

# MODERN SCHOOL, VAISHALI SUMMER VACATION HOMEWORK CLASS-XII

## **PHYSICS**

- 1) Write the experiments in the experiment file as per the list provided.
- 2) Write the activity in activity file as per the list provided.
- 3) Make a project file on the allotted topic.
- 4) Do the numerical from ncert book of chapter 1,2,3,4
- 5) Put the all valuable activity related to you in your portfolio.
- 6) Write down 50 formula with dimension and unit related your syllabus.
- 7) Write down 10 prove.

# **CHEMISTRY**

- 1)Roll number 1 to 5 study for the presence of oxalic ions in guava fruit at different stages of ripening.
- 2) Roll number 6 to 10 compare the rate of fermentation of carrot wheat flour gram potato juice etc.
- 3) Roll number 11 to 15 study of biomolecules as carbohydrates presence in food stuff
- 4) Roll number 16 to 20 study of quantity of case in present in different samples of milk
- 5) Roll number 21 to 25 study of digestion of starch by salivary amylase and effect of PH and temperature on it
- 6) Roll number 26 to 30 extraction of Essential oil present in ajwain ilaichi cardamom.
- 7) Roll number 31 to 33 study of common food adulterant in fat oil, butter paper.

### Revise

- Ch-1 SOLUTION, Ch-2 Electrochemistry,
- Ch -3 Electrochemistry make these chapter mind map, and book mark for formula.

# **ENGLISH**

- 1) Study the English literary periods given below:
- i. The romantic period
- ii. Victorian period

- iii. Modern period
- iv. Postmodern/contemporary period

Select any one period from the above.

- 2) Research and compile the following for the topic selected in a project file:
- General Introduction of the period
- Two eminent poets/writers (paste images of the poets and their work)
- Study two of their works in detail and cover the following:
- a. Salient features of the literary work selected
- b. Style of its writing
- c. Contemporary influences

The project file should contain:

- Index page
- Acknowledgement
- Certificate of completion
- Topic
- Objective
- Report/student reflection
- Bibliography

# **APPLIED MATHEMATICS**

- 1) Revise chapters 1,2,3,4,5,and 6 for Pre mid term examination.
- 2) Make mind maps of all the chapters.
- 3) Make working models on the following topics: Roll no. 1 to 3 Numeric Inequalities Roll no. 4 to 6 Matrices Roll no. 7 to 9 Differentiation Roll no. 10 to 13 Increasing and Decreasing Functions
- 4) Make Projects on the topics discussed in class.

#### STANDARD MATHEMATICS

- 1) Revise chapters 1,2,3,and 4 for Pre mid term examination.
- 2) Make mind maps of all chapters (unit wise).
- 3) Make working models on the following topics:

Roll no. 1 to 5 – Relations and functions.

Roll no. 6 to 10 – Inverse Trigonometric functiins

Roll no. 11 to 15 – Matrices

Roll no. 16 to 20 - Determinants

Roll no. 21 to 25 – Continuity

Roll no. 25 to 30 - Vector Algebra

Roll no. 31 to 33 – Three dimensional geometry

4). Complete the Lab Manual as discussed in the class.

# **ACCOUNTANCY**

Do all excercise questions of:

- 1) Chapter 1 Fundamental of partnership.
- 2) Chapter 2 Goodwill nature and valuation.
- 3) Chapter 3 Change in psr.
- 4) Chapter 4 Admission of partner

# **BUSINESS STUDIES**

Revise and do case studies of

- 1) Chapter 1 -Management nature and purpose.
- 2) Chapter 2 -Principles of management revise and do all question short and long with case studies.

### **ECONOMICS**

1)Assignment-

Complete the assignment in the Economics Assignment note- Book for the month of April and May.

2)Project- Work

Prepare Project Files as per the CBSE guidelines for Boards Examination on the topics discussed in the class.

Include all the initial and ending pages as told.

