

ENGLISH

1. The day Private Quelch was chosen for cookhouse duties, the writer felt very happy and contented. Write a diary-entry expressing your thoughts and feelings, imagining yourself to be in the writer's place.
2. Write a speech on 'Child Labour' to be delivered in your school assembly on the occasion of LABOUR DAY.
3. You are Abhishek and you have noticed an advertisement of a Book Fair at Pragati Maidan, New Delhi. Send an e-mail to your brother , asking him to visit the fair.
4. Write an article on the topic 'Utility of Computers in Children's Education' in about 150 words.
5. Write 20 Newspaper Headlines.
6. Write a notice for your School notice-board informing the students about the School Inspection to be held on 1st December 2017 by the District Education Officer. The notice should be of 50 words asking for punctuality, discipline and cleanliness. Put the notice in a box. You are the School Captain.
7. You are Nitish Goel. Send a post-card to your friend Ajay inviting him to the sacred thread ceremony of your younger brother, who is 9 years old. Make the format for the purpose.
8. Write about your School Hostel using both active and passive voices.
9. Read the story 'Keeping It from Harold' and note down the main incidents in your HW notebook.
10. Read the chapters 11 to 19 of the novel 'Three Men in a Boat' and note down the main points in your HW copy.
11. Read the passages given in the Unit 'Mystery' from your Main Course Book .

HINDI

१. कीचड़ का काव्य पाठ के प्रश्नों के उत्तर लिखिए ।
२. एक फूल की चाह कविता को पढ़कर उसका भावार्थ लिखिए ।
३. विराम चिह्नों के भेद को लिखकर उनका प्रयोग कर वाक्य बनाइए ।
४. उपसर्ग और प्रत्यय की परिभाषा बताते हुए सभी के उदाहरण लिखिए ।
५. अनुच्छेद लिखिए – दहेज एक अभिशाप , स्त्री शिक्षा
६. छात्र - शिक्षक, पिता - पुत्र के बीच संवाद लिखिए ।
७. विज्ञापन तैयार कीजिए - २
८. पत्र लिखिए – प्रिय मित्र को , अपने मामाजी को

ODIA

ସମସ୍ତ ପ୍ରଶ୍ନର ଉତ୍ତର ଦିଅ ।

୧. ଭାରତୀୟ ସଂସ୍କୃତିର ବାର୍ତ୍ତାବହ – ‘ସ୍ଵାମୀ ବିବେକାନନ୍ଦ’
୨. ସେବା ଓ ମମତାର ମୂର୍ତ୍ତିମତ୍ତ ପ୍ରତୀକ – ‘ମଦର ଟେରେସା’
୩. ଧର୍ମ ରାଜନୀତିର ପରିପଲ୍ଲୀ କି ?
୪. ତୁମ ପ୍ରିୟ ପୁସ୍ତକ
୫. ସମାଜରେ ନୈତିକ ଶିକ୍ଷା ଓ ଆଧ୍ୟାତ୍ମିକ ଶିକ୍ଷାର ପ୍ରୟୋଜନ
୬. ପଲ୍ଲୀର ଶାରଦୀୟ ସନ୍ଧ୍ୟା
୭. କଳିଙ୍ଗର ବରପୁତ୍ର ବିଜୟାନନ୍ଦ ପଟ୍ଟନାୟକ
୮. ସତ୍ତ୍ଵକ ଦୁର୍ଯ୍ୟୋଧନ ଏକ ନିତିଦିନିଆ ବ୍ୟାପାର
୯. ସାଂପ୍ରତିକ ଯୁଗର ଶିକ୍ଷା ସମସ୍ୟା ଓ ତା’ର ପ୍ରତିକାର
୧୦. ଭାରତର କାଶ୍ମୀର ସମସ୍ୟା ଏକ ଜାତୀୟ ସମସ୍ୟା
୧୧. ଏକ ଘରପୋଡ଼ି ସମ୍ଭାବ୍ୟ ପ୍ରକାଶ କରିବା ନିମନ୍ତେ ଦୈନିକ ସମ୍ବାଦପତ୍ରକୁ ସମ୍ବାଦ ପ୍ରେରଣ କର ।
୧୨. ଦୈନିକ ସମ୍ବାଦପତ୍ରରେ ପ୍ରକାଶିତ ସମ୍ବାଦର ପ୍ରତିବାଦ କରି ଏକ ଅଭିଯୋଗ ପତ୍ର ସମ୍ଭାବ୍ୟ ପତ୍ରିକା ସଂପାଦକଙ୍କ ନିକଟକୁ ଲେଖ ।
୧୩. ବ୍ୟାଙ୍କରେ ଖାତା ଖୋଲିବା ନିମନ୍ତେ ବ୍ୟାଙ୍କ ମ୍ୟାନେଜରଙ୍କ ନିକଟକୁ ପତ୍ର ।
୧୪. ତୁମ ଗ୍ରାମରେ ଏକ ପାଠାଗାର ଗୃହ ନିର୍ମାଣ ନିମନ୍ତେ ଆର୍ଥିକ ସହାୟତା ନିମ୍ନ ବିଭାଗୀୟ ମନ୍ତ୍ରୀଙ୍କୁ ଦରଖାସ୍ତ ପ୍ରଦାନ କର ।
୧୫. ବିଦ୍ୟାଳୟରେ ସରସ୍ଵତୀ ପୂଜାରେ ଯୋଗଦେବା ନିମନ୍ତେ ନିମନ୍ତ୍ରଣ ପତ୍ର ଲେଖ ।
୧୬. ତୁମ ଗ୍ରାମରେ ଘନଘନ ଚୋର ଛିଣ୍ଡି, ଏହାର ନିରାକରଣ ପାଇଁ ଥାନା ଅଧିକାରୀଙ୍କୁ ଦୃଷ୍ଟି ଆକର୍ଷଣ ନିମନ୍ତେ ଦୈନିକ ସମ୍ବାଦପତ୍ରକୁ ଏକ ସମ୍ବାଦ ପ୍ରେରଣ କର ।

