related to each other and can't be understood in isolation like change in lifestyle which can be linked to the improved demand of technologically advanced shoes. However, the company can't be self satisfied. It will have to adjust to rapidly changing technology, fragmentation of market, changing brand loyalties, etc. It has got good man power and a very well established production department. It knows that various resources in the form of inputs have to be transformed into the best products and sold for increasing its revenue. However, there are various challenges which the company is facing. These are in the form of protests done by labour unions throughout the country which sometimes assume the form of strikes. The board of directors is keen to adapt to this difficult situation. Government is playing a very positive role, like it did a few years back, and is freeing the business environment from unnecessary restrictions and government controls. The company is hopeful of emerging as a winner under such government support.

1. Which features of business environment are highlighted in the above case?
2. Identify the importance of business environment highlighted in the above case?
3. Which dimension of business environment is highlighted above?

Q4. 'Runners Ahead' is an emerging software consultancy company. It has a specific manner but political, social and economic conditions affect it in a general way. The company has decided to prepare an emergency plan to meet unpredictable challenges which change the business in a very fast manner particularly in the field of Information Technology. The changes in the IT sector are very fast. So the chances of success are high; like in the case of new software launched where the company has the advantage of entering the market early. However, things are not so easy. Every time circumstances pose new challenges. The organisation has decided to monitor the external business environment so that it can adopt suitable measures to increase its client base.

Recently the company has been given a project by the government to study and analyse its new policy. The policy of the government is to give a bigger role to the private sector by reducing its own role in the Public Sector Undertakings.

In order, to meet new challenges the company has to exploit various aspects of business. Recently it has invented a new type of advanced software for social networking sites for the aged people catering to their specific needs. The company is expecting huge rise in its revenue through the help of this project.

Which features of business environment is highlighted in the above case?

Identify the importance of business environment highlighted in the above case.

Which dimension of business environment is highlighted in the above case?

Q5. ABCDE Ltd. has opened a customized shoe business in 23 cities. The organisation has done a lot of research on the nature of business environment in which it is doing business. The market has fragmented as there are many players, brand loyalties of the customers keep on changing, customers are more demanding and there is intense competition in the market. Every week on Saturday the board of directors sits for a meeting and decides the future course of action. They rely on their surveys and past performances of other companies to achieve policy making and deciding future course of action. The company devotes its lot of

time in understanding the external environment. With all the research the company has realised that the business environment does tend to have a lot of impact on the organisation so it is necessary to continuously monitor it.

Name and explain the various importance of Business Environment highlighted above?

## **CHAPTER-4 PLANNING**

### **OBJECTIVE TYPE QUESTIONS**

#### **A.MULTIPLE CHOICE QUESTIONS**

1. Name the function of management which involves setting objectives and developing appropriate courses of action to achieve these objectives.
  - (a) Directing
  - (b) Organising
  - (c) Planning
  - (d) Staffing
2. Which of the following is not a benefit of planning?
  - (a) Planning reduces overlapping and wasteful activities.
  - (b) Planning is a mental exercise.
  - (c) Planning provides directions.
  - (d) Planning reduces the risks of uncertainty.
3. Which of the following is a benefit of planning?
  - (a) Helps in avoiding confusion and misunderstanding.
  - (b) Ensures clarity in thought and action.
  - (c) Useless and redundant activities are minimised or eliminated.
  - (d) All of the above.
4. Which of the following statements is not true with reference to planning?
  - (a) Planning is a pre-requisite for controlling.
  - (b) Planning does not lead to rigidity.
  - (c) Planning enables a manager to look ahead and anticipate changes.
  - (d) Planning facilitates co-ordination among departments and individuals in the organisation.
5. What is known as the primary function of management?
  - (a) Controlling
  - (b) Organising
  - (c) Planning
  - (d) Staffing
6. Which of the following is not a feature of planning?
  - (a) Planning is futuristic.
  - (b) Planning is pervasive.
  - (c) Planning establishes standards for controlling.
  - (d) Planning focuses on achieving objectives.
7. All other managerial functions are performed within the framework of the plans drawn. Identify the related feature of planning.
  - (a) Planning focuses on achieving objectives.
  - (b) Planning is pervasive.
  - (c) Planning is futuristic.
  - (d) Planning is primary function of management.
8. Planning requires logical and systematic thinking rather than guess

work or wishful thinking. Identify the related feature of planning.

- (a) Planning is futuristic.
- (b) Planning is a mental exercise.
- (c) Planning establishes standards for controlling.
- (d) Planning focuses on achieving objectives.

9. Planning cannot foresee everything, and thus, there may be obstacles to effective planning. Identify the related limitation of planning.

- (a) Planning leads to rigidity.
- (b) Planning may not work in a dynamic environment.
- (c) Planning does not guarantee success.
- (d) Planning reduces creativity.

10. It is not always true that just because a plan has worked before it will work again. Identify the related limitation of planning.

- (a) Planning leads to rigidity.
- (b) Planning reduces creativity.
- (c) Planning may not work in a dynamic environment.
- (d) Planning does not guarantee success.

11. Identify the correct sequence of steps involved in the planning process.

- (a) Evaluating alternative courses, Identifying alternative course of actions, Setting objectives, Developing premises
- (b) Setting objectives, Identifying alternative course of actions, Evaluating alternative courses, Developing premises
- (c) Setting objectives, Developing premises, Identifying alternative course of actions, Evaluating alternative courses
- (d) Setting objectives, Developing premises, Identifying alternative course of actions, Evaluating alternative courses

12. They represent the end point of planning.

- (a) Rules
- (b) Methods
- (c) Objectives
- (d) Policies

13. A strategy is derived from

- (a) Policy
- (b) Objective
- (c) Method
- (d) Rule

14. A strategy is a comprehensive plan which will not include this dimension

- (a) Determining long term objectives
- (b) Adopting a particular course of action
- (c) The ends which the management seeks to achieve by its operations
- (d) Allocating resources necessary to achieve the objective

15. They provide a basis for interpreting strategy, which is usually stated in general terms.

- (a) Policies
- (b) Procedures
- (c) Objectives
- (d) Programmes

16. They detail the exact manner in which any work is to be performed.

- (a) Rules

- (b) Methods
- (c) Procedures
- (d) Programmes

17. It helps to save time, money and effort, and increases efficiency.

- (a) Procedure
- (b) Programme
- (c) Rule
- (d) Method

18. It is a plan which quantifies future facts and figures.

- (a) Procedure
- (b) Programme
- (c) Rule
- (d) Budget

19. Which of the following is not a standing plan?

- (a) Policy
- (b) Procedure
- (c) Programme
- (d) Rule

20. Which of the following is not a single use plan?

- (a) Budget
- (b) Programme
- (c) Method
- (d) All of the above

21. Micromax was India's largest seller of mobile handsets. It launched low-cost Chinese manufacturing with some smart packaging and features like long-lasting batteries and dual-sim functionality to garner 20% market share in India's value-conscious mobile handset market. Identify the two types of plans being described in the above lines.

- (a) Strategy and objective
- (b) Rule and Programme
- (c) Programme and objective
- (d) Method and objective

22. According to a survey, these days the young children have more power in purchasing decisions than ever before. The parents seek their kids' opinions about all kinds of once-adult decisions, including where to go for dinner, what kind of car to buy, even what to wear. Therefore, the retailers are adapting to this by enhancing their kids' sections. If the children want to shop in the store for their clothes, then there's a greater chance the parent will also see something they want to buy as well. Identify the type of plan being described in the above lines.

- (a) Programme
- (b) Method
- (c) Strategy
- (d) Rule

23. According to a survey of 250 consumer packaged goods (CPG) companies by a reputed firm, 75% of brand owners say they're going to spend significantly more on packaging as it is critical to their brand's success.

Identify the type of plan being described in the above lines.

- (a) Rule
- (b) Programme
- (c) Strategy
- (d) Method

24. According to the World Health Organization, 39% of adults are overweight. Consequently in the U.K., a sugar tax was introduced in 2018 on beverages containing more than 5% sugar to curb sugar intake. Identify the type of plan being described in the above lines.

- (a) Programme
- (b) Method
- (c) Strategy
- (d) Rule

25. According to the Economic Survey, insights from behavioural economics can be strategically utilised to create an aspirational agenda for social change – from BBBP (Beti Bachao Beti Padhao) to BADLAVL (Beti Aapki Dhan Lakshmi Aur Vijay Lakshmi); from Swachh Bharat to Sundar Bharat; from ‘Give It Up’ for the LPG subsidy to ‘Think about the Subsidy’ and from tax evasion to tax compliance. Identify the type of plan being described in the above lines.

- (a) Programme
- (b) Method
- (c) Strategy
- (d) Rule

### **ASSERTION AND REASON BASED QUESTIONS**

**Q.1** Read the following statement carefully – Assertion (A) and Reason (A) and choose the correct alternative:

**Assertion (A):** Planning is Pervasive.

**Reason(R):** Planning is required at all levels and in all department of the organization.

- a) Both Assertion (A) and Reason (A) are true and Reason (A) is the correct explanation of Assertion (A).
- b) Both Assertion (A) and Reason (A) are true and Reason (A) is not the correct explanation of Assertion (A).
- c) Assertion (A) is true, but Reason (A) is false.
- d) Assertion (A) is false, but Reason (A) is true.

**Q.2** Read the following statement carefully – Assertion (A) and Reason (A) and choose the correct alternative:

**Assertion (A):** Planning is futuristic.

**Reason(R):** Planning is concerned with the future which is certain and does not require forecast.

- a) Both Assertion (A) and Reason (A) are true and Reason (A) is the correct explanation of Assertion (A).
- b) Both Assertion (A) and Reason (A) are true and Reason (A) is not the correct explanation of Assertion (A).
- c) Assertion (A) is true, but Reason (A) is false.
- d) Assertion (A) is false, but Reason (A) is true.

### **SUBJECTIVE TYPE QUESTIONS**

Q1. Suhasini a home science graduate from a reputed college has recently done a cookery course. She wished to start her own venture with a goal to provide ‘health food’ at reasonable price. She discussed her idea with her teacher (mentor) who encouraged her. After analyzing various options for starting her business venture, they shortlisted the option to sell ready made and ‘ready to make’ vegetable shakes and sattu milk shakes. Then they both weighed the pros and cons of both the shortlisted options. Name the function of management being discussed above and give any one of its characteristics.

Also briefly discuss any three limitations the function discussed in the case. (5 marks)

Q2. A company is manufacturing garments. The manager wants to increase profits by purchasing new high speed machines or increasing the sale price or using waste material in manufacturing stuffed toys.

He decided that 'using waste material' to increase the profit is the best solution for him.

Identify the concept of management involved.

Mention the steps involved in the above process by quoting the line from the question.

To complete the process of the concept identified in (a), what two next steps does the manager have to take? Explain.

Q3. In 'Chak De India' movie, Shahrukh Khan becomes the coach of the girls' hockey team. He knows that he has to prepare the girls for the international hockey matches and bring the world cup after winning. For this he prepares a long-term plan and thinks the ways how to beat the competitors. He coaches the girls to play in different ways like defensive, offensive, etc. at the outset of a match he explains who will open the match, and how the ball will be passed by one player to another step by step. Identify four types of plan that are highlighted in the above case, quoting the lines from it.

Q4. Arush joins as a sales manager of a company dealing in naturotherapy produces. Being proficient in his work, he knew that without good planning he will not be able to organise, direct, control or perform any of the other managerial functions efficiently and effectively. Only on the basis of sales forecasting, he would assist in the preparation of the annual plans for its production and sales. Besides, he will have to prepare sales plans regularly on weekly, monthly, quarterly and half yearly basis. While preparing the sales forecasts, he undertakes intellectual thinking involving foresight, visualization and issued judgement rather than wishful thinking or guess work. Most importantly, all these planning activities will be meaningful only if they will coincide with the purpose for which the business is being carried out.

In context of the above case, identify the various features of planning highlighted in the above paragraph by quoting lines from it.

Q5. The management of ABC Ltd. set up the target of selling 10,000 units per week and made all their plans based on this target. But due to change in technology adapted by competitors which reduced their cost, the ABC Ltd. could not achieve their target.

Identify the limitation of planning discussed in the above para.

State any other two limitations.

## **CH-5 ORGANISING OBJECTIVE TYPE QUESTIONS**

### **A. MULTIPLE CHOICE QUESTIONS**

1 Dividing work into smaller and manageable task is a part of

- (a) Departmentalisation                      (b) Identification and division of work  
(c) Assignment of duties                      (d) All of the above

2 Grouping of activities in accordance to their nature is a part of

- (a) Division of work                              (b) Specialisation  
(c) Departmentalisation                      (d) Generalisation

3 What is the correct order of organising process?

- (a) Assignment of Duties  
(b) Departmentalisation  
(c) Identification and Division of work  
(d) Establishing reporting relationships.

4 Span of management refers to.

- (a) No. of subordinates at lower level
- (b) Total no. of managers.
- (c) no. of subordinates under a superior.
- (d) no. of levels in the organisation.

5 Form of Organisational structure in which it is easy to fix responsibility

- (a) Functional Organisation      (b) Formal Organisation
- (c) Informal organization          (d) Divisional structure

6 Name the type of organisation in which structure of jobs are created with clearly defined functions, authority and responsibility

- (a) Formal organisation          (b) Informal organisation
- (c) Delegation                      (d) Decentralisation

7 Which of the following is not an element of delegation?

- (a) Authority                          (b) Accountability
- (c) Responsibility                      (d) None of these

8 Under accountability a person is answerable for the

- (a) Growth of company              (b) Final outcome of the assigned task
- (c) Delegation of authority          (d) None of the above

9 Find the odd one.

- (a) It promotes flexibility and initiative
- (b) It leads to occupational specialisation
- (c) It makes training of employees easier, or the focus is only on a limited range of skills
- (d) It promotes control and coordination within a department

10 Which of the following is not a demerit of divisional structure?

- (a) It promotes product specialisation
- (b) It facilitates expansion and growth
- (c) It ensures greater accountability
- (d) None of the above

11 Which of the following is not an element of delegation?

- a) Authority                              c) Responsibility
- b) Accountability                        d) None of these

12 Which of the following cannot be delegated?

- a) Authority                              c) Responsibility
- b) Accountability                        d) None of these

13 Which is not a feature of formal organisation?

- a) It is personal                          c) It is based on rules and procedures
- b) It is more stable                      d) It is deliberately planned

14. Which organisation structure is compulsory?

- c) Formal                                  c) both(a) and (b)
- d) Informal                                d) None of the

above

15. What is Decentralisation?

- a) Short form of delegation              c) Extended form of delegation
- b) Middle form of delegation            d) None of the above

#### **ASSERTION REASON BASED QUESTION**

Assertion (A) – Decentralisation is extending delegation to the lowest level.

Reason (R) - Decentralisation refers to delegation of authority throughout all the levels of the organization. Decision making authority is shared with lower levels and is consequently placed nearest to the points of action.

Alternatives:

- a. Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
- b. Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
- c. Assertion (A) is True and Reason (R) is False.
- d. Assertion (A) is False and Reason (R) is True.

Assertion (A) – Organising leads to specialisation.

Reason (R) – In Organising clarity in working relations cannot be possible.

- a. Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
- b. Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
- c. Assertion (A) is True and Reason (R) is False.
- d. Assertion (A) is False and Reason (R) is True

### **SUBJECTIVE TYPE QUESTIONS**

Q1. Lalita Food Limited is a famous company making different food materials. Ms.Lalita is the managing director of the company. She is fully attached to the employees of her company. This is the very reason that before taking every decision she consults all the concerned employees. A suggestion box has also been provided in the company. It is opened once a week. The employee's giving positive suggestions are rewarded. Besides, all the employees of the company also enjoy full freedom to communicate with any senior officer any time, concerning matters of both types related to their jobs or their personal lives.

Identify the form of organisation, described in the paragraph given above and write about two of its advantages.

Q2. A company is manufacturing washing machines. There is a well-defined system of jobs which is clear and defines authority, responsibility and accountability in the company. But people are not allowed interact beyond their officially defined roles. As a result, the company is not able to adopt the changing business environment. The work force is also not motivated due to lack of social interaction. The company is facing problems of procedural delays and inadequate recognition to creative talents.

- I. Suggest how the organisation can overcome the problems faced by it.
- II. Give any two benefits it will derive from your suggestion.
- III. Also list any two points of suitability of the above mentioned structure.

Q 3 Aman, Avneesh and Amrish have decided to start a business of manufacturing toys. They identified the following main activities which they have to perform:

- (a) Purchase of raw material
- (b) Purchase of machinery
- (c) Arrangement of finance
- (d) Production of toys
- (e) Sale of toys
- (f) Identifying the areas where they can sell their toys
- (g) Selection of employees

In order to facilitate the work they thought that four managers should be appointed to look after (a) Production, (b) Finance, (c) Marketing and (d) Personnel.

- a) Identify the function of management involved in above mentioned para.
- b) Quote the lines from above para which help you in identifying this function.
- c) State the steps followed in the process of this function of management.

Q 4. A company is manufacturing washing machines. There is a well defined system of jobs with a clear and definite authority, responsibility and accountability in the company. But people are not allowed to interact beyond their officially defined roles. As a result the company is not able to adapt to the changing business environment. The workforce is also not motivated due to lack of social interaction. The company is facing problems of procedural delays and inadequate recognition to creative talents.

- i. Suggest how the organisation can overcome the problems faced by it.
- ii. Give any two benefits it will derive from your suggestion.

## **CHAPTER-6 STAFFING**

### **A. MULTIPLE CHOICE QUESTIONS**

1. Ramesh is working under the guidance of Harish, a carpenter, for the last three years to learn the different skills of this job. Is the method of training which Ramesh is undergoing.
  - (a) Orientation
  - (b) Apprenticeship Training
  - (c) Vestibule Training
  - (d) Internship Training
2. This test aims to identify the areas in which candidate has special liking.
  - (a) Interest test
  - (b) Trade test
  - (c) Intelligence test
  - (d) Personality test
3. NAUKRI.COM India's No.1 Job site Above is an example of \_\_\_\_\_.
  - (a) Placement agencies
  - (b) Web Publishing
  - (c) Advertisement
  - (d) all of these
4. \_\_\_\_\_ is a managerial decision making process as to predict which job applicants will be successful if hired
  - (a) Recruitment
  - (b) Orientation
  - (c) Training
  - (d) Selection
5. \_\_\_\_\_ refers of the learning opportunities designed to help employees grow.
  - (a) Development
  - (b) Training
  - (c) Performance appraisal
  - (d) Induction
6. It is a face to face conversation between employer and applicant
  - (a) Selection
  - (b) Interview
  - (c) Recruitment
  - (d) Staffing
7. Vinod is working as plant supervisor in Cargo Ltd. Noida. His place of work was changed to Gurugram without any change in his position in the hierarchy, Identify the concept.
  - (a) Promotion
  - (b) Lay off
  - (c) Training
  - (d) Transfer
8. Sehaj is working as human resource manager in Flora Ltd. He is assigned the work to find out the number and type of personnel available so that he could decide and recruit the required number of persons for each department. Identify the concept involved.
  - (a) Recruitment
  - (b) all of these
  - (c) work force analysis
  - (d) work load analysis

9. Staffing function begins with\_\_\_\_\_.

- (a) Selection
- (b) Training
- (c) Estimating manpower requirements
- (d) Promotion

10. Staffing is very important function these days because of\_.

- (a) Survival and growth
- (b) Optimum utilisation of human resources
- (c) Better performance
- (d) all of these

11 Promotion involves

- a) Financial incentives
- b) Non-financial incentives
- c) Both(a) and (b)
- d) None of the above.c)

12 Which of the following is selection test?

- a) Trade test
- b) Intelligence test
- c) Aptitude test
- d) Medical fitness test

13“It refers to the employee occupying the position or post for which the person has been selected.” Identify the term.

- a) Training
- b) Recruitment
- c) Promotion
- d) Placement.

14 Which of the following test measure the existing skills of the individual?

- a) Trade test
- b) Intelligence test
- c) Aptitude test
- d) Personality test.

15 How a business firm came to know that organisation is under-staffed or over-staffed?

- a) Production analysis
- b) Salary analysis
- c) Sales analysis
- d) Workforce analysis.

### **ASSERTION REASON BASED QUESTIONS.**

1. Assertion (A): Staffing recognises the importance of every single person employed by an organisation. Reason (R): Staffing has been described as the managerial function of filling and keeping filled the positions in the organisation structure. Alternatives:

(a) Both Assertion (A) and Reason (R) are True and Reason (R) is the correct explanation of Assertion

(A)

(b) Both Assertion (A) and Reason (R) are True but Reason (R) is not the correct explanation of Assertion (A)

(c) Assertion (A) is True but Reason (R) is False

(d) Assertion (A) is False but Reason (R) is True

2. Assertion (A): Human resource are the foundation of any business.

Reason (R): Staffing is the most fundamental and critical drive of organisational performance.

(a) Both Assertion (A) and Reason (R) are True and Reason (R) is the correct explanation of Assertion

(A)

(b) Both Assertion (A) and Reason (R) are True but Reason (R) is not the correct explanation of Assertion (A)

(c) Assertion (A) is True but Reason (R) is False

(d) Assertion (A) is False but Reason (R) is True

## **SUBJECTIVE TYPE QUESTIONS**

1. Mr. Ganesh- was in the company so that he could practice the theoretical knowledge acquired by him from his college.  
Mr. Rahul- was provided a dummy model of machinery to do practice on it.  
Mr. Shekhar- was asked to work with an expert for specific period of time so that he learns by observation.  
Identify the technique of training discussed in above cases (a, b, c).
2. 'Pure Energy Ltd' imported a new hi-tech machine from Japan for manufacturing high quality and low cost solar panels in India. After a month, the report of Production Manager reflected a decline in quantity and quality of production. On investigation, it was found that there was lack of technical knowledge and skills amongst the employees for using these hi-tech machines. This resulted in high-overhead charges as well as frequent visits of engineers were required from Japan.  
Suggest what should be done to increase the quality and quantity of Production.  
Also state, how the employees will be benefited from your suggestion.  
Identify the functions of management discussed above.
3. Teja Ltd. received 22,495 applications for the post of fifty supervisors. Preliminary, screening was done and 3,545 applications were filtered. Various steps of selection process were taken and finally fifty candidates as supervisor were selected. They were directly posted to their respective posts. After one-month performance appraisal of these candidates was conducted. It was found that out of 50, eight were not able to perform as per standards as they were facing practical problems while handling machines.  
In your opinion, what should be done to improve the performance of these eight supervisors.
4. How an organisation can be benefited by improving the skill level of employees. Orient Ltd. expanding its business operations. All the departmental heads were asked to fill up "Manpower Requisition form and estimate the annual requirement of – skilled and unskilled workers "All the departmental heads submitted the requisition forms to HR Manager. HR Manager, compiled all such requisition forms as Requirement of skilled workers – 89  
Requirement of unskilled workers – 265. After this, Recruitment and further selection procedure was followed. Name and explain the methods of recruitment (three each) for each category which would be most appropriate in the above case.

## **CHAPTER-7 DIRECTING**

### **A. MULTIPLE CHOICE QUESTIONS:**

Q1. Yamini received a special gold coin from her school management for exceptionally good board result of her students in her subject. Identify the need of Yamini being fulfilled as per Maslow's Need Hierarchy Theory.

- (a) Esteem Needs
- (b) Belonging Needs
- (c) Self Actualisation Needs
- (d) Basic Physiological Needs

Q2. Which of the following is not an advantage of directing?

- a) Initiates action
- b) Integrates employee efforts
- c) Provides leadership
- d) Restricts changes

Q3. Which of the following statements is not true?

- a) Directing initiates action in the organization
- b) Directing helps a manager to integrate individual efforts
- c) Directing does not help in developing commitment on part of subordinates
- d) None of the above

Q4. Identify the need in which an employee desires self respect, recognition and status.

- a) Security needs
- b) social needs
- c) Esteem needs
- d) Self actualization needs

Q5. In an organizational context, example of security/safety need is

- a) Job security
- b) Stability of income
- c) Pension plans
- d) All of these

Q6. To satisfy esteem needs, which type of incentives is needed?

- a) Financial incentives
- b) Non-financial incentives
- c) Additional incentives
- d) None of these

Q7. XYZ company offers its director certain benefits such as car, housing, medical facilities, etc, apart from basic salary. Name the incentive provided here by the company to its directors.

- a) Stock option
- b) Perquisites
- c) Bonus
- d) Job enrichment

Q8. Dheeraj Madan works as a Human Resource Manager in Busybee Limited. He gives due care in designing jobs, so that it offers a meaningful work experience by assuming a diversity of work content requiring higher level of knowledge. Identify the type of incentive being adopted by the company.

- (a) Employee recognition programme
- (b) Organisational climate
- (c) Career advancement opportunities
- (d) Job enrichment

Q9. Leadership is a key factor in making an organization successful, because

- a) It influences the behavior of people
- b) It introduces changes
- c) It handles conflicts
- d) All of the above

Q10. Which of the following leadership styles is also regarded as boss-centered leadership?

- a) Autocratic leadership style
- b) Democratic leadership style
- c) Free-rein leadership style
- d) All of the above

Q11. Democratic style of leadership helps in

- a) Improving morale of subordinates
- b) Developing positive attitude among subordinates

- c) Developing self-confidence in subordinates
- d) All of the above

Q12. During the year 2018, Halla Walla Limited made surplus profits due to In order to give due recognition to its employees and motivate them to continue with the good work, the company decided to give a certain percentage of profits to them. Identify the type of financial incentive being adopted by the company.

- (a) Perquisites
- (b) Productivity linked wage incentives
- (c) Co-partnership
- (d) Profit sharing

Q13. Which one of the following is an element of directing?

- (a) Delegating authority
- (b) Designing organisation structure
- (c) Communication
- (d) Designing control system

Q14. Which of the following is an example of retirement benefits?

- a) Provident fund
- b) Pension
- c) Gratuity
- d) All of these

Q15. The need for affection, sense of belongingness, acceptance and friendship is related with

- a) Safety/security needs
- b) Social needs
- c) Esteem needs
- d) Self actualization needs

### ASSERTION AND REASON BASED QUESTIONS

**Q.1** Read the following statement carefully – Assertion (A) and Reason (A) and choose the correct alternative:

**Assertion (A):** Informal Communication arises from social interaction of people.

**Reason(R):** Information system of communication is generally referred to as the Grapevine.

- a) Both Assertion (A) and Reason (A) are true and Reason (A) is the correct explanation of Assertion (A).
- b) Both Assertion (A) and Reason (A) are true and Reason (A) is not the correct explanation of Assertion (A).
- c) Assertion (A) is true, but Reason (A) is false.
- d) Assertion (A) is false, but Reason (A) is true.

**Q.2** Read the following statement carefully – Assertion (A) and Reason (A) and choose the correct alternative:

**Assertion (A):** Motivation can be forced on employees.

**Reason(R):** The internal feelings influence human behavior to act in a particular manner.

- a) Both Assertion (A) and Reason (A) are true and Reason (A) is the correct explanation of Assertion (A).
- b) Both Assertion (A) and Reason (A) are true and Reason (A) is not the correct explanation of Assertion (A).
- c) Assertion (A) is true, but Reason (A) is false.
- d) Assertion (A) is false, but Reason (A) is true.

### SUBJECTIVE TYPE QUESTIONS:

Q 1 .Rahim was working in an enterprise on daily wages basis. It was difficult for him to fulfill the basic needs of his family. His daughter fell ill. He had no money for his daughter's treatment .To meet the expenses of her treatment; he

participated in a cycle race and won the prize money. The cycle company offered him a permanent pensionable job which he happily accepted.

- i) By quoting the lines from the above para identify the needs of Rahim that are satisfied by the offer of Cycle Company.
- ii) Also, explain two other needs of Rahim followed by above that are still to be satisfied.

Q 2. Huma is working in a company on a permanent basis. As per the job agreement she had to work for 8 hours a day and was free to work overtime. Huma worked overtime, due to which she fell ill and had to take leave from her work. No one showed concern and enquired about her health. She realised that she was fulfilling only some of her needs while some other needs still remained to be satisfied.

i. By quoting the lines from the above para. Identify the needs of Huma which she is able to fulfill.

ii. Also explain two other needs of Huma followed by the above needs, which still remained to be satisfied.

Q3. Pramod was a supervisor at Annapurna Aata factory. The factory was producing 200 quintals of aata every day. His job is to make sure that the work goes on smoothly and there was no interruption in production. He was a good leader who would give orders only after consulting his subordinates and work out the policies with the acceptance of the group.

Identify and describe the leadership style being adopted by Pramod.

Q4. Smita had been working as an assistant manager with Johnson Enterprises' for the last ten years. She was very popular amongst her colleagues

because of her commitment and dedication towards the work. When the manager senior to her retired, all her colleagues thought that now Smita would be promoted. But to everyone's surprise the vacant post was filled by an outsider, Mrs Rita. Smita felt demoralised and her performance started declining. She would abstain herself often and could not meet her targets. Mrs Rita was a good leader, who would not only instruct her subordinates but would also guide and inspire them. She noticed Smita's behavior and felt that her performance could be improved. She started involving Smita in decision making – issues related to the organisation and made her a part of high level joint management committee. Smita was now punctual in office and her performance started improving.

- i. Identify the function of management being performed by Rita.
- ii. Name the element of the above function of management which helped Rita to improve Smita's behavior.
- iii. State any three features of the element identified in (ii) above.

## **CHAPTER-8 CONTROLLING**

### **MULTIPLE CHOICE QUESTION**

Q1. Which of the following describes the nature of controlling?

- a. Goal oriented process
- b. Pervasive function
- c. Continuous process
- d. All of the above

Q2. In a marketing firm, the Financial Manager pays more attention towards an increase of 3% in the marketing cost as compared to a 15% increase in the courier expenses. Identify the concept being used by the manager.

- a. Management by exception
- b. Critical point control
- c. Corrective action
- d. None of the above

Q3. Which of the following factors are beyond the control of an organisation.