3) Revise and prepare thoroughly with all the back exercises questions of the book of the syllabus completed till date

# **PHYSICAL EDUCATION**

1) Practical I - Yoga

Define any Yoga Aasan with diagram

2)Practical II - Basketball

Explain basketball

- 3)Practical III Athletics
- 4)Practical IV- Volley ball
- 5)Practical V- Badminton

# **HISTORY**

#### **PROJECT**

Prepare the given History Project as per the CBSE guidelines.

Some suggested topics for project work are:

- 1. The History and Legacy of Mauryan Empire
- 2. "Mahabharat" The Great Epic of India.
- 3. The Revolt of 1857- Causes; Planning & Coordination; Leadership, Vision of Unity.
- 4. The Philosophy of Guru Nanak Dev.
- 5. An insight into the Indian Constitution.

Instructions for Completion of Project:-

- The project is to be done on inter-leaf sheets.
- The total length of the project will be 20-25 pages.
- The projects must be neat and well presented and must be completely hand-written.
- No whiteners to be used or written matter to be crossed out. In case of any mistakes, redo the sheet.
- Do not number sheets or write dates unless so instructed.
- Color illustrations, maps, charts may be hand drawn or printed (if it is relevant for any aspect of your project) are welcome.

#### **ADDITIONAL TIPS:**

#### PREFACE:

- 1. Name of Project:
- 2. Problem Statement / Objective of Project:

The objective of the project is know the: (quote from the objectives given for your topic)

# **ENTREPRENEURSHIP**

- 1) Prepare a project as per the guidance given in the class on the topic of market survey must attached questionaries with the specified questions and their respective answer as you have conducted a survey accordingly
- 2) Must revise chapter done in the class for class test.

# **FINE ARTS**

#### A.Revise:

- 1. Rajasthani miniature painting
- 2. Pahari miniature painting
- 3. Mughal miniature painting
- B. 1. Coloured landscape
  - 2. Figure composition

# **POLITICAL SCIENCE**

Class will be divided into six groups with four / five students in each group of 4 students.

# **TOPIC ALLOTTED**

Group I : Environment : Crisis and solutions

Group II : Security : Burning global need and

role of Leaderhip

Group III : Foreign Policy : Need and

importance

Group IV : Niti Aayog : Thinking tank

of government

Group V : Coalition government : A

boon or a bane

Group VI : EU : Changing phases

Group VII : SAARC : India and its

position and role

Group VIII : BRICS : Conflicts and

solutions

## **GENERAL GUIDELINES:**

• The project is to be done on inter-leaf sheets.

- The total length of the project will be 20-25 pages.
- Students have to preserve the initial drafts of the project as well as any research papers that they may have used.
- Students have to be prepared to give a presentation of the project in the class.
- A summary / synopsis (one page) of the project has to be prepared covering:

The objective statement Their observations and findings The learning outcomes

- Any other learning from this exercise such as skills of team work, problem solving, time
  management, information collection, processing, analysing and synthesizing relevant
  information to derive meaningful conclusions;
- The projects must be neat and well-presented and must be completely hand-written.
- No whiteners to be used or written matter to be crossed out. In case of any mistakes, redo the sheet.
- Do not number sheets or write dates unless so instructed. •
- Colour illustrations, maps, charts may be hand drawn or printed (if it is relevant for any aspect of your project) are welcome to make them look attractive.

## **Presentation:**

- 1. In the form of art form like cartoons, caricatures, posters....digital prints or sheets
- 2. Spontaneous speeches can also be a part of presentation. Panel discussion by students can

also be presented. Role play ,songs, enactment, PPT, video.....

# **Details of Project Work**

- 1. The project can be **individual / pair / group of 4-5 each.** The Project can be made on the topics given in the syllabus of a particular class.
- 2. The suggestive list of activities for project work is as follows: Role Play, Skit, Presentation, Model, Field Survey, Mock Drills/Mock Event Mine craft etc.