MATHEMATICS

1. Write the proofs of the following theorems.
 - a) A diagonal of a parallelogram divides it into two congruent triangles.
 - b) Opposite sides of a parallelogram are equal.
 - c) If each pair of opposite sides of a quadrilateral are equal, prove that it is a parallelogram.
 - d) Opposite angles of a parallelogram are equal, prove it.
 - e) If each pair of opposite angles of a quadrilateral are equal, prove that it is a parallelogram.
 - f) Prove that the diagonals of a parallelogram bisect each other.
 - g) If the diagonals of a quadrilateral bisect each other, prove that it is a parallelogram.
 - h) A quadrilateral is a parallelogram if a pair of its opposite sides are equal and parallel.

- i) The line segment joining the mid points of any two sides of a triangle is parallel to the third side. Prove it.
- j) The line drawn through the midpoint of any side of a triangle and parallel to another side , bisects the third side. Prove it.
- k) Parallelograms on the same base and between the same parallels are equal in area.
- l) Triangles on the same base and between the same parallels are equal in area.
- m) Two triangles having the same base and equal areas lie between the same parallels.

2. Chapter – 9 (Areas of parallelograms & Triangles)

From NCERT Text Book

Exercise 9.2 - 6 questions, Exercise 9.3 - 16 questions

From any reference book of Class – IX.

At least 10 questions each on the following chapters.

Chapter-1 : Number System

Chapter-2 : Polynomials

Chapter-6 : Lines & Angles

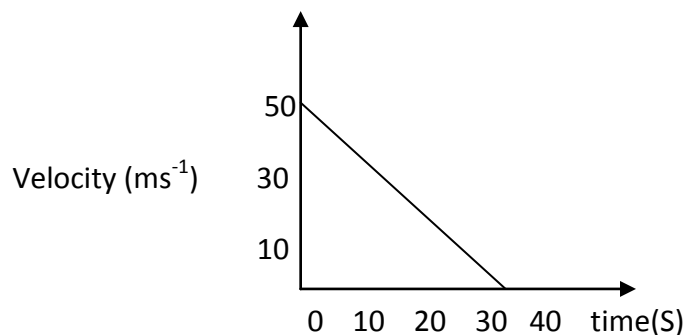
Chapter-7 : Triangles

Chapter-8 : Quadrilaterals

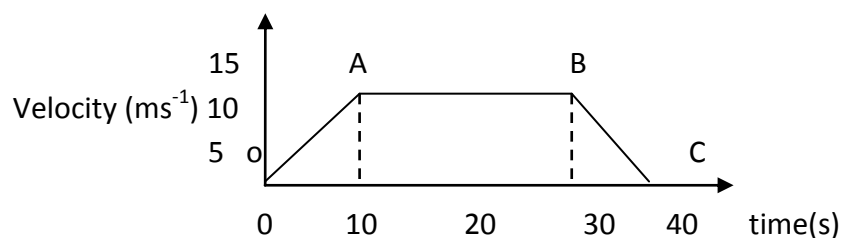
PHYSICS

Answer the following.