- a. Change in government policies
- b. Change in technology

- c. Competition level
  - d. All of the above
- Q4. In controlling process, the next stage after setting performance standards is
- a. Measurement of actual performance
  - b. Comparing actual performance with standards
  - c. Analysing deviations
  - d. Taking corrective actions
- Q5. The need for the controlling function is felt in
- a. Business organisations
  - b. Political organisations
  - c. Social organisations
  - d. All of the above
- Q6. Reducing the workers, absenteeism in a factory by 20% is an example of
- a. Quantitative standard
  - b. Qualitative standard
  - c. Deviation
  - d. None of the above
- Q7. In controlling process, while setting performance standards, standards can be set
- a. In quantitative terms only
  - b. In qualitative terms only
  - c. Both (a) and (b)
  - d. In subjective terms
- Q8. Which standards are used in production?
- a. Quality standards
  - b. Quantity standards
  - c. Cost standards
  - d. All of the above
- Q9. which of the following is the technique of measurement of performance?
- a. Personal observation
  - b. Sample checking
  - c. Performance reports
  - d. All of the above
- Q10. Yash runs a logistic company. The Tour Incharges of each trip in the company are expected to submit a report to the Event Manager on the completion of every trip. Identify the step in the controlling process being described in the above lines.
- a. Setting of standards
  - b. Measurement of actual performance
  - c. Taking corrective action
  - d. Analysing the deviations
- Q11. An efficient control system helps to
- a. Accomplishes organisational objectives
  - b. Boosts employee morale
  - c. Judges accuracy of standards
  - d. All of the above
- Q12. Controlling function of an organisation is
- a. Forward looking
  - b. Backward looking
  - c. Forward as well as backward looking
  - d. None of the above
- Q13. "Managerial control implies the measurement of a accomplishment against the standard and the correction of deviations to assure attainment of objectives according to plans." This definition has been given by
- a. Koontz and O'Donnell
  - b. Peter Drucker
  - c. Henry Fayol
  - d. Chester Barnard
- Q14. Budgetary control requires the preparation of
- a. Training schedule
  - b. Budgets
  - c. Network diagram

d. Responsibility centres

**ASSERTION REASON BASED QUESTION.**

1. Assertion (A) – Standards are criteria against which actual performance would be measured.  
Reason (R) – Standards can be set in both Quantitative as well as Qualitative terms.  
Alternatives:
  - a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
  - b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
  - c) Assertion (A) is True and Reason (R) is False.
  - d) Assertion (A) is False and Reason (R) is True.
  
2. Assertion (A) – In order to seek result from the subordinates, a manager needs to exercise effective control over the activities of the subordinates.  
Reason (R) – Controlling is a primary function of middle level manager.
  - a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
  - b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
  - c) Assertion (A) is True and Reason (R) is False.
  - d) Assertion (A) is False and Reason (R) is True

**SUBJECTIVE TYPE QUESTIONS:**

Q1 Jindal Ltd. could not achieve the target production of 15,000 cars p.a. It could produce only 14,125 cars-while analysing the deviations, it was found that workers were not efficient. Training programmes were organised and next year, company was able to produce 15,000 units. Production manager is of the opinion that with this, management ends at controlling.

Do you agree? Give reasons to support your answer.

Q2. Kanu is appointed as a Factory Manager in a gel- pen manufacturing company. He was given a target of producing one lac gel pens per month. He knew that the essence of management is to achieve desired results' but he know how to ensure that the work goes on according to plans.”

Guide him by explaining the process so that he is able to achieve the desired results.

Q3. Airtech Ltd. Is manufacturing mobile phones both for domestic Indian market as well as for export. It had enjoyed a substantial market share and also had a loyal customer following. But lately it has been experiencing problems because its target have not been met with regard to sales and customer satisfaction . Also, mobile market in India has grown tremendously and new players have come with better technology and pricing. This is causing problems for the company. It is planning to revamp its controlling system and take other steps necessary to rectify the problems it is facing. It also decides to offer its basic models of mobile phones at 50% discount to the poor people.

- a) State any two benefits the company will derive from a good control system.
- b) How can the company relate its planning with control in this line of business to ensure that its plan are actually implemented and targets attained.
- c) Give the steps that the company should follow to remove the problems it is facing.

Q4. You are a manager in a car manufacturing company. It is reported that postal expenses have increased by 10 % and cost of raw material by 2% which of the two deviations is more critical to you? It is related to which concept of controlling? Explain it.

Q5. Polycons Ltd. Is a firm manufacturing paper bags in Odisha. It has employed female workers in the company and manufacture paper bags from recycle paper and sells them to various at economic rates. Since last 1 month, its customers (firms) are reporting of complaints received from the users that these bags are unable to manage heavy weight and get torn easily.

- a) Which function of management has been ignored above?
- b) Discuss the steps to be undertaken in respect of the ignored function to pacify situation.

## **CH-9 FINANCIAL MANAGEMENT**

### **OBJECTIVE TYPE QUESTIONS**

#### **A.MULTIPLE CHOICE QUESTIONS**

1. The Cheapest source of finance is:
  - a. Debenture
  - b. Equity share capital
  - c. Preference share
  - d. Retained earnings
2. A decision to acquire a new and modern plant to upgrade an old one is a
  - a. Financing decision
  - b. Working capital decision
  - c. Investment decision
  - d. None of the above
3. Other things remaining the same, an increase in the tax rate on corporate profit will
  - a. Make the debt relatively cheaper
  - b. Make the debt relatively the dearer
  - c. Have no impact on the cost of debt
  - d. We can't say
4. Companies with a higher growth potential are likely to
  - a. Pay lower dividends
  - b. Pay higher Dividends
  - c. Dividends are not affected
  - d. none of the above
5. Financial leverage is called favourable if:
  - a. Return on investment is lower than the cost of debt.
  - b. ROI is higher than the cost of Debt
  - c. Debt is easily available.
  - d. If the degree of existing financial leverage is low.
6. Higher debt – equity ratio results in:
  - a. lower financial risk
  - b. higher degree of operating risk
  - c. higher degree of financial risk
  - d. higher EPS.
7. Higher Working capital usually results in:
  - a. higher current ratio, higher risk and higher profits
  - b. lower current ratio, higher risk and profits
  - c. higher equity, lower risk and lower profits
  - d. lower equity, lower risk and higher profits.
8. Current assets are those assets which get converted into cash:
  - a. within six months
  - b. within one year
  - c. between one year and three years

d. between three and five years.

9. A fixed asset should be financed through:

- a. long term liability
- b. short term liability
- c. medium term liability
- d. mix of long and short term liability

10. Current assets of a business firm should be financed through:

- a. current liability only
- b. long term liability only
- c. Fixed liabilities only
- d. Both types (i.e., long and short term liabilities)

11. Financial management helps in

- a. Reducing the cost of funds
- b. Keeping the risks under control
- c. Achieving effective development of funds
- d. All of the above

12. To maximize the wealth of owners means

- a. To minimize the risk of the shareholders
- b. To maximize the shares of shareholders
- c. To maximize the current price of equity shares of the company
- d. To minimize the tax in the hands of shareholders

13. Dividend is that portion of profit, which is distributed to the shareholders and undistributed profit which remains in the business is known as

- a. Earnings
- b. Equity
- c. Retained earnings
- d. Interest

14. Financial planning helps in

- a. Running the business smoothly by forecasting
- b. Avoiding business shocks and surprises
- c. Coordinating various business functions
- d. All of the above

15. Calculate the profit before interest and tax from the following information: Profit after tax = Rs. 150,000 Interest Rs. 60,000 and Tax rate is 50%

- a. Rs. 3,60,000
- b. Rs. 3,00,000
- c. Rs. 45,000
- d. Rs. 1,05,000

### **ASSERTION REASON BASED QUESTIONS**

1. Assertion (A): Financial management is concerned with optimal procurement as well as the usage of finance.

Reason (R): For optimal procurement, different available sources of finance are identified and compared in terms of their costs and associated risks.

- (a) Both Assertion (A) and Reason (R) are True and Reason (R) is the correct explanation of Assertion (A)
- (b) Both Assertion (A) and Reason (R) are True but Reason (R) is not the correct explanation of Assertion (A)
- (c) Assertion (A) is True but Reason (R) is False
- (d) Assertion (A) is False but Reason (R) is True.

2. Assertion (A): The primary aim of financial management is to minimise shareholders' wealth. Reason (R): The shareholders gain if the value of shares in the market increases.

- (a) Both Assertion (A) and Reason (R) are True and Reason (R) is the correct explanation of Assertion (A)

(b) Both Assertion (A) and Reason (R) are True but Reason (R) is not the correct explanation of Assertion (A)

(c) Assertion (A) is True but Reason (R) is False

(d) Assertion (A) is False, but Reason (R) is True.

## SUBJECTIVE TYPE QUESTIONS

Q1. Abhishek Ltd.' is manufacturing cotton clothes. It has been consistently earning good profits for many years. This year too, it has been able to generate ^ profits. There is availability of enough cash in the company and good prospects for growth in future. It is a well-managed organisation and believes in quality, equal employment opportunities and good remuneration practices. It has many shareholders who prefer to receive a regular income form their investments.

It has taken a loan of Rs.50 lakhs from I.C.I.C.I Bank and is bound by certain restrictions on the payment of dividend according to the terms of the loan agreement.

The above discussion about the company leads to various factors which decide how much of the profits should be retained and how much has to be distributed by the company. Quoting the lines from the above discussion, identify and explain any four such factors.

Q2. "A business that doesn't grow dies", says Mr. Shah, the owner of Shah Marble Ltd. with glorious 36 months of its grand success having a capital base of RS.80 crores. Within a short span of time, the company could generate cash flow which not only covered fixed cash payment obligations but also create sufficient buffer. The company is on the growth path and a new breed of consumers is eager to buy the Italian marble sold by Shah Marble Ltd. To meet the increasing demand, Mr. Shah decided to expand his business by acquiring a mine. This required an investment of RS.120 crores. To seek advice in this matter, he called his financial advisor Mr. Seth who advised him about the judicious mix of equity (40%) and Debt (60%). Mr. Seth also suggested him to take loan from a financial institution as the cost of raising funds from financial institutions is low. Though this will increase the financial risk but will also raise the return to equity shareholders. He also apprised him that issue of debt will not dilute the control of equity shareholders. At the same time, the interest on loan is a tax deductible expense for computation of tax liability. After due deliberations with Mr. Seth, Mr. Shah decided to raise funds from a financial institution.

A. Identify and explain the concept of Financial Management as advised by Mr. Seth in the above situation.

B. State the four factors affecting the concept as identified in part (1) above which have been discussed between Mr. Shah and Mr. Seth

Q3. 'Sarah Ltd.' is a company manufacturing cotton yarn. It has been consistently earning good profits for many years. This year too, it has been able to generate enough profits.

There is availability of enough cash in the company and good prospects for growth infuture. It is a well-managed organization and believes in quality, equal employment opportunities and good remuneration practices.

It has many shareholders who prefer to receive a regular income from their investments. It has taken a loan of Rs.40 lakhs from IDBI and is bound by certain restrictions on the payment of dividend according to the terms of loan in agreement.

The above discussion about the company leads to various factors which decide how muchofthe profits should be retained and how much has to be distributed by the company.

Quoting the lines from the above discussion identity and explain any four such factor

Q4. 'Smart Stationery Ltd.' wants to raise funds of < 40, 00,000 for its new project. The management is considering the following mix of debt and equity to raise this amount: Capital Structure

Alternative

I  
Equity 40, 00,000

II  
30, 00,000

III  
10, 00,000

Debt                    0                                    10, 00,000                                    30, 00,000

Other details are as follows:

Interest Rate on Debt 9%

Face Value of Equity Shares <

100 each Tax Rate 30%

Earning Before Interest and Tax (EBIT) < 8, 00,000

(a) Under which of the three alternatives will the company be able to take advantage of Trading on Equity ?

(b) Does Earning Per Share always rise with increase in debt?

Q5. 'G. Motors' is the manufacturer of sophisticated cranes. The Production manager of the company, reported to the Chief Executive Officer, Ashish Jain that one of the machines used in manufacturing sophisticated cranes had to be replaced to compete in the market, as other competitors were using automatic machines for manufacturing cranes. After a detailed analysis, it was decided to purchase a new automatic machine having the latest technology. It was also decided to finance this machine through long term sources of finance. Ashish Jain compared various machines and decided to invest in the machine which would yield the maximum returns to its investors.

(a) Identify the financial decision taken by Ashish Jain.

(b) Explain any three factors affecting the decision identified in (a) above.

## CHAPTER 10

### FINANCIAL MARKET

#### A. MULTIPLE CHOICE QUESTIONS

1. Which of the following statements is not true with regard to money market?

(a) It involves low market risk.

(b) It is situated at specific locations.

(c) Deals in unsecured and short-term debt instruments.

(d) The instruments traded are highly liquid.

2. Which of the following statements is not true with regard to Treasury bills?

(a) Are issued in the form of a promissory note.

(b) They are highly liquid and have assured yield

(c) They carry high risk of default.

(d) They are available for a minimum amount of ₹25,000 and in multiples thereof.

3. Which of the following statements is not true with regard to Commercial paper?

(a) Is a long-term unsecured promissory note with a fixed maturity period.

(b) It usually has a maturity period of 15 days to one year.

(c) It is sold at a discount and redeemed at par.

(d) Companies use this instrument for bridge financing.

4. Which of the following statements is not true with regard to Call money?

(a) It is short-term finance repayable on demand.

(b) Its maturity period ranges from one day to fifteen days.

(c) There is a direct relationship between call rates and other short-term money market instruments.

(d) It is used for inter-bank transactions.

5. Which of the following statements is not true with regard to primary market?

(a) Is also known as the old issues market.

- (b) It facilitates the transfer of investible funds from savers to entrepreneurs.
- (c) It deals with new securities being issued for the first time
- (d) It facilitates the transfer of investible funds from savers to entrepreneurs.

6. Which of the following statements is not true with regard to capital market?

- (a) The funds are raised for a short period of time.
- (b) Both debt and equity funds can be raised.
- (c) It is classified into two types.
- (d) All of the above.

7. Which of the following statements is not true with regard to stock exchange?

- (a) It provides a platform for buying and selling of new securities.
- (b) It curbs the marketability of the securities.
- (c) By providing a ready market, it extends liquidity to the securities.
- (d) It provides a platform for buying and selling of old securities.

8. Which of the following is not a protective function of stock exchange?

- (a) Prohibition of fraudulent and unfair trade practices.
- (b) Controlling insider trading.
- (c) Regulation of takeover bids by companies.
- (d) Promotion of fair practices and code of conduct in securities market.

9. Raj Enterprises wishes to invest ₹1,10,000 in treasury bills. What is the maximum number of treasury bills it can buy with this fund?

- (a) 6
- (b) 7
- (c) 4
- (d) 2

10. Which of the following statements is true with regard to financial markets?

- (a) They link the households which save funds and business firms which invest these funds.
- (b) They work as an intermediary between the savers and the investors by mobilising funds between them.
- (c) They allocate funds available for investment into their most productive investment opportunity.
- (d) All of the above

11. The allocated function is performed by

- (a) Financial market
- (b) Capital market
- (c) Money market
- (d) All of the above

12. It is a market for short-term funds which deals in monetary assets whose period of maturity is up to one year.

- (a) Primary market
- (b) Secondary market
- (c) Capital market
- (d) Money market

13. It is an instrument of short-term borrowing by the Government of India maturing in less than one year.

- (a) Commercial bill
- (b) Treasury bill
- (c) Call money
- (d) None of the above

14. Who issues a treasury bill?

- (a) Any nationalised bank
- (b) Any private sector bank
- (c) Reserve Bank of India
- (d) All of the above

15. Suppose an investor purchases a 91 days Treasury bill with a face value of ₹2,00,000 for ₹1,92,000. By holding the bill until the maturity date, the investor receives ₹2,00,000. What is the amount of interest received by him?

- (a) ₹8,000
- (b) ₹80,000
- (c) ₹3,92,000
- (d) ₹2,00,000

16. It is used as an alternative to bank borrowing for large and creditworthy companies,

- (a) Commercial bill
- (b) Commercial papers
- (c) Call money
- (d) None of the above

17. It is a method by which banks borrow from each other to be able to maintain the cash reserve ratio.

- (a) Commercial bill
- (b) Commercial papers
- (c) Call money
- (d) None of the above

18. A rise in call money rates makes other sources of finance such as commercial paper and certificates of deposit

- (a) Expensive in comparison with banks who raise funds from these sources.
- (b) Cheaper in comparison with banks who raise funds from these sources.
- (c) Creates no effect on other sources.
- (d) None of the above

19. It is a short-term, negotiable, self-liquidating instrument which is used to finance the credit sales of firms.

- (a) Commercial bill
- (b) Commercial papers
- (c) Call money
- (d) None of the above

20. The capital market consists of

- (a) Development banks
- (b) Commercial banks
- (c) Stock exchanges
- (d) All of the above

### ASSERTION AND REASON BASED QUESTIONS

**Q.1** Read the following statement carefully – Assertion (A) and Reason (A) and choose the correct alternative:

**Assertion (A):** Primary Market promotes capital formation directly.

**Reason(R):** Only buying of securities takes place in the primary market

- a) Both Assertion (A) and Reason (A) are true and Reason (A) is the correct explanation of Assertion (A).
- b) Both Assertion (A) and Reason (A) are true and Reason (A) is not the correct explanation of Assertion (A).
- c) Assertion (A) is true, but Reason (A) is false.

d) Assertion (A) is false, but Reason (A) is true.

**Q.2** Read the following statement carefully – Assertion (A) and Reason (A) and choose the correct alternative:

**Assertion (A):** Money market instrument are less risky.

**Reason(R):** Instruments of money market have shorter duration and issuers are financially sound.

- a) Both Assertion (A) and Reason (A) are true and Reason (A) is the correct explanation of Assertion (A).
- b) Both Assertion (A) and Reason (A) are true and Reason (A) is not the correct explanation of Assertion (A).
- c) Assertion (A) is true, but Reason (A) is false.
- d) Assertion (A) is false, but Reason (A) is true.

### **SUBJECTIVE TYPE QUESTIONS**

Q1. Ramesh buys a financial asset from the RBI. This financial asset is an instrument of short term borrowing. He has bought it because he doesn't want to take risk and wants an assured return. This instrument is a promissory note. It is highly liquid. This instrument is also known as Zero Coupon Bond. On this instrument is written T-91.

- 1. Which financial asset is indicated in the above case?
- 2. On whose behalf does the RBI issue this instrument?
- 3. Why is this instrument called as the Zero Coupon Bond?
- 4. What does T-91 denote here?
- 5. What is the minimum amount for which this instrument is available?

Q2. Ramesh the CEO of a company thinks of going with the most popular method of raising funds used by the public companies. He discussed this option with his immediate subordinates. After discussion he realises that since his company is a private company he should think of some other option. Then they think of issuing the securities through intermediaries like issuing houses or stock brokers. When his nephew comes to know about his decision, he decides to suggest his uncle another way. He advises him to involve institutional investors which will help him raise funds more quickly and reduce many mandatory and non-mandatory expenses. After a lot of discussion the option suggested by his nephew is chosen as final.

- 1. In the above case identify the various methods of floatation highlighted.
- 2. Which method do you think will be applicable in the primary market?
- 3. In which type of capital market trading of only existing shares is done?
- 4. In which type of capital market only buying of securities is possible as securities can't be sold here?
- 5. Which type of capital market doesn't have fixed geographical location?

Q3. Nishant is a big supporter of the vital role played by the stock exchange in securing wider circulation of ownership of companies to the common people and supports the education of the common public about the positive effects of making investments. However, he knows nothing spreads very fast in public and takes its own time. He knows that it is only due to the presence of the stock markets that a continuous market is made available to the buying and selling of the securities. People don't want late results; they want everything instant. True investor knows that there should be knowledge before the habit of making investments. The knowledge about the companies participating should be there before any big decision is taken. Most of the people however, get attracted to the stock market as it allows speculative activity within limits which helps in liquidity of the shares in the stock market. We have different news papers which give a lot of news these days about strictness in the stock market. All this is happening today because scams took place in the 80s. But now everything takes place in legal framework providing safe and fair deal in the market. It can be expected that in the future days to come things are going to get better for investors and issuers, not to mention the intermediaries.

Identify and explain the functions of stock exchange discussed in the above para.

Q4. A company wanted to raise funds so it reached out to facilities an institutional arrangements through which long term funds (debt + equity) were raised and invested. A lot of thinking was

done whether the company should have gone for debt or equity. Finally, it decided to go for equity. The owner of the company decided to follow the guidelines of SEBI.

1. Which concept of financial market is highlighted in the starting of the case?
2. Name two objectives of SEBI.

## **CHAPTER-11**

### **MARKETING MANAGEMENT**

#### **OBJECTIVE TYPE QUESTIONS**

##### **MULTIPLE CHOICE**

##### **QUESTIONS:**

Q1. Which of the following functions of marketing helps in making product more attractive and improving its performance/

- a) Marketing planning
- b) Product designing and development
- c) Branding
- d) Promotion

Q2. With which element is exchange mechanism related?

- a) Publicity
- b) Marketing
- c) Advertising
- d) Branding

Q3. Name the philosophy of marketing which is an extension of marketing concept.

- a) Product concept
- b) Societal marketing concept
- c) Production concept
- d) Selling concept

Q4. Which of the following is the function of marketing?

- a) Gathering and analysing market information
- b) Marketing planning
- c) Standardisation and grading
- d) All of the above

Q5. Marketing plays a very important role in the economy by

- a) Raising living standard of the people
- b) Ensuring smooth flow of goods through efficient distribution system
- c) Accelerating economic activity
- d) All of the above

Q6. Which one of the following is not a marketing mix?

- a) Product
- b) Physical distribution
- c) Product pricing
- d) Production process

Q7. Which of the following refers to that process of assigning a distinctive name or symbol to the product, by which it can be known, remembered and identified?

- a) Trademark
- b) Product mix
- c) Branding
- d) Packaging

Q8. Which of the following refers to the process of designing a small slip or complex graphics that are a part of package, which denotes its nature, content and usage?

- a) Branding
- b) Packing
- c) Labelling
- d) None of these

Q9. If the management of a company wants to exercise highest level of control over the distribution of its products, which of the following channels of distribution would be preferred by it?

- a) Zero level channel
- b) One level channel
- c) Two level channel
- d) Three level channel

Q10. Which of the following statement is not correct?

- a) In zero level channel, goods are directly made available to consumers from manufacturers.
- b) In one level channel, goods are made available from manufacturers to retailers and then to customers.
- c) In two level channel, goods are available from manufacturer to agent and then to retailer.
- d) None of the above.

Q11. When Sarita opened the door on hearing the doorbell, a person was standing who was selling Britannica world's 'encyclopaedia'. Here, Britannica is using which element of promotion mix?

- a) Public relation
- b) Sales promotion
- c) Advertising
- d) Personal selling

Q12. Which of the following statement is not correct?

- a) Marketing is same thing as shopping for goods and services.
- b) Marketing is equally relevant to non profit organisation
- c) Marketing management means management of the marketing functions
- d) Selling is only a part of the process of marketing.

Q13. Which one of the following factors is not relevant to price fixation?

- a) Obtaining market leadership
- b) Age of an organization
- c) Value for money
- d) Product differentiation

Q14. Which one of the following promotion tools has mass reach?

- a) Advertising
- b) Personal selling
- c) Sales promotion
- d) Public relations

Q15. As soon as Coca Cola reduced its selling price on 2 ltr to rupees 75, soon Pepsi followed with a price reduction in its selling price priced its 2 ltr per bottle at 74.50 which factor of pricing is being discussed here?

- a) The utility and demand
- b) Extent of competition in the market
- c) Marketing methods used
- d) Pricing objectives

### **ASSERTION AND REASON BASED QUESTION**

1. Assertion (A) – Under Product Concept, focus is on innovating and improving the products.  
Reason (R) – Under Selling Concept, consumers are persuaded to buy products.

Alternatives:

- a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
  - b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
  - c) Assertion (A) is True and Reason (R) is False.
  - d) Assertion (A) is False and Reason (R) is True.
2. Assertion (A) – Packaging serves as a promotional tool .  
Reason (R) – Packaging protects the contents of the product from spoilage, leakage, damage etc.
- a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
  - b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
  - c) Assertion (A) is True and Reason (R) is False.
  - d) Assertion (A) is False and Reason (R) is True

### **SUBJECTIVE TYPE QUESTIONS**

Q1 ‘Various tools of promotion are used by the marketers to promote their products,’

- a) Why do companies use all the tools at the same time?
- b) Name and explain the most commonly used non-personal tool of promotion which is paid by the marketer.
- c) Which tool of promotion will primarily be used for the following?
  - i) To promote or protect the image of its individual products.
  - ii) An existing product meant for mass usage by literate people.
  - iii) To introduce a new product to a particular class of people through door – to- door visits.
  - iv) To attract attention of the potential buyers by using incentives.

Q2 Since childhood Niru and Janak had been watching their grandmother procuring what from the market ,washing it well, drying it and getting it converted into Atta. They conducted a survey to collect data to identify whether there is demand for readymade Atta realised that the growing number of working women, it is the need of the hour to manufacture high quality Atta. They named their product ‘Srijan’ and set up “Srijan Atta Factory” at Jaunpur Village. To penetrate into the market and, they decided to keep their price low. For manufacturing smooth flow of their product into the market and avoiding delays in delivery, it was

decided to store wheat at SKM services which had scientific processes and logistics facilitating quick delivery. They set up an online complaint portal to take care of consumer grievances.

By quoting the lines from the above para, state five marketing functions undertaken by Neeru and Janak for successful marketing of 'Srijan' Atta.

Q3 'Energy Drinks India Ltd. 'has scanned a profitable opportunity for marketing of soft drinks with 'Indian' traditional flavour'. The company wanted to market its products in India as well as in neighbouring countries. A board meeting of the company was held on 15<sup>th</sup> Feb, 2021 wherein the marketing manager was asked to give a presentation to develop this market offering. For this it was also decided to set-up its manufacturing unit in a village of Bihar. This will not only help in the development of the village but will also provide employment to the youth of that village. The marketing manager chooses a combination of variables to prepare its market offering. He used a set of marketing tools that the firm would use its marketing objectives in the target market.

- a) Name and state the concept of marketing used by the marketing manager for creating its market offering.
- b) Also, explain briefly, the various elements of this concept.

Q4 It is necessary that goods and services must be available to the customers at the right place, in the right quantity and at right time.

- a) Name and explain the element of marketing mix highlighted above.
- b) Explain the components of this element.

Q5 Sankalp and Kavi, students of 12<sup>th</sup> class with 'business studies' as an elective subject were discussing the elements of marketing mix. Sankalp said that one of the important tools of marketing mix is related to the amount received for the goods sold or services rendered. Kavi requested Sankalp in knowing the name of that element. Sankalp also added to this element is also affected by various factors. Kavi asked Sankalp to explain these factors for which Sankalp agreed. State any six factors, which affect the element this element of marketing mix as explained by Sankalp and Kavi.

## **CHAPTER 12 CONSUMER PROTECTION**

### **OBJECTIVE TYPE QUESTIONS**

#### **A. MULTIPLE CHOICE QUESTIONS**

Q1. Name the quality mark used for food products:

- a. AGMARK      b. FPO      c. HALLMARK      d. ISI

Q2. The quality certification mark used to ensure safety of electrical goods is:

- a. AGMARK      b. FPO      c. HALLMARK      d. ISI

Q3. The Act which controls production, supply and distribution of essential commodities:

- (a) The Essential Commodities Act, 1955      (b) The Consumer protection Act, 1986  
(c) The Sales of Goods Act, 1930      (d) The Bureau of Indian Standards Act, 1986

Q4. Right to Seek Redressal allows a customer to:

- (a) File a complaint against defective goods or deficient services  
(b) Seek for relief against defective goods or deficient services  
(c) Seek help from consumer organization  
(d) All the Above

Q5. "Many business firms have a set up their own consumer services and grievance cells". Which right is being highlighted in the given statement?

- (a) Right to consumer education      (b) Right to be informed

(c)Right to seek redressal      (d)Right to be heard

Q6.A complaint can be made to the State commission if the claim value is :

(a)More than Rs.20 Lakhs   (b)Less than Rs.20 Lakhs

© More than Rs.20 lakhs but less thanRs.1 crore   (d)More than Rs.1 crore

Q7. 'Jago Grahak Jago' highlights the importance of:

(a)Right to be informed

(b)Right to seek redressal

(c)Right to consumer education

(d)Right to be heard

Q8.The final appeal against the District Forum Order can be heard in

(a)State Commission

(b)National Commission

(c) Supreme Court of India

(d)None of the Abov

Q9.Name the Act which prevents the use of fraudulent mark on products:

(a)The prevention of Food Adulteration Act,1954

(b)The Trade Mark Act,1999

The Bureau of Indian Standards Act,1986

(d)The Competition Act,2002

Q10.A complaint can be filed against a seller, manufacturer or a dealer of goods whose goods are \_\_\_\_\_ in any manner.

(a)Perfect

(b)Flawless

(c)Defective

(d)None of the Above

Q11.Who Among the following can be President of the National Consumer Dispute Redressal Commission?

(a)Judge of a High Court

(b)Judge of a Supreme Court

(c)Lawyer of a High Court

(d)Lawyer of a Supreme Court.

Q12.The consumer must be assured whenever possible access to a variety of goods and services at competitive prices.

a. Right to Consumer Protection Act

b. Right to choose

c. Right to safety

d. Right to be heard

Q13.Consumer Protection Act is applicable:

a. Immovable goods

b. Movable goods

c. Specific goods and services

d. All goods and services.

Q14.Identify the importance of consumer protection according to consumers point of view.

a. Consumer ignorance

b. Government intervention

c. Moral justification

d. Social responsibility

Q15.Which of the following is importance of consumer protection in the view of business:

a. Unorganized consumers

b. Consumer ignorance

c. Moral justification

d. Unorganized consumers

Q16. A consumer has a right to fill a complaint and to be heard in case of dissatisfaction with goods or services according to which right of consumer protection act?

- a. Right to be heard
- b. Right to seek redressal
- c. Right to choose
- d. Right to consumer education

### **ASSERTION REASON BASED QUESTION**

1. Assertion (A): The Consumer Protection Act 2019 is only applicable on e-commerce firms.  
Reason (R): The Consumer Protection Act 2019 extends to the whole of India.

- (a) Both Assertion (A) and Reason (R) are True and Reason (R) is the correct explanation of Assertion (A)
- (b) Both Assertion (A) and Reason (R) are True but Reason (R) is not the correct explanation of Assertion (A).
- (c) Assertion (A) is True but Reason (R) is False
- (d) Assertion (A) is False but Reason (R) is True

2. Assertion (A): Under the Consumer Protection Act 2019, a consumer is a person who buys any goods or avails services for a consideration, which has been paid or promised, or partly paid and partly promised, or under any scheme of deferred payment.

Reason (R): The Consumer Protection Act 2019 applies to only offline transactions. Alternatives:

- (a) Both Assertion (A) and Reason (R) are True and Reason (R) is the correct explanation of Assertion (A)
- (b) Both Assertion (A) and Reason (R) are True but Reason (R) is not the correct explanation of Assertion (A)
- (c) Assertion (A) is True but Reason (R) is False
- (d) Assertion (A) is False but Reason (R) is True.

### **SUBJECTIVE TYPE QUESTIONS**

Q1. Indian Youth Organisation (IYO) organized a visit of its members to an old age home to inculcate the habit of social work among them. The visit revealed that the living conditions of the inmates of the old age home were not hygienic. So, the IYO members decided to clean the premises. During their cleanliness drive, they realized that the old age home also required pest control. But some of the inmates of old age home were reluctant for it, because they believed that the pest control may create health problems for them.

