GD DAV PUBLIC SCHOOL

BHANDARKOLA, SATAR ROAD, DEOGHAR

SUMMER VACATION ASSIGNMENT AND PROJECT: 2026-27

CLASS – XI

(Science ,Commerce & Humanities)

NAME-_____ Roll No _____

ENGLISH

ASSIGNMENT

1)Write a brief review of any two taught stories including commentary on the characters, plot and overall message.

2)In schools and colleges, a great stress is laid on the importance of discipline in life. Express your ideas in a form of a speech on 'Importance of discipline in life' for your school magazine in about 250 words.

3)Prepare a list of any twenty idiomatic expressions with meaning and examples.

PROJECT

Prepare a project on any ethnic tribe of India. You may write about people, their names, traits, geographic and economic features using relevant pictures in a scrap book or a project file.

BIOLOGY

Q1. Prepare an investigatory project and submit its typed record (in 20-25 pages) choose one from the given topics or use your innovative ideas.

a) Possible effects of maternal behaviour On fetal development
b) Study of effects of antibiotics on Micro-Organism
c) Detailed study of infertility Its causes and treatment
d) How's cigarettes affect your health
e) Diffusion vs food colouring

Q2. Make DIVO card on one topic of your choice from Diversity .

Q3. Solve all questions of NCERT textbook exercise from chapter 1 & 2

PHYSICS

Assignment: Units & Dimension

Section A – Very Short Answer Type Questions

1. Define:
(a) Fundamental quantities
(b) Derived quantities
2. Write the SI unit of:
(a) Force
(b) Pressure
(c) Power
3. What are supplementary units in SI system?
4. Write the dimensions of:
(a) Velocity
(b) Acceleration
(c) Density
(d)Work
(e) Energy
(f) Momentum
5. State the principle of homogeneity of dimensions.
6. Define dimensional formula.
7. Why is dimensionless quantity not necessarily unitless? Give one example.

Section B - Short Answer Type Questions

8. Distinguish between fundamental and derived units with examples.
9. Can dimensional analysis derive numerical constants in an equation? Explain.
10. Write two uses of dimensional analysis.

Section C – Numerical / Long Answer Type Questions

11. The frequency of vibration of a stretched string depends upon its length l, tension T, and mass per unit length m. Use dimensional analysis to derive the relation.

12. The energy E stored in a capacitor depends on capacitance C and voltage V, Using dimensional analysis, find the relation between them.

Section D – Higher Order Thinking Type Questions

13. Using dimensional analysis, prove that escape velocity depends on radius ▫ and acceleration due to gravity ▫.

Assertion-Reason Type Questions

14. Assertion: Every physical quantity can be expressed in terms of fundamental quantities.

Reason: Derived quantities depend on fundamental quantities.

15. Assertion: Dimensionally correct equations are always physically correct.

Reason: Dimensional analysis cannot determine numerical constants.

16. Assertion: Radian is a dimensionless quantity.

Reason: It is the ratio of arc length to radius.

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CHEMISTRY

Q.1. Calculate the mass of sodium acetate (CH3COONa) required to make 500 mL of 0.375 molar aqueous solution. Molar mass of sodium acetate is 82.0245 g mol-1

2.Calculate the molecular mass of the following:

(i) H20(ii) C02(iii) CH4

3.Calculate the mass percent of different elements present in sodium sulphate (Na2 SO4).

4.Calculate the amount of carbon dioxide that could be produced when

(i) 1 mole of carbon is burnt in air.
(ii) 1 mole of carbon is burnt in 16 g of dioxygen.
(iii) 2 moles of carbon are burnt in 16 g of dioxygen.

5.Calculate the concentration of nitric acid in moles per litre in a sample which has a density 1.41 g mL-1 and the mass percent of nitric acid in it is being 69%.

6.In three moles of ethane (C2H6), calculate the following:

(i) Number of moles of carbon atoms (ii) Number of moles of hydrogen atoms

(iii) Number of molecules of ethane

7.A sample of drinking water was found to be severely contaminated with chloroform, CHCly supposed to be carcinogenic in nature. The level of contamination was 15 ppm (by mass).

(i) Express this in percent by mass

(ii) Determine the molality of chloroform in the water sample.

8.Express the following in scientific notation:

(i) 0.0048 (v) 6.0012 (ii) 234,000 (iii) 8008 (iv) 500.0

9.How many significant figures are present in the following?

(i) 0.0025 (ii) 208 (iii) 5005 (iv) 126,000

(v) 500.0 (vi) 2.0034

10.Round up the following upto three significant figures:

(i) 34.216 (ii) 10.4107 (iii) 0.04597 (iv) 2808

11. 50 MCQ questions based on some basic concepts of chemistry (PYQ).

MATHS

Assignment

- Solve all the problems of the topic Relation & Function in a separate notebook.

ACCOUNTANCY

1) Solve Practical Problems from Chapter 05 - Accounting Equation and Chapter 08 Journal Entries.

2) Prepare Notes from Chapter 01 (if remaining), Chapter 02, Chapter 05 and Chapter 08.
3) Complete all Theoretical Question-Answer and Objective Question-Answer from Chapter 01,02,05 and 08.
4) Read and Remember prepared notes.

BUSINESS STUDIES.

General Instructions:

- Home work must be submitted in a Project file and all the contents should be hand written on project paper (one side rule and one side blank).
- Project must have Cover Page, Acknowledgement, Index, Preface, Certificate by teacher, Introductory page, Content pages , Conclusion, Reference and Bibliography
- Use only Black and Blue pen and Colour Pencils if requires.
- Paste required Colourful and present it attractively.
- Project will be submitted on the first day after Summer vacation.