1. A particle is moving in a circle of diameter 5m. What is its displacement when it covers one and half revolutions?
2. Define (a) average speed and (b) average velocity
3. A runner presses the ground with his feet before he starts his run. Identify action and reaction in this situation.
4. A heavy and a light object have same momentum. Which of these is travelling faster?
5. Why does the weight of a body vary from poles to equator?
6. (a) What can be depicted from the graph regarding the motion of the object?
(b) Find the value of acceleration from the graph.



7. A bullet of mass 10g travelling horizontally with a velocity of 150ms^{-1} strikes stationary wooden block and comes to rest in 0.03s. Calculate the distance of penetration of bullet into the block. Also calculate the magnitude of force exerted by the wooden block on the bullet.
8. A force of 2N acting on a body changes its velocity uniformly from 2ms^{-1} to 5ms^{-1} in 10s. Calculate the mass of the body.
9. State and prove Law of conservation of Momentum.
10. The velocity time graph of a body is shown below:
 - a. State the kind of motion represented by OA, AB and BC
 - b. What is the acceleration for BC
 - c. Find the distance travelled between 10^{th} and 30^{th} second.



CHEMISTRY

1. Using Symbol and Valence given to you write the chemical formulae for the followings

- | | |
|-------------------------|-------------------------|
| 1. Zinc oxide | 20. Barium chloride |
| 2. Aluminium chloride | 21. Ferric sulphate |
| 3. Calcium sulphide | 22. Mercury(II) oxide |
| 4. Sodium carbonate | 23. Copper(II)carbonate |
| 5. Magnesium nitrate | 24. Ferrous sulphate |
| 6. Barium sulphate | 25. Iron(II)sulphide |
| 7. Potassium sulphate | |
| 8. Ammonium phosphate | |
| 9. Silver nitrate | |
| 10. Ferrous chloride | |
| 11. Aluminium phosphate | |
| 12. Calcium bicarbonate | |
| 13. Aluminium oxide | |
| 14. Potassium carbonate | |
| 15. Zinc chloride | |
| 16. Lead(II) nitrate | |
| 17. Silver bromide | |
| 18. Sodium sulphite | |
| 19. Magnesium oxide | |

2. Write the name of the compounds whose chemical formulae are given below.

1. $Zn_3(PO_4)_2$
2. $Al_2(CO_3)_3$
3. K_2SO_4
4. NH_4NO_3
5. $Ca(OH)_2$
6. FeS
7. $PbCO_3$
8. Ag_2O
9. $BaSO_4$
10. $NaHCO_3$
11. $Fe(NO_3)_3$
12. Na_2SO_3

IONS- Atoms or clusters of atoms carrying charge on them are called ions. Ions may be positive (for metals) or negative (for non metals)

EXAMPLES-

Sodium ion- Na^+ , Calcium ion- Ca^{2+} , Aluminium ion- Al^{3+} , Chloride ion- Cl^- , Oxide ion- O^{2-} , Nitride ion- N^{3-} (Valence number of positive or negative charge)

Now write to represent the following ions.

1. Calcium ion
2. Potassium ion
3. Sulphide ion
4. Bromide ion
5. Ferric ion
6. Copper(II) ion
7. Phosphide ion

A. Read your text book chapter 1,2,3 thoroughly and then write exercise questions from each chapter.

B. Read the chapter "structure of the atom" from your text book and write the answer of the exercise questions.

BIOLOGY

Attempt all the Questions/Exercises given below referring the Notes/concepts given in the class:

Short Answer Questions

1. Why are lysosomes known as 'suicide-bags' of a cell?
2. Do you agree that "A cell is a building unit of an organism". If yes, explain why?
3. Why does the skin of your finger shrink when you wash clothes for a long time?