IYO, therefore decided to provide ethical, safe and odorless pest control. They showed to the inmates of old age home a pamphlet of the proposed pest control product which promised easy, inexpensive and long lasting pest control. The inmates happily agreed and the pest control was carried out. It worked for a fortnight but due to their dismay the effect started wearing off. IYO contacted the pest control company which kept on postponing their visit. After waiting for a month, IYO filed a case in the consumer court. The consumer court was satisfied about the genuineness of the complaint and issued necessary directions to the pest control company.

1. State any six directions that might have been issued by the court.
2. Also, identify any two values that are being communicated by IYO to the society.

Q2. 'Vastra Ltd.' is engaged in the manufacturing of apparel. Over the years, it has become a popular brand due to its good product quality and exclusive designing. The company plans to open its own retail showrooms in metropolitan cities in India. In order to meet its financial needs it has offered for subscription an IPO of Rs. 4 lakh equity shares in the price band of Rs. 430– Rs. 445 each. As per the

guidelines of SEBI, the company has provided a complete disclosure of the relevant details in its prospectus.

Identify and explain the right of the consumer being fulfilled by the directives of SEBI in the above mentioned case.

Briefly explain any two points highlighting the importance of consumer protection from the point of view of the businessmen.

Q3. Home Shop 18 is an online and on-air retail and distribution venture of the Network 18 group, India. It is a part of the Network 18 Media and Investments Limited which is owned and operated by Reliance Industries. Currently, Home Shop 18 comprises of more than 15 categories namely, Mobiles, Health & Beauty, Apparel, Jewellery, Home & Kitchen, Household Appliances etc. to name a few. The company offers a wide variety of goods under each of these categories. Identify and explain the relevant consumer right being promoted by the company. Also mention any two values being reflected through this approach adopted by the company.

Q4. On her sister's wedding, Radha decided to gift her gold earrings. When she shared her plan with her husband, he showed her an article in the daily national newspaper under the heading "Jago Grahak Jago." The campaign included details about the various aspects that people must consider before buying any gold jewellery.

Why do you think campaigns like "Jago Grahak Jago" are inserted in the newspaper?

Name the right of consumer being fulfilled through this initiative of the government. State any three responsibilities that Radha must discharge as an aware consumer while buying her sister's wedding gift.

Q5. Suryansh booked a flat through a private builder in Greater Noida, Uttar Pradesh at the cost of Rs.2 crores. As per the terms of the contract, the builder promised to provide him with all the basic and modern amenities such as continuous electric supply, CCTV Camera, Club facility, good quality of water, good security etc. although he was given the possession of the flat in time, the builder did not provide all the basic and common facilities which also included 3 tier security having CCTV camera coverage for each floor. Suryansh kept complaining to the builder after possession of the flat for non-installation of CCTV camera and other common and basic amenities as promised at the time of agreement, but the builder kept assuring him that he will do the needful and he need not worry. After a month, Suryansh had to travel abroad, so he left his home with his flat duly locked. But on his return, he found that his flat has been robbed and theft of Rs. 10,000 and jewellery worth Rs. 10 Lac had taken from place. He complained to the builder that had CCTV cameras been installed, it would have been a deterrent and the theft would not have been taken place. Also, CCTV would have ensured that no unwanted person would have entered the building. When Suryansh discussed this incident with his friend Sooraj, who runs a consumer association, he advised him to file a case against the builder.

In context of the above case:

Name the right of consumer that Sooraj has advised Suryansh to exercise. State any three functions highlighting the role of a consumer association

**MACRO ECONOMICS**  
**CHAPTER -1 CIRCULAR FLOW OF INCOME**

**MCQ**

- Q1. Stock variable is defined as a variable which is:  
 (a) Measured over a period of time (b) Measured at a particular point of time  
 (c) cannot be measured (d) None of these
- Q2. Interest is classified as:  
 (a) Stock variable (b) Flow variable  
 (c) Either (a) or (b) (d) Neither (a) or (b)
- Q3. Real flow is also known as:  
 (a) Nominal flow (b) Physical flow  
 (c) Money flow (d) Both (a) and (b)
- Q4. Which of the following is consumption sector?  
 (a) Households (b) Firms  
 (c) Foreign (d) Government
- Q5. Money flow involves exchange of:  
 (a) Goods and services (b) Gifts  
 (c) Money (d) None of these
- Q6. Real flow refers to the flow of factor services from \_\_\_\_\_ to \_\_\_\_\_.  
 (a) Firms to households (b) Households to firms  
 (c) Firms to government (d) households to government
- Q7. In a closed economy, \_\_\_\_\_ is not included  
 (a) Households (b) Firms  
 (c) Foreign (d) Government
- Q8. Which of the following is not a flow?  
 (a) Capital (b) income  
 (c) Investment (d) depreciation
- Q9. Which of the following is a stock?  
 (a) wealth (b) saving  
 (c) export (d) profits
- Q10. Flow of goods and services and factors of production across different sectors in a barter system is known as:  
 (a) Real flow (b) money flow  
 (c) Capital flow (d) none of these

**Choose appropriate word and fill in the blanks. (1 mark each):**

- In the \_\_\_\_\_ phase, income received by factors of production, is spent on goods and services produced by \_\_\_\_\_.
- In a two-sector economy, there is no \_\_\_\_\_ and \_\_\_\_\_ sector
- Real flow is also known as \_\_\_\_\_.
- \_\_\_\_\_ is also known as nominal flow.
- \_\_\_\_\_ variable is a dynamic concept.

**State whether the following statements are true or false (1 mark each) :**

- Capital formation is a stock.
- Inventory is a stock variable.
- Circular flow of income does not take place in case of closed economy.

**Matching type questions:**

- Choose the correct pair of statement:

Column I	Column II
a) Money flow	i) it involves exchange of goods and services
b) Stock	ii) it has a time dimension

c) Real flow	iii) it is also known as physical flow
d) Flow	iv) it is a static concept

## 2. Matching type questions:

1. Identify the correct sequence of alternatives given in column II by matching them with respective items in column I:

Column I	Column II
a) Real flow	i) Static concept
b) Flow	ii) Flow of goods and services
c) Money flow	c) Money flow
d) Stock	iv) Nominal flow

### ASSERTION REASON QUESTION (AQR):

1. Read the following statements: Assertion (A) and reason (B). choose one of the correct alternatives given below:

Assertion (A): Savings are zero in case of two sector economy.

Reason (R): House hold spend the entire factor income received from firms on consumption of goods and services.

- Both assertion (A) & reason (R) are true and R is correct explanation of A.
- Both assertion (A) & reason (R) are true and R is not correct explanation A.
- Assertion (A) is true but reason (R) is false.
- Assertion (A) is false but reason (R) is true.

2. Read the following statements: Assertion (A) and reason (B). choose one of the correct alternatives given below:

Assertion (A): Total production is equal to total consumption in case of two sector economy.

Reason (R): Household sector supplies factor services only to firms.

- Both assertion (A) & reason (R) are true and R is correct explanation of A.
- Both assertion (A) & reason (R) are true and R is not correct explanation A.
- assertion (A) is true but reason (R) is false.
- assertion (A) is false but reason (R) is true.

### Hots and Application Based Question:

1. "In a two-sector economy, national product is equal to national income". Comment.

2. Classify the following as stock and flow:

Losses, Profits, Savings, Capital, Production, Wealth, GDP, Balance in bank account.

### Short Answer Type Question

Q1. Explain the circular flow of income.

Q2. "Households and Firms depend on each other in the circular flow of income."

Justify the statement in case of two sector model.

Q3. Distinguish between Stock and Flow. Give an example of each.

### Long Answer Type Question

Q1. Briefly Explain the money flow and the real flow of income.

Q2. Describe the circular flow of income in a two-sector economy (without financial market).

## CHAPTER-2 BASIC CONCEPTS OF MACRO ECONOMICS

### MCQ

Q1. Depreciation of fixed capital asset refers to:

- Normal wear and tear
- Foreseen obsolescence
- Normal wear & tear & foreseen obsolescence.
- Unforeseen obsolescence

- Q2. Unforeseen obsolescence of fixed capital assets during production is:  
 (a)Consumption of Fixed Capital (b)Capital Loss  
 (c)Income loss (d)None of the above.
- Q3. Refrigerator purchased by a confectionery shop is an example of:  
 (a) Final Good (b) Intermediate goods  
 (c) Capital good (d) both (a) and (c)
- Q4. Which of the following is an example of Non-durable good?  
 (a) Milk (b)Bread  
 (c) both (a) and (b) (d)clothes
- Q5. Addition to the capital Stock of an economy is termed as:  
 (a)Investment (b)Capital loss  
 (c)Consumption of Fixed capital (d)All of these
- Q6. Japanese Embassy in India is a part of domestic territory of:  
 (a)India (b)Japan  
 (c)Both (a) & (b) (d)International Area
- Q7. Foreign embassies in India are a part of India's:(Choose the correct alternative)  
 (a)Economic Territory (b)Geographical Territory  
 (c)Both (a) and (b) (d)None of the above
- Q8. Goods purchased for the following purposes are final goods:(Choose the correct alternative)  
 (a)for satisfaction of wants (b)For investment in firm  
 (c) Both (a) and (b) (d)None of the above.

**Choose appropriate word and fill in the blanks.**

- Final goods are those goods which are used either for \_\_\_\_\_ or for \_\_\_\_\_.
- \_\_\_\_\_ income is a receipt concept.
- Factor income is included in both \_\_\_\_\_ income and \_\_\_\_\_ income.

**State whether the following statements are true or false (1 mark each):**

- Bread is always a consumer good.
- Purchase of machinery by producer is an intermediate good.
- Intermediate goods are always durable in nature.
- Butter is only a final product.
- Unexpected obsolescence is a component of depreciation.

**Matching type questions:**

- Identify the correct sequence of alternatives given in column II by matching them with respective items in column I:

Column I	Column II
a) Factor income	i) consumption of fixed capital
b) inter mediate goods	ii) received by factors of production
c) depreciation	iii) scholarship
d) indirect taxes	iv) goods within the production boundary
e) transfer income	v) machinery purchased by a firm
f) final goods	vi) G S T

**ASSERTION REASON QUESTION (AQR):**

- Read the following statements: Assertion (A) and reason (B). choose one of the correct alternatives given below:

**Assertion (A):** Transfer income is not included in national income.

**Reason (R):** Transfer income is a unilateral concept.

- Both assertion (A) & reason (R) are true and R is correct explanation of A.
- Both assertion (A) & reason (R) are true and R is not correct explanation A.
- assertion (A) is true but reason (R) is false.
- assertion (A) is false but reason (R) is true.

2. Read the following statements: Assertion (A) and reason (B). choose one of the correct alternatives given below:

**Assertion (A):** Subsidy is a transfer payment.

**Reason (R):** Subsidy contributes to current flow of goods and services.

- i) Both assertion (A) & reason (R) are true and R is correct explanation of A.
- ii) Both assertion (A) & reason (R) are true and R is not correct explanation A.
- iii) assertion (A) is true but reason (R) is false.
- iv) assertion (A) is false but reason (R) is true.

**Hots and Application Based Question:**

1. 'N F I A can never be negative' Defend or refute with valid reason.
2. 'Gross investment is always greater than net investment'. Defend or refute with valid reason.
3. Which among the following are consumer goods and capital goods and why?
  - i) A car used as a taxi
  - ii) Refrigerator in a hotel
  - iii) A C in a house.
4. Subsidies to the producers, should be treated as transfer payments. Defend or refute with valid reason.

**Short Answer Type Question**

Q1. Distinguish between intermediate products and final products. Give examples.

Or

Explain the basis of classifying goods into intermediate and final goods. Give suitable examples.

Q2. 'Machine purchased is always a final good' Do you agree? Give reasons for your answer.

Q3. Which of the following expenditures incurred are on intermediate products and which are on final products? You must state reason for your answer.

- (i) Purchase of ticket for train journey by an individual.
- (ii) Purchase of eatables by a firm.
- (iii) Purchase of a car by an employer for office use by his employees.

Q4. What is meant by net factor income from abroad? Briefly describe its various components.

**Long Answer Type Questions**

Q1. Briefly discuss the meaning of domestic territory and normal residents.

Q2. Discuss the concept of factor income and transfer income with the help of examples.

### CHAPTER 3-National income and related aggregates

Q1. If economic subsidies are added to and indirect taxes are subtracted from the national income at market prices, then it will be equal to:

- (a) Domestic income
- (b) National income
- (c) Gross national product at market prices
- (d) Gross domestic product at factor cost

Q2. Which of the following is not an component of operating surplus?

- (a) Interest
- (b) Rent
- (c) Royalty
- (d) Compensation of employees

Q3. In which type of economy, domestic income is equal to national income?

- (a) Open economy
- (b) Closed economy
- (c) Both (a) and (b)
- (d) Neither (a) or (b)

Q4. Domestic factor income is another name for:

- (a) NDP<sub>fc</sub>
- (b) NNP<sub>mp</sub>
- (c) GDP<sub>fc</sub>
- (d) NNP<sub>fc</sub>

Q5. Net domestic product at factor cost is less than national income when:

- (a) Net factor income from abroad is positive
- (b) Net factor income from abroad is negative

(c) Net factor income from abroad is zero (d) net exports are positive

Q6. National income is equal to :

- (a) Domestic Product plus factor incomes earned from abroad
- (b) Domestic Product plus net factor incomes earned from abroad
- (c) Domestic Product minus factor incomes earned from abroad
- (d) Domestic Product plus exports minus imports.

Q7. If net national product is given at market prices, we \_\_\_\_\_ indirect taxes and \_\_\_\_\_ subsidies to get national income of the economy.

- (a) Add, subtract
- (b) add, divide
- (c) Subtract, add
- (d) subtract, Divide

Q8. From the following information, compute GNPmp. GDPfc=3000; net factor income to abroad=200. Indirect Taxes=420, subsidies=240.

- (a) 3,380
- (b) 2,980
- (c) 3,020
- (d) 2,620

**Choose appropriate word and fill in the blanks.**

Q1. NNPfc is also known as \_\_\_\_\_ income.

Q2. NDPfc is also known as \_\_\_\_\_ income.

Q3. The value of GNP will be greater than GDP, when value of \_\_\_\_\_ is positive.

**State whether the following statements are true or false:**

Q1. In a closed economy GDP is always equal to GNP.

Q2. Domestic income of a country can be more than its national income.

Q3. Domestic product includes contribution of only resident producers with in the domestic territory of the country.

**Matching type questions:**

Q1. Identify the correct sequence of alternatives given in column II by matching them with respective items in column I:

Column I	Column II
a) NDPfc	i) National income
b) NDPmp	ii) GDPfc - dep + NIT
c) NNPfc	iii) Domestic income
d) GNPfc	iv) NDPmp + dep - NIT + NFIA

**ASSERTION REASON QUESTION (AQR):**

Q1. Read the following statements: Assertion (A) and reason (B). choose one of the correct alternatives given below:

**Assertion (A):** Domestic income is equal to national income in case of closed economy.

**Reason (R):** Closed economy has no economic relations with rest of the world.

- i) Both assertion (A) & reason (R) are true and R is correct explanation of A.
- ii) Both assertion (A) & reason (R) are true and R is not correct explanation A.
- iii) assertion (A) is true but reason (R) is false.
- iv) assertion (A) is false but reason (R) is true.

Q2. Read the following statements: Assertion (A) and reason (B). choose one of the correct alternatives given below:

**Assertion (A):** Domestic income is a territorial concept.

**Reason (R):** Domestic income includes value of final goods and services produced in the entire world.

- i) Both assertion (A) & reason (R) are true and R is correct explanation of A.
- ii) Both assertion (A) & reason (R) are true and R is not correct explanation A.
- iii) assertion (A) is true but reason (R) is false.
- iv) assertion (A) is false but reason (R) is true.

**Hots and Application Based Question:**

Q1. Mention the situation in which following equation hold true:

- i) National income = Domestic income
- ii) GDPfc > GDPmp
- iii) NNPfc < NDPfc

iv)  $GDP_{fc} = GDP_{mp}$

**Short Answer Type Questions:**

Q1. Define the following terms : (i)  $GDP_{mp}$ ; (ii)  $NDP_{fc}$ ; (iii)  $NNP_{mp}$

Q2. When can domestic product be more than national product?

Q3. Distinguish between Gross Domestic Product at market price and national income.

Q4. Distinguish between domestic product and national product.

Q5. Is it necessary that Domestic Income is always less than national Income?

**Long Answer Type Questions:**

Q1. Distinguish between Domestic Product and National Product giving suitable examples in support of your answer;

Q2. Discuss the concepts of : (i)  $NDP$  at  $MP$ ; (ii)  $GNP$  at  $FC$  (iii)  $GDP$  at  $MP$ .

**CHAPTER 4-Measurement of National income**

Q1. 'Commodity Service method' is another name for:

- (a) Expenditure Method (b) Income method  
(c) value-added method (d) None of the above

Q2. 'Distributed Profits' is also known as:

- (a) Corporate Tax (b) Dividend  
(c) Retained Earnings (d) None of these

Q3. If a farmer sells wheat to miller for Rs. 500 and a miller sells flour to baker for Rs. 700 and baker sells bread to consumer for Rs 1000. then total value added by 'miller' and 'baker' is:

- (a) 500 (b) 300  
(c) 1,700 (d) 1,200

Q4. Which of the following is a part of Expenditure Method?

- (a) Rent and Royalty (b) Mixed Income  
(c) Net Exports (d) Sales

Q5. If  $NDP_{fc} = Rs. 1,500$  and Net Factor Income to Abroad = Rs 500, then  $NNP_{fc}$  will be:

- (a) 2,000 (b) 1,500  
(c) 1,000 (d) 2,500

Q6. Net Exports is calculated as:

- (a) Exports + Imports (b) Exports - imports  
(c) Imports - Exports (d) None of these

Q7. Which of the following is included in domestic income?

- (a) Factor income from abroad (b) Windfall gains  
(c) Capital Gains (d) Bonus to employees

Q8. Which of the following is not included in compensation of employees?

- (a) Wages and salaries in cash  
(b) Wages and salaries in kind  
(c) Employees' contribution to social security schemes  
(d) Employers' contribution to social security schemes

Q9. When the entire output is sold in an accounting year, then value of output is equal to:

- (a) Sales + change in stock (b) sales  
(c) Sales - change in stock (d) None of these

Q10. 'Operating Surplus' refers to:

- (a) Income from Property (b) Income from entrepreneurship.  
(c) Income from property and entrepreneurship (d) None of these.

Q11. According to income method, domestic income is equal to:

- (a) Rent and Royalty + Interest + Profit + Compensation of employees.  
(b) Operating Surplus + Compensation of employees + income of Self - employed  
(c) Both (a) and (b) (d) neither (a) and (b)

**Choose appropriate word and fill in the blanks.**

Q1. Income method is also known as \_\_\_\_\_ method and \_\_\_\_\_ method.

Q2. Combined factor income, which can't be separated into various factor income components is known as \_\_\_\_\_ income.

Q3. Net domestic fixed capital formation + change in stock = \_\_\_\_\_.

Q4. Rent + interest + profit = \_\_\_\_\_.

Q5. When nominal G D P is ₹ 850 cr and price index is 170, real GDP will be \_\_\_\_\_.

**State true or false with reasons:**

Q1. Nominal GDP can never be less than real GDP.

Q2. Gross domestic capital formation is always greater than gross domestic fixed capital formation.

Q3. Real GDP can be equal to nominal GDP.

Q4. Gross value added at market price and gross domestic product at market price are one and same thing.

Q5. Industrial waste driven into river is an example of positive externality.

**Matching type questions:**

Q1. Identify the correct sequence of alternatives given in column II by matching them with respective items in column I:

Column I	Column II
a) value added	i) sales + change in stock
b) income method	ii) corporate tax
c) business tax	iii) national income at constant price
d) value of output	iv) value of output – intermediate consumption
e) real national income	v) distributive share method

Q2. Choose the correct pair of statements.

Column I	Column II
a) national income at current prices	i) real national income
b) value added	ii) value of output – change in stock
c) mixed income	iii) income of self-employed persons
d) income method	iv) G S T

**ASSERTION REASON QUESTION (ARQ):**

Q1. Read the following statements: Assertion (A) and reason (B). choose one of the correct alternatives given below:

**Assertion (A):** Interest paid by government on public debt is not included in national income.

**Reason (R):** Interest paid on loans taken for consumption purpose is not considered as factor income.

i) Both assertion (A) & reason (R) are true and R is correct explanation of A.

ii) Both assertion (A) & reason (R) are true and R is not correct explanation A.

iii) assertion (A) is true but reason (R) is false.

iv) assertion (A) is false but reason (R) is true.

Q2. Read the following statements: Assertion (A) and reason (B). choose one of the correct alternatives given below:

**Assertion (A):** Net exports is a domestic concept.

**Reason (R):** Net exports includes non-factor services.

i) Both assertion (A) & reason (R) are true and R is correct explanation of A.

ii) Both assertion (A) & reason (R) are true and R is not correct explanation A.

iii) assertion (A) is true but reason (R) is false.

iv) assertion (A) is false but reason (R) is true.

Q3. Read the following statements: Assertion (A) and reason (B). choose one of the correct alternatives given below:

**Assertion (A):** Operating surplus does not arise in general government sector.

**Reason (R):** General government produces goods and services with the aim of earning profit.

- i) Both assertion (A) & reason (R) are true and R is correct explanation of A.
- ii) Both assertion (A) & reason (R) are true and R is not correct explanation A.
- iii) assertion (A) is true but reason (R) is false.
- vi) assertion (A) is false but reason (R) is true.

**Hots and Application Based Question:**

Q1. Suppose the GDP of nation X was ₹ 2000 crores in 2018-19, whereas the GDP of nation Y in the same year was ₹ 1,20,000 crores. If the GDP of nation X rises to rs 4000 crores in 2020-21 and the GDP of nation Y rises to rs 2,00,000 crores in 2020-21. Compare the rate of change of GDP of nations X and Y, taking 2018-19 as base year.

Q2. 'Domestic services (household services) are not considered as an economic activity' Defend or refute with valid reason.

Q3. 'Higher GDP always means greater availability of goods and services in the economy' Defend or refute with valid reason.

Q4. "India's GDP is expected to increase by 8 % in 2021-22: World Bank". Does the given statement mean that welfare of people of India increase at the same rate? Comment with reason.

**Short Answer Type Question**

Q1. Explain the problem of double counting in the estimation of national income by the value-added method?

Q2. How can the problem of double counting be avoided?

Q3. What precautions (any four) should be taken while estimating national income by production method?

Or

State the various Precautions of product method that should be kept in mind while estimating National Income.

Q4. What is meant by Compensation of employees? Discuss elements of Compensation of employees?

Q5. Define Operating Surplus. State its Components.

Q6. Explain 'mixed income of self-employed' and give an example.

**Long Answer Type Question:**

Q1. Explain the precautions that should be taken while calculating national income by expenditure method.

Q2. Distinguish between real gross domestic product and nominal gross domestic product. Can gross domestic product be used as an index of welfare of the people? Give two reasons.

Q3. Explain the concept of 'real income'. Explain why, due to the presence of externalities, real national income in itself cannot be treated as a true index of welfare.

Q4. Distinguish between 'nominal income' and 'real income'. Explain why, due to the presence of externalities, real national income in itself cannot be treated as a true index of welfare.

Q5. Explain 'non-monetary exchanges' as a limitation of using gross domestic product as an index of welfare of a country.

Q6. Attempt all numerical from scanner.

**Chapter 5 & 6 - Money and Banking**

**MCQ:**

1. High powered money consists of:

- (a) Currency and coins held by the public.
- (b) Currency, cash reserves with banks and demand deposits
- (c) Currency held by the public and cash reserves with banks

- (d) Currency and demand deposits
2. Who regulates money supply in India?  
 (a) Government of India (b) R B I  
 (c) Commercial banks (d) Planning commission
3. Money supply includes \_\_\_\_\_  
 (a) All deposits in banks (b) Only demand deposits in banks  
 (c) Only times deposits in banks (d) Currency in banks
4. \_\_\_\_\_ are termed as legal tender money.  
 (a) Demand deposits (b) Time deposits  
 (c) Inter-bank deposits (d) Currency notes
5. The ratio of deposits that a commercial bank has to keep with R B I is called:  
 (a) Deposit ratio (b) S L R  
 (c) C R R (d) L R R
6. Which of the following agency is responsible for issuing rs one currency note in India?  
 (a) R B I (b) Ministry of commerce  
 (c) Ministry of finance (d) NITI Aayog
7. Demand deposits include:  
 (a) Saving account deposits and fixed deposits  
 (b) Saving account deposits and current account deposits  
 (c) Current account deposits and fixed deposits  
 (d) All types of deposits
8. Which of the following is not a quantity method of credit control?  
 (a) Open market operation (b) Margin requirements  
 (c) Variable reserve ratio (d) Bank rate policy
9. The process of buying and selling of securities by the Central bank of a country is known as:  
 (a) margin requirements (b) Open market operation  
 (c) C R R (d) S L R
10. If LRR is 20%, the value of money multiplier would be:  
 (a) 2 (b) 3  
 (c) 4 (d) 5

**Choose appropriate word and fill in the blanks.**

- Two components of money supply are \_\_\_\_\_ and \_\_\_\_\_.
- Only \_\_\_\_\_ demand deposits are part of money supply. (gross/net)
- Bank money is \_\_\_\_\_ (legal tender money/non-legal tender money)
- Value of money multiplier \_\_\_\_\_ with an increase in CRR (increase/decrease/remains unchanged)
- Bank rate is also known as \_\_\_\_\_.
- Loans offered by commercial banks \_\_\_\_\_ (increase/decrease) the money supply in the economy.

**State true or false with reasons:**

- All financial institutions are banking institution.
- Margin requirement is raised by the Central bank to increase money supply.
- M<sub>1</sub> is also known as transaction money.
- Money does not include money held by the government and banking system.
- There is an inverse relationship between LRR and value of money Multiplier.
- Demand deposits are equal to cash deposit of the people with the commercial banks.

**Matching type questions:**

Q1. Identify the correct sequence of alternatives given in column II by matching them with respective items in column I:

Column I	Column II
----------	-----------

a) barter exchange	i) simultaneous fulfillment of mutual wants of buyers and sellers
b) M1	ii) legal tender money
c) currency with public	iii) total volume of money held by the public at a particular point of time
d) Double coincidence of wants	iv) currency with public + demand deposits with commercial banks + other deposits with RBI
e) money supply	v) exchange of goods with goods

Q2. Identify the correct sequence of alternatives given in column II by matching them with respective items in column I:

Column I	Column II
a) bank rate	i) sale & purchase of government securities by RBI
b) money multiplier	ii) apex institution of money market
c) Open Market Operations	iii) Discount rate
d) Central Bank	iv) deposit multiplier

**ASSERTION REASON QUESTION (ARQ):**

Q1. Read the following statements: Assertion (A) and reason (B). choose one of the correct alternatives given below:

**Assertion (A):** Currency money is also termed as fiat money.

**Reason (R):** Under law, currency must be accepted for payments of all debts.

- i) Both assertion (A) & reason (R) are true and R is correct explanation of A.
- ii) Both assertion (A) & reason (R) are true and R is not correct explanation A.
- ii) assertion (A) is true but reason (R) is false.
- iii) assertion (A) is false but reason (R) is true.

Q2. Read the following statements: Assertion (A) and reason (B). choose one of the correct alternatives given below:

**Assertion (A):** Credit creation comes to an end when total cash reserves become equal to initial deposit.

**Reason (R):** The value of money multiplier is determined by LRR.

- i) Both assertion (A) & reason (R) are true and R is correct explanation of A.
- ii) Both assertion (A) & reason (R) are true and R is not correct explanation A.
- iii) assertion (A) is true but reason (R) is false.
- iv) assertion (A) is false but reason (R) is true.

**Hots and Application Based Question:**

Q1. Illustrate with the help of hypothetical numerical example the process of credit creation.

Q2. 'Credit creation is inversely related with reserve deposit ratio'. Justify the given statement, using a hypothetical example.

Q3. Currency is issued by central bank, yet we say that commercial banks create money. Explain. How is this money creation by commercial banks likely to affect national income? Explain.

**Short answer type of questions - (3 to 4 marks)**

1. What is barter? what are its limitations?
2. Define 'Money Supply'. What are the components of money supply?
3. If LRR is 0.1, what is the value of deposit multiplier?
4. What is a bank?
5. Briefly describe the banking structure in India.
6. Explain the process of CREDIT CREATION by Commercial Banks.
7. How will CRR/SLR/Reverse repo rate and open market operations control money supply in an economy?

**Long answer type questions (6 marks)**

1. Explain the process of money multiplier with help of a numerical example. Assume that LRR is 20%. and initial investment is Rs 1000 crores.

2. Define Central Bank. Discuss its any two functions.
3. How is bank rate and repo rate are used by central bank in influencing credit creation by commercial banks?

### Chapter 7 Aggregate demand and related concepts

#### MCQ

- Q1. Out of the following, which can have a value more than one?  
 a) MPC                      b) APS                                      c) APC                                      d) MPS
- Q2. AD curve is a:  
 a) Horizontal straight line parallel to the X-axis  
 b) Positively sloped curve  
 c) Negatively sloped curve  
 d) Vertical straight line parallel to the Y-axis
- Q3. Break – even point is achieved when:  
 a) National income = Consumption                      b) Consumption = Investment  
 c) Consumption = Saving                                      d) National Income > Consumption
- Q4. Tick the wrong option:  
 a) APC can be more than one                                      b) APC rises with increase in income  
 c) APC can never be zero                                      d) APC can be equal to one
- Q5. \_\_\_\_\_ refers to actual saving in an economy during a year.  
 a) Ex – ante saving                                      b) MPS  
 c) APS                                      d) Ex – post saving

#### Fill in the blanks:

- Q1. APC is more than 1 before the \_\_\_\_\_ point.
- Q2. In a two sector economy, Aggregate Demand is a function of \_\_\_\_\_ and \_\_\_\_\_
- Q3. If MPC is equal to 0.60, then MPS is equal to \_\_\_\_\_
- Q4. Equilibrium occurs when Ex-ante saving is equal to \_\_\_\_\_
- Q5. \_\_\_\_\_ refers to actual savings in an economy during a year.

#### State True or False with reasons:

- Q1. Both MPS and APS can be equal to one.
- Q2. Value of marginal propensity to save can never be negative.
- Q3. Value of average propensity to save can never be less than zero.
- Q4. With increase in national income, both APC and APS fall.
- Q5. Average propensity to consume can be greater than one.