Home Work

1. Field Visit:

> Visit to a Mall

The students are required to observe the following and prepare a Project report on it. Present all the information using tables, diagrams and pictures.

(a) Number of floors, shops occupied and unoccupied
(b) Nature of shops, their ownership status (Sole proprietorship, Partnership, HUF, Joint Stock
company and Cooperative Society
(c) Nature of goods dealt in: local brands, international brands
(d) Service business shops- Spas, gym, salons, etc.
(e) Rented spaces, owned spaces
(f) Different types of promotional schemes
(g) Most visited shops
(h) Special attractions of the Mall- Food court, Gaming zone or Cinema, etc
(i) Innovative facilities
(j) Parking facilities

2. Case Study on a Product

Students may develop a Case Study on the following lines:
(i) Research for change in price of the product. For example, Peda in Deoghar during 'Saavan'.
(ii) Effect on prices in the absence of effective transport system.
(ii) Effect on prices in the absence of suitable warehouse facilities.
(iv) Duties performed by the warehouses.
(v) Demand and supply situation of the product during Pooja season, prices near the place of origin and away.

Present all the information using tables, diagrams and pictures.

ECONOMICS

Instructions:

- This assignment must be handwritten on A4 sheets.
- Use diagrams wherever applicable.
- Complete the work neatly and submit on the first day after vacation.

Part A: Introduction to Microeconomics

1. Define the following concepts:
   - Microeconomics
   - Scarcity
   - Opportunity Cost
   - Central Problems of an Economy
2. Differentiate between microeconomics and macroeconomics.
   Create a table with at least 3 points of distinction.
3. Explain the three central problems of an economy with suitable examples.
   - What to produce
   - How to produce
   - For whom to produce
4. Write a short note on 'Production Possibility Curve' (PPC) with a diagram.
   - Definition
   - Shape of the curve
   - Meaning of points on and outside the curve

Part B: Consumer's Equilibrium

1. State the law of diminishing marginal utility with an example.
2. Explain the conditions for consumer's equilibrium in case of:
   a. Single commodity
   b. Two commodities (Use utility approach)
3. Differentiate between Total Utility (TU) and Marginal Utility (MU) with a table.

4. Project Activity:

Make a chart or collage explaining consumer equilibrium using either:

- Utility analysis OR
- Indifference curve approach (any one)

HISTORY

PROJECT WORK

Topic: Life and Writing System in Mesopotamian Civilization (use pictures, map and diagram)

ASSIGNMENT

Write and learn all NCERT exercise questions answers of ch 1

POLITICAL SCIENCE

Project/Assignment

1. Making of the Indian Constitution: A Timeline Story

Objective: Understand the historical process and key debates of the Constituent Assembly.

Tasks:

- Make a visual timeline from 1946–1950 with 8–10 key events
- Profile 3 members of the Constituent Assembly and their main contribution
- Write 300 words: “One feature of the Constitution I value most and why”

Submission: Chart paper / Scrapbook + handwritten report

2. Fundamental Rights in My Life

Objective: Connect constitutional rights to daily life.

Tasks:

- Choose 3 Fundamental Rights. For each, give 1 real news example from 2025–2026 where it was used/violated

- Interview 2 people: “Which right matters most to you?” Record answers
- Create a poster: “If rights had no remedies, then…”

Submission: A4 file with clippings, interview notes, poster

3. How India Votes: Understanding Elections

Objective: Analyze the Indian electoral process.

Tasks:

- Compare First Past the Post vs Proportional Representation with examples
- Make a table of 2024 Lok Sabha results: Top 3 parties, seats, vote %
- Design a mock Election Commission awareness pamphlet for first-time voters

Submission: 8–10 page report + pamphlet

General Guidelines

Component	Details
Word Limit	1000–1200 words total, handwritten
Structure	Cover page, Certificate, Acknowledgement, Index, Introduction, Main content, Conclusion, Bibliography
Sources	NCERT Class 11 Political Science, newspaper, PRS India, ECI website
Presentation	Use maps, flowcharts, newspaper cuttings. Pictures should have captions
Deadline	Opening day after vacation
Marks	20 marks: 5 Content, 5 Research, 5 Presentation, 5 Viva

Tips to score well:

1. Use NCERT language and add your own opinion.
2. Add 1–2 current 2026 examples. It shows you're linking theory to reality.

COMPUTER SCIENCE

1. Explain the basic components of a computer system with the help of a block diagram.
2. Differentiate between primary memory and secondary memory with suitable examples.
3. What is the role of the CPU in a computer system? Explain the functions of ALU and Control Unit.
4. Differentiate between system software and application software with examples.
5. Explain different types of computer memory such as RAM, ROM, cache memory, and virtual memory.
6. Explain the difference between primary memory and secondary memory.

INFORMATICS PRACTICES

1. Explain the basic components of a computer system with the help of a block diagram.
2. Differentiate between primary memory and secondary memory with suitable examples.
3. What is the role of the CPU in a computer system? Explain the functions of ALU and Control Unit.
4. Differentiate between system software and application software with examples.
5. Explain different types of computer memory such as RAM, ROM, cache memory, and virtual memory.
6. Explain the difference between primary memory and secondary memory.
7. What is the role of the operating system in a computer system?
8. Define input/output devices and give two examples.

PHYSICAL EDUCATION

1. Write about Surya namaskar in detail along with its 12 poses.
2. Why Physical Fitness is necessary? Write the ways to remain fit in detail.