TATA DAV PUBLIC SCHOOL, NOAMUNDI

STD-IX HOLIDAY HOME WORK 2026-27

(HIST., POL-SC.& ECO.)

Q.1.Differentiate between Diversity and Inclusivity with one example each.

Q. 2.Explain how sustainability is linked with both development and environment.

Q.3.Describe the relevance of Social Science in understanding social issues such as inequality, exclusion and discrimination, using suitable examples.

Q.4."Democracy is considered better than other forms of government ".Justify the statement.

Q.5.Define Democracy. Explain the essential features of a democratic government.

Q.6.Distinguish between a Parliamentary system and a Presidential system of government.

Q.7.Explain the concept of scarcity and the need of choice with suitable examples.

Q.8.Explain the concept of "What to Produce, " How to Produce and for " Whom to Produce ".

Q.9.Compare market, Centrally Planned and Mixed Economy.

ENGLISH

1. Search for poems or songs dedicated to India, your motherland, in your regional language.
2. Prepare an interdisciplinary project on India's major geographical features. For each feature, describe the region, explain its importance in the lives of the people living there and mention the languages spoken in that region. Include – monuments, rivers, deserts, valleys, islands, plateaus etc.
3. Make a pictorial presentation of the 'National Integration' of India.

TATA DAV PUBLIC SCHOOL NOAMUNDI

Home work for summer Vacation ---

संस्कृत

शारदा - इति पाठ्यपुस्तकात् प्रथमपाठस्य सत्यं शिवं सुन्दरम् संस्कृतं - इति अभ्यासस्य प्रश्नोत्तराणि लिखेत ।

व्याकरणे- अस्मद् , युष्मद् ,तत् , एतत्, किम् सर्वनामशब्दरूपाणि स्मरेत ।

धातुरूपाणि- पठ्, अस्, कृ, दृश् धातूनां रूपाणि पञ्च-

लकारेषु स्मरेत ।

परियोजना- कार्यं- उपपदविभक्तीनां एवं कारकसूत्राणां सूत्राणि चार्ट पत्रे लेखितव्यानि ।

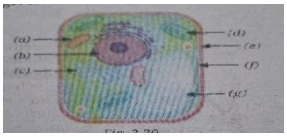
हिंदी

1. वाक्य किसे कहते हैं? अर्थ की दृष्टि से सभी वाक्यों की परिभाषा एवं 10-10 उदाहरण सहित लिखिए।
2. समास से क्या अभिप्राय है? सभी समास के भेदों को परिभाषित करते हुए 10-10 उदाहरण लिखिए।
3. ' दो बैलों की कथा' कहानी पढ़कर प्रश्नोत्तर बनाइए।

SCIENCE

BIOLOGY

1. Differentiate between the following pairs of terms based on the clue given in parentheses: (i) What is the difference between cell membrane and cell wall on the basis of permeability?
(ii) What is the difference between RER and SER on the basis of structure?
(iii) What is the difference between chloroplasts and chromoplasts on the basis of pigments?
2. Two similar animal cells are placed in two different solutions. Answer the following: (i) What will happen to --
i)Cell X when it is placed in pure water?
(ii) What will happen to Cell Y when it is placed in a concentrated salt solution?
Cells are observed after some time: Cell X swells and Cell Y shrinks. Which statement correctly explains this observation?
(i) Salt molecules move into Cell Y, causing it to shrink.
(ii) Water moved into Cell X and more water move out of Cell Y than the salt solution entered it.
(iii) Water moved into Cell X and move out of Cell Y through the cell membrane.
(iv) Solute movement cause osmosis in both cells.
3. Look at the diagram of a cell (Fig. 2.20). Identify the parts labelled (a) to (g) and match them with their correct functions:



(i) Controls all the activities of the cell?
(ii) Site of cellular respiration?
(iii) Stores materials and also provides rigidity to the cell?
(iv) Separates the cell contents from the surroundings?
\(v) Provides structural rigidity to the cell?
vi) Packs and stores materials received from the ER?
(vii) helps in manufacturing food.
4. Two students, Renu and Rohit, are discussing plastids. Who is correct? Justify your answer.
Is Renu correct in saying that all parts of plants, including roots, contain plastids?
Or is Rohit correct in saying plastids are absent in roots since they are underground and do not perform photosynthesis?
5. Mitochondria and chloroplasts are important organelles in plant cells. How are they similar and different in structure and function?
Biology project--
Use suitable digital tools or software to make animations or simulations of cell division and present them in class.
Make a model of any type of synthetic cell using inexpensive and eco-friendly materials.
Work with your classmates to create a model of mitosis or meiosis for a science project or exhibition.

PHYSICS

1. A car travels 30 km north and then 40 km east. What is the total distance travelled and the resultant displacement?
2. Distinguish between speed and velocity.
3. During an experiment, a signal from a spaceship reached the ground station in five minutes. What was the distance of the spaceship from the ground station? The signal travels at the speed of light, that is, 3 lakhs km/s.
4. An artificial satellite is moving in a circular orbit of radius 36,000 km. Calculate its speed if it takes 24 hours to revolve around the earth.
5. Define acceleration. Write it's S.I unit.

CHEMISTRY

1. You are provided with a mixture of naphthalene and ammonium chloride by your teacher. Suggest an activity to separate them with well labelled diagram
2. You are provided with a solution of substances 'X'. How will you test whether it is saturated or unsaturated with respect to 'X' at a given temperature? What happens when a hot saturated solution is allowed to cool?
3. Explain what is observed when a strong beam of light is focused on a colloidal solution of starch in water. Name the phenomenon.
4. A solution contains 40 g of common salt in 320 g of water. Calculate the concentration in terms of mass by mass percentage of the solution.
5. What would you observe when (i) a saturated solution of potassium chloride prepared at 60°C is allowed to cool at room temperature? (ii) an aqueous sugar solution is heated to dryness? (iii) a mixture of iron filings and sulphur powder is heated strongly?

MATHEMATICS

1. Prepare a project on "PASCAL'S TRINGLE".
2. If 7^{th} term of an A.P is 32 and its 13^{th} term is 62. Find the A.P.
3. Find the sequence whose n^{th} term is
   (i) $a_n = \frac{3n-2}{2}$ (ii) $a_n = \frac{2n-3}{6}$ (iii) $a_n = 2n^2 - 3n$
4. Find the A.P whose first term is – 7 and common difference is 5.
5. How many terms are there in the sequence 3, 6, 9, 12, … 111.
6. Find the value of k, if 1 and – 3 are the zeroes of the following polynomials respectively
   (i) P(x) = $2x^3 + kx - 6$
   (ii) P(x) = $kx^2 - 14x + 1$
7. Find the zeroes of the polynomials
   (i) $x^2 - x - 2$
   (ii) $x^2 + 7x + 12$
8. Two years ago, a father was five times as old as his son. Two years later his age will be 8 more than 3 times the age of son. Find their present age.