#### Matching type questions:

- Q1. Match the statements given under A with the correct options given under

A	B
1. Induced investment	a. It is income inelastic
2. Autonomous investment	b. It is income elastic

#### Assertion reason questions:

- Q1. Read the following statements:

**Assertion (A)** and Reason (R). Choose one of the correct alternatives given below:

**Assertion (A):** At Break-Even point, Consumption is equal to national income

**Reason (R):** APC falls continuously with increase in income as proportion of income spent on consumption keeps on decreasing.

- a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of assertion (A)  
 b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of assertion (A)  
 c) Assertion (A) is true but Reason (R) is false  
 d) Assertion (A) is false but Reason (R) is True

- Q2. Read the following statements: Assertion (A) and Reason (R). Choose one of the correct alternatives given below:

**Assertion (A):** Rich people have lower propensity to consume as compared to poor people

**Reason (R):** Consumption can never be zero even if national income is zero.

Alternatives:

- a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of assertion (A)
- b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of assertion (A)
- c) Assertion (A) is true but Reason (R) is false
- d) Assertion (A) is false but Reason (R) is true

**HOTS and Application Based Questions:**

Q1. If personal disposable income is Rs. 1,000 crore and consumption expenditure is Rs. 750 crore, find out average propensity to save.

Q2. Can APS ever be negative? If yes, give an example?

Q3. APC and MPC are two parameters. The value of which parameter can be greater than one and when?

Q4. Can MPS or MPC ever be negative? Give reasons in support of your answer.

**Short answer type questions**

Q1. Define aggregate demand. State its components.

Q2. Explain the distinction between 'autonomous investment' and 'induced investment'

Q3. Explain the distinction between voluntary and involuntary unemployment.

Q4. What is the difference between marginal propensity to consume and marginal propensity to save? What is the relation between the two?

Q5. Explain the relationship between average propensity to consume and average propensity to save. Which of these can have a negative value and when?

Q6. Differentiate between aggregate demand and aggregate supply.

**Long answer type questions**

Q1. Explain 'consumption function' with the help of a schedule and diagram.

Q2. What is meant by 'propensity to consume'? Discuss the two types of propensities to consume.

Q3. Explain the steps taken in derivation of the consumption curve from the saving curve. Use diagram.

Q4. Outline the steps required to be taken in deriving saving curve from the given consumption curve. Use diagram.

Q5. Distinguish between autonomous consumption and induced consumption.

Q6. Draw consumption curve and saving curve in a single diagram and mark the 'break-even-point'

## Chapter 8 Income Determination and Multiplier

**MCQ**

Q1. At equilibrium level:

- a) Consumption = Investment
- b) Aggregate demand = Saving
- c) Saving = Investment
- d) Consumption = Saving

Q2. If MPC is 0.6, the investment multiplier will be:

- a) 1.67
- b) 6
- c) 2.5
- d) 4

Q3. The maximum value of multiplier is \_\_\_\_\_ when the value of MPC is \_\_\_\_\_

- a) Infinity, zero
- b) One, infinity
- c) Infinity, one
- d) None of these

Q4. If  $MPC = 0$ , the value of multiplier is:

- a) 0
- b) Between 0 and 1
- c) 1
- d) Infinity

Q5. If  $MPC = MPS$ , then value of multiplier is:

- a) Infinity
- b) Equal to MPC
- c) One
- d) Two

**Fill in the blanks:**

Q1. Value of investment multiplier varies between \_\_\_\_\_ and \_\_\_\_\_

Q2. If MPC and MPS are equal, then the value of multiplier is \_\_\_\_\_

Q3. Inventories accumulate when planned investment is \_\_\_\_\_ than planned saving.

Q4. When investment multiplier is 1, the value of marginal propensity to consume is

Q5. \_\_\_\_\_ refers to a situation when AD is equal AS beyond the full employment equilibrium.

**State True or False with reasons:**

Q1. Value of investment multiplier varies between zero and infinity.

Q2. If aggregate demand exceeds aggregate supply, the income rises.

Q3. When investment multiplier is 1, the value of marginal propensity to consume is zero.

Q4. Inventories accumulate when planned investment is less than planned saving.

Q5. If MPS is half of MPC, then value of investment multiplier will be 4.

**Matching type questions:**

Q1. Match the statements given under A with the correct options given under B

A	B
1. When planned saving is less than planned investment	a) National income is likely to fall
	b) National income is likely to rise

**Assertion reason question:**

Q1. Read the following statements: Assertion (A) and Reason (R). Choose one of the correct alternatives given below:

Assertion (A): According to Keynesian theory, equilibrium level is always achieved at full employment level.

Reason (R): At full employment equilibrium, there is no involuntary unemployment. Alternatives

a) Both Assertion (A) and Reason (R) are True and Reason (R) is the correct explanation of Assertion (A) b) Both Assertion (A) and Reason (R) are True and Reason (R) is not the correct explanation of Assertion (A)

c) Assertion (A) is True but Reason (R) is False

d) Assertion (A) is False but Reason (R) is true

Q2. Read the following statements: Assertion (A) and Reason (R). Choose one of the correct alternatives given below:

Assertion (A): Higher the value of MPC, higher is the value of investment multiplier

Reason (R): Investment multiplier is directly related to MPS

a) Both Assertion (A) and Reason (R) are True and Reason (R) is the correct explanation of Assertion (A) b) Both Assertion (A) and Reason (R) are True and Reason (R) is not the correct explanation of Assertion (A)

c) Assertion (A) is True but Reason (R) is False

d) Assertion (A) is False but Reason (R) is true

**HOTS and Application Based Questions:**

Q1. Higher saving induces greater investment. Comment

Q2. Is it correct that a tax on the households reduces their MPC?

**Short answer type questions**

Q1. Explain the meaning of investment multiplier. What can be its minimum value and why?

Q2. Explain equilibrium level of national income using savings and investment approach. Draw diagram in support of your explanation.

Q3. Explain how the level of effective demand is attained in an economy if Aggregate demand is more than the Aggregate supply.

Q4. Using the 'saving and investment' approach explain how is the equilibrium level of national income determined? Also explain what will happen if the equilibrium condition is not fulfilled.

Q5. In an economy planned spending is greater than planned output. Explain all the changes that will take place in an economy.

Q6. Explain the meaning of under employment equilibrium.

**Long answer type questions**

- Q1. Explain determination of equilibrium level of income using ‘Consumption plus Investment’ approach. Use diagram.
- Q2. Why must aggregate demand be equal to aggregate supply at the equilibrium level of income and output. Explain with the help of a diagram.
- Q3. Explain the meaning of equilibrium level of income and output using saving and investment approach. Use a diagram.
- Q4. What changes will take place to bring an economy in equilibrium if:
- Planned savings are greater than planned investment
  - Planned savings are less than planned investment
- Q5. Explain the determination of equilibrium level of national income using ‘saving and investment’ approach. Use diagram. Also explain the effect if saving is greater than investment.
- Q6. Explain the changes that take place when aggregate demand and aggregate supply are not equal.

### Chapter 9- Problem of deficient demand and excess demand

#### MCQ

- Q1. \_\_\_\_\_ is exercised through discussions, letters and speeches to banks.
- Moral suasion
  - Selective credit controls
  - Margin requirements
  - Open market
- Q2. Which of the following is not the reason of excess demand?
- Fall in the propensity to consume
  - Reduction in taxes
  - Increase in investments
  - Deficit financing
- Q3. Increase in cash reserve ratio will lead to:
- Fall in aggregate demand
  - Rise in aggregate demand
  - No change in aggregate demand
  - None of these
- Q4. The gap by which actual aggregate demand exceeds the aggregate demand required to establish full employment equilibrium is known as \_\_\_\_\_
- Deficient demand
  - Deflationary gap
  - Inflationary gap
  - Excess demand
- Q5. During excess demand, central bank \_\_\_\_\_ the margin
- Decreases
  - Increases
  - Removes
  - Does not change

#### Fill in the blanks:

- Q1. During excess demand, Central bank \_\_\_\_\_ the margin
- Q2. In case of deficient demand, RBI \_\_\_\_\_ cash reserve ratio
- Q3. To correct the inflationary gap, money supply should be \_\_\_\_\_
- Q4. “Change in Government Spending” is a part of \_\_\_\_\_ policy
- Q5. Deflationary gap indicates \_\_\_\_\_ (excess/deficient) demand in an economy

#### Matching type questions:

- Q1. Match the statements given under A with the correct options given under B.

A	B
1. Excess demand	a) ) Leads to fall in general price level
2. Deficient demand	b) ) Leads to fall in general price level

#### Assertion reason questions:

- Q1. Read the following statements: Assertion (A) and Reason (R). Choose one of the correct alternatives given below:
- Assertion (A): Excess demand does not lead to any increase in the level of output.
- Reason (R): Excess demand gives rise to an inflationary gap. Alternatives:
- Both Assertion (A) and Reason (R) are True and Reason (R) is the correct explanation of Assertion (A)
  - Both Assertion (A) and Reason (R) are True and Reason (R) is not the correct explanation of Assertion (A)
  - Assertion (A) is True but Reason (R) is False
  - Assertion (A) is False but Reason (R) is true

Q2. Read the following statements: Assertion (A) and Reason (R). Choose one of the correct alternatives given below:

Assertion (A): Deficient demand leads to under employment equilibrium

Reason (R): During deficient demand, equilibrium is determined at a level less than full employment equilibrium

- a) Both Assertion (A) and Reason (R) are True and Reason (R) is the correct explanation of Assertion (A)
- b) Both Assertion (A) and Reason (R) are True and Reason (R) is not the correct explanation of Assertion (A)
- c) Assertion (A) is True but Reason (R) is False
- d) Assertion (A) is False but Reason (R) is true

**HOTS and Application Based Questions:**

Q1. What is the effect of deficient demand on output, employment and prices?

Q2. What is the effect of excess demand on output, employment and prices?

Q3. Even in a state of full employment, there is a possibility of an increase in output. Is it true?

Q4. Fiscal policy always aims at raising additional revenue for the government.

Comment

**Short answer type questions**

Q1. What is the impact of excess demand on output, employment and prices?

Q2. Explain the meaning of inflationary gap with the help of a diagram.

Q3. Explain the situation of deficient demand in an economy with the help of a diagram.

Q4. How can increase in the government expenditure solve the problem of deficient demand?

Q5. Explain the role of “open market operations” in controlling the inflationary gap.

Q6. How does increase in taxes help to control the situation of excess demand?

**Long answer type questions**

Q1. Explain the problem of ‘excess demand’ in an economy with the help of a diagram. Explain the role of bank rate in correcting it.

Q2. Explain the concept of ‘excess demand’ in macroeconomics. Also, explain the role of ‘open market operation’ in correcting it.

Q3. Discuss, in brief, the meanings of deficient demand and deflationary gap with the help of a diagram. Also, discuss the effect of deficient demand on output, employment and price level.

Q4. Explain the role of the following in correcting ‘deficient demand’ in an economy:

- i. Open market operations
- ii. Bank rate

Q5. Explain the role of the following in correcting ‘excess demand’ in an economy:

- i. Bank rate
- ii. Open market operation

Q6. Explain the concept of ‘deflationary gap’. Also explain the role of ‘margin requirements’ in reducing.

**Chapter 10 - GOVERNMENT BUDGET AND THE ECONOMY**

**MCQ:**

Q 1. Borrowing in government budget is:

- (a) revenue deficit
- (b) fiscal deficit
- (c) primary deficit
- (d) deficit in taxes

Q 2. The non-tax revenue in the following is:

- (a) export duty
- (b) import duty
- (c) dividends
- (d) excise

Q 3. Primary deficit in government budget is:

- (a) revenue expenditure – revenue receipts
- (b) total expenditure – total receipts
- (c) revenue deficit – interest payments
- (d) fiscal deficit – interest payments

Q 4. Direct tax is called direct because it is collected directly from:  
 (a) the producers on goods produced (b) the buyers of goods  
 (c) the sellers of goods (d) the income earners

Q 5. Primary deficit in government budget equals to:  
 (a) interest payments less borrowings (b) interest payments  
 (c) borrowings less interest payments (d) none of these

**Choose appropriate word and fill in the blanks.**

- Q1. Revenue deficit can be estimated using the formula\_\_\_\_\_.
- Q2. Fiscal deficit can be estimated using the formula\_\_\_\_\_.
- Q3. Primary deficit can be estimated using the formula\_\_\_\_\_.
- Q4. Disinvest is a \_\_\_\_\_(capital/revenue) receipt of the government.
- Q5. Government expenditure on mid-day meal scheme running in government school is a type of \_\_\_\_\_expenditure in government budget.
- Q6. Policy of surplus budget at the time of inflation is a part of \_\_\_\_\_objective of government budget.

**Matching type questions:**

Q1. Choose the correct pair of statements.

Column I	Column II
a) Revenue receipts	i) Receipts which create liability or reduce assets
b) GST	ii) Direct tax
c) Fiscal deficit	iii) Revenue deficit + (capital expenditure - capital receipts excluding borrowing)
d) Non-tax revenue	iv) Borrowings

**ASSERTION REASON QUESTION (ARQ):**

Q1. Read the following statements: Assertion (A) and reason (B). choose one of the correct alternatives given below:

Assertion (A): Primary deficit is the root cause of fiscal deficit.

Reason (R): High primary deficit indicates that interest commitments on earlier loans have forced the government to borrow.

- a) Both Assertion (A) and Reason (R) are True and Reason (R) is the correct explanation of Assertion (A)  
 b) Both Assertion (A) and Reason (R) are True and Reason (R) is not the correct explanation of Assertion (A)  
 c) Assertion (A) is True but Reason (R) is False  
 d) Assertion (A) is False but Reason (R) is true

Q2. Read the following statements: Assertion (A) and reason (B). choose one of the correct alternatives given below:

Assertion (A): Deficient demand leads to under employment equilibrium

Reason (R): During deficient demand, equilibrium is determined at a level less than full employment equilibrium

- a) Both Assertion (A) and Reason (R) are True and Reason (R) is the correct explanation of Assertion (A)  
 b) Both Assertion (A) and Reason (R) are True and Reason (R) is not the correct explanation of Assertion (A)  
 c) Assertion (A) is True but Reason (R) is False  
 d) Assertion (A) is False but Reason (R) is true

**Hots and Application Based Question:**

Q1. The government budget of a country cannot have fiscal deficit without the existence of revenue deficit. Defend or refute with valid reason.

Q2. 'Taxation is an effective tool to reduce the inequalities of income'. Justify the given statement with valid reason.

Q3. The government budget of a hypothetical economy presents the following information. Find budgetary deficit.

- i) Revenue expenditure = 25000 cr.  
 ii) Capital receipts = 30000 cr.  
 iii) Capital expenditure = 35000 cr.

- iv) Revenue receipts = 20000 cr.
- v) Interest payments = 10000 cr.
- vi) Borrowings = 20000 cr.

**SHORT ANSWER TYPE QUESTIONS:**

- Q 1. Explain how government budget can be useful in influencing the allocation of resources in an economy.
- Q 2. Giving reasons classify the following into revenue receipts and capital receipts: i. Recovery of loans ii. profits of public sector undertakings iii. borrowings
- Q 3. Explain how government budget can be useful in bringing economic stability in the economy.
- Q 4. Distinguish between direct taxes and indirect taxes. Give an example of each.
- Q 5. Explain how government budget can be used to influence distribution of income.
- Q 6. Explain the basis of classifying taxes into direct and indirect tax. Give examples.
- Q 7. Explain the role of government budget in fighting inflationary and deflationary tendencies.
- Q 8. Giving reason, state whether the following is a revenue expenditure or a capital expenditure in a government budget: i) Expenditure on scholarship ii) expenditure on building a bridge
- Q 9. Tax rates on higher income group have been increased. Which economic value does it reflect? Explain.
- Q 10. Government raises its expenditure on producing public goods. Which economic value does it reflect? Explain.
- Q 11. Explain the role of government budget in fighting unemployment.
- Q 12. Explain the role of government budget in accelerating economic growth.

**CHAPTER 11-FOREIGN EXCHANGE RATE**

**MCQ**

- Q1. Other things remaining unchanged when in a country the price of foreign exchange rises, national income is:
  - (a) likely to rise
  - (b) likely to fall
  - (c) likely to rise and fall both
  - (d) None of the above
- Q2. If ₹ 70 are required to buy 1 U S \$, instead of ₹ 68, it will lead to rise in:
  - (a) export to U S A
  - (b) import to U S A
  - (c) both a & b
  - (d) either a & b
- Q3. Depreciation of domestic currency leads to rise in:
  - (a) exports
  - (b) import
  - (c) both a & b
  - (d) either a & b
- Q4. Import of goods and services raises the \_\_\_\_\_ of foreign exchange
  - (a) Supply
  - (b) Demand
  - (c) both a & b
  - (d) either a & b

**Read the following statements: Assertion (A) and Reason (R). Choose one of the correct alternatives given below:**

**Alternatives:**

- a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).
- b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A).
- c) Assertion (A) is true but Reason (R) is False
- d) Assertion (A) is False but Reason (R) is true.

**Q1.Assertion (A):** Depreciation of domestic currency leads to a rise in exports to foreign countries

**Reason (R):** Due to the depreciation of the domestic currency, more goods can be purchased from India with the same amount of foreign currency.

**Q2.Assertion (A):** Demand for foreign exchange and exchange rate moves in the same direction.

**Reason (R):** When the exchange rate rises domestic goods become cheaper in the international market.

**Q3.Assertion (A):** Make in India, the campaign initiated by the government leads to a fall in the foreign exchange rate.

**Reason (R):** Through Make in India campaign, production of goods will be within the territory of India. That would decrease import, results in decrease demand for foreign exchange rate. In turn foreign exchange rate would fall.

**Q4.Assertion (A):** Managed Floating Rate System is a hybrid of a fixed exchange rate and a flexible exchange rate system.

**Reason (R):** Central Bank maintains reserves of foreign exchange under Managed Floating Rate System to ensure that the exchange rate stays within the targeted value.

**Choose appropriate word and fill in the blanks.**

Q1. Exports of goods and services raises the \_\_\_\_\_ of foreign exchange.  
(demand/supply)

Q2. Devaluation of the domestic currency makes \_\_\_\_\_ (export/import) cheaper

Q3. \_\_\_\_\_ (Flexible/Fixed) exchange rate is also known as free exchange rate.

**Hots and Application Based Question:**

Q1. Recently Indian rupee has depreciated significantly. This has lead to distress for Indian importers. Defend or refute with valid reason.

Q2. A country deliberately keeps the value of its currency low under the managed floating system. Discuss briefly how it will affect the export of the country.

Q3. India is taking huge leaps in the index of Ease of Doing Business, as a result many MNCs are shifting their production base to India. In the light of above statement, comment upon the flow of foreign exchange and its likely impact on the Indian economy.

**Short Answer Type Question:**

Q1. Explain the relationship between fall in the price of U S Dollar and its demand.

Q2. Discuss briefly the concept of flexible exchange rate system of foreign exchange rate determination.

Q3. Discuss briefly the concept of managed floating exchange rate system of foreign exchange rate determination.

Q4. What is the roll of a central bank in the following exchange rate: i) Fixed exchange ii) Floating exchange iii) Managed floating?

**Long Answer Type Question:**

Q1. Distinguish between Fixed exchange rate and Floating exchange rate. If exchange rate falls, explain its effects on exports and imports.

Q2. Explain by giving example the distinction between depreciation and devaluation of domestic currency.

## CHAPTER 12 - BALANCE OF PAYMENTS

### MCQ

Q1. An Indian real estate company received rent from Google in New York would be recorded on \_\_\_\_\_ side of \_\_\_\_\_ account.

(a) credit, current

(b) credit, capital

(c) debit, capital

(d) debit, current

Q2. An Indian company located in India receives a loan from a company located abroad. How is this transaction recorded in India's BoP account?

(a) Credit side of current account

(b) debit side of current account

- (c) credit side of capital account (d) debit side of capital account
- Q3. Foreign exchange transactions dependent on other foreign exchange transaction are called:
- (a) Current account transactions (b) Capital account transaction  
(c) Autonomous transaction (d) Accommodating transaction
- Q4. Foreign exchange transactions which are independent on other foreign exchange transaction are called:
- (a) Current account transactions (b) Capital account transaction  
(c) Autonomous transaction (d) Accommodating transaction

**Choose appropriate word and fill in the blanks:**

- Q1. Equilibrium in Balance Of Payments is achieved when the net value of all the receipts and payments is \_\_\_\_\_ (zero/positive)
- Q2. Charity from abroad will be recorded on \_\_\_\_\_ (credit/debit) of the B O P accounts.
- Q3. \_\_\_\_\_ is the difference between the value of exports and imports of goods. (BoT/BoP)
- Q4. \_\_\_\_\_ (Autonomous transaction/Accommodating transaction) are determined by the gap in the BoP

**ASSERTION REASON QUESTION (ARQ):**

- Q1. Read the following statements: Assertion (A) and reason (B). choose one of the correct alternatives given below:

Assertion (A): Autonomous transaction are independent from the state of BOP.

Reason (R): Autonomous items are also known as above the line items.

- i) Both assertion (A) & reason (R) are true and R is correct explanation of A.  
ii) Both assertion (A) & reason (R) are true and R is not correct explanation A.  
iii) assertion (A) is true but reason (R) is false.  
iv) assertion (A) is false but reason (R) is true.

**Short Answer Type Question:**

- Q1. Distinguish between current account deficit and trade deficit.
- Q2. Trade deficit must exist if a country is facing a situation of current account deficit. Defend or refute with valid reason.
- Q3. Discuss briefly the components of BOP.
- Q4. Distinguish between the Autonomous transaction and Accommodating transaction in the BOP.
- Q5. What are the components of the current account of the balance of payment account.

**Long Answer Type Question:**

- Q1. Write any three points of difference between BOT and BOP.
- Q2. Distinguish between current account and capital account of BOP.
- Q3. How can deficit in BOP be financed?

**Hots and Application Based Question:**

- Q1. BoP is always balanced in the accounting sense. Defend or refute the given statement with valid reason.
- Q2. "A country with trade deficit cannot have current account surplus in its BOP" Defend or refute the given statement with valid reason.
- Q3. Are the following entered on the credit side or debit side and in the current account and capital account of BOP. Give reason for your answer.
- i) Investment from abroad.  
ii) Transfer of funds to relatives abroad.  
iii) Imports of machinery.  
iv) Interest on loan received from abroad.
- Q4. State the effect of rise in the price of foreign exchange on the BOP status.

**INCOME DETERMINATION- NUMERICALS**

1. Give the meaning of Average Propensity to Save. What is its relation with Average Propensity to Consume?
  2. Find consumption expenditure from the following  
Autonomous Consumption =Rs. 100  
Marginal Propensity to Consume =0.70  
National Income = Rs. 1000
  3. Find consumption expenditure from the following  
National Income =Rs. 5000  
Autonomous Consumption = Rs. 1000  
Marginal Propensity to Consume = 0.8
  4. Find National Income from the following  
Autonomous Consumption = Rs. 100  
Marginal Propensity to Consume =0.60  
Investment = Rs. 200
  5. Find investment from the following  
National Income = Rs. 600 Autonomous Consumption = Rs. 150  
Marginal Propensity to Consume =0.70
  6. Given that National Income is Rs. 80 crore and consumption expenditure is Rs. 64 crore, find out Average Propensity to Save. When income rises to Rs. 100 crore and consumption expenditure to Rs. 78 crore, what will be the Average Propensity to Consume and Marginal Propensity to Consume?
  7. If National Income is Rs. 50 crore and saving is Rs. 5 crore, find out Average Propensity to Consume. When income rises to Rs. 60 crore and saving to Rs. 9 crore, what will be the Average Propensity to Consume and Marginal Propensity to Save?
  8. If National Income is Rs. 90 crore and consumption expenditure Rs.81 crore, find out Average Propensity to Save. When income rises to Rs. 100 crore and consumption expenditure to Rs. 88 crore, what will be the Marginal Propensity to Consume and Marginal Propensity to Save?
  9. In an economy, the Marginal Propensity to Consume is 0.75. Investment expenditure in the economy increases by Rs. 75 crore. Calculate the total increase in National Income.
  10. Explain the relationship between Average Propensity to Consume and Average Propensity to Save. Which of these can have a negative value and when?
  11. Explain the meaning of Marginal Propensity to Consume. What is its relationship with Marginal Propensity to Save?
  12. In an economy, total savings are Rs. 2000 crore and the ratio of Average Propensity to Save and Average Propensity to Consume is 2 : 7. Calculate the level of income in an economy.
  13. In an economy, the consumption expenditure is Rs. 8750 crore and the ratio of Average Propensity to Consume and Average Propensity to Save is 7 : 1. Calculate the level of income in the economy.
  14. In an economy, the ratio of Average Propensity to Consume and Average Propensity to Save is 5 : 3. The level of income is Rs. 6000. How much are the savings? Calculate.
- 4 Marks Questions**
15. Calculate Marginal Propensity to Consume from the following data about an economy which is in equilibrium  
National Income = Rs. 2000  
Autonomous Consumption Expenditure = Rs. 200  
Investment Expenditure = Rs. 100
  16. Calculate investment expenditure from the following data about an economy which is in equilibrium  
National Income = Rs. 1000

Marginal Propensity to Save = 0.20

Autonomous Consumption Expenditure = Rs. 100

17. Calculate autonomous consumption expenditure from the following data about an economy which is in equilibrium

National Income = Rs. 500

Marginal Propensity to Save = 0.30

Investment Expenditure = Rs. 100

18. Calculate investment expenditure from the following data about an economy which is in equilibrium

National Income = Rs. 1000

Marginal Propensity to Save = 0.25

Autonomous Consumption Expenditure = Rs. 200

19. Calculate autonomous consumption expenditure from the following data about an economy which is in equilibrium.

National Income = Rs. 1200

Marginal Propensity to Save = 0.20

Investment expenditure = Rs. 100

20. Calculate Marginal Propensity to Consume from the following data about an economy which is in equilibrium

National Income = Rs. 1500

Autonomous Consumption Expenditure = Rs. 300

Investment Expenditure = Rs. 300

21. Calculate 'autonomous consumption expenditure' from the following data about an economy which is in equilibrium

National Income = Rs. 900

Marginal Propensity to Save = 0.10

Investment Expenditure = Rs. 80

22. Calculate 'investment expenditure' from the which is in equilibrium

National Income = Rs. 700

Marginal Propensity to Consume = 0.8

Autonomous Consumption Expenditure = Rs. 70

23. Calculate 'Marginal Propensity to Consume' from the following data about an economy which is in equilibrium

National Income = Rs. 800

Autonomous Consumption Expenditure = Rs. 100

Investment Expenditure = Rs. 100

### **( I E D ) CH.1 INDIAN ECONOMY ON THE EVE OF INDEPENDENCE**

#### **Multiple Choice Questions**

**Q.1 During the British Rule India's Foreign Trade had various features except**

.....

(Choose the correct alternative to fill the blank:)

a. Restrictive policies of commodity production, trade and tariff.

b. British monopoly over India's exports and imports.

c. Free trade from India to the rest of the world.

d. Large export surplus.

**Q. 2 Which of the following was the main interest of the zamindars during the British rule in India?**

a. The main interest of the zamindar was to produce cash crops

b. The main interest of the zamindar was to collect rent from the farmers

c. The main interest of the zamindar was to improve the condition of the agricultural sector

d. The main interest of the zamindar was to produce food crops

**Q. 3 Which of the following sectors was the major contributor to the Gross Domestic Product (GDP) during the British rule in India?**

- a. Primary sector
  - b. Secondary sector
  - c. Tertiary sector
  - d. None of the above
- Q In which year was India's first official census survey undertaken?
- a. 1881
  - b. 1850
  - c. 1891
  - d. None of the above

Q. 4 What led to the poor agricultural production that affected the Indian economy during the eve of Independence?

1. Drought during that time.
2. Britishers did not introduce modern technologies, irrigational equipment and fertilizers for agricultural practices.
3. Tsunami during the eve of Independence.
4. Britishers did not have enough agriculture knowledge.

### Short Answer Type questions

Q1. What do you understand by the drain of Indian wealth during the colonial period?

Q2. What objectives did the British intend to achieve through their policies of infrastructure development in India?

Q3 What was the two-fold motive behind the systematic deindustrialisation effected by the British in pre - independent India?

Q4 "During the British colonial rule, despite being the occupation of about 85% of India's population, the agriculture sector continued to experience stagnation and, not infrequently, unusual deterioration. Agricultural productivity became low." Do you agree? What were the main causes of India's agricultural stagnation/ low productivity during the colonial period?

### Long Answer Type Questions

Q 1 Give a quantitative appraisal of India's demographic profile during the colonial period.

Q 2 What was the state of Indian economy on the eve of independence. Explain.

Q 3 What were the objectives of the British government in bringing about changes in the infrastructure in the Indian economy

Q 4 Mention the condition of occupational structure at the time of independence in India.

Q 5 Were there any positive contributions made by the British in India? Discuss

### High Order Thinking Skill Questions (HOTS)

Q 1 Give a quantitative appraisal of India's demographic profile during the colonial period.

Q 2 Underscore some of the India's most crucial economic challenges at the time of independence.

Q3 What were the objectives of the British government in bringing about changes in the infrastructure in the Indian economy

## I E D CH.2 INDIAN ECONOMY SINCE 1950-1990

### Multiple Choice Questions

1. When was the Planning Commission set up in India?

- a) 1952
- b) 1950
- c) 1964
- d) 1975

2. Who was the Chairperson of the Planning Commission of India ?

- a) President of India
- b) Finance Minister of India
- c) Prime Minister of India
- d) Governor of RBI

3. \_\_\_\_\_ is known as the architect of Indian planning. ( Fill in the blank with correct alternative)

- a) Jawaharlal Nehru
- b) Mahatma Gandhi
- c) Mahalanobis
- d) M Visvesvaraya

4. . The contribution made by each sector of the economy into GDP is called\_\_\_\_\_.( Fill in the blank with correct option)

- a) Real GDP
- b) Structural GDP
- c) Structural composition
- d) Real composition

5. . Industries are classified into \_\_\_\_\_categories in the Industrial Policy Resolution:

- a) Two                      b) Three                      c) Four                      d) Five
6. Modernisation is an important economic planning objective that focuses on \_\_\_\_\_  
 (Choose the correct alternative to fill in the blank)
- A Adoption of innovative technology.  
 B. Equal distribution of income and wealth.  
 C Bringing positive changes in the social output.
- a) Only A                      b) A and B                      c) A and C                      d) A, B and C

**Fill in the blanks**

- 1 combined with social justice is the principal goal of planning in India.  
 2 modernisation means adoption of new technology and change in ----- .  
 3 Planning in India started with heavy reliance on ----- --. (public sector/private sector)

**True or False**

- 1 Rice and wheat were the crops benefited the most as a result of the green revolution.  
 2 The main reason behind providing protection to the small scale industries by the Indian Governments during the 1950-1990 era was to make them competent with large scale industries.