4. A person takes concentrated solution of salt, after sometime, he starts vomiting. What is the phenomenon responsible for such situation? Explain.
5. We eat food composed of all the nutrients like carbohydrates, proteins, fats, vitamins, minerals and water. After digestion, these are absorbed in the form of glucose, amino acids, fatty acids, glycerol etc.
6. If you are provided with some vegetables to cook. You generally add salt into the vegetables during cooking process. After adding salt, vegetables release water. What mechanism is responsible for this?
7. If cells of onion peel and RBC are separately kept in hypotonic solution, what among the following will take place? Explain the reason for your answer.
 - (a) Both the cells will swell.
 - (b) RBC will burst easily while cells of onion peel will resist the bursting to some extent.
 - (c) a and b both are correct.
 - (d) RBC and onion peel cells will behave similarly.
8. Bacteria do not have chloroplast but some bacteria are photoautotrophic in nature and perform photosynthesis. Which part of bacterial cell performs this?
9. How is a bacterial cell different from an onion peel cell?
10. Name the two organelles in a plant cell that contain their own genetic material and ribosomes.
11. Why are lysosomes also known as “scavengers of the cells”?
12. Which cell organelle controls most of the activities of the cell?
13. Which kind of plastid is more common in
 - (a) roots of the plant
 - (b) leaves of the plant
 - (c) flowers and fruits
14. Why do plant cells possess large sized vacuole?
15. How are chromatin, chromatid and chromosomes related to each other?
16. What are the consequences of the following conditions?
 - (a) A cell containing higher water concentration than the surrounding medium
 - (b) A cell having low water concentration than the surrounding medium.
 - (c) A cell having equal water concentration to its surrounding medium.
17. Animals of colder regions and fishes of cold water have thicker layer of subcutaneous fat. Describe why?
18. If a potted plant is covered with a glass jar, water vapours appear on the wall of glass jar. Explain why?
19. Differentiate between voluntary and involuntary muscles. Give one example of each type.
20. Differentiate the following activities on the basis of voluntary (V) or involuntary (I V) muscles.
 - (a) Jumping of frog
 - (b) Pumping of the heart
 - (c) Writing with hand
 - (d) Movement of chocolate in your intestine
21. Water hyacinth floats on water surface. Explain.
22. Which structure protects the plant body against the invasion of parasites?

Long Answer Questions

1. Describe the structure and function of different types of epithelial tissues. Draw diagram of each type of epithelial tissue.
2. Draw well labelled diagrams of various types of muscles found in human body.
3. Give reasons for
 - (a) Meristematic cells have a prominent nucleus and dense cytoplasm but they lack vacuole.
 - (b) Intercellular spaces are absent in sclerenchymatous tissues.
 - (c) We get a crunchy and granular feeling, when we chew pear fruit.
 - (d) Branches of a tree move and bend freely in high wind velocity.
 - (e) It is difficult to pull out the husk of a coconut tree.
4. List the characteristics of cork. How are they formed? Mention their role.
5. Draw a plant cell and label the parts which
 - (a) determines the function and development of the cell
 - (b) packages materials coming from the endoplasmic reticulum
 - (c) provides resistance to microbes to withstand hypotonic external media without bursting
 - (d) is site for many biochemical reactions necessary to sustain life.
 - (f) is a fluid contained inside the nucleus
6. Illustrate only a plant cell as seen under electron microscope. How is it different from animal cell?
7. Differentiate between rough and smooth endoplasmic reticulum. How is endoplasmic reticulum important for membrane biogenesis?
8. In brief state what happens when
 - (a) Dry apricots are left for sometime in pure water and later transferred to sugar solution?
 - (b) A Red Blood Cell is kept in concentrated saline solution?
 - (c) The Plasma-membrane of a cell breaks down?
 - (d) Rheo leaves are boiled in water first and then a drop of sugar syrup is put on it?
 - (e) Golgi apparatus is removed from the cell?

HISTORY & CIVICS

1. Which is known as the supreme law of the country? What does it include?
2. Who was Nelson Mandela? Why was he imprisoned?
3. What does Segregation mean in South Africa? What was African National Congress?
4. What policies were changed by the White Regime in South Africa?
5. Write the significance of 'Constituent Assembly Debates'.
6. Mention any three changes that were brought about in the Constitution of South Africa after 1994.
7. Describe the steps taken to form the Constituent Assembly.
8. What are Constituent Assembly Debates?
9. What is the philosophy of Indian Constitution?
10. Describe how the Indian Constitution has embodied the basic values into institutional arrangements?
11. Explain how did the White minority and the black majority agree to draw up a common constitution for South Africa?
12. Why do we need a constitution?

13. "The familiarity with political institutions of the Colonial rule helped to develop an agreement over the institutional design." Justify the statement.
14. Explain the importance of Institutional design of the Constitution of India.
15. Explain any 5 major ideals enshrined in the Preamble to the Constitution.
16. What kind of inspiration do we get from the Constitution of South Africa?
17. "The Preamble of Indian Constitution Provides a Philosophy and Value of Constitution." Explain any 3 values that you derived from it.
18. Give a brief description about any 2 members of the Constituent Assembly.
19. Which country Constitutional features inspired Indian Constitution makers?
20. Describe the term-
 - Sovereign
 - Republic
 - Fraternity
 - Secular

GEOGRAPHY

- 1) Explain the factors affecting the climate of India?
- 2) What does 'monsoon' imply?
- 3) Write a brief note on the south-west monsoon and its influence on the climate of India?
- 4) Why eastern coastal plains are prone to cyclone?
- 5) Define coriolis force and ENSO.

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