GD DAV PUBLIC SCHOOL
BHANDARKOLA, SATAR ROAD, DEOGHAR

SUMMER VACATION ASSIGNMENT AND PROJECT: 2026-27

CLASS - X

NAME: _____ ROLL No. _____

SUBJECT: ENGLISH

PROJECT:-

▪Portray the biography of any one among the following in creative way-

- Robert Frost
- Nelson Mandela

ASSIGNMENT:-

Note Down the Critical Appreciations of the poems Dust of Snow & Fire and Ice.

(Note- All works must be in presentable way in stick file.)

SUBJECT: HINDI

1) 100-150 शब्दों में अनुच्छेद लिखें -

क) समय का सदुपयोग।

ख) विद्यार्थी-जीवन में अनुशासन।

2)रचना के आधार पर वाक्य के 10-10 उदाहरण कॉपी पर लिखें।

3) पठित पाठों के शब्दार्थ और प्रश्नोत्तर याद करें।

परियोजना - कार्य

किन्हीं तीन कवि या लेखक का जीवन-परिचय चार्ट पेपर पर बनाएँ।

SUBJECT: SANSKRIT

गृहकार्यम्-

प्रथमपाठस्य प्रश्नोत्तराणि लिखन्तु (पुस्तिकायाम्)

परियोजनाकार्यम्-

स्वरसन्धेः भेदान् उदाहरणसहितं चित्रमाध्यमेन प्रदर्शयन्तु (स्टिक फाइल)

SUBJECT: MATHEMATICS

1. Check whether 12^n can end with the digit 0 for any natural number n.
2. Find the largest number which on dividing 1251, 9377 and 15628 leaves remainders 1, 2 and 3 respectively.
3. Show that $5 + 2\sqrt{7}$ is an irrational number, where $\sqrt{7}$ is given to be an irrational number.
4. Find the zeroes of the quadratic polynomial $7y^2 - \frac{11}{3}y - \frac{2}{3}$ and verify the relationship between the zeroes and the coefficients.
5. Activity:

OBJECTIVE – To draw the graph of a quadratic polynomial and observe:

i) The shape of a curve when the coefficient of x^2 is positive.
ii) The shape of the curve when the coefficient of x^2 is negative.
iii) Its number of zeroes.

SUBJECT: SCIENCE

(PHYSICS)

Assignment-Based Questions (Concept + Application)

1. State the sign convention used in mirror formula with a diagram.
2. What happens to image size and nature when an object moves from infinity to the pole of a concave mirror?
3. An object is placed 20 cm in front of a concave mirror of focal length 10 cm. Find image position and nature.
4. A concave mirror forms an image twice the size of the object at 15 cm. Find focal length.
5. Case-Based Question
   A student stands in front of a concave mirror at different distances.
   - At 50 cm → image is real and inverted
   - At 10 cm → image is virtual and erect

   Questions:

   I. Identify focal length range.
   II. Explain why image nature changes.
   III. Draw ray diagrams for both cases.

Note :- Do the given work in H.W. notebook.

BIOLOGY

ASSIGNMENT :-

1. Write down 25 MCQs from the topics- Nutrition and Respiration.
2. Case study: What is 'Oxygen Dept 'and how does it relate to athletic training?
3. Experiment- Describe an experiment to show that Co_2 is released during respiration.

PROJECT:-

1. Make a working model of human digestive system .
2. Make a working model of human respiratory system.

Note- Debt or EPOC means access post exercise oxygen.

CHEMISTRY

Assignment –

Part A: Practice Questions

1. Balance the following combination reactions:

(a) $H_2 + O_2 \rightarrow H_2O$

(b) $CaO + H_2O \rightarrow Ca(OH)_2$

(c) $N_2 + H_2 \rightarrow NH_3$

2. Write the word equations for the following:

(a) Burning of magnesium ribbon in air

(b) Formation of slaked lime from quicklime

(c) Formation of ammonia from nitrogen and hydrogen

Part B: Application & Value-Based

1. Environmental Connection:

Explain how the combination reaction of CO_2 with water forms carbonic acid, and discuss its role in acid rain.

2. Ethical Connection:

Cement hardens due to a combination reaction with water. Why is it important to use cement responsibly in construction?

Part C: Creative Tasks

1. Diagram Work:

Draw a neat diagram showing the reaction of burning magnesium ribbon and label the product formed.

2. Myth vs Reality Slide:

- Myth: "All reactions produce harmful substances."

- Reality: Show with examples how combination reactions can produce useful compounds (like $Ca(OH)_2$ for neutralizing acidic soil).

3. Daily Life Chemistry:

Collect 3 examples of combination reactions from daily life (e.g., respiration, photosynthesis, lime water preparation) and write their equations.

Part D: Higher-Order Thinking

1. Case Study:

Farmers add quicklime (CaO) to acidic soil. Write the reaction and explain how this combination reaction improves soil fertility.

2. MCQ Challenge:

Which of the following is a combination reaction?

- (a) $2KClO_3 \rightarrow 2KCl + 3O_2$
- (b) $CaO + H_2O \rightarrow Ca(OH)_2$
- (c) $Zn + CuSO_4 \rightarrow ZnSO_4 + Cu$
- (d) $NaOH + HCl \rightarrow NaCl + H_2O$

Submission Format:

- Neatly written in a notebook.
- Diagrams must be labelled.
- Creative tasks can be done on chart paper for display in the science club.

SUBJECT: SOCIAL SCIENCE

1. Map work (Label and locate states and union territories with their capitals on India Map and paste in your notebook)
2. Do Map practice of History and Geography.
3. Explain the difference types of soil in India.

4. What are the different forms of power sharing in modern democracies? Give an example of each of these.
5. Write the Ethnic composition of Belgium and Sri Lanka.
6. Write about the Rio de Janeiro Earth Summit, 1992 and Agenda 21.
7. Briefly trace the process of German and Italy unification.
8. What steps did the French revolutionaries take to create a sense of collective identity among the French people? Write any five.
9. Prepare a project in a project file on the topic "Consumer Rights". (15-20 A4 size papers)
10. Learn and revise all the completed chapters. (Geography, History, Economics and Civics

SUBJECT- ARTIFICIAL INTELLIGENCE (AI)

Short Answer Type Questions

1. What are the main elements of communication? Explain any two elements briefly.
2. What are the 7 Cs of effective communication? Name any four.
3. Explain the importance of feedback in the communication process.
4. What are the factors that cause common stress to students?

Long Answer Type Questions

1. Explain the process of communication with the help of its elements. Why is communication important in daily life?
2. Describe the 7 Cs of effective communication in detail with suitable examples.
3. Differentiate between verbal, non-verbal, visual, and written communication. Explain their advantages and uses.
4. What is feedback in communication? Explain its types and importance in making communication effective.
5. What are communication barriers? Explain different types of communication barriers and suggest ways to overcome them.

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