

MODERN SCHOOL, VAISHALI
SUMMER VACATION HOMEWORK
CLASS-XI (2025-26)

PHYSICS

- 1) Solve the example problems and the problems given in exercises of chapter 1, 2 and 3 from NCERT book. Do this work in a 20-30 pages test notebook.
- 2) Write down all the formula along with their dimension formula as given in appendix of class XI NCERT book. Do this work on A4 sheets and put the pages in a simple paper folder.
- 3) Practice all the derivations done in class in your class notebook under the heading “Derivations practice”.
- 4) Make a project file on the allotted topic-

Roll no 1, 8, 15, 22, 29 of class XI A & roll no 1, 8 of class XI B : Designing a Basic Measuring Instrument

Roll no 2, 9, 16, 23, 30 of class XI A & roll no 2, 9 of class XI B : Recording and Analyzing Free Fall using Smartphone Sensors

Roll no 3, 10, 17, 24, 31 of class XI A & roll no 3, 10 of class XI B : Graphical Analysis of Uniform & Non-uniform Motion

Roll no 4, 11, 18, 25 of class XI A & roll no 4, 11 of class XI B : Projectile Motion Simulation Using Python or Tracker App

Roll no 5, 13, 19, 26 of class XI A & roll no 5, 12 of class XI B: Design a Simple Newton’s Cradle and Study Momentum Transfer

Roll no 6, 13, 20, 27 of class XI A & roll no 6 of class XI B: Renewable Energy Sources and Their Efficiency Comparison

Roll no 7, 14, 21, 28 of class XI A & roll no 7 of class XI B: Torque and Rotational Motion: Simple Experiments with Bicycle Wheels

CHEMISTRY

1. Make investigatory project on the topic given according to roll number:

Roll no. 1,8,15,22,29

Checking the bacterial contamination in drinking water by testing sulphide ion.

Roll no. 2,9,16,23,30

Study of the methods of purification of water

Roll no. 3,10,17, 24,31

Testing the hardness, presence of Iron, Fluoride, Chloride, etc., depending upon the regional variation in drinking water and study of causes of presence of these ions above

Roll no. 4 ,11,18,25,32

Investigation of the foaming capacity of different washing soap and effect of addition of sodium carbonate.

Roll no 5,12,19,,26

Study the acidity of different samples of tea leaves.

Roll No. 6,13,20,27

Determination of the rate of evaporation of different liquids

Roll no.7,14,21,28

Study of acidity of fruit and vegetable juices

Revise

Ch-1 Structure of Atom

Ch-2 Some basic concepts of chemistry

Ch -3.Classification of Elements and Periodicity in Properties and complete all assignments questions ,make these chapter mind map, and book mark for formula.

ENGLISH

GENERAL INSTRUCTIONS

1-THIS ASSIGNMENT IS DIVIDED INTO TWO PARTS

2-PART A CONTAINS A SET OF QUESTIONS TO BE ATTEMPTED IN CREATIVE WRITING SKILLS NOTEBOOK

3- PART B HAS TO BE IN PROJECT FILE .IT HAS TO BE ON A4 SIZE SHEET PUT TOGETHER IN A FILE. YOUR SUBMISSION MUST HAVE A COVERPAGE/PICTURES /PHOTOGRAPHS/SKETCHES. ALONG WITH YOUR WRITE UP. YOU MAYMAKE IT COLOURFUL & VIBRANT.

1. Collect atleast 10 classified advertisements on To let, For Sale Situation Vacant,Situation wanted from newspapers and paste in your notebooks.

2. You are a member of the social awareness team of your school and you have to participate in an Awareness drive regarding the importance of water.

Prepare a Poster highlighting the importance and ways of rainwater harvesting that can be implemented by the residents of the area.

PROJECT PORTFOLIO

Read the chapter 1: The Portrait of a Lady by Khushwant Singh and attempt the following:

A. Compare and contrast the characteristics of the author's grandmother with that of your own grandmother.

Note the following points:

1. Give a catchy title to your presentation.
 2. Add some pictures of your grandmother of various stages of her life.
 3. Maximum 10 pages be there in your project.
 4. Write a note on your association with your grandmother and some unforgettable experiences with her.
 5. Pen down some seminal details and achievements of your grandmother's life.
 6. Make it attractive and colorful.
- B. Research on Khushwant Singh's life and works. Find out about the role of Khushwant Singh's father in building Delhi. Compile your findings in a project file specifying the detail of each stage with pictures.

APPLIED MATHEMATICS

- 1) Revise chapters : Binary Numbers, Logarithms and Indices, Quantitative Aptitude, Sequence and Series and Sets and Relations.
- 2) Make mind maps of all the chapters covered in class.
- 3) Complete the Activity files as instructed in class.