**Assertion Reason Questions**

- 1 . Read the following statement given below and choose the correct alternative  
 Assertion(A)- Land reforms refers to the change in the ownership of landholdings  
 Reason (R )- Equity in agricultural sector called for land reforms in 1950
- a) Both assertion and reason are true. Reason is the correct explanation of assertion  
 b) Both assertion and reason are true. Reason is not the correct explanation of assertion  
 c) Assertion is true but reason is not  
 d) Reason is true but assertion is not

- 2 . Read the following statement given below and choose the correct alternative  
 Assertion (A)- In a mixed economy, factors of production are owned by the public sector

Reason (R )- Consumer sovereignty exists in mixed economy

- a) Both assertion and reason are true. Reason is the correct explanation of assertion  
 b) Both assertion and reason are true. Reason is not the correct explanation of assertion  
 c) Assertion is true but reason is not  
 d) Reason is true but assertion is not

- 3 Assertion(A)- After independence, India adopted inward looking trade strategy which is called import substitution

Reason ( R)- Import substitution was highly regulatory and restrictive in nature

- a) Both assertion and reason are true. Reason is the correct explanation of assertion  
 b) Both assertion and reason are true. Reason is not the correct explanation of assertion  
 c) Assertion is true but reason is not  
 d) Reason is true but assertion is not

**Short Answer Type Questions**

1. Explain the need and type of land reforms implemented in the agriculture sector.  
 2. "While the nation had immensely benefited from the green revolution, the technology involved was not free from risks." Do you agree with the given statement? Give valid reasons in support of your answer.  
 Explain in brief.  
 3. Explain 'growth with equity' as a planning objective.  
 4. . Do you think outsourcing is good for India? Why are developed countries opposing it?  
 5. Explain how import substitution can protect domestic industry.  
 6. Why and how was private sector regulated under the IPR 1956?

**Long Answer Type Questions**

- 1 Though public sector is very essential for industries, many public sector undertakings incur huge losses and are a drain on the economy's resources. Discuss the usefulness of public sector undertakings in the light of this fact.
2. While subsidies encourage farmers to use new technology, they are a huge burden on government finances. Discuss the usefulness of subsidies in the light of this fact.

### High Order Thinking Skill Questions (HOTS)

1. Does modernisation as a planning objective create contradiction in the light of employment generation? Explain.
2. What is sectoral composition of an economy? Is it necessary that the service sector should contribute maximum to GDP of an economy? Comment.

## CH. 3 INDIAN ECONOMIC DEVELOPMENT (LPG)

### Multiple Choice Questions

Q 1 Which among the following is not a good effect of LPG policy on india economy?

- (a) Increase in consumer sovereignty (b) Check on inflation  
(c) Full employment (d) A shift from monopoly market to competitive market

Q 2 Demonetisation implies\_\_\_\_\_.

- (i) stripping the legal tender status of a currency.  
(ii) removing certain currency notes from the market and investing them in government bonds.  
(iii) deliberately reducing the flow of certain currency bills for a specified period of time.  
(iv) all of the above

Q 3 Which of this is not a method of Privatization ?

- A)Disinvestment B)Sale of PSUs to private sector  
C) Contraction of PSUs D) Sale of PSUs to Government

Q 4 Which of the following explains the way for a government company to for Privatization?

- (i) Withdrawl of the government from ownership and management of public sector companies.  
(ii) Outright sale of public sector companies.  
(iii) Both (i) and (ii) (iv) None of the above

### Fill in the blanks

Q 1 WTO was established in the year

Q 2 Monetary Policy is the policy of-----.

Q 3 Under the new trade policy import licensing was abolished except in case of ----

Q 4\_\_\_\_\_and\_\_\_\_\_currency notes of old Mahatma Gandhi series were banned as legal tender money on 8th November,2016.

### Assertion Reason Questions

Q 1 Assertion (A): Following liberalisation, reduction in tax rates led to fall in tax evasion.

Reason (R): Reduced tax rate paves way for tax compliance and therefore greater tax revenue for government.

Alternatives:

- (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)  
(b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)  
(c) Assertion (A) is true but Reason (R) is false  
(d) Assertion (A) is false but Reason (R) is true

Q2 Assertion (A): deregulation of financial sector gave bank more autonomy which to give loans to rising sector of economy which lead to growth of Indian economy.

Reason (R): One of the major aims of financial sector reforms was to reduce the role RBI from regulator to facilitator of financial sector.

Alternatives:

- a) Both the statements are true and reason (R) the correct explanation of assertion (A)
- b) Both the statements are true but reason (R) is not the correct explanation of assertion (A)
- c) Assertion (A) is true but reason(R) is false.
- d) Assertion (A) is false but reason(R) is true.

### **Short Answer Type Questions**

Q 1 Highlight the points needed for economic reforms in the country?

Q 2 Explain the functions of WTO.

Q 3 list the aims of trade policy reforms.

Q 4 Name the sector that benefitted the most with the introduction of economic reforms in India.

Q 5 Explain the two measures in which the policies of NEP are categorized.

Q 6 What is outsourcing? What makes India a favourite destination of outsourcing?

Q 7 Why did RBI have to change its role from controller to facilitator of financial sector in India?

Q. 8 Explain the followings on the basis of Economic reforms:

- (a) Agricultural sector
- (b) Industrial Sector

### **Long Answer Type Questions**

Q 1 Those Public Sector Undertakings which are making profits should be privatised. Do you agree with this view? Why?

Q 2 Explain the following:

- a. Tax reforms
- b. Industrial sector reforms
- c. Foreign exchange reforms
- d. Trade and investment reforms

Q 3 Define the privatisation. Discuss the need for privatisation.

Q 4 . Distinguish between the following

- (i) Strategic and Minority sale
- (ii) Bilateral and Multi-lateral trade
- (iv) Tariff and Non-tariff barriers.

Q. 5 While subsidies encourage farmers to use new technology, they are a huge burden on government finances. Discuss the usefulness of subsidies in the light of this fact.

Q. 6 What is Goods and Services Tax (GST)? State its aim and features.

### **High Order Thinking Skill Questions (HOTS)**

Q 1 should India be a member country of WTO? Justify your answer with valid points.

Q 2 Critically appraise the new economic policy.

Q 3 Do you think outsourcing is good for India? Why are developed countries opposing it?

### **Chapter 4- Indian Economy Development - Human Capital Formation**

#### **MCQ**

Q1. \_\_\_\_\_ five year plan recognized the importance of human capital.

- a) Seventh
- b) Third
- c) Eight
- d) Sixth

Q2. Which of the following is an example of physical capital?

- a) Machinery
- b) Health of people
- c) Building
- d) both a and c

Q3. In India, which of the following organizations regulate the health sector?

- a) ICMR
- b) UGC
- c) AICTE
- d) None of these

Q4. The expenditure by the government on education is expressed as:

- a) Percentage of total govt. expenditure
- b) Percentage of GDP
- c) Percentage of national income
- d) Neither (a) nor (b)

Q5. Which one of the following is a reason for poor human capital formation in India?

- a) Brain drain
- b) High growth of population
- c) Insufficient resources
- d) All of these

**Fill in the blanks:**

Q1. \_\_\_\_\_ capital is tangible, while \_\_\_\_\_ capital is intangible.

Q2. \_\_\_\_\_ is the percentage of students completing the last year of primary school.

Q3. The revenue from education cess is spent on \_\_\_\_\_ (Elementary/Higher) education.

Q4. A form of training that takes place during the working is called \_\_\_\_\_ training.

Q5. \_\_\_\_\_ rate refers to the ratio of literate adult population to the total adult population in the country?

**Matching type questions:**

Q1. Match the statements given under A with the correct options given under B

(A) (B)  
i. Human Capital a) It is tangible and can be easily sold in the market

ii. Physical Capital b) It is intangible and cannot be sold in the market

**Assertion Reason questions**

Q1. Read the following statements: Assertion (A) and Reason (R). Choose one of the correct alternatives given below:

Assertion (A): Education contributes to economic growth.

Reason (R): Education confers higher earning capacity on people.

Alternatives:

- a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of assertion (A)
- b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of assertion (A)
- c) Assertion (A) is true but Reason (R) is false
- d) Assertion (A) is false but Reason (R) is True

Q2. Read the following statements: Assertion (A) and Reason (R). Choose one of the correct alternatives given below:

Assertion (A): Spread of education is necessary to control the population growth rate.

Reason (R): Human capital formation decrease quality of life.

Alternatives:

- a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of assertion (A)
- b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of assertion (A)
- c) Assertion (A) is true but Reason (R) is false
- d) Assertion (A) is false but Reason (R) is True

**HOTS and application based question:**

Q1. "Human capital benefits only the owner and not the society" Defend or refute?

Q2. "Education contributes to economic growth" Do you agree?

Q3. How can the productivity of human resources be increased?

Q4. How does "Expenditure on migration" is a source of human capital formation?

**Short answer type question:**

Q1. "Human Capital Formation Gives birth to innovation, invention and technological improvements." Do you agree with the given statement? Support your answer with valid arguments.

Q2. Discuss the concept of physical capital?

Q3. What is meant by human capital formation? State its various sources.

Q4. Why government expenditure on tertiary education is important?

Q5. How does education contribute to economic growth?

Q6. Explain, how does "Investment in Human Capital" contributes to growth of an economy.

**Long answer type question:**

Q1. Examine the role of education in the economic development of a country.

Q2. Briefly discuss the various problems of human capital formation.

Q3. Distinguish between human capital and human development.

Q4. Distinguish between physical capital and human capital.

Q5. How does expenditure on "On-the-job-training" and "Information" act as a source of human capital formation?

Q6. Why it is difficult to prove cause and effect relation between human capital and economic growth?

**Chapter 5 IED - Rural Development**

**Multiple Choice Questions - MCQ's**

1. Name the apex institution for rural financing in India.

- (a) SIDBI (b) IDBI  
(c) NABARD (d) None of these

2. Agriculture marketing does not comprise of\_\_\_\_\_.

- (a) Transportation of the produce to the market place for sale.  
(b) Grading of the produce according to the quality.  
(c) Storage of the produce for sale in future.  
(d) Credit taken to meet expenditure on agriculture.

3. \_\_\_\_\_was a harbinger of major changes in the credit system as it led to the diversification

of the portfolio of rural credit towards production oriented lending.

- (a) Green revolution (b) White revolution  
(c) Golden revolution (d) None of these

4. Match the following and choose the correct option

Column I

Column II

A. Apni Mandi

(i) Andhra Pradesh and Telangana

B. Hadaspar Mandi

(ii) Punjab, Haryana and Rajasthan

C. Rythu Bazars

(iii) Pune

D. Uzhavar Sandies

(iv) Tamil Nadu

(a) (A)-(i), (B)-(iii), (C)-(ii), (D)-(iv) (b) (A)-(ii), (B)-(iii), (C)-(i), (D)-(iv)

(c) (A)-(iv), (B)-(iii), (C)-(i), (D)-(ii) (d) (A)-(ii), (B)-(i), (C)-(iii), (D)-(iv)

**Assertion / Reasoning type and Statement based Questions:**

11. Read the following statements carefully and choose the correct alternative:

Statement I: Self Help Groups (SHGs) have emerged to fill the gap in formal credit system and informal credit system.

Statement II: More than two-third of India's population depends on agriculture.

- (a) Both the statements are true  
(b) Both the statements are false.  
(c) Statement I is true, but statement II is false  
(d) Statement II is true, but statement I is false

12. Read the following statements – Assertion (A) & Reason (R) carefully and choose the correct alternative:

Assertion (A): Rural development in India is a core element for overall development of the nation.

Reason (R): More than two-third of India's population depends on agriculture.

(a) Assertion (A) and Reason (R) are true and Reason (R) is correct explanation for Assertion (A).

(b) Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation for Assertion (A).

(c) Assertion (A) is true, but Reason (R) is false.

(d) Assertion (A) is false, but Reason (R) is true.

13. Read the following statements carefully and choose the correct alternative given below:

Statement I: the emergence of Self-Help Groups (SHGs) ensured the reduction in the fissures of the formal credit system.

Statement II: The borrowings from SHGs mainly confined to consumption purposes by its members.

(a) Both the statements are true

(b) Both the statements are false.

(c) Statement I is true, but statement II is false

(d) Statement II is true, but statement I is false

Read the following statements – Assertion (A) & Reason (R) carefully and choose the correct alternative given below:

14.

Assertion (A): Since the default rates of farm loans have become chronically high due to multiple reasons, the rural banks are facing a lot of cash crunch.

Reason (R): Due to lack of proper storage facilities a lot of farm produce is wasted.

(a) Assertion (A) and Reason (R) are true and Reason (R) is correct explanation for Assertion (A).

(b) Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation for Assertion (A).

(c) Assertion (A) is true, but Reason (R) is false.

(d) Assertion (A) is false, but Reason (R) is true.

15. Read the following statements – Assertion (A) & Reason (R) carefully and choose the correct option:

Assertion (A): We should attach significance to rural development although we see around us fast growing cities with large industries and modern information technology hubs.

Reason (R): More than two-third of India's population depends on agriculture that is yet to become productive enough to provide for them; one-fourth of rural Indian still lives in abject poverty.

(a) A is true but R is false.

(b) A is false but R is true.

(c) Both A and R are true and R explains A.

(d) Both A and R are true but R does not explain A.

16. Read the following statements carefully and choose the correct alternative:

Statement I: Development of human resources including literacy, more specifically, female literacy, education and skill development is included in rural development.

Statement II: During 2014-15, the GVA growth rate of agriculture and its allied sectors was less than one per cent.

- (a) Both the statements are true
- (b) Both the statements are false.
- (c) Statement I is true, but statement II is false
- (d) Statement II is true, but statement I is false

#### **Case Study Based Questions - MCQ's**

**CASE STUDY 1 : Read the following and answer Q. 17-20 on the basis of the same:**

Since ages, farmers in Indian have taken recourse to debt. In the earlier times the same was from informal sources. Since independence with the efforts of the government, formal sector has actively come into picture. Farmers borrow not only to meet their investment needs but also to satisfy their personal needs. Uncertainty of income caused by factors likes crop failure caused to irregular rainfall, reduction in ground water table, locust/other pest attack etc. These reasons push them into the clutches of the private money lenders, who charge exorbitant rates of interest which add to their miseries. Various governments in India, at different times for different reasons, introduced debt relief/ waiver schemes. These schemes are used by governments as a quick means to extricate farmers from their indebtedness, helping to restore their capacity to invest and produce, in short to lessen the miseries of farmers across India. The costs and benefits of such debt relief schemes are, however, a widely debated topic among economists. Some economists argue that such schemes are extremely beneficial to the poor and marginalised farmers while others argue that these schemes add to the fiscal burden of the government, others believe that these schemes may develop the expectation of repeated bailouts among farmers which may spoil credit culture among farmers.

17. Uncertainty of income for farmers in India is majorly caused by \_\_\_\_\_?
- (a) Irregular rainfall
  - (b) Unavailability of loans
  - (c) Lack of government support
  - (d) All of these
18. Some economists argue that debt waiver schemes are extremely beneficial to the poor and marginalised farmers, as these schemes are burden on \_\_\_\_\_
- (a) Personal expenditures
  - (b) Government
  - (c) Poverty
  - (d) Unemployment
19. \_\_\_\_\_ is the most prominent body responsible for providing loans for long terms land development.
- (a) The National Bank for Agriculture and Rural Development.
  - (b) Land Development Bank
  - (c) Regional Rural Banks (RRBs)
  - (d) Small Industrial Development Bank of India (SIDBI).

#### **Extra Questions**

Q. 1 Critically evaluate the role of the rural credit / banking system in the process of rural development in India?

Q. 2 Explain the role of micro-credit programmes in meeting the credit requirements of the poor.

Q. 3 "The Prime Minister urged to increase the rural income by increasing non-farm activities." Explain how non-farm activities can lead to rise in income of people in rural sector.

### CH. 6 I E D - Employment

#### Multiple Choice Questions - MCQ's

1. \_\_\_ provides different estimates of unemployment, attributes of the unemployed and the variety of unemployment prevailing in our country.

(a) The National Statistical Office's Reports of Employment and Unemployment situation

(b) Reports of Census of India

(c) Directorate General of Employment and Training Data of Registration with Employment Exchanges

(d) All of the above

1. Which of the following is working in the informal sector?

(a) A private school teacher in a school which has 25 teachers.

(b) The owner of a textile shop employing nine workers.

(c) Driver of a bus company which has more than 10 buses with 20 drivers, conductors and other workers.

(d) Civil engineer working in a construction company which has 10 workers.

2. Owing to the efforts of the \_\_\_\_\_ the Indian government has initiated the modernisation of informal sector enterprises and provision of social security measures to informal sector workers.

(a) The National Statistical Office

(b) The Census of India

(c) The National Sample Survey Organization

(d) International Labour Organization

3. Some people look for jobs in newspapers, some look for a job through friends and relatives. In many cities, people standing in some select areas looking for people to employ them for that day's work. Some go to factories and offices and give their bio-datas and ask whether there is any vacancy in their factory or office. Some go to employment exchanges. The situation described in the above paragraph is called

(a) Disguised unemployment

(b) Seasonal unemployment

(c) Open unemployment

(d) None of these

4. "Google in India has hired 4000 graduate students." The given statement deals with \_\_\_\_\_ sector employment.

(a) Formal

(b) Informal

(c) Rural

(d) Urban

#### Assertion / Reasoning type and Statement based Questions:

5. Read the following statements – Assertion (A) & Reason (R) and select the correct alternative:

Assertion (A): The worker population ratio in rural India is higher than that in urban areas.

Reason (R): People in rural areas have limited resources to earn a higher income.

People cannot stay at home as their economic condition may not allow them to do so.

(a) Both Assertion (A) and Reason (R) are true and Reason (R) is correct explanation for Assertion (A).

(b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation for Assertion (A).

(c) Assertion (A) is true, but Reason (R) is false.

(d) Assertion (A) is false, but Reason (R) is true.

6. Read the following statements carefully and choose the correct alternative:

Statement I: An establishment with four hired worker is known as formal sector establishment.

Statement II: Those who work in private sector establishments which employ 10 hired

workers or more are called informal sector workers.

- (a) Both the statements are true
- (b) Both the statements are false.
- (c) Statement I is true, but statement II is false
- (d) Statement II is true, but statement I is false

Case Study Based Questions – MCQ's

**CASE STUDY : Read the following and answer 1 to 4 on the basis of the same:**

In September 2020, India saw an unemployment rate of over six percent. This was a significant improvement from the previous months. A damaging impact on an economy as large as India's caused due to a total lockdown was imminent.

Unemployment went up to 24 percent on May 17, 2020. This was possibly a result of a decrease in demand as well as the disruption of workforce faced by companies.

Furthermore, this caused a GVA loss of more than nine percent for the Indian economy that month. Between February and April 2020, the share of households that experienced a fall in income shot up to nearly 46 percent. Inflation rates on goods and services including food products and fuel were expected to rise later this year. Social distancing resulted in the job losses, specifically those Indian society's lower economic strata. Several households terminated domestic help services – essentially an unorganized monthly-paying job. Most Indians spent a large amount of time engaging in household chores themselves, making it the most widely practiced lockdown activity. The most devastating impact of the virus and the lockdown had been on the economically backward classes, with limited access to proper healthcare and other resources. This resulted in the government has launched various programs and campaigns to help sustain these households. Under the Pradhan Mantri Garib Kalyan Yojna, 312 billion Indian rupees were accrued and provided to around 331 million beneficiaries that included women, construction workers, farmers and senior citizens. More aid was announced in mid May, to mainly support small businesses through the crisis.

1. Under the \_\_\_\_\_, 312 billion Indian rupees were accrued and provided to around 331 million beneficiaries that included women, construction workers, farmers, farmers and senior citizens.

2. Due to Covid-19 lockdown, Inflation rates on goods and services including food products and fuel were expected to \_\_\_\_\_ (rise/fall) later this year.

3. \_\_\_\_\_ provides difference estimates of unemployment, attributes of the unemployed and the variety of unemployment prevailing in our country.

- (a) National Sample Survey Organization's Reports of Employment and Unemployment situation
- (b) Reports of Census of India
- (c) Directorate General of Employment and training Data of Registration with Employment Exchange.
- (d) All the above

4. Some people look for jobs in newspapers, some look for a job through friends and relatives. In many cities, people standing in some select areas looking for people to employ them for that day's work. Some go to factories and offices and give their bio-data and ask whether there is any vacancy in their factor or office. Some go to employment exchanges. The situation described in the above paragraph is called \_\_\_\_\_.

- (a) Disguised unemployment
- (b) Seasonal unemployment
- (c) Open unemployment
- (d) None of these

**Some Important Questions:**

1. " It is necessary to create employment in the formal sector rather than in the informal sector." Defend or refute the given statement with valid arguments.

2. Analyse the recent trends in sectoral distribution of workforce in India.

**Trends in Employment Pattern (Sector-wise and Status-wise), 1993-2018 (in %)**

Item	1993-94	2011-2012	2017-2018
Primary	64	48.9	44.6
Secondary	16	24.3	24.4
Services	20	26.8	31
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

3. Compared to urban women, more rural women are found working. Why?

4. Explain briefly the different types of unemployment prevailing in India.

5. What measure/steps have been taken by the government of India in generating employment or creating opportunities for employment generation in India?

6. From the following table calculate the missing figure:

Region	Estimated Population (in crore)	Estimated No. of workers (in crores)	Workforce Participation rate (%)
Rural	70	35	____(i) ____
Urban	____(ii) ____	20	40
Total	-	-	____(iii) ____

7. Answer the following question on the basis of the following data:

**Workforce Participation Rate in India (2011-12)**

Sex	Worker-Population Ratio		
	Total	Rural	Urban
Men	52.1	51.7	53.0
Women	16.5	17.5	14.2
Total	34.7	35.0	33.9

(a) Why is there difference in the workforce participation rate between rural and urban areas?

(b) Compared to females, more males are found to be working. The difference in participation rate is very large in urban areas. Give reasons.

**Chapter 7 I E D - Sustainable Economic Development**

**Multiple Choice Questions - MCQ's**

1. \_\_\_\_\_ means the ability of the environment to absorb degradation.

- (a) Absorptive capacity
- (b) Carrying capacity
- (c) Assimilating capacity
- (d) Sustainable development

2. The CPCB (Central Pollution control Board) has identified \_\_\_\_\_ categories of industries (large and medium scale) as significant polluting.

- (a) 15                      (b) 16                      (c) 17                      (d) 18

3. The use of \_\_\_\_\_ as fuel in public transport system may reduce air pollution.

- (a) LPG                      (b) CNG                      (c) Water                      (d) Electricity

4. In years, India is taking efforts to increase the power generation through solar. India is also

leading an international body called \_\_\_\_\_.

- (a) International Solar Alliance (ISA)  
(b) Central Pollution Control Board (CPCB)  
(c) United Nations Conference on Environment and Development (UNCED)  
(d) Ministry of environment

5. In 2015, the UN formulated \_\_\_\_\_ Sustainable Development Goals (SDGs) intended to be achieved by the year 2030.

- (a) 14                      (b) 15                      (c) 16                      (d) 17

**Assertion / Reasoning type and Statement based Questions:**

9. Read the following statements carefully and choose the correct alternative:

Statement-I: Renewable resources are those which can be used without the possibility of the recourse becoming depleted or exhausted.

Statement-II: Carrying capacity means the ability of the environment to absorb degradation.

- (a) Both the statements are true.  
(b) Both the statements are false.  
(c) Statement-I is true, Statement-II is false.  
(d) Statement-II is true, Statement-I is false.

10. There are two statements given below, marked as Assertion (A) and Reason (R). Read the statements and choose the correct option.

Assertion (A): The threat to India's environment poses a dichotomy.

Reason (R): Threat of poverty-induced environmental degradation and, at the same time, threat of pollution from affluence and a rapidly growing industrial sector.

- (a) Both the statements are true.  
(b) Both the statements are false.  
(c) Statement-I is true, Statement-II is false.  
(d) Statement-II is true, Statement-I is false.

11. Read the following statements carefully and choose the correct alternative:

Statement-I: In order to address two major environmental concern in India, viz. water and air pollution, the government set up the central pollution control board (CPCB) in 1974.

Statement-II: The CPCB has indentified 14 categories of industries (large and medium scale) as significantly polluting.

- (a) Both the statements are true.  
(b) Both the statements are false.  
(c) Statement-I is true, Statement-II is false.  
(d) Statement-II is true, Statement-I is false.

12. Read the following statements carefully and choose the correct alternative:

Statement-I: The pollution control Boards (PCBs) prepare manual, codes and guideline relating to treatment and disposal of sewage and trade effluents.

Statement-II: The CPCB (central pollution control board) has identified seventeenth categories of industries (large and medium scale) as significant polluting.

- (a) Both the statements are true.  
(b) Both the statements are false.  
(c) Statement-I is true, Statement-II is false.  
(d) Statement-II is true, Statement-I is false.

13. Read the following statements – Assertion (A) and reason (R) and select the correct

alternative:

Assertion (A): Mini-hydel power plants are more or less environmental – friendly.

Reason (R): They do not change the land use pattern in areas where they are located; they generate enough power.

(a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of assertion (A).

(b) Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of assertion (A).

(c) Assertion (A) is true but Reason (R) is false.

(d) Assertion (A) is false but Reason (R) is true.

### **Case Study Based Questions - MCQ's**

CASE STUDY 1: Read the following carefully and answer question no. 14-17 on the basis of the same:

Sustainable development is the synonymous in the minds of many with the colour green and for good reasons. Twenty years ago, at the first summit at Rio de Janeiro, in Brazil, world leaders set out what today is conventional wisdom: Social and Economic Human progress – cannot be divorced from environmental protection unless both are advanced together, both will flounder together. Sustainable development is as much about health, education and jobs, as it is about the ecosystem. It is about ever widening inclusion and movement away from decisions that erode democratic space and do not address social inequality, intolerance, and violence. Sustainable development is about changes that transform impoverished people, communities, and countries into informed, educated healthy and productive societies. It is about wealthy creation that generates equality and opportunity. Sustainable development is about consumption and production patterns that respect planetary boundaries; it is also about increasing tolerance and respect for human rights at all levels.

14. Which of the following is not one of the ways to attain the goal of sustainable development?

(a) Use of cleaner fuels

(b) Use of traditional knowledge and practices

(c) Spreading awareness

(d) Sticking to methods to promote inequalities.

15. State whether the given statement is true or false:

As per the UNDP Report education and health are the broader issues of human development

16. Sustainable development and economic growth are \_\_\_\_\_ (directly / indirectly) related.

17. Read the following statements – Assertion (A) and Reason (R)

Assertion (A): Sustainable Development is about changes that transform impoverished people, communities and countries into informed, educated, healthy and productive societies. Reason (R): Sustainable Development advocates about wealth creation that generates Socio-economic equality and opportunity.

(a) Both Assertion (A) and Reason (R) are true.

(b) Both Assertion (A) and Reason (R) are false.

(c) Assertion (A) is true but Reason (R) is false.

### **Some Important Questions:**

18. What are the functions of the environment?

19. What is the aim of sustainable development? What needs to be achieved sustainable development, according to Herman Daly, a leading environmental economist?

20. Explain, how according to Brundtland Commission the present generation can promote sustainable development.

21. Explain the concept of 'sustainable development' as defined by Edward Barbier.

22. State and discuss any two principal causes of environmental degradation.

23. "Ujjwala Yojana has been a game changer for rural India". Do you agree? State any three conventional fuels being targeted under the LPG cylinder distribution scheme (Ujjwala Yojana).

24. Account for the current environmental crisis.

25. Explain how the opportunity costs of negative environmental impact are high?
26. Is environmental crisis a recent phenomenon? If so, why?
27. Explain the supply-demand reversal of environmental resources.
28. Why is agricultural diversification essential for sustainable rural development in India?
29. Comment on the following:
  - (a) If the rate of resource extraction exceeds the rate of regeneration, it leads to reduction in carrying capacity of the environment.
  - (b) India's environmental problems pose a dichotomy & they are poverty induced and at the same time due to affluence in living standards.
30. Explain the relevance of inter-generational equity in the definition of sustainable development.

**Ch. 8 I E D - Development Experiences of India: A Comparison With Neighbors  
Multiple Choice Questions - MCQ's**

1. Pakistan introduced its economic reforms in the year \_\_\_\_\_.  
(a) 1974                      (b) 1976                      (c) 1978                      (d) 1988
2. Introduction of Economic Reforms in China took place in the year \_\_\_\_\_.  
(a) 1974                      (b) 1976                      (c) 1978                      (d) 1988
3. Which of the following countries adopted 'One Child Policy' as a measure to control population? \_\_\_\_\_.  
(a) India                      (b) China                      (c) Pakistan                      (d) Russia
4. Great Proletarian Cultural Revolution was introduced under the leadership of \_\_\_\_\_.  
(a) Mao Zedong              (b) J.L. Nehru                      (c) M.K. Gandhi              (d) M.A. Jinnah
5. Which of the following countries initiated its process of Economic Reforms in the year 1991? \_\_\_\_\_.  
(a) Pakistan                      (b) India                      (c) Russia                      (d) China
6. 'GLF' with respect to the people's Republic of China referred to as \_\_\_\_\_.  
(a) Giant Leap Forward                      (b) Great Lead Forum  
(c) Great Leap Forward                      (d) Giant Lead Forum
7. India is not a member of which of the following regional/global economic grouping? \_\_\_\_\_.  
(a) European Union      (b) BRICS                      (c) G-20                      (d) SAARC
8. The main aim of 'Great Leap Forward' was to ensure rapid increase in \_\_\_\_\_ sector in China.  
(a) Primary                      (b) Secondary                      (c) tertiary                      (d) All of these
9. Arrange the following events in chronological order and choose the correct answer from the given alternatives:  
(i) Establishment of People's Republic of China                      (ii) Creation of Pakistan  
(iii) First Five-Year Plan of India                      (iv) First Five-Year Plan of China  
(a) (i), (iv), (ii), (iii)                      (b) (iii), (ii), (i), (iv)  
(c) (ii), (i), (iii), (iv)                      (d) (iv), (iii), (ii), (i)
10. India is not a member of which of the following regional/global economic grouping? \_\_\_\_\_.  
(a) SAARC                      (b) BRICS                      (c) G-7                      (d) G-20
11. Arrange the following events of China in chronological order and choose the correct alternative:  
(i) Great Proletarian Cultural Revolution                      (ii) Great Leap Forward campaign  
(iii) Introduction of Economic Reforms                      (iv) First five year Plan  
(a) (ii), (iv), (iii), (i)                      (b) (iv), (ii), (i), (iii)  
(c) (ii), (iv), (i), (iii)                      (d) (iv), (i), (ii), (iii)
12. In China, commune system is related to \_\_\_\_\_ sector.  
(a) Agriculture                      (b) Industry                      (c) Service                      (d) Informal
13. Great Leap Forward (GLF) was the campaign launched by Mao in the year \_\_\_\_\_.

