



DAV PUBLIC SCHOOL, SASARAM

H.A. & P.W. for Diwali & Chhath VACATION 2025-26

CLASS - XI

English

1. Bring out and describe the historical elements in 'Discovering Tut: The Saga Continues' and 'The Adventure'.
2. The poem 'A Photograph' and 'Childhood' are accounts of the poets going back to childhood for different reasons. What are these reasons? Write briefly about each poem.
3. Prepare a mind map of the poem 'Childhood'.

Maths

1. Find the value of $\tan \frac{\pi}{8}$
 2. Let S be the Sum, P be the Product and R be the sum of reciprocals of n term of a G.P. Prove that $p^2 = \frac{S^n}{R}$
 3. If α and β are different Complex number with $\beta = 1$ then find $\tan \frac{\beta - \alpha}{1 - \alpha\beta}$
- OR, Draw the Graph of $y = x - 1$

Physics

Make a investigatory project (on any of given topic)

- | | |
|-------------------------------------|--------------------------------------|
| 1. Mechanics (pendulums) | 2. Projectile motion |
| 3. Hooke's Law | 4. Elasticity |
| 5. Thermodynamics (solar heaters) | 6. Evaporation, thermal conductivity |
| 7. Waves and sound (Doppler effect) | 8. Simple harmonic motion |

Chemistry

Unit 4: Chemical bonding Q.No. 35,36,37,38,39,40. from exercise.

Biology

1. Describe the role of microbes in household product.
2. Describe the role of microbes in industry.
3. Describe the role of microbes in sewage treatment.

Economics

1. Write & learn all the formulas from Mean, Median, and Mode.
Calculate Mean, Median, and Mode from the following data:
2. Monthly Profit (₹ '000) Frequency

Less than 10	4
Less than 20	20
Less than 30	35
Less than 40	55
Less than 50	62
Less than 60	67
3. Distinguish between Mean, Median, and Mode.

Accountancy

1. From the following transactions of a concern, prepare Machinery Account for the year ending 31st March 2023 :
2022
April 1 : Purchased a second-hand machinery for ₹ 40,000.
April 1 : Spent ₹ 10,000 on repairs for making it serviceable.

Dec 31 : Repairs and Renewals of machinery ₹ 2,000.

2023

March 31 : Depreciate the machinery at 10% p.a.

2. The Sameer Transport Company purchased 10 Trucks at ₹ 90,000 each on 1st April 2019 . On 1st October 2021 , one of the Trucks was involved in an accident and is completely destroyed. ₹ 56,200 was received from the Insurance Company for the sum of ₹ 60,000. The company writes off 20% per annum on the Diminishing Balance Method . The company maintains the calendar year as its financial year.

Show the Truck A/c for four years ending 31st Dec 2022.

AI

1. Create a poster or collage showing how AI can help in different sectors such as education, farming, healthcare, and transport.
2. Write a Python program to plot a line graph showing the temperature recorded over 7 days.

Data:

Days: Mon, Tue, Wed, Thu, Fri, Sat, Sun

Temperature (°C): 30, 32, 31, 33, 29, 28, 2

3. Write a Python program to create a scatter plot showing the relation between hours of study and marks scored.

Data:

Hours of Study: 2, 3, 4, 5, 6, 7, 8

Marks: 50, 55, 65, 70, 80, 85, 90