Steps involved in the conduct of the project: Students may work upon the following lines as a suggested flow chart:

- Choose a Title/Topic Need of the Study,
- Objective of the Study
- Hypothesis Content -Timeline, Maps, Mind maps, Pictures, cartoons etc.
- (Organization of Material/Data Present Material/Data)
- Analysing the Material/Data for Conclusion
- Draw the Relevant Conclusion
- Bibliography

# **Expected Checklist for the Project Work:**

- Introduction of topic/title
- Identifying the causes, events, consequences and/or remedies
- Various stakeholders and effect on each of them
- · Advantages and disadvantages of situations or issues identified
- Short-term and long-term implications of strategies suggested during research
- Validity, reliability, appropriateness, and relevance of data used for research work and for presentation in the project file
- Presentation and writing that is succinct and coherent in project file
- Citation of the materials referred to, in the file in footnotes, resources section, bibliography etc.

# **Assessment of Project Work:**

- Project Work has broadly the following phases: Synopsis/ Initiation, Data Collection, Data Analysis and Interpretation through activities ,quiz, survey ,interviews and Conclusion.
- Viva

# A. Make a PPT, Case Study & a 2 page Newsletter on any one topic (R.NO.wise)

•	VENEZUELA CRIISIS	R.NO. 1-3
	CHINA – THE NEXT SUPER POWER	<u>R</u> .NO. 4-6
•	SYRIAN CIVIL WAR	R.NO. 7-9
•	INDIA AND UNSC	R.NO. 10-12
•	REFUGEE CRISIS	R.NO. 13-15-
•	SUSTAINABLE DEVELOPMENT	R.NO. 17-21
•	KASHMIR:THEN AND NOW	R.NO. 22-26
•	COVID :A CAUSE AND CONSEQUENCE OF GLOBALISATION –	R.NO. 27-31

- B. Inculcate habit of reading newspaper and make short reports for further reference.
- C. Make a sample paper on Book 1 : Contemporary World Politics
- D. Assignments on Google Classroom to be completed in the register.

#### **INFORMATION PRACTICES**

#### **Data Series & Data Frames**

- Q:1) Write the python code to define series data structure with an example
- Q:2) Write Python code to make a small project based on data series to display the marks of 5 topper students with their names as index values?
- Q:3) Write the python code to convert the index values from default to user defined values?
- Q:4) Make a small project that how to write a indented python code in a python interpreter with conditions and variables define format
- Q:5) Differentiate between 1-D and 2-D data structure used in python with using at-least one example of each of them.?

- Q:6) Write python code to display the stud names, ID, Subject of top 5 students in a given DataFrame.?
- Q:7) Write python code to display all attributes of DataSeries data structure using a suitable example.?
- Q:8) Write python code to display all attributes of DataFrame data structure using a suitable example.?
- Q:9) Write python code to display all columns names of a given DataFrame type of data?
- Q:10) Write python code to make a DataFrame using a list of lists with relevant data to DataFrame.?

## **BIOLOGY**

Roll no 1.To study the coagulabe and non coagulabe milk protein.

Roll no 2. Visit a gynecologist and study about various gynecological disorders.

Roll no 3.A research on prolapsed uterus.

Roll no 4.Bioremediation in dealing with environmental issues.

Roll no 5. Study on hiw cell makes a decision to divide or to stop dividing.

Roll no 6.Genome data is used to study cancer evolution and assist cancer therapy.

Roll no 7. Evolution of life overtime.

Roll no 8. Research on process of prepration of antibiotics

Roll no 10.Studey and compare the BOD of ten different waterborne near you area.

Roll no 11.Study the reproductive parts ,mode of reproduction of atleast ten different flowers found in your locality.

Roll no 11. Research on algae as jet fuel.

Roll no 12. Research on steps involved in plant tissue culture.

Roll no 13.Drug resistance in Bacteria using antibiotics

Roll no 14.Does junk food causes infertility among girls.

Roll no 15. Use of solar panel to conserve energy.