- (a) 1951                      (b) 1955                      (c) 1958                      (d) 1962

**Assertion / Reasoning type and Statement based Questions:**

14. Read the following statements-Assertion (A) and Reason (R), and select the correct alternative:

Assertion (A): Over the last two decades or so, nations are forming regional and global economic groupings such as the SAARC, European Union, ASEAN, G-8, G-20s, BRICS etc.

Reason (R): This will strengthen their own domestic economies.

- (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).
- (b) Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of Assertion (A).
- (c) Assertion (A) is true but Reason (R) is false.
- (d) Assertion (A) is false but Reason (R) is true.

15. Read the following statements carefully and choose the correct alternative:

Statement –I: Since 2018, Pakistan is working on the basis of 12th Fieve Year Development Plan (2018-23), whereas, China is working on 12th Five Year Plan (2021-25).

Statement –II: Until March 2017, India had been following five Year Plan-Based development model, which now has been replaced by NITI aayog.

- (a) Both the statements are true.
- (b) Both the statements are false.
- (c) Statement-I is true, Statement-II is false.
- (d) Statement –II is true, Statement-I is false.

16. There are two statements given below, marked as Assertion (A) and Reason (R). Read the statements and choose the correct option.

Assertion (A) : India and Pakistan adopted similar developmental strategies.

Reason (R): Both of them created a large publics sector and raised public expenditure on social development.

- (a) A is true but R is false.
- (b) A is false but R is true.
- (c) Both A and R are true and R explains A.
- (d) Both A and R are true but R does not explain A.

17. Read the following statements-Assertion (A) and Reason (R), and select the correct alternative:

Assertion (A): The Great Leap Forward (GLF) campaign initiated in 1958 met with many problems.

Reason (R): A severe drought caused havoc in Chin killing about 30 million people. When Russia had conflicts with China, it withdrew its professionals who had earlier been sent to china to help in the industrialization process.

- (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).
- (b) Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of Assertion (A).
- (c) Assertion (A) is true but Reason (R) is false.
- (d) Assertion (A) is false but Reason (R) is true.

**Case Study Based Questions - MCQ's**

**CASE STUDY 1: Read the following table and answer question no. 18-21 on the basis of the table and previous knowledge:**

**TABLE 10.1: Select Demographic Indications, 2017-18**

Country	Estimated Population (in million)	Annual Growth Of Population	Density (Per sq. km)	Child Sex Ratio/Gender Ratio	Fertility Rate	Urbanisation

India	1352	1.03	455	924	2.2	34
China	1393	0.46	148	249	1.7	59
Pakistan	212	2.05	275	943	3.6	37

Source: World Development Indicators 2019. www.worldbank.org.

18. Scholars Point out the \_\_\_\_\_ as the major reason for low population growth.

- (a) One child norm introduced in China in the late 1970s
- (b) Great Leap Forward (GLF) campaign initiated in 1958
- (c) Commune system introduced in 1958
- (d) Great Proletarian Cultural Revolution introduced in 1965

19. Urbanisation is high in China with India having \_\_\_\_\_ per cent of its people living in urban areas.

- (a) 34
- (b) 59
- (c) 37
- (d) 36

20. There are two statements given below, marked as Assertion (A) and reason (R).

Read the statements and choose the correct option.

Assertion (A): The sex ratio is low and biased against females in all three countries.

Reason (R): Same preference prevail in all these countries.

- (a) A is true but R is false.
- (b) A is false but R is true.
- (c) Both A and R are true and R explains A.
- (d) Both A and R are true but R does not explain A.

21. Read the following statements carefully and choose the correct alternative:

Statement-I: After a few decades, in China, there will be more elderly people in proportion to young people.

Statement-II: The fertility rate is low in China and the highest is India.

- (a) Both the statements are true.
- (b) Both the statements are false.
- (c) Statement-I is true, Statement-II is false.
- (d) Statement-II is true, Statement-I is false.

**Some Important Questions:**

22. Explain the Great Leap Forward campaign of China as initiated in 1958. Also, state the problems which GLF campaign met with.

23. Describe the path of developmental initiatives taken by Pakistan for its economic development.

24. Compare and contrast India and China's sectoral contribution towards GDP.

25. India, China and Pakistan have travelled more than seven decades of developmental path with varied results.' Explain the given statement with valid arguments.

26. "The present day fast industrial growth in China can be traced back to the reforms introduced in 1978." Defend or refute the above statement.

27. "In Pakistan the reform process led to worsening of all the economic indicators. However, during the last few years, Pakistan has recovered its economic growth and has been sustaining." Defend or refute the above statement.

28. "India, China and Pakistan have travelled more than seven decades of development path with varied results." Explain the given statement with valid arguments.

**Worksheet (Class XII)**

**Chapter 2 (Relations and Functions)**

1. The maximum number of equivalence relations on the set  $A = \{1, 2, 3\}$  are  
 (a) 1                      (b) 2                      (c) 3                      (d) 5
2. The number of possible symmetric relations on a set containing 4 elements is  
 (a) 512                      (b) 1024                      (c) 256                      (d) 32
3. If the set A contains 5 elements and the set B contains 6 elements, then number of one-one and onto mappings from A to B is  
 (a) 720                      (b) 120                      (c) 0                      (d) none of these
4. Let  $A = \{1, 2, 3, \dots, n\}$  &  $B = \{a, b\}$ . Then the number of surjections from A to B is  
 (a)  $n_{P_2}$                       (b)  $2^n - 2$                       (c)  $2^n - 1$                       (d) none of these
5. If a relation R on the set  $\{1, 2, 3\}$  be defined by  $R = \{(1, 2)\}$ , then R is  
 (a) Reflexive                      (b) Transitive                      (c) symmetric                      (d) none of these
6. The number of possible reflexive relations on a set containing three elements is  
 (a) 512                      (b) 64                      (c) 256                      (d) 128
7. Let  $f: R \rightarrow R$  be defined as  $f(x) = \frac{1}{x} \forall x \in R$ . Then f is:  
 (a) One-one                      (b) onto                      (c) bijective                      (d) not defined
8. Which of the following functions from Z to Z is a bijection?  
 (a)  $f(x) = x^3$                       (b)  $g(x) = x + 2$                       (c)  $f(x) = 2x + 1$                       (d)  $f(x) = x^2 + 1$
9. Function  $f: R \rightarrow R$  given by  $f(x) = x + \sqrt{x^2}$  is  
 (a) Injective                      (b) surjective                      (c) bijective                      (d) none of these
10. Let  $f: Z \rightarrow Z$  be given by  $f(x) = \begin{cases} \frac{x}{2}, & \text{if } x \text{ is even} \\ 0, & \text{if } x \text{ is odd} \end{cases}$ . Then f is  
 (a) One-one but not onto                      (c) onto but not one-one  
 (b) One-one and onto                      (d) neither one-one nor onto
11. The function  $f: R \rightarrow R$  defined by  $f(x) = (x - 1)(x - 2)(x - 3)$  is  
 (a) One-one but not onto                      (c) onto but not one-one  
 (b) Both one-one and onto                      (d) neither one-one nor onto
12. If the set A contains 7 elements and the set B contains 10 elements, then number of one-one functions from set A to B is  
 (a)  $10_{C_7}$                       (b)  $10_{C_7} \cdot 7!$                       (c)  $7^{10}$                       (d)  $10^7$
13. The function  $f: R \rightarrow R$  defined by  $f(x) = 4 + 3 \cos x$  is

- (a) One-one but not onto
- (b) onto but not one-one
- (c) One-one and onto
- (d) neither one-one nor onto

14. A relation R is defined on Z as:  $aRb$  if and only if  $a^2 - 7ab + 6b^2 = 0$ ; then R is

- (a) Reflexive and symmetric
- (b) symmetric but not reflexive
- (c) Transitive but not reflexive
- (d) reflexive but not symmetric

Directions: (Q.Nos 15-19): In the following questions, a statement of assertion (A) is followed by the statement of reason (R). Make the correct choice as:

- (a) Both A and R are true and R is a correct explanation of A
- (b) Both A and R are true and R is not a correct explanation of A
- (c) A is true and R is false
- (d) A is false and R is true

15. Assertion: a function  $f: A \rightarrow B$  cannot be an onto function, if  $n(A) < n(B)$ .

Reason: a function  $f: A \rightarrow B$  is an onto function if each element in B has atleast one pre-image in A.

16. Assertion: the number of reflexive relations on set  $A = \{1, 2, 3, 4, 5\}$  is  $2^{20}$ .

Reason: the number of reflexive relations on a set A containing n elements is  $2^{n(n-1)}$ .

17. Assertion: The identity relation on a set A is an equivalence relation

Reason: The universal relation on a set A is an equivalence relation

18. Assertion: The function  $f: R \rightarrow R$  defined by  $f(x) = x^3 + 1$  is a bijection.

Reason: Every polynomial function is a bijection

19. Assertion: The function  $f: R \rightarrow R$  defined by  $f(x) = \frac{x}{x^2+1}$  is not one-one.

Reason:  $f(4) = \frac{4}{17}, f\left(\frac{1}{4}\right) = \frac{4}{17}$

20. Prove the relation R on the set  $N \times N$  defined by (a, b) R (c, d)  $a+d = b+c$ , for all (a, b) (c, d)  $\in N \times N$  is an equivalence relation.

21. Prove that the function  $f: R \rightarrow R$ , defined as  $f(x) = x^3 - 7$ , is bijective.

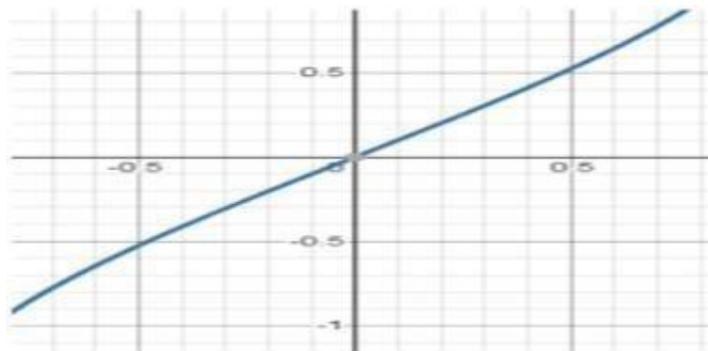
22. Show that the relation R in the set A,  $A = \{x \in Z : 0 \leq x \leq 12\}$  given by  $R = \{(a, b) : (a-b) \text{ is multiple of } 4\}$  is an equivalence relation. Find the set of all the elements in set A which are related to 1.

23. Let R be a relation on the set "A" of ordered pairs defined by  $(x, y) R(u, v)$  if and only if  $xv = yu$ . Show that R is an equivalence relation.

24. Show that the function  $f: R \rightarrow R$ , given by  $f(x) = x^3 + x$  is a bijection.

## Ch 2 Inverse Trigonometry

- 1) Solve for  $x$  :  $\{x \cos(\cot^{-1} x) + \sin(\cot^{-1} x)\}^2 = 51/50$   
 (a)  $1/\sqrt{2}$                       (b)  $1/5\sqrt{2}$                       (c)  $2\sqrt{2}$                       (d)  $5\sqrt{2}$
- 2) If  $\sin^{-1}(x^2 - 7x + 12) = n\pi$ ,  $6 \leq n \in \mathbb{I}$ , then  $x =$   
 (a) -2                      (b) 4                      (c) -3                      (d) 5
- 3) If  $\tan^{-1}(\cot \theta) = 2\theta$ , then  $\theta$  is equal to  
 (a)  $\pi/3$                       (b)  $\pi/4$                       (c)  $\pi/6$                       (d) None of these
- 4)  $\cot(\pi/4 - 2\cot^{-1} 3) =$   
 (a) 7                      (b) 6                      (c) 5                      (d) None of these
- 5) If  $6\sin^{-1}(x^2 - 6x + 8.5) = \pi$ , then  $x$  is equal to  
 (a) 1                      (b) 2                      (c) 3                      (d) 8
- 6)  $\sin^{-1}(1 - x) - 2\sin^{-1} x = \pi/2$   
 (a) 0                      (b)  $1/2$                       (c) 0,  $1/2$                       (d)  $-1/2$
- 7)  $2\tan^{-1}(\cos x) = \tan^{-1}(2\operatorname{cosec} x)$   
 (a) 0                      (b)  $\pi/3$                       (c)  $\pi/4$                       (d)  $\pi/2$
- 8) The domain of the function defined by  $f(x) = \sin^{-1}\sqrt{x-1}$   
 (a)  $[1, 2]$                       (b)  $[-1, 1]$                       (c)  $[0, 1]$                       (d) none of these
- 9) The value of expression  $2 \sec^{-1} 2 + \sin^{-1}(1/2)$   
 (a)  $\pi/6$                       (b)  $5\pi/6$                       (c)  $7\pi/6$                       (d) 1
- 10) The range of  $\sin^{-1} x + \cos^{-1} x + \tan^{-1} x$  is  
 (a)  $[0, \pi]$                       (b)  $[\pi/4, 3\pi/4]$                       (c)  $(0, \pi)$                       (d)  $[0, \pi/4]$
- 11) The value of  $\cot^{-1} 9 + \operatorname{cosec}^{-1}(\frac{\sqrt{41}}{4})$  is given by  
 (a) 0                      (b)  $\pi/4$                       (c)  $\tan^{-1} 2$                       (d)  $\pi/2$
- 12) The equation  $2\cos^{-1} x + \sin^{-1} x = 11\pi/6$  has  
 (a) no solution                      (b) only one solution  
 (c) two solutions                      (d) three solutions
- 13) What will be the value of  $x + y + z$  if  $\cos^{-1} x + \cos^{-1} y + \cos^{-1} z = 3\pi$ ?  
 a)  $-1/3$                       b) 1                      c) 3                      d) -3
- 14) The given graph is for which equation?



- a)  $y = \sin x$       b)  $y = \sin^{-1}x$       c)  $y = \operatorname{cosec}x$       d)  $y = \sec x$

- 15) What is the value of  $\sin^{-1}(\sin 6)$ ?  
 a)  $-2\pi - 6$       b)  $2\pi + 6$       c) either  $-2\pi + 6$  or  $2\pi + 6$       d)  $2\pi - 6$

Directions : Each of these questions contains two statements, Assertion and Reason. Each of these questions also has four alternative choices, only one of which is the correct answer. You have to select one of the codes (a), (b), (c) and (d) given below.

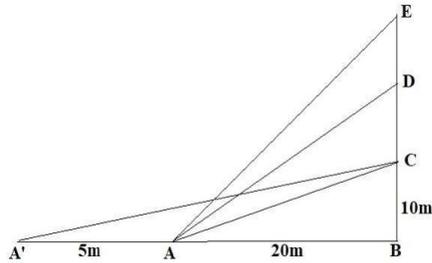
- (a) Assertion is correct, reason is correct; reason is a correct explanation for assertion.  
 (b) Assertion is correct, reason is correct; reason is not a correct explanation for assertion  
 (c) Assertion is correct, reason is incorrect  
 (d) Assertion
- 16) Assertion (A):  $\sin^{-1}(\sin \frac{2\pi}{3}) = \frac{2\pi}{3}$   
 Reason (R):  $\sin^{-1}(\sin X) = X$  where  $X \in [-\frac{\pi}{2}, \frac{\pi}{2}]$
- 17) Assertion (A): Range of  $\tan^{-1}x$  is  $(-\frac{\pi}{2}, \frac{\pi}{2})$   
 Reason (R): Domain of  $\tan^{-1}x$  is  $\mathbb{R}$
- 18) Assertion (A): Principal value of  $\sin^{-1}(1/2)$  is  $\frac{\pi}{4}$   
 Reason (R): Principal value of  $\cot^{-1}(1/\sqrt{3})$  is  $\frac{\pi}{6}$
- 19) Assertion (A): Range of  $\cot^{-1}x$  is  $(0, \pi)$   
 Reason (R): Domain of  $\tan^{-1}x$  is  $\mathbb{R}$
- 20) Assertion (A): Principal value of  $\cos^{-1}(1)$  is  $\pi$   
 Reason (R): Value of  $\cos 0^\circ$  is 1.

### CASE STUDY QUESTIONS

The Government of India is planning to fix a hoarding board at the face of a building on the road of a busy market for awareness on COVID-19 protocol. Ram, Robert and Rahim are the three engineers who are working on this project. 'A' is considered to be a person viewing the hoarding board 20 metres away from the building, standing at the edge of a pathway nearby, Ram Robert and Rahim suggested to the firm to place the hoarding board at three different locations

namely C, D and E. 'C' is at the height of 10 metres from the ground level. For the viewer 'A', the angle of elevation of 'D' is double the angle of elevation of 'C'. The angle of elevation of 'E' is triple the angle of elevation of 'C' for the same viewer.

Look at the figure given and based on the above information answer the following:



- (i) What is the measure of  $\angle CAB$
- (ii) What is the measure of  $\angle DAB$
- (iii) A' is another viewer standing on the same line of observation across the road. If the width of the road is 5 meters, then the difference between  $\angle CAB$  and  $\angle CA'B$ .

2) FIND THE VALUE OF:

A)  $\tan^{-1}(\sqrt{3}) - \cot^{-1}(-\sqrt{3})$ .

B)  $\cos^{-1}(-1/2) + 2 \sin^{-1}(1/2)$

C)  $\tan^{-1}\sqrt{3} - \sec^{-1}(-2)$

D)  $\cot(\pi/2 - 2 \cot^{-1}\sqrt{3})$

2) find the value of  $\theta$

$$\text{If } \tan^{-1}\left(\frac{1}{1+1 \cdot 2}\right) + \tan^{-1}\left(\frac{1}{1+2 \cdot 3}\right) + \dots + \tan^{-1}\left(\frac{1}{1+n(n+1)}\right) = \tan^{-1}\theta,$$

23) Prove that:

$$\tan^{-1}\left(\frac{\cos x}{1 + \sin x}\right) = \frac{\pi}{4} - \frac{x}{2}, x \in \left(-\frac{\pi}{2}, \frac{\pi}{2}\right).$$

24) Prove the following.

$$\cos\left(\sin^{-1}\frac{3}{5} + \cot^{-1}\frac{3}{2}\right) = \frac{6}{5\sqrt{13}}$$

25) Solve for x,  $\cos(2 \sin^{-1} x) \equiv 1/9$

### Ch 3 & 4 Matrices and Determinants

1. Let  $A = \begin{bmatrix} 2 & 3 \\ -1 & 2 \end{bmatrix}$ , then show that  $A^2 - 4A + 7I = 0$ .

Using this result calculate  $A^5$  also.

2. If A and B are square matrices of the same order, then  $(A + B)(A - B)$  is equal to  
 (a)  $A^2 - B^2$       (b)  $A^2 - BA - AB - B^2$       (c)  $A^2 - B^2 + BA - AB$       (d)  $A^2 - BA + B^2 + AB$

3. If A and B are symmetric matrices of the same order, then  $(AB' - BA')$  is a  
 (a) Skew symmetric matrix      (b) Null matrix

(c) Symmetric matrix      (d) None of these

4. If A and B are two skew symmetric matrices of same order, then AB is symmetric matrix if \_\_\_\_\_.

5. Write the order of the product matrix:

6. If A is skew symmetric matrix, then  $A^2$  is a \_\_\_\_\_ matrix.

7. Find value of a and b if  $A = B$ , where

$$A = \begin{bmatrix} a+4 & 3b \\ 8 & -6 \end{bmatrix}, \quad B = \begin{bmatrix} 2a+2 & b^2+2 \\ 8 & b^2-5b \end{bmatrix}$$

8. Show that  $A = \begin{bmatrix} 5 & 3 \\ -1 & -2 \end{bmatrix}$  satisfies the equation  $A^2 - 3A - 7I = O$  and hence find

$$A^{-1}.$$

9. Find the matrix A satisfying the matrix equation:

$$\begin{bmatrix} 2 & 1 \\ 3 & 2 \end{bmatrix} A \begin{bmatrix} 3 & 2 \\ 5 & -3 \end{bmatrix} = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}.$$

10. Find A, if  $A = \begin{bmatrix} 4 & -4 & 8 & 4 \\ 1 & -1 & 2 & 1 \\ 3 & -3 & 6 & 3 \end{bmatrix}$ .

11. Show by an example that for  $A \neq O$ ,  $B \neq O$ ,  $AB = O$ .

12. Give an example of matrices A, B and C such that  $AB = AC$ , where A is non-zero matrix, but  $B \neq C$ .

13. Show that  $A'A$  and  $AA'$  are both symmetric matrices for any matrix A.

14. Verify that  $A^2 = I$  when  $A = \begin{bmatrix} 0 & 1 & -1 \\ 4 & -3 & 4 \\ 3 & -3 & 4 \end{bmatrix}$ .

15. If  $A = \begin{bmatrix} 1 & 5 \\ 7 & 12 \end{bmatrix}$  and  $B = \begin{bmatrix} 9 & 1 \\ 7 & 8 \end{bmatrix}$ , find a matrix C such that  $3A + 5B + 2C$  is a null matrix.

16. If  $A = \begin{bmatrix} 3 & -5 \\ 4 & 2 \end{bmatrix}$ , then find  $A^2 - 5A - 14I$ . hence, obtain  $A^3$ .

17. If  $A = \begin{bmatrix} \cos\alpha & \sin\alpha \\ -\sin\alpha & \cos\alpha \end{bmatrix}$ , and  $A^{-1} = A'$ . find value of  $\alpha$ .

18. If the matrix  $\begin{bmatrix} 0 & a & 3 \\ 2 & b & -1 \\ c & 1 & 0 \end{bmatrix}$  is a skew symmetric matrix, find the values of a, b and c.

19. Find x, y, z if  $A = \begin{bmatrix} x & y & -z \\ x & -y & z \end{bmatrix}$  satisfies  $A' = A^{-1}$ .

20. If  $A = \frac{1}{\pi} \begin{bmatrix} \sin^{-1}(x\pi) & \tan^{-1}\left(\frac{x}{\pi}\right) \\ \sin^{-1}\frac{x}{\pi} & \cot^{-1}(\pi x) \end{bmatrix}$ ,  $B = \frac{1}{\pi} \begin{bmatrix} -\cos^{-1}(x\pi) & \tan^{-1}\left(\frac{x}{\pi}\right) \\ \sin^{-1}\frac{x}{\pi} & -\tan^{-1}(\pi x) \end{bmatrix}$ , then  $A - B$  is

equal to

- (a) I                      (b) O                      (c) 2I                      (d)  $\frac{1}{2}I$

21. If A is a square matrix such that  $A^2 = I$ , then  $(A - I)^3 + (A + I)^3 - 7A$  is equal to

- (a) A                      (b) I - A                      (c) I + A                      (d) 3A

22. On using elementary column operations  $C_2 \rightarrow C_2 - 2C_1$  in the following matrix equation

$\begin{bmatrix} 1 & -3 \\ 2 & 4 \end{bmatrix} = \begin{bmatrix} 1 & -1 \\ 0 & 1 \end{bmatrix} \begin{bmatrix} 3 & 1 \\ 2 & 4 \end{bmatrix}$ , we have:

$$(a) \begin{bmatrix} 1 & -5 \\ 0 & 4 \end{bmatrix} = \begin{bmatrix} 1 & -1 \\ 2 & 2 \end{bmatrix} \begin{bmatrix} 3 & -5 \\ 2 & 0 \end{bmatrix} \quad (b)$$

$$\begin{bmatrix} 1 & -5 \\ 0 & 4 \end{bmatrix} = \begin{bmatrix} 1 & -1 \\ 0 & 1 \end{bmatrix} \begin{bmatrix} 3 & -5 \\ -0 & 2 \end{bmatrix}$$

$$(c) \begin{bmatrix} 1 & -5 \\ 2 & 0 \end{bmatrix} = \begin{bmatrix} 1 & -3 \\ 0 & 1 \end{bmatrix} \begin{bmatrix} 3 & 1 \\ -2 & 4 \end{bmatrix} \quad (d)$$

$$\begin{bmatrix} 1 & -5 \\ 2 & 0 \end{bmatrix} = \begin{bmatrix} 1 & -1 \\ 0 & 1 \end{bmatrix} \begin{bmatrix} 3 & -5 \\ 2 & 0 \end{bmatrix}$$

23. On using elementary row operation  $R_1 \rightarrow R_1 - 3R_2$  in the following matrix equations

$$\begin{bmatrix} 1 & -3 \\ 2 & 4 \end{bmatrix} = \begin{bmatrix} 1 & -1 \\ 0 & 1 \end{bmatrix} \begin{bmatrix} 3 & 1 \\ 2 & 4 \end{bmatrix}, \text{ we have:}$$

$$(a) \begin{bmatrix} -5 & -7 \\ 3 & 3 \end{bmatrix} = \begin{bmatrix} 1 & -7 \\ 0 & 3 \end{bmatrix} \begin{bmatrix} 2 & 0 \\ 1 & 1 \end{bmatrix}$$

$$(b) \begin{bmatrix} -5 & -7 \\ 3 & 3 \end{bmatrix} = \begin{bmatrix} 1 & 2 \\ 0 & 3 \end{bmatrix} \begin{bmatrix} -1 & -3 \\ 1 & 1 \end{bmatrix}$$

$$(c) \begin{bmatrix} -5 & -7 \\ 3 & 3 \end{bmatrix} = \begin{bmatrix} 1 & 2 \\ 1 & -7 \end{bmatrix} \begin{bmatrix} 2 & 0 \\ 1 & 1 \end{bmatrix}$$

(d)

$$\begin{bmatrix} 4 & 2 \\ -5 & -7 \end{bmatrix} = \begin{bmatrix} 1 & 2 \\ -3 & -3 \end{bmatrix} \begin{bmatrix} 2 & 0 \\ 1 & 1 \end{bmatrix}$$

24. Express the matrix  $\begin{bmatrix} 2 & 3 & 1 \\ 1 & -1 & 2 \\ 4 & 1 & 2 \end{bmatrix}$  as the sum of a symmetric and a skew symmetric matrix.

25. If  $\begin{vmatrix} 2x & 5 \\ 8 & x \end{vmatrix} = \begin{vmatrix} 6 & 5 \\ 8 & 3 \end{vmatrix}$ , then find x.

26. If  $\Delta = \begin{vmatrix} 1 & x & x^2 \\ 1 & y & y^2 \\ 1 & z & z^2 \end{vmatrix}$ ,  $\Delta_1 = \begin{vmatrix} 1 & 1 & 1 \\ yz & zx & xy \\ x & y & z \end{vmatrix}$ , then prove that  $\Delta + \Delta_1 = 0$ .

27. Show that  $\Delta = \begin{vmatrix} x & p & q \\ p & x & q \\ q & q & x \end{vmatrix} = (x-p)(x^2 + px - 2q^2)$ .

28. If  $\Delta = \begin{vmatrix} 0 & b-a & c-a \\ a-b & 0 & c-b \\ a-c & b-c & 0 \end{vmatrix}$ , then show that  $\Delta$  is equal to zero.

29. In a triangle ABC, if 
$$\begin{vmatrix} 1 & 1 & 1 \\ 1+\sin A & 1+\sin B & 1+\sin C \\ \sin A+\sin^2 A & \sin B+\sin^2 B & \sin C+\sin^2 C \end{vmatrix} = 0$$
. Then prove that

$\Delta ABC$  is an isosceles triangle.

30. If  $A = \begin{bmatrix} x & 5 & 2 \\ 2 & y & 3 \\ 1 & 1 & z \end{bmatrix}$ ,  $xyz = 80$ ,  $3x + 2y + 10z = 20$ , then  $A \text{ adj. } A = \begin{bmatrix} 81 & 0 & 0 \\ 0 & 81 & 0 \\ 0 & 0 & 81 \end{bmatrix}$ .

31. If  $A = \begin{bmatrix} 0 & 1 & 3 \\ 1 & 2 & x \\ 2 & 3 & 1 \end{bmatrix}$ ,  $A^{-1} = \begin{bmatrix} \frac{1}{2} & -4 & \frac{5}{2} \\ -\frac{1}{2} & 3 & -\frac{3}{2} \\ \frac{1}{2} & y & \frac{1}{2} \end{bmatrix}$  then find the value of x and y

32. Using the properties of determinants, evaluate :

1. 
$$\begin{vmatrix} a+x & y & z \\ x & a+y & z \\ x & y & a+z \end{vmatrix}$$
      2. 
$$\begin{vmatrix} 0 & xy^2 & xz^2 \\ x^2y & 0 & yz^2 \\ x^2z & zy^2 & 0 \end{vmatrix}$$

33. Using the properties of determinants, prove that :

1. 
$$\begin{vmatrix} y^2z^2 & yz & y+z \\ z^2x^2 & zx & z+x \\ x^2y^2 & xy & x+y \end{vmatrix}$$
      2. 
$$\begin{vmatrix} a^2+2a & 2a+1 & 1 \\ 2a+1 & a+2 & 1 \\ 3 & 3 & 1 \end{vmatrix} = (a-1)^3$$

34. Find the value of  $\theta$  satisfying 
$$\begin{vmatrix} 1 & 1 & \sin 3\theta \\ -4 & 3 & \cos \theta \\ 7 & -7 & -2 \end{vmatrix} = 0$$
.

35. If  $A = \begin{bmatrix} 1 & 2 & 0 \\ -2 & -1 & -2 \\ 0 & -1 & 1 \end{bmatrix}$ , find  $A^{-1}$ . Using  $A^{-1}$ , solve the system of linear equations

$x - 2y = 10$ ,  $2x - y - z = 8$ ,  $-2y + z = 7$ .

36. Using matrix method, solve the system of equations  $3x + 2y - 2z = 3$ ,  $x + 2y + 3z = 6$ ,  $2x - y + z = 2$ .

37. Given  $A = \begin{bmatrix} 2 & 2 & -4 \\ -4 & 2 & -4 \\ 2 & -1 & 5 \end{bmatrix}$ ,  $B = \begin{bmatrix} 1 & -1 & 0 \\ 2 & 3 & 4 \\ 0 & 1 & 2 \end{bmatrix}$ , find  $BA$  and use this to solve the system of equations

$y + 2x = 7$ ,  $x - y = 3$ ,  $2x + 3y + 4z = 17$ .

