DAV PUBLIC SCHOOL, SASARAM

Diwali and Chhath Vacation H.A

Class– XII (Science & Comm.)

ENGLISH

- Prepare a report on the celebration / function which was recently held in your school.
- Compare and contrast the character of Sophie and that of the office boy deeming their helps, aspirations and consequence / result.
- Referring to the content of 'The Enemy' throw light upon its message.

PHYSICS

- Explain the Compound Microscope with derive the expression of magnification.
- Make the Investigatory project as per CBSE syllabus.

CHEMISTRY

- Chapter: Amines
- Exercise Questions: 2, 4, 5 and 7.

MATHS

- Solve the differential equations:

  $(x + y)\,(dy/dx) = 1$

  $(x + 3y^2)\,(dy/dx) = y$
- If $\mathbf{a} = 2\hat{i} + \hat{j} + \hat{k}$, $\mathbf{b} = 2\hat{i} - \hat{j} + 3\hat{k}$ and $\mathbf{c} = \hat{i} - 2\hat{j} + \hat{k}$, find a unit vector parallel to the vector $\mathbf{2a - b + 3c}$.

BIOLOGY

Describe about the transmission of AIDS (HIV VIRUS) in the human beings.
Describe the role Microbes in sewage treatment.

ACCOUNTANCY

- Chapter 6: Cash Flow Statement
- Solve the following questions:

  3, 5, 6, 9 (A), 9 (B), 16, 18, 25, 33, 36 and 38.

BUSINESS STUDIES

- Prepare a project on "Consumer Protection

ARTIFICIAL INTELLIGENCE

- What is a confusion matrix? Explain True Positive, True Negative, False Positive and False Negative with a suitable example.
- Explain the different types of bias in AI systems. How can these biases affect decision-making?

Economics

- Prepare a project based case study on Comparative Analysis of India, China, and Pakistan
- Core Question: Why did China outpace India and Pakistan in economic development despite all three nations starting their development journeys around the same time?

* Project Guidelines:
  - Construct a comparative table analyzing GDP growth rates, population growth, and sectoral share of GDP (Agri, Industry, Services).
  - Analyze the pivotal role of China's Great Leap Forward and Economic Reforms of 1978.
  - Evaluate the political and structural bottlenecks that slowed down Pakistan and India.