STANDARD MATHEMATICS

- 1) Revise Chapters : Sets, Relation and Functions, Trigonometric Functions, Complex Numbers, Linear inequalities
- 2) Make mind maps of the chapters covered in the class.
- 3) Complete the Maths Lab Manual as instructed in class.

ACCOUNTANCY

Make a proper notes on the following topics and prepare same for further assessment

Chapter 1 .Introduction to Accounting

Accounting- concept, meaning, as a source of information, objectives, advantages and limitations, types of accounting information; users of accounting information and their needs.

Qualitative Characteristics of Accounting Information. Role of Accounting in Business.

Chapter 2. Basic Accounting Terms

Entity, Business Transaction, Capital, Drawings. Liabilities (Non Current and Current).

Assets (Non Current, Current); Expenditure (Capital and Revenue), Expense, Revenue, Income, Profit, Gain, Loss, Purchase, Sales, Goods, Stock, Debtor, Creditor, Voucher,

Discount (Trade discount and Cash Discount)

Chapter 3.Theory Base of Accounting

Fundamental accounting assumptions: GAAP: Concept: Basic Accounting Concept:

Business Entity, Concern, Accounting Period, Cost Concept, Dual Aspect, Revenue

Recognition, Matching, Full Disclosure, Consistency, Conservatism, Materiality and Objectivity

BUSINESS STUDIES

1.Revise and write Chapter -1, Business, Trade and Commerce, do and revise Case Studies.
Revise its features, types of risk, types of business activities, categories of industries.

2. Learn and write Chapter -2, Form of Business Organization, Learn and write features and demerits of Sole proprietorship, Partnership, Cooperative Society and Joint Hindu Family Business.

3. Learn and write Chapter- 3, Private, Public and Global Enterprises, write and learn differences among Departmental Undertaking vs Statutory Corporation vs Govt Company.

ECONOMICS

1)Assignment-

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

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

Statistics for Economics

Chapter 1: Introduction and Statistics

Chapter 2- Meaning, Scope and Importance of Statistics,

Chapter 3- Collection of Data,

Chapter 4 - Organisation of Data,

Chapter 5- Tabulation of Data

Micro Economics

Chapter 1: Introduction

PHYSICAL EDUCATION

1) Practical I - Yoga

Define any Yoga Asana with diagram

2)Practical II - Basketball

Explain basketball

3)Practical III - Athletics

4)Practical IV- Volley ball

5)Practical V- Badminton

HISTORY

The students should make a project file on Mesopotamia Roman Empire (any one aspect).

The project should consist of the following:

1. Title page
2. Acknowledgment
3. Table of contents
4. Introduction
5. The body of the project should have description of the selected topic, pictures, data and other relevant information
6. Conclusion should have students' observations on the topic
7. Bibliography and references

Model

Prepare any on Model any archaeologist artefacts

Example stone tools , seals , jewellery etc

ENTREPRENEURSHIP

- 1."Prepare a project as per the guidance given in the class on the topic of market survey must attached questionnaires 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.

PAINTING

2 coloured landscape and 1 lippan art (round shape)

POLITICAL SCIENCE

Project Work : 20 marks

Class will be divided into six groups with four / five students in each group of 6 students.

TOPIC ALLOTTED

Group I: Making of the Constitution.

Group II: Elections in India.

Group III: Working of the Indian Judiciary System.

Group IV: Social Justice: Are ethics followed in Indian Politics

Group V: Human Rights Act and its gratification in India.

Group VI: Political impact on Indian Legislation.

GENERAL GUIDELINES:

The total length of the project will be 20-25 pages.

Students have to be prepared to give a presentation of the project in the class.

The projects must be neat and well-presented and must be completely handwritten

INFORMATION PRACTICES

- 1) Make small project for data types used in python
- 2) Make a difference b/w input() function and int(input()) function
- 3) How to store data into computer memory using ASCII codes
- 4) Differentiate b/w python immediate mode and script mode with adv and disadv of both of them
- 5) What is meant by conditional clause in python and give an example of each of conditional clause types used in python
- 6) How python convert its code from Higher level to machine code by using Interpreter / Compiler or Assembler, Justify your answer
- 7) How to swap to numbers in python, give different types of solution of this problem
- 8) Write python code to make a currency program in python
- 9) Differentiate between Interpreter / compiler or Assembler
- 10) Write different types of operators used in python , give examples of them.

BIOLOGY

1.Prepare a working model on Circulatory system or Respiratory System

2.Prepare a power-point presentation on following topics-

Roll No. 1 to 3- Animal Kingdom

Roll No. 3 to 5- Plant Physiology

Roll No. 6 TO 10- Human Physiology

3. Research on Impact of Stress Hormones on Animal Behaviour.