38. The value of determinant  $\begin{vmatrix} a-b & b+c & a \\ b-a & c+a & b \\ c-a & a+b & c \end{vmatrix}$
- (a)  $a^3 + b^3 + c^3$       (b)  $3abc$       (c)  $a^3 + b^3 + c^3 - 3abc$   
 (d) none of these

39. Let  $f(t) = \begin{vmatrix} \cos t & t & 1 \\ 2\sin t & t & 2t \\ \sin t & t & t \end{vmatrix}$ , then  $\lim_{t \rightarrow 0} \frac{f(t)}{t^2}$  is equal to
- (a) 0      (b) -1      (c) 2  
 (d) 3

40. The maximum value of  $\Delta = \begin{vmatrix} 1 & 1 & 1 \\ 1 & 1+\sin\theta & 1 \\ 1+\cos\theta & 1 & 1 \end{vmatrix}$  is ( $\theta$  is real number)
- (a)  $\frac{1}{2}$       (b)  $\frac{\sqrt{3}}{2}$       (c)  $\sqrt{2}$   
 (d)  $\frac{2\sqrt{3}}{2}$

41. If  $A = \begin{vmatrix} 2 & \lambda & -3 \\ 0 & 2 & 5 \\ 1 & 1 & 3 \end{vmatrix}$ , then  $A^{-1}$  exists if
- (a)  $\lambda = 2$       (b)  $\lambda \neq 2$       (c)  $\lambda \neq -2$   
 (d) none of these

42. If  $x, y, z$  are all different from zero and  $\begin{vmatrix} 1+x & 1 & 1 \\ 1 & 1+y & 1 \\ 1 & 1 & 1+z \end{vmatrix} = 0$ . Then value of  $x^{-1} + y^{-1} + z^{-1}$  is
- (a)  $x y z$       (b)  $x^{-1} y^{-1} z^{-1}$       (c)  $-x - y - z$   
 (d) -1

43. There are two values of  $a$  which makes determinant,  $\Delta = \begin{vmatrix} 1 & -2 & 5 \\ -2 & a & -1 \\ 0 & 4 & 2a \end{vmatrix} = 86$ , then sum of these number is
- (a) 4      (b) 5      (c) -4  
 (d) 9

44. If  $A$  is invertible matrix of order  $3 \times 3$ , then  $|A^{-1}|$  \_\_\_\_\_.

45. If A is a matrix of order  $3 \times 3$ , then  $|A^2|^{-1} = \underline{\hspace{2cm}}$ .
46. If A is matrix of order  $3 \times 3$ , then number of minors in determinant of A are  $\underline{\hspace{2cm}}$ .
47.  $(A^3)^{-1} = (A^{-1})^3$ . Where A is a square matrix and  $|A| \neq 0$ .
48. If the value of a third order determinant is 12, then the value of the determinant formed by replacing each element by its co-factor will be 144.

### Ch 5 Continuity and Differentiability

1. The function  $f(x) = \begin{cases} \sin x + \cos x, & \text{if } x \leq 0 \\ \frac{k}{x}, & \text{if } x > 0 \end{cases}$  is continuous at  $x = 0$ , then find the value of k
2. Find the value of the constant k so that the function f defined below is continuous at  $x = 0$ , where  $f(x) = \begin{cases} \frac{1 - \cos 4x}{8x^2}, & x > 0 \\ k, & x = 0 \end{cases}$
3. If  $f(x) = \begin{cases} k \sin \frac{\pi}{2}(x+1), & x \leq 0 \\ \frac{\tan x - \sin x}{x^3}, & x > 0 \end{cases}$  is continuous at  $x = 0$ , then find the value of k.
4. If  $f(x) = \sqrt{\frac{2 \cos x - 1}{\cot x - 1}}$ ,  $x \leq \frac{\pi}{4}$  find the value of  $f(\frac{\pi}{4})$  so that f(x) becomes continuous at  $x = \frac{\pi}{4}$ .
6. Show that the function f given by  $f(x) = \begin{cases} \frac{e^x - 1}{e^x + 1}, & \text{if } x > 0 \\ 0, & \text{if } x = 0 \end{cases}$  is discontinuous at  $x = 0$ .
7. Let  $f(x) = \begin{cases} \frac{1 - \cos 4x}{x^2}, & \text{if } x < 0 \\ a, & \text{if } x = 0 \\ \frac{\sqrt{x}}{\sqrt{6 + \sqrt{x}} - 4}, & \text{if } x > 0 \end{cases}$  for what value of a, f continuous at  $x = 0$ ?
8. Find the value of k in each question so that the function f is continuous at the indicated point:

i.  $f(x) = \begin{cases} 3x-8, & \text{if } x \leq 5 \\ 2k, & \text{if } x > 5 \end{cases}$  at  $x = 5$

ii.  $f(x) = \begin{cases} \frac{2^{x+2}-16}{4^x-16}, & \text{if } x \leq 2 \\ k, & \text{if } x > 2 \end{cases}$  at  $x = 2$

9. Given  $f(x) = \frac{1}{x-1}$  find the points of discontinuity of the composite function  $y = f[f(x)]$ .

10. Let  $f(x) = x|x|$ , for all  $x \in \mathbb{R}$ . discuss the derivability of  $f(x)$  at  $x = 0$ .

11. Find the values of  $p$  and  $q$  so that  $f(x) = \begin{cases} x^2+3x+p, & \text{if } x \leq 1 \\ qx+2, & \text{if } x > 1 \end{cases}$  is differentiable at  $x = 1$ .

12. Find  $\frac{dy}{dx}$ , if  $y = \sin^{-1} \left( \frac{5x+12\sqrt{1-x^2}}{13} \right)$ ,  $-\frac{\pi}{4} < x < \frac{\pi}{4}$

13. Find  $\frac{dy}{dx}$ , if  $y = \cos^{-1} \left( \frac{\sin x + \cos x}{\sqrt{2}} \right)$ ,  $-\frac{\pi}{4} < x < \frac{\pi}{4}$

14. Find  $\frac{dy}{dx}$ , if  $y = \log \left( \frac{x + \sqrt{x^2+a^2}}{x - \sqrt{x^2-a^2}} \right)$

15. Find  $\frac{dy}{dx}$ , if  $y = \tan^{-1} \left( \frac{\sqrt{1+x^2} + \sqrt{1-x^2}}{\sqrt{1-x^2} - \sqrt{1+x^2}} \right)$ ,  $-1 < x < 1$ ,  $x \neq 0$

16. Find  $\frac{dy}{dx}$ , if  $y = \tan^{-1} \left( \frac{\sqrt{1+x} + \sqrt{1-x}}{\sqrt{1+x} - \sqrt{1-x}} \right)$

17. Find  $\frac{dy}{dx}$ , if  $y = \tan^{-1} \left( \frac{\sqrt{1+\sin x} + \sqrt{1-\sin x}}{\sqrt{1+\sin x} - \sqrt{1-\sin x}} \right)$

18. If  $y = \sin^{-1} \left\{ x\sqrt{1-x} - \sqrt{x}\sqrt{1-x^2} \right\}$  and  $0 < x < 1$ , then find  $\frac{dy}{dx}$ .

19. Find  $\frac{dy}{dx}$ , if  $y = \tan^{-1} \left( \sqrt{1+x^2} - x \right)$

20. If  $x = a(\theta + \sin \theta)$ ,  $y = a(1 - \cos \theta)$ , find  $\frac{d^2y}{dx^2}$  at  $\theta = \frac{\pi}{2}$

21. If  $x^m y^n = (x+y)^{m+n}$ , prove that i)  $\frac{dy}{dx} = \frac{y}{x}$  ii)  $\frac{d^2y}{dx^2} = 0$

22. If  $y\sqrt{x^2+1} = \log(\sqrt{x^2+1} - x)$ , show that  $(x^2+1)\frac{dy}{dx} + xy + 1 = 0$

23. If  $y = (\cos x)^{(\cos x)^{\dots}}$ , show that  $\frac{dy}{dx} = \frac{y^2 \tan x}{y \log \cos x - 1}$

24. If  $y = \sqrt{\sin x + \sqrt{\sin x + \sqrt{\sin x + \dots}}}$ , prove that  $\frac{dy}{dx} = \frac{\cos x}{2y-1}$

25. If  $y = \sin(\log x)$ , prove that  $x^2 \frac{d^2y}{dx^2} + x \frac{dy}{dx} + y = 0$

26. If  $y = \log \left( x + \sqrt{x^2 + 1} \right)$ , prove that  $(1+x^2) \frac{d^2y}{dx^2} + x \frac{dy}{dx} - 2 = 0$
27. If  $y = \log \tan \frac{x}{4} + \frac{\pi}{2}$ , show that  $\frac{dy}{dx} = \sec x$ . Also find the value of  $\frac{d^2y}{dx^2}$  at  $x = \frac{\pi}{4}$
28. If  $x = a(\cos t + t \sin t)$  and  $y = a(\sin t - t \cos t)$  find  $\frac{d^2x}{dt^2}$ ,  $\frac{d^2y}{dt^2}$  and  $\frac{d^2y}{dx^2}$ .
29. If  $\sqrt{1-x^2} + \sqrt{1-y^2} = a(x-y)$ , show that  $\frac{dy}{dx} = \sqrt{\frac{1-y^2}{1-x^2}}$
30. If  $y\sqrt{1-x^2} + x\sqrt{1-y^2} = 1$ , show that  $\frac{dy}{dx} = -\sqrt{\frac{1-y^2}{1-x^2}}$
31. If  $y = \tan x + \sec x$ , prove that  $\frac{d^2y}{dx^2} = \frac{\cos x}{(1-\sin x)^2}$ .
32. If  $x = \sin t$  and  $y = \sin pt$ , that  $(1-x^2) \frac{d^2y}{dx^2} - x \frac{dy}{dx} + p^2y = 0$ .
33. If  $y = \sin(m \sin^{-1} x)$ , prove that  $(1-x^2) y_2 - xy_1 + m^2y = 0$
34. If  $x = a \sin pt$ ,  $y = b \cos pt$ , then show that  $(a^2 - x^2) y \frac{d^2y}{dx^2} + b^2 = 0$
35. Differentiate  $\tan^{-1} \frac{\sqrt{1-x^2}}{x}$  with respect to  $\cos^{-1} \left( 2x \sqrt{1-x^2} \right)$ , where  $x \in \frac{1}{\sqrt{2}}, 1$ .
36. Differentiate  $y = (\cos x)^x + (\sin x)^x$
37. Differentiate  $\tan^{-1} \left( \frac{\sqrt{1+x^2}-1}{x} \right)$  w.r.t.  $\tan^{-1} x$  when  $x \neq 0$ .
38. Verify Rolle's theorem for  $f(x) = (x-1)(x-2)^2$  in  $[1, 2]$
39. If  $f$  is continuous on its domain  $D$ , then  $|f|$  is also continuous on  $D$ .  
(T/F)

The composition of two continuous functions is a continuous function.

(T/F)

## Applications of Derivatives

### *Multiple Choice Questions (MCQs)*

- 1) The curve  $y = x^5$  has at  $(0,0)$ .  
 (a) a vertical tangent (parallel to x-axis)                      (b) a horizontal tangent (parallel to x-axis)  
 (c) an oblique tangent    (d) no tangent
- 2) The point on the curve  $y = (x-1)(x-2)$  at which the tangent makes an angle of  $135^\circ$  with the positive direction of x-axis has coordinates  
 (a) (1,0)                      (b) (0,1)                      (c) (-1,0)                      (d) (0,-1)

- 3) The slope of the normal to the curve  $y = 2x^2 + 3\sin x$  at  $x = 0$  is  
 (a) 3 (b)  $1/3$  (c) -3 (d)  $-1/3$
- 4) If the function  $f(x) = x + \cos x + b$  is strictly decreasing over  $R$ , then  
 (a)  $b < 1$  (b)  $b \leq 1$  (c)  $b \geq 1$  (d) no value of  $b$  exists
- 5) The function  $f(x) = \frac{1+|x|}{1+|x|}$  is \_\_\_\_\_  
 (a) strictly increasing (b) strictly decreasing  
 (c) neither increasing nor decreasing (d) none of these
- 6) Which of the following functions is decreasing in  $(0, \pi/2)$ ?  
 (a)  $\sin 2x$  (b)  $\tan x$  (c)  $\cos x$  (d)  $\cos 3x$
- 7) The function  $f(x) = 2x^3 - 3x^2 - 12x + 4$  has  
 (a) two points of local maximum (b) two points of local minimum  
 (c) one maximum and one minimum (d) no maximum, no minimum
- 8) The function  $f(x) = x^e$  has a stationary point at  
 (a)  $x = e$  (b)  $x = 1/e$  (c)  $x = 1$  (d)  $x = \sqrt{e}$
- 9) The critical points of the function  $f(x) = (x - 2)^3(2x + 1)$ , are  
 (a) 1 and 2 (b) 1 and  $-1/2$  (c)  $-1$  and 2 (d) 1
- 10) If  $f(x) = a \log |x| + b/x^2 + x$  has its extremum values at  $x = -1$  and  $x = 2$ , then  
 (a)  $a = 2, b = -1$  (b)  $a = 2, b = -1/2$  (c)  $a = -2, b = 1/2$  (d) none of these

*ASSERTION-REASON BASED(Q-11 to 14)*

Each of the following examples contains STATEMENT-I (Assertion) and STATEMENT-II (Reason) and has the following four choices (a), (b), (c) and (d), only one of which is the correct answer. Mark the correct choice.

- (a) STATEMENT-I and STATEMENT-II are true; STATEMENT-II is a correct explanation for STATEMENT-I
- (b) STATEMENT-I and STATEMENT-II are true; STATEMENT-II is not a correct explanation for STATEMENT-I.
- (c) STATEMENT-I is True, STATEMENT-II is False.
- (d) STATEMENT-I is False, STATEMENT-II is True.
- 11) STATEMENT-I (Assertion): The curve  $y - x^{2/3} + x = 0$  has a vertical tangent at the point  $(0,1)$ .  
 STATEMENT-II (Reason): At the point where a curve has a vertical tangent  
 $\frac{dy}{dx} = 0$ .
- 12) Let  $AB$  be a diameter of a circle and  $C$  is any point on the circle, other than  $A$  and  $B$ .  
 STATEMENT-I (Assertion): Area of  $\Delta ABC$  is maximum when it is isosceles.  
 STATEMENT-II (Reason):  $\Delta ABC$  is a right angles triangle.
- 13) Consider the function  $f(x) = x^2/x^4 + x^2/x^4$ .

STATEMENT-I (Assertion):  $f(x)$  is decreasing on  $[0, \pi/4]$ .

STATEMENT-II (Reason):  $f(x)$  is increasing on  $[\pi/4, \pi/2]$ .

14) STATEMENT-I (Assertion): Curves  $y = x^2$  and  $x = y^2$  intersect orthogonally at the origin.

STATEMENT-II (Reason): The angle of intersection of two curves at their common point is the angle between the tangents. If the angle of intersection is a right angle, we say the curves intersect orthogonally.

*CASE STUDY BASED*

15) A toy manufacturer wants to cut a 28 metres long wire into two pieces. One of the two pieces is to be bent into the form of a square of side  $x$  and other into the form of a circle of radius  $y$ . Based on the above information answer the following questions:

(i) The relation between  $x$  and  $y$  is

- (a)  $4x + \pi y = 28$       (b)  $2x + \pi y = 14$       (c)  $2x + \pi y = 28$       (d)  $x + \pi y = 14$

(ii) If  $A$  is the total area of the circle and square, then  $A =$

- (a)  $(\pi + 4)x^2 - 56x + 196$       (b)  $\frac{1}{\pi} \{(\pi + 4)^2 + 56x + 196\}$   
 (c)  $\frac{1}{\pi} \{(\pi + 4)^2 - 56x + 196\}$       (d)  $\frac{1}{\pi} \{(\pi - 4)^2 - 56x + 196\}$

16) An open tank with a rectangular base and vertical sides is to be constructed so as to hold 8000 litres of water. The tank is 2m deep and material for the bottom costs ₹ 1800 per square meter and ₹ 900 per square meter for the vertical faces. Based on the above information answer the following questions:

(i) If  $x$  and  $y$  represent the length and breadth of the rectangular base, then the cost of construction of the base is

- (a)  $700xy$       (b)  $1800xy$       (c)  $800xy$       (d)  $1200xy$

(ii) The cost of construction of vertical walls is

- (a)  $900(x + y)$       (b)  $1800(x + y)$       (c)  $3600(x + y)$       (d)  $1400(x + y)$

(iii) If  $C$  denotes the total cost of construction of the tank, then  $\frac{dC}{dx}$  is equal to

- (a)  $3600 \left(1 - \frac{4}{x^2}\right)$       (b)  $1800 \left(1 - \frac{4}{x^2}\right)$       (c)  $3600 \left(1 - \frac{4}{x^2}\right)$       (d)  $900 \left(1 - \frac{4}{x^2}\right)$

## Ch 7 Integration

1.  $\sqrt{1 + \cos x}$
2.  $\frac{\sec x}{\sec x + \tan x}$
3.  $\frac{2^x + 3^x}{5^x}$
4.  $\frac{8x + 13}{\sqrt{4x + 7}}$
5.  $\frac{\sin 4x}{\sin x}$
6.  $\tan x \tan 2x \tan 3x$
7.  $\tan(x - \theta) \tan(x + \theta) \tan 2x$
8.  $\sqrt{1 + 2 \tan x (\tan x + \sec x)}$
9.  $\frac{1}{\sin(x - a) \cos(x - b)}$
10.  $\frac{\sin\left(x - \frac{\pi}{3}\right) \sin\left(2x + \frac{\pi}{3}\right)}{\sin\left(x - \frac{\pi}{3}\right) \sin\left(x + \frac{\pi}{3}\right)}$
11.  $\frac{\sin 2x}{a^2 \sin^2 x + b^2 \cos^2 x}$
12.  $\frac{\tan x}{a + b \tan^2 x}$
13.  $\frac{\sin^4 x}{\cos^8 x}$
14.  $\frac{1}{\sqrt{\sin^3 x \cos^5 x}}$
15.  $\sqrt{\sec x - 1}$
16.  $\frac{\sqrt{\sin(x - a)}}{\sqrt{\sin(x + a)}}$
17.  $\sqrt{\frac{a - x}{a + x}}$
18.  $\frac{1}{a^2 \sin^2 x + b^2 \cos^2 x}$

$$19. \frac{1}{1 + 3 \sin^2 x + 8 \cos^2 x}$$

$$20. \frac{\sin x}{\sin 3x}$$

$$21. \frac{1}{(2 \sin x + 3 \cos x)^2}$$

$$22. \frac{1}{1 + \sin x + \cos x}$$

$$23. \frac{1}{\sqrt{3} \sin x + \cos x}$$

$$24. \frac{x^2}{(x \sin x + \cos x)^2}$$

$$25. e^x \frac{x}{(x+1)^2}$$

$$26. \sin(\log x) + \cos(\log x)$$

$$27. e^x \frac{x^2 + 1}{(x+1)^2}$$

$$28. \frac{\log x}{(1 + \log x)^2}$$

$$29. \log(\log x) + \frac{1}{(\log x)^2}$$

$$30. e^{2x} \left( \frac{1 + \sin 2x}{1 + \cos 2x} \right)$$

$$31. \frac{1}{\log x} - \frac{1}{(\log x)^2}$$

$$32. \frac{1}{\sin x - \sin 2x}$$

$$33. \frac{x^2 + 1}{x^4 + 1}$$

$$34. \frac{x^2 - 1}{x^4 + x^2 + 1} x^2 dx$$

$$35. \int \frac{1}{x^4 + x^2 - 2} dx$$

$$36. \frac{1}{x^4 + 1}$$

$$37. \sqrt{\tan x}$$

$$38. \frac{1}{\sin^4 x + \cos^4 x}$$

$$39. \int_0^3 [x] dx$$

$$40. \int_0^{1.5} \lfloor x^2 \rfloor dx$$

$$41. \int_0^{2\pi} \frac{1}{1 + e^{\sin x}} dx$$

$$42. \int_0^{\frac{\pi}{2}} \frac{dx}{(a^2 \cos^2 x + b^2 \sin^2 x)^2}$$

$$43. \int_0^1 \cot^{-1}(1 - x + x^2) dx$$

$$44. \int \tan^8 x \sec^4 x dx$$

$$45. \int \frac{x^3}{x^4 + 3x^2 + 2} dx$$

$$46. \int_2^8 \frac{\sqrt{10-x}}{\sqrt{x} + \sqrt{10-x}} dx$$

$$47. \int_0^{\frac{\pi}{4}} \sqrt{1 - \sin 2x} dx$$

$$48. \int x^2 \tan^{-1} x dx$$

$$49. \int \frac{x^3 + x}{x^4 - 9} dx$$

$$50. \int_{-1}^1 \frac{x^3 + |x| + 1}{x^2 + 2|x| + 1} dx$$

$$51. \int_{-2}^2 |x \cos \pi x| dx$$

$$52. \int \frac{\sin^6 x}{\cos^8 x} dx$$

$$53. \int_0^1 \frac{dx}{e^x + e^{-x}}$$

$$54. \int \frac{dx}{x \sqrt{x^4 - 1}}$$

$$55. \int \frac{\cos x - \cos 2x}{1 - \cos x} dx$$

$$56. \int \frac{\sqrt{x}}{\sqrt{a^3 - x^3}} dx$$

$$57. \int \frac{(\cos 5x + \cos 4x)}{1 - 2 \cos 3x} dx$$

$$58. \int \frac{x^2}{1 - x^4} dx$$

$$59. \int \frac{\sqrt{1+x^2}}{x^4} dx$$

$$60. \int \frac{x}{\sqrt{x} + 1} dx$$

$$61. \int \frac{x^{\frac{1}{2}}}{1 + x^4} dx$$

$$62. \int_0^{\pi} x \sin x \cos^2 x dx$$

$$63. \int_0^{\frac{1}{2}} \frac{dx}{(1+x^2)\sqrt{1-x^2}}$$

$$64. \int e^{\tan^{-1}x} \frac{(1+x+x^2)}{1+x^2} dx$$

$$65. \int \sin^{-1} \sqrt{\frac{x}{a+x}} dx$$

$$66. \int_{-\frac{\pi}{4}}^{\frac{\pi}{4}} \log(\sin x + \cos x) dx$$

$$67. \int \frac{dx}{\sin(x-a) \sin(x-b)}$$

$$68. \int e^x \frac{(1-x)^2}{1+x^2} dx$$

$$69. \int \frac{x + \sin x}{1 + \cos x} dx$$

$$70. \int_0^{\frac{\pi}{2}} \frac{2^{\sin x}}{2^{\sin x} + 2^{\cos x}} dx$$

$$71. \int_{-\pi}^{\pi} (\cos ax - \sin bx)^2 dx$$

$$72. \int_0^{\frac{\pi}{4}} \frac{\sec x}{1 + 2 \sin^2 x} dx$$

$$73. \int_0^{\pi} \frac{x \tan x}{\sec x \cos ex} dx$$

$$74. \int_0^{\pi/4} \frac{dx}{\cos^3 x \sqrt{2 \sin 2x}}$$

$$75. \int_0^{\pi/2} \frac{5 \sin x + 3 \cos x}{\sin x + \cos x} dx$$

$$76. \int \frac{\sin x - x \cos x}{x(x + \sin x)} dx$$

$$77. \int \frac{1 - \cos x}{\cos x(1 + \cos x)} dx$$

$$78. \int \frac{x dx}{1 + x \tan x}$$

$$79. \int \left( x^{-\frac{1}{3}} e^{\frac{1}{x}} - \frac{1}{x} \right) dx$$

$$80. \int \frac{x^2 - 1}{(x^2 + 1)\sqrt{x^3 + x^2 + x}} dx$$

$$81. \int \frac{x^2 - 3x + 1}{\sqrt{1 - x^2}} dx$$

$$82. \int_0^a \frac{dx}{x + \sqrt{a^2 - x^2}}$$

$$83. \int_{-\pi/2}^{\pi/2} \frac{\cos x}{1 + e^x} dx$$

$$84. \int_0^{\infty} \frac{x}{(1+x)(1+x^2)} dx$$

85. If  $x = \int_0^y \frac{dt}{\sqrt{1+9t^2}}$  and  $\frac{d^2y}{dx^2} = ay$  then find the value of 'a'.

86. If  $\int \frac{3e^x - 5e^{-x}}{4e^x + 5e^{-x}} dx = ax + b \log |4e^{-x} + 5e^x| + C$ , then find the value of 'a' & 'b'.

87. If  $\int \frac{dx}{1 + \sin x} = \tan \left( \frac{x}{2} + a \right) + b$ . Find the values of a and b.

88. Show that  $\int_0^{\frac{\pi}{2}} \frac{\sin^2 x}{\sin x + \cos x} dx = \frac{1}{\sqrt{2}} \log(\sqrt{2} + 1)$

89. If  $\int_0^1 \frac{e^t}{1+t} dt = a$ , then  $\int_0^1 \frac{e^t}{(1+t)^2} dt$  is equal to

- (a)  $a - 1 + \frac{e}{2}$  (b)  $a + 1 - \frac{e}{2}$  (c)  $a - 1 - \frac{e}{2}$  (d)  $a + 1 + \frac{e}{2}$

**Chapter - 8 (Applications of Integrals)**

- The area of the region bounded by the curve  $y = \sin x$  between the ordinates  $x = 0$ ,  $x = \frac{\pi}{2}$  and the  $x - y$  axis is  
 (a) 2 sq units (b) 3 sq units (c) 4 sq units (d) 1 sq units
- Area of the region bounded by the curve  $y = |x + 1| + 1$ ,  $x = -3$ ,  $x = 3$  and  $y = 0$  is  
 (a) 8 sq units (b) 16 sq units (c) 32 sq units (d) none of these
- The area bounded by the curve  $y = x|x|$ ,  $x = -2$  and the coordinates  $x = -1$  and  $y = 1$  is given by  
 (a) 0 sq units (b) 1/3 sq units (c) 2/3 sq units (d) 4/3 sq units
- The area of the region bounded by the curve  $x^2 = 4y$  and the straight line  $x = 4y - 2$  is  
 (a)  $\frac{32}{8}$  (b)  $\frac{16}{8}$  (c)  $\frac{2}{8}$  (d)  $\frac{9}{8}$
- The area of the region bounded by the curve  $y = \sqrt{16 - x^2}$  and x-axis is  
 (a) 8 sq units (b) 20p sq units (c) 16p sq units (d) 256p sq units
- Area of the region in the first quadrant enclosed by the x-axis, the line  $y = x$  and the circle  $x^2 + y^2 = 32$  is  
 (a) 16p sq units (b) 4p sq units (c) 32p sq units (d) 24 sq units

7. The area of the region bounded by the ellipse  $\frac{x^2}{25} + \frac{y^2}{16} = 1$  is  
 (a)  $20p$  sq units      (b)  $20p^2$  sq units      (c)  $16p^2$  sq units      (d)  $25p$  sq units
8. The area of the region bounded by the curve  $x = 2y + 3$  and the  $y$  lines.  $y = 1$  and  $y = -1$  is  
 (a) 4 sq units      (b)  $\frac{3}{2}$  sq units      (c) 6 sq units      (d) 8 sq units
9. The area of the region bounded by the  $y$ -axis,  $y = \cos x$  and  $y = \sin x$ ,  $0 \leq x \leq \frac{\pi}{2}$  is  
 (a)  $\sqrt{2}$  sq units      (b)  $(\sqrt{2} + 1)$  sq units      (c)  $(\sqrt{2} - 1)$  sq units      (d)  $(2\sqrt{2} - 1)$  sq units
10. The area of the region bounded by the curve  $y = x + 1$  and the lines  $x = 2$  and  $x = 3$  is  
 (a)  $\frac{1}{2}$  sq units      (b)  $\frac{9}{2}$  sq units      (c)  $\frac{11}{2}$  sq units      (d)  $\frac{13}{2}$  sq units
11. Assertion (A): The area bounded by  $x^2 = 4x$  and  $y = x$  is  $8$  sq units.  
 Reason (R): The area bounded by  $x^2 = 4x$  and  $y = x$  is  $8$  sq units.
13. Assertion (A): The area of the region bounded by the curve  $y = \sin x$  between  $x = 0$  and  $x = 4\pi$  is 4 sq units.  
 Reason (R):  $\int_0^{4\pi} \sin x \, dx = 1$
14. Assertion (A): The area bounded by the line  $y = x$  and the curve  $y = x^3$  is  $\frac{1}{4}$  sq units.  
 Reason (R):  $\int_0^1 (x - x^3) \, dx = \frac{1}{4}$
15. Find the area bounded by the curve  $y = \sin x$  between  $x = 0$  and  $x = 2\pi$ .
16. Find the area of region bounded by the triangle whose vertices are  $(-1, 1)$ ,  $(0, 5)$  and  $(3, 2)$ , using integration.
17. Using integration find the area of region bounded by the triangle whose vertices are  $(1,0)$ ,  $(2,2)$  and  $(3,1)$ .
18. Compute the area bounded by the lines  $x + 2y = 2$ ,  $y - x = 1$  and  $2x + y = 7$ .
19. Find the area of the region bounded by  $\{(x, y): x^2 \leq y \leq |x|\}$
20. Draw a rough sketch of the given curve  $y = 1 + |x + 1|$ ,  $x = -3$ ,  $x = 3$ ,  $y = 0$  and find the area of the region bounded by them, using integration.
21. Find the area of the smaller region between the ellipse  $9x^2 + y^2 = 36$  and the line  $\frac{x}{2} + \frac{y}{4} = 1$

22. Find the area bounded by the curve  $y = 2x - x^2$  and the line  $y = -x$
23. Find the area bounded by the curve  $y = 2\cos x$  and the x-axis from  $x = 0$  to  $x = 2\pi$ .
24. Sketch the graph of  $y = |x + 3|$  and evaluate the area under the curve  $y = |x + 3|$  above x-axis and between  $x = -6$  to  $x = 0$ .
25. Find the area bounded by the curve  $y = x^2$  and  $y = x$ .
26. Find the area bounded by the curve  $y = \sin x$  and  $y = \cos x$  in first quadrant.
27. Find the area bounded by the curve  $y = |x + 6|$  and above the x-axis between  $-9$  and  $0$ .
28. Find the area bounded by the curve  $2x + 3y = 6$  and  $4x^2 + 9y^2 = 36$ .
29. Find the area bounded by the curve  $y = 2x - x^2$  and the line  $y = x$
30. Draw a rough sketch of the given curve  $y = 1 + |x + 2|$ ,  $x = -3$ ,  $x = 3$ ,  $y = 0$  and find the area of the region bounded by them, using integration.
31. Find the area bounded by the curve  $y^2 = 4ax$  and  $y = mx$ .

**CHAPTER – 9 (DIFFERENTIAL EQUATIONS).**

- Q01. The degree of the differential equation  $x^2 \frac{d^2y}{dx^2} = \left(x \frac{dy}{dx} - y\right)^3$  is  
 (a) 1 (b) 2 (c) 3 (d) 6
- Q02. The integrating factor of the differential equation  $(x + 3y^2) \frac{dy}{dx} = y$  is  
 (a)  $x$  (b)  $\frac{1}{x}$  (c)  $\frac{1}{y}$  (d)  $-\frac{1}{y}$
- Q03. The order and degree of the differential equation  $\left(\frac{dy}{dx}\right)^3 + \left(\frac{d^3y}{dx^3}\right)^3 + 5x = 0$  are respectively  
 (a) 3; 6 (b) 3; 3 (c) 3; 9 (d) 6; 3
- Q04. The integrating factor of the differential equation  $x \frac{dy}{dx} = 2x^2 + y$  is  
 (a)  $x$  (b)  $-x$  (c)  $\frac{1}{x}$  (d)  $-\frac{1}{x}$
- Q05. The integrating factor of the differential equation  $x \frac{dy}{dx} - y = \log x$  is  
 (a)  $-\frac{1}{x}$  (b)  $-x$  (c)  $\frac{1}{x}$  (d)  $x$
- Q06. How many arbitrary constants are there in the particular solution of the differential equation  $\frac{dy}{dx} = -4xy^2$ ;  $y(0) = 1$ ?  
 (a) 1 (b) 2 (c) 3 (d) 0
- Q07. If  $\frac{dy}{dx} = \frac{x^3 - y^n}{x^2y + xv^2}$  is homogeneous, then value of  $n$  must be  
 A. Both A and R are true and R is the correct explanation of A.  
 B. Both A and R are true but R is NOT the correct explanation of A.  
 C. A is true but R is false  
 D. A is false but R is True

**Assertion (A):** The solution of differential equation

$$\frac{dy}{dx} = \frac{y}{x} + \tan \frac{y}{x} \text{ is } \cos\left(\frac{y}{x}\right) = xc$$

**Reason (R):**  $\frac{dy}{dx} = \frac{y}{x} + \tan \frac{y}{x}$  we can clearly see that it is an homogeneous equation substituting  $y = vx$

**Assertion (A):** The degree of the differential equation given by

$$\frac{dy}{dx} = \frac{x^4 - y^4}{(x^2 + y^2)xy} \text{ is } 1.$$

**Reason (R):** The degree of a differential equation is the degree of the highest order derivative when differential coefficients are free from radicals and fraction.

Find the general solution of the differential equation  $ye^{x/y}dx = (xe^{x/y} + y^2)dy$ ,  $y \neq 0$ .

Find the particular solution of the differential equation

$\cos y dx + (1 + e^{-x}) \sin y dy = 0$ , given that  $y = \pi/4$  when  $x = 0$ .

For the differential equation given below, find a particular solution satisfying the given

condition  $(x + 1) \frac{dy}{dx} = 2e^{-y} + 1$ ;  $y = 0$  when  $x = 0$ .

Find the general solution of the differential equation  $x^2 y dx - (x^3 + y^3) dy = 0$ .

Find the particular solution of the differential equation  $\frac{dy}{dx} + y \sec x = \tan x$ , where  $x \in \left[0, \frac{\pi}{2}\right)$

given that  $y = 1$ , when  $x = \pi/4$ .

Find the general solution of the following differential equation :  $x dy - (y + 2x^2) dx = 0$ .

The degree of a differential equation (when it is a polynomial equation in derivatives) is the highest power (positive integral index) of the highest order derivative involved in the given differential equation.

Order

Degree

Non-Linear

$$\left(\frac{d^2y}{dx^2}\right) + 6\left(\frac{dy}{dx}\right) + 4 = 0$$

NOTE:- SOLVE THE FOLLOWING QUESTIONS :-

**READ THE FOLLOWING CASE STUDY**

**Based on the above information, answer the following questions.**

(i) Order and degree of  $\left(\frac{ds}{dt}\right)^4 + 3s\frac{d^2s}{dt^2} = 0$  is:

- (a) O=2, D=1
- (b) O=1, D=1
- (c) O=3, D=4
- (d) None of these

(ii) Order and degree of  $\left(\frac{d^2y}{dx^2}\right)^4 + \cos\left(\frac{dy}{dx}\right) = 0$  is:

- (a) O=2, D=2
- (b) O=2, D=not defined
- (c) O=3, D= 1
- (d) O=1, D=1

(iii) Order and degree of  $\left(\frac{d^2y}{dx^2}\right) = \cos 3x + \sin 3x$  is:

- (a) O=2, D=0
- (b) O=2, D=2
- (c) O=2, D=1
- (d) O=2, D=3

- Find the equation of a curve whose tangent at any point on it, different from origin, has slope  $y + y/x$ .
- Find the equation of a curve passing through the point (1, 1) if the perpendicular distance of the origin from the normal at any point P(x, y) of the curve is equal to the distance of P from the x-axis.
- The order of the differential equation of all circles of given radius a
- Order of the differential equation representing the family of parabolas  $y^2 = 4ax$
- Form the differential equation of all circles which pass through origin and whose centres lie on y-axis.
- Form the differential equation of all circles which pass through origin and whose centres lie on x-axis.
- Find the general solution of  $(1 + \tan y)(dx - dy) + 2xdy = 0$
- Find the general solution of  $(1 + \tan y)(dx + dy) + 2xdy = 0$
- Find the equation of a curve passing through origin if the slope of the tangent to the curve at any point (x, y) is equal to the square of the difference of the abscissa and ordinate of the point.
- Find the equation of a curve passing through the point (1, 1). If the tangent drawn at any point P (x, y) on the curve meets the co-ordinate axes at A and B such that P is the mid-point of AB.

## Ch 10 Vectors

- For what value of  $\lambda$  are the vectors  $a = 2\hat{i} + \lambda\hat{j} + \hat{k}$  and  $b = \hat{i} - 2\hat{j} + 3\hat{k}$  perpendicular to each other?
- If  $|\vec{a}| = \sqrt{3}$ ,  $|\vec{b}| = \sqrt{2}$  and  $a \cdot b = 3$ , find the angle between  $a$  and  $b$ .
- Direction ratios of a line are 3, 1, -2 write its direction cosines such that the line makes acute angle with z axis.
- If  $a = \hat{i} + 2\hat{j} - 3\hat{k}$  and  $b = 2\hat{i} + 4\hat{j} + 9\hat{k}$ , find a unit vector parallel to  $a + b$ .
- Find the projection of  $a$  on  $b$  if  $a \cdot b = 8$  and  $b = 2\hat{i} + 6\hat{j} + 3\hat{k}$ .
- Find the value of p, if  $(2\hat{i} + 6\hat{j} + 27\hat{k}) \cdot (\hat{i} + 3\hat{j} + p\hat{k}) = 0$ .
- Find the value(s) of x for which the vector  $r = (x^2 - 1)\hat{i} + 5\hat{j} - 3(x^2 - 4)\hat{k}$  makes acute angles with the coordinate axes. Ans:
- If  $|\vec{a}| = 3$  and  $-2 \leq k \leq 1$ , then what can you say about  $k|\vec{a}|$ ? Ans:  $0 \leq k \leq 6$
- If  $|\vec{a}| = 2$ ,  $|\vec{b}| = 3$ ,  $\vec{a} \cdot \vec{b} = 4$ , find  $|\vec{a} - \vec{b}|$ .

10. If  $|\dot{a}| = a$ , then find the value of the following  $|\dot{a} \cdot \hat{i}|^2 + |\dot{a} \cdot \hat{j}|^2 + |\dot{a} \cdot \hat{k}|^2$       Ans:  $2a^2$
11. If  $a \times b = b \times c \neq 0$ , show that  $a + c = mb$  where  $m$  is a scalar.
12. If  $|\dot{a} + \dot{b}| = |\dot{a} - \dot{b}|$ , show that  $a$  and  $b$  are perpendicular.
13. Write the value of  $(\hat{i} \cdot \hat{j}) \cdot \hat{k} + (\hat{j} \cdot \hat{k}) \cdot \hat{i}$
14. Write the direction cosines of a line equally inclined to the three coordinate axes.
15. What is the cosine of the angle which the vector  $\sqrt{2}\hat{i} + \hat{j} + \hat{k}$  makes with  $y$  axis?
16. If  $a \times b = c \cdot d$  and  $a \cdot c = b \cdot d$  prove that  $a - d$  is parallel to  $b - c$ , provided  $a \neq d$  and  $b \neq c$ .
17. The dot product of a vector with vectors  $\hat{i} + \hat{j} - 3\hat{k}$ ,  $\hat{i} + 3\hat{j} - 2\hat{k}$  and  $2\hat{i} + \hat{j} + 4\hat{k}$  are 0, 5 and 8 respectively. Find the vector.
18. If  $a = \hat{i} + \hat{j} + \hat{k}$  and  $b = \hat{j} - \hat{k}$ , find a vector  $c$  such that  $a \cdot c = b$  and  $a \cdot c = 3$ .      Ans:  $c = \frac{1}{3}(5\hat{i} + 2\hat{j} + 2\hat{k})$
19. If  $a + b + c = 0$  and  $|a| = 3, |b| = 5$  and  $|c| = 7$ , then find the angle between  $a$  and  $b$ .      Ans:  $\theta = \frac{\pi}{3}$
20. If for three non zero vectors  $a, b$  and  $c$ ;  $a \cdot b = a \cdot c$  and  $a \times b = a \times c$ , then show that  $b = c$ .
21. If  $\alpha = 3\hat{i} + 4\hat{j} + 5\hat{k}$  and  $\beta = 2\hat{i} + \hat{j} - 4\hat{k}$ , then express  $\beta$  in the form  $\beta = \beta_1 + \beta_2$ , where  $\beta_1$  is parallel to  $\alpha$  and  $\beta_2$  is perpendicular to  $\alpha$ .
22. If  $a, b, c$  are position vectors of vertices A, B, C of a triangle ABC, show that area of triangle is  $\frac{1}{2} |a \cdot b + b \cdot c + c \cdot a|$
23. If a parallelogram whose diagonal vectors are  $d_1$  and  $d_2$ , then prove that  $A = \frac{1}{2} |d_1 \cdot d_2|$ .
24. If the sum of two unit vectors is a unit vector, prove that the magnitude of their difference is  $\sqrt{3}$ .
25. For any three vectors  $a, b, c$  show that  $a - b, b - c$  and  $c - a$  are coplanar.
26. If  $a, b, c$  are unit vectors, suppose  $a \cdot b = a \cdot c = 0$  and angle between  $c$  and  $b$  is  $\frac{\pi}{6}$ . Prove that  $\dot{a} = 2(\dot{b} \times \dot{c})$ .

27.  $a, b, c$  are three non zero vectors such that  $a \times b = c, b \times c = a$ . Prove that  $a, b, c$  are mutually at right angles and  $|\dot{b}| = 1, |\dot{c}| = |\dot{a}|$ .
28. If  $a$  and  $b$  are two unit vectors and  $\theta$  is the angle between them, then show that:  $\sin \frac{\theta}{2} = \frac{1}{2} |\dot{a} - \dot{b}|$ .
29. If any three vectors  $a, b, c$  are coplanar, show that the vectors  $a + b, b + c$  and  $c + a$  are also coplanar.
30. Prove that  $|\dot{a} \times \dot{b}|^2 = \begin{vmatrix} \dot{a} \cdot \dot{a} & \dot{a} \cdot \dot{b} \\ \dot{a} \cdot \dot{b} & \dot{b} \cdot \dot{b} \end{vmatrix}$ .
31. If  $-\dot{i} + \dot{j} - \dot{k}$  bisects the angle between  $\dot{c}$  and  $3\dot{i} + 4\dot{j}$ . Find a unit vector in the direction of  $\dot{c}$ .
32. Given that the  $\dot{a}, \dot{b}, \dot{c}$  form a triangle such that vectors  $\dot{a} = \dot{b} + \dot{c}$ . Find  $p, q, r, s$  such that area of triangle is  $5\sqrt{6}$ , where  $\dot{a} = pi + qj + rk, \dot{b} = si + 3j + 4k, \dot{c} = 3i + j - 2k$ . Ans:  $q=4, r=2, p=8, -8, s=5, -11$
33. Prove that  $\dot{a} \cdot (\dot{b} + \dot{c}) \times (\dot{a} + 2\dot{b} + 3\dot{c}) = 6 \dot{a} \cdot \dot{b} \times \dot{c}$ .
34. if  $\dot{p} = \dot{i} + \dot{j} + \dot{k}$  and  $\dot{q} = \dot{i} - 2\dot{j} + \dot{k}$ , find a vector of magnitude  $5\sqrt{3}$  units perpendicular to the vector  $\dot{q}$  and coplanar with vectors  $\dot{p}$  and  $\dot{q}$ . Ans:  $\dot{r} = 5(\dot{i} + \dot{j} + \dot{k})$
35. Find a unit vector in the plane of vectors  $\dot{a} = \dot{i} + 2\dot{j}$  and  $\dot{b} = \dot{j} + 2\dot{k}$  and perpendicular to the vector  $\dot{c} = 2\dot{i} + \dot{j} + 2\dot{k}$

### Worksheet Chapter - 11 (3-dimensional Geometry)

- The angle between the straight lines  $\frac{x+1}{2} = \frac{y-2}{5} = \frac{z+3}{4}$  and  $\frac{x-1}{1} = \frac{y+2}{2} = \frac{z-3}{-3}$  is
  - $45^\circ$
  - $30^\circ$
  - $60^\circ$
  - $90^\circ$
- The direction ratios of the line perpendicular to the lines  $\frac{x-7}{2} = \frac{y+17}{-3} = \frac{z-6}{1}$  and  $\frac{x+5}{1} = \frac{y+3}{2} = \frac{z-4}{-2}$  are proportional to
  - 4, 5, 7
  - 4, -5, 7
  - 4, -5, -7
  - 4, 5, 7
- The equation of x - axis in space is
  - $x = 0, y = 0$
  - $x = 0, z = 0$
  - $z = 0, y = 0$
  - $x = 0$
- P is a point on the line segment joining the points (3, 2, -1) and (6, 2, -2). If x-coordinate of P is 5, then its y-coordinate is
  - 2
  - 1
  - 1
  - 2

5. The coordinates of a point on the line  $\frac{x+2}{3} = \frac{y+1}{2} = \frac{z-3}{2}$  at a distance of  $\frac{6}{\sqrt{2}}$  from the point (1, 2, 3) is  
 (a) (56, 43, 111)      (b)  $(\frac{56}{17}, \frac{43}{17}, \frac{111}{17})$       (c) (2, 1, 3)      (d) (-2, -1, -3)
6. The coordinates of the foot of the perpendicular drawn from the point (2, 5, 7) on the x-axis are given by  
 (a) (2, 0, 0)      (b) (0, 5, 0)      (c) (0, 0, 7)      (d) (0, 5, 7)
7. A line makes equal angles with co-ordinate axis. Direction cosines of this line are  
 (a)  $\pm(1, 1, 1)$       (b)  $\pm(\frac{1}{\sqrt{3}}, \frac{1}{\sqrt{3}}, \frac{1}{\sqrt{3}})$       (c)  $\pm(\frac{1}{3}, \frac{1}{3}, \frac{1}{3})$       (d)  $\pm(\frac{1}{\sqrt{3}}, \frac{-1}{\sqrt{3}}, \frac{-1}{\sqrt{3}})$
8. The image of the point (1, 6, 3) in the line  $\frac{x}{1} = \frac{y-1}{2} = \frac{z-2}{2}$  is  
 (a) (2, 0, 5)      (b) (1, 3, 4)      (c) (1, 0, 7)      (d) (-3, -2, 0)
9. If a line makes angle  $\frac{\pi}{3}$  and  $\frac{\pi}{4}$  with x-axis and y-axis respectively, then the angle made by the line with z-axis is  
 (a)  $\frac{\pi}{2}$       (b)  $\frac{\pi}{3}$       (c)  $\frac{\pi}{4}$       (d)  $\frac{5\pi}{12}$
10. If the lines  $\frac{x}{\alpha} = \frac{y}{3-\alpha} = \frac{z}{2}$  and  $\frac{x}{\alpha} = \frac{y}{-1} = \frac{z}{2-\alpha}$  are perpendicular, then the value of  $\alpha$  is  
 (a) 2/3      (b) 3      (c) 4      (d) 4/3
11. Case Based Question:  
 The equations of motion of a rocket are:  $x = 2t^2$ ,  $y = -4t^2$ ,  $z = 4t^2$ , where t is given in seconds and distance is given in kilometers.  
 Based on the above information, answer the following
- (i) The path of the rocket is  
 (a) Parabolic      (b) circular      (c) elliptical      (d) straight line
- (ii) The position of the rocket after 10 seconds is  
 (a) (-20, 40, 40)      (b) (20, -40, 40)      (c) (20, 40, 40)      (d) (20, 40, -40)
- (iii) The distance of the rocket from the origin after 10 seconds is  
 (a) 20 km      (b) 60 km      (c) 80 km      (d) 40 km
- (iv) The distance of the rocket from the line  $\vec{r} \rightarrow = 20\hat{i} - 10\hat{j} + 40\hat{k} + \lambda(10\hat{i} - 20\hat{j} + 10\hat{k})$  after 10 seconds is  
 (a) 10 km      (b)  $5\sqrt{3}$  km      (c)  $20\sqrt{3}$  km      (d)  $10\sqrt{3}$  km
12. Find the shortest distance between the lines whose equations are:  
 $\vec{r} \rightarrow = (\hat{i} + \hat{j}) + \lambda(2\hat{i} - \hat{j} + \hat{k})$  and  $\vec{r} \rightarrow = (2\hat{i} + \hat{j} - \hat{k}) + \mu(3\hat{i} - 5\hat{j} + 2\hat{k})$ .

13. Find the distance between the lines  $\vec{r}_1$  and  $\vec{r}_2$  given by

$$\vec{r}_1: \vec{r} \rightarrow = (\vec{i} + 2\vec{j} - 4\vec{k}) + \lambda(2\vec{i} + 3\vec{j} + 6\vec{k}); \vec{r}_2: = (3\vec{i} + 3\vec{j} - 5\vec{k}) + \mu(4\vec{i} + 6\vec{j} + 12\vec{k})$$

14. Find the shortest distance between the following lines

$$\frac{x-3}{1} = \frac{y-5}{-2} = \frac{z-7}{1} \text{ and } \frac{x+1}{7} = \frac{y+1}{-6} = \frac{z+1}{1}$$

15. Show that the lines  $\frac{x+1}{3} = \frac{y+3}{5} = \frac{z+5}{7}$  and  $\frac{x-2}{1} = \frac{y-4}{3} = \frac{z-6}{5}$  intersect. Also find their point of intersection.

16. Find the coordinates of the foot of perpendicular and the length of the perpendicular drawn from the point P(5, 4, 2) to the line  $\vec{r} \rightarrow = (-\vec{i} + 3\vec{j} + \vec{k}) + \lambda(2\vec{i} + 3\vec{j} - \vec{k})$ . Also find the image of P in this line.

17. Find the value of p so that the lines  $\frac{1-x}{3} = \frac{7y-14}{2p} = \frac{5z-10}{11}$  and  $\frac{7-7x}{3p} = \frac{y-5}{1} = \frac{6-z}{5}$  are perpendicular to each other.

18. Find the vector equation of the line passing through (1, 2, -4) and perpendicular to the two lines:  $\frac{x-8}{3} = \frac{y+19}{-16} = \frac{z-10}{7}$  and  $\frac{x-15}{3} = \frac{y-29}{8} = \frac{z-5}{-5}$

19. Find the equation of (i) x-axis, (ii) y-axis and (iii) z-axis

20. If a line makes  $90^\circ$  and  $60^\circ$  respectively with the positive directions of x and y axes, find the angle which it makes with the positive direction of z-axis.

## Chapter - 12 (Linear Programming Problems)

1. Corner points of the feasible region determined by the system of linear constraints are (0, 3), (1, 1) and (3, 0). Let  $Z = px + qy$ , where  $p, q > 0$ . Condition on p and q so that the minimum of Z occurs at (3, 0) and (1, 1) is

- (a)  $P = 2q$                       (b)  $\vec{q} = \frac{q}{2}$                       (c)  $P = 3q$                       (d)  $p = q$

2. The number of solutions of the system of inequations  $\vec{x} + 2\vec{y} \leq 3, 3\vec{x} + 4\vec{y} \geq 12, \vec{x} \geq 0, \vec{y} \geq 1$  is

- (a) 0                                  (b) 2                                  (c) finite                              (d) infinite

3. If the minimum value of an objective function  $\vec{z} = \vec{x}\vec{x} + \vec{y}\vec{y}$  occurs at two points (3,4) and (4,3), then

- (a)  $\vec{x} + \vec{y} = 0$                       (b)  $\vec{x} = \vec{y}$                       (c)  $3\vec{x} = \vec{y}$                       (d)  $\vec{x} = 3\vec{y}$

4. The objective function of a linear programming problem is:

- (a) a constraint                      (c) function to be optimized  
(b) A relation between the variables                      (d) None of these

5. A set of values of decision variables that satisfies the linear constraints and non-negativity conditions of an L.P.P. is called its:

- (a) Unbounded solution (c) Optimum solution  
 (b) Feasible solution (d) None of these
6. The maximum value of  $Z = 3x + 4y$  subjected to constraints  $x + y \leq 4$ ,  $x \geq 0$  and  $y \geq 0$  is:  
 (a) 12 (b) 14 (c) 16 (d) None of These
7. The point which does not lie in the half-plane  $2x + 3y - 12 < 0$  is:  
 (a) (2, 1) (b) (1, 2) (c) (-2, 3) (d) (2, 3)
8. In maximization problem, optimal solution occurring at corner point yields the  
 (a) Highest value of  $Z$  (c) Lowest value of  $Z$   
 (b) Mid value of  $Z$  (d) Mean value of  $Z$
9. In a LPP, objective function is always  
 (a) Linear (b) Quadratic (c) Cubic (d) All of these
10. The optimal value of the objective function is attained at the points:  
 (a) On X- axis (c) on Y- axis  
 (b) corner points of the feasible region (d) None of these
11. The minimum value of  $Z = 3x + 5y$  subjected to constraints  $x + 3y \geq 3$ ,  $x + y \geq 2$ ,  $x, y \geq 0$  is:  
 (a) 5 (b) 7 (c) 10 (d) 11
12. Maximize  $Z = 3x + 5y$ , subject to constraints:  $x + 4y \leq 24$ ,  $3x + y \leq 21$ ,  $x + y \leq 9$ ,  $x \geq 0$ ,  $y \geq 0$   
 (a) 20 at (1, 0) (b) 30 at (0, 6) (c) 37 at (4, 5) (d) 33 at (6, 3)
13. Assertion (A): Feasible region is the set of points which satisfy all of the given constraints.  
 Reason (R): The optimal value of the objective function is attained at the points on X-axis only.
14. Assertion (A): If an LPP attains its maximum value at two corner points of the feasible region then it attains maximum value at infinitely many points.  
 Reason (R): if the value of the objective function of a LPP is same at two corners then it is same at every point on the line joining two corner points.
15. Assertion (A): For an objective function  $Z = 15x + 20y$ , corner points are (0,0), (10,0), (0,15) and (5,5). Then optimal values are 300 and 0 respectively.  
 Reason (R): (R):The maximum or minimum value of an objective function is known as optimal value of LPP. These values are obtained at corner points.
16. Assertion (A): Consider the linear programming problem. Maximise  $Z = 4x + y$  Subject to constraints  $x + y \leq 50$ ;  $x + y \leq 100$  and  $x, y \geq 0$ . Then, maximum value of  $Z$  is 50.

Reason (R): If the shaded region is bounded then maximum value of objective function can be determined.

17. Solve the following linear programming problem graphically  
Maximise  $Z = 2x + 3y$ , subject to  $x + y \leq 4$ ,  $x \geq 0$ ,  $y \geq 0$
18. Solve the following linear programming problem graphically  
Maximise  $Z = -x + 2y$ , subject to constraints  $x \geq 3$ ,  $x + y \geq 5$ ,  $x + 2y \geq 6$  and  $x, y \geq 0$
19. Solve the following linear programming problem graphically  
Minimise  $Z = -5x + 2y$  subject to constraints  $x + 2y \leq 120$ ,  $x + y \geq 60$ ,  $x - 2y \geq 0$  and  $x, y \geq 0$
20. Determine graphically the minimum value of the objective function  $Z = -50x + 20y$ , subject to constraints  $2x - y \geq -5$ ,  $3x + y \geq 3$ ,  $2x - 3y \leq 12$  and  $x, y \geq 0$ .
21. Determine graphically the maximum value of the objective function  $Z = 3x + 2y$ , subject to constraints  $x + 2y \leq 10$ ,  $3x + y \leq 15$  and  $x, y \geq 0$ .
22. Determine graphically the minimum and maximum value of the objective function  $Z = 3x - 4y$ , subject to constraints  $x - 2y \leq 0$ ,  $-3x + y \leq 4$ ,  $x - y \leq 6$  and  $x, y \geq 0$ .
23. Determine graphically the maximum value of the objective function  $Z = 3x + 4y$ , subject to constraints  $x + y \leq 1$ ,  $x, y \geq 0$ .
24. Determine graphically the minimum value of the objective function  $Z = 6x + 3y$  subject to constraints  $4x + y \geq 80$ ,  $x + 5y \geq 115$ ,  $3x + 2y \leq 150$ ,  $x, y \geq 0$ .

### **CHAPTER- 13 (PROBABILITY)**

Q.1:  $P(A \cap B)$  is equal to:

- (A).  $P(A) \cdot P(B|A)$ .      (B).  $P(B) \cdot P(A|B)$ .      (C). Both A and B.      (D). None of these.

Q.2: If  $P(A) = 0.8$ ,  $P(B) = 0.5$  and  $P(B|A) = 0.4$ , what is the value of  $P(A \cap B)$ ?

- (A). 0.32.      (B). 0.25.      (C). 0.1.      (D). 0.5.

Q.3: An urn contains 10 black and 5 white balls. Two balls are drawn from the urn one after the other without replacement. What is the probability that both drawn balls are black?

- A).  $3/7$ .      B).  $7/3$ .      C).  $1/7$ .      D).  $1/3$ .

Q.4: If A and B are two independent events, then the probability of occurrence of at least one of A and B is given by:

- A).  $1 + P(A') P(B')$ .      B).  $1 - P(A') P(B')$ .      C).  $1 - P(A') + P(B')$ .      D).  $1 - P(A') - P(B')$ .

Q.5: If one ball is drawn at random from each of three boxes containing 3 white and 1 black, 2 white and 2 black, 1 white and 3 black balls, then the probability that 2 white and 1 black balls will be drawn is:-

- A).  $13/32$ .    B).  $1/4$ .    C).  $1/32$ .    D).  $3/16$ .

Note- ANSWER THE FOLLOWING ASSERTION REASONING QUESTIONS ACCORDING TO GIVEN OPTIONS. ONLY ONE OPTION IS CORRECT.

- a) both Assertion and reason are correct and reason is correct explanation for Assertion
- b) both Assertion and reason are correct but reason is not correct explanation for Assertion
- c) Assertion is true but reason is false.
- d) Both Assertion and reason are false

6). Assertion : Two dice are thrown simultaneously. There are 11 possible outcomes and each of them has a probability  $1/11$ .

Reason : Probability of an event (E) is defined as  $P(E) = \frac{\text{Number of favourable outcomes}}{\text{Total number of possible outcomes}}$

7). Assertion (A) : If  $P(A) = 0.4$ ,  $P(B) = p$ ,  $P(A \cup B) = 0.6$ . A & B are given to be the independent events, then  $(3p) = 1$ .

Reason (R) : For independent events A and B, we always have  $P(A \cap B) \neq P(A) \cdot P(B)$ .

8). Assertion (A) : Three cards are drawn successively with replacement from a well shuffled pack of 52 cards. Then the mean of the number of red cards, is  $3 \frac{3}{2}$ .

Reason (R) : For the independent events E and F, we may or may not have  $P(E \cap F) = P(E) \cdot P(F)$ .

9). Assertion (A) : Let A and B are two independent events. If  $P(A) = 0.2$ ,  $P(B) = 0.1$  then

$P(A \cap B) = 0.02$ . Reason (R) : For independent events A and B, we always have  $P(A \cap B) =$

$P(A) \cdot P(B)$ .

NOTE:- ANSWER THE FOLLOWING QUESTIONS (LONG ANSWER TYPE QUESTIONS).

10). A black and a red die are rolled together. Find the conditional probability of obtaining the sum 8, given that the red die resulted in a number less than 4.

11). Three persons A, B and C apply for a job of Manager in a private company. Chances of their selection (A, B and C) are in the ratio 1:2:4. The probabilities that A, B and C can introduce changes to improve profits of the company are 0.8, 0.5 and 0.3, respectively. If the change does not take place, find the probability that it is due to the appointment of C.

12). Let X denote the number of colleges where you will apply after your results and  $P(X = x)$  denotes your probability of getting admission in x number of colleges. It is given that

$$P(X = x) = \begin{cases} kx & , \text{ if } x = 0 \text{ or } 1 \\ 2kx & , \text{ if } x = 2 \\ k(5 - x) & , \text{ if } x = 3 \text{ or } 4 \\ 0 & , \text{ if } x > 4 \end{cases}$$

where k is a positive constant. Find the value of k. Also, find the probability that you will get admission in

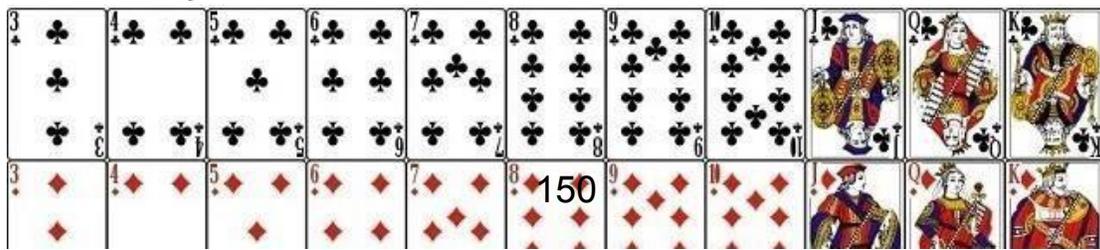
- (i) exactly one college
- (ii) at most 2 colleges
- (iii) at least 2 colleges.

13). A bag A contains 4 black and 6 red balls and bag B contains 7 black and 3 red balls. A die is thrown. If 1 or 2 appears on it, then bag A is chosen, otherwise bag B. If two balls are drawn at random (without replacement) from the selected bag, find the probability of one of them being red and another black.

14). Three friends go for coffee. They decide who will pay the bill, by each tossing a coin and then letting the "odd person" pay. There is no odd person if all three tosses produce the same result. If there is no odd person in the first round, they make a second round of tosses and they continue to do so until there is an odd person. What is the probability that exactly three rounds of tosses are made?

**NOTE:-ANSWER THE FOLLOWING CASE BASED**

**QUESTIONS:-15).**



Two friends were playing cards and one card is lost from a deck of 52 cards, unfortunately. From the remaining cards, one friend withdraws two cards and found both of them diamonds.

**Based on the above case, solve the following questions.**

**(a) Find the probability that the lost card is diamond?**

(b) If he draws one card instead of two cards in the above case then find the probability that the lost card is diamond?

