



S.NO	MCQ
1	Area under velocity –time graph represents a physical quantity which has the unit of a) m^2 b) m c) m^3 d) m/s
2	The rocket works on the principle of conservation of a) Momentum b) Energy c) Mass d) Velocity
3	Which of the following is a scalar quantity a) Velocity b) Distance c) Force d) acceleration
4	Unit of density is a) Kg b) m^3 c) Kg/m^3 d) m/s
5	During summer, water kept in an earthen pot becomes cool because of the phenomenon of (a) diffusion (b) transpiration (c) osmosis (d) evaporation
6	Which of the following is not a property of solids? (a) interparticle spaces are minimum (b) definite shape and volume (c) forces of attraction between the particles are maximum (d) particles can move freely within a limited space
7	The process used to separate camphor from salt (a) separating funnel (b) sublimation (c) centrifugation (d) evaporation
8	When dilute sulphuric acid is added to a mixture of iron filings & sulphur powder, it is observed that (a) a brisk reaction takes place without the evolution of gas. (b) a brisk reaction takes place with the evolution of a colourless gas. (c) the yellow colour of sulphur disappears. (d) gas with the smell of rotten egg is evolved.
9	Aditi observed following observations while looking into a permanent slide. I) cells are long and cylindrical ii) Light and dark bands are present. It could be a slide of a. Striated muscle fiber b. smooth muscle fiber c. neuron d. parenchyma cells.
10	Which sub group in plant kingdom produces flowers? a. Angiosperms b. fungi c. mosses d. ferns
	VERY SHORT ANSWER
11	1. What should be the lens magnification when you place the slide under microscope. 2. In a plant cell why is nucleus present on one side?

12	Name the stain used for preparing Animal cell and Plant cell
13	List any two important characteristics of Bryophytes.
14	<p>The questions below consist of statement of an Assertion and Reason. Use the following key to choose appropriate answer:</p> <p>(A) If both assertion and reason are CORRECT and reason is the CORRECT explanation of the assertion. (B) If both assertion and reason are CORRECT, but reason is NOT THE CORRECT explanation of the assertion. (C) If assertion is CORRECT, but reason is INCORRECT. (D) If assertion is INCORRECT, but reason is CORRECT (E) If both assertion and reason are INCORRECT</p> <p>Assertion: Epithelial tissues are the covering or protective tissues Reason: Materials are exchanged at the surface across the epithelial tissue.</p>
15	The volume of 50 g of a substance is 20 cm ³ . Find its density.
16	Name the unbalanced force that stops a ball rolling on the ground.
17	<p>The following questions consist of two statements – Assertion (A) and Reason (R). Answer the question selecting the appropriate option given below.</p> <p>a) Both A and R are true and R is the correct explanation of A b) Both A and R are true but R is not the correct explanation of A. c) A is true but R is false. d) A is false but R is true.</p> <p>Assertion (A): Greater is the mass of the body, greater is the measure of inertia. Reason (R): Mass of the body is a measure of inertia.</p>
18	What happens to the boiling point of water when salt is added to it?
19	What is a pure substance? Give one example
20	Why is ice at 273 K more effective in cooling than water at the same temperature?
	SECTION-B
21	<p>a) Write two differences between distance travelled and displacement. b) The displacement of a moving object in a given interval of time is zero. Would the distance travelled by the object also be zero? Justify your answer.</p> <p style="text-align: center;">OR</p> <p>When will you say a body is in (i) uniform acceleration (ii) non-uniform acceleration? Give one example for each.</p>
22	<p>Define momentum. Give its unit. In a cricket match, why does a player moves his hands backward while catching the ball?</p>
23	<p>a) Define impulse. b) A body starts from rest and rolls down a hill with a constant acceleration. If it travels 400m in 20 seconds, calculate the force acting on the body if its mass is 10Kg.</p> <p style="text-align: center;">OR</p> <p>A motorcar of mass 1200kg is moving along a straight line with a uniform velocity of 90km/h. Its velocity is slowed down to 18km/h in 4 s by an unbalanced external force. Calculate the acceleration and change in momentum. Also calculate the magnitude of the force required.</p>
24	<p>(a) You are given a mixture of mustard oil and water. Name the process that can be used to obtain mustard oil from the above mixture. (b) Write the principle involved in this process.</p>

	(c) Draw a labelled diagram of the above process. OR (a) What is meant by concentration of a solution? (b) A solution contains 50g of sugar in 350 g of water. Calculate the concentration of solution?
25	Compare solution, suspension and colloids in terms of (i) Stability (ii) Filterability (iii) Tyndall effect
26	Carbon dioxide gas was taken in an enclosed cylinder and compressed by applying pressure: (a) which state of matter will we obtain after completion of the process? (b) Name and define this process (d) What is the common name of the product obtained in the above process? OR Write in brief, an activity to show the particulate nature of matter. List any two characteristics of particles of matter.
27	1. Why does Meristematic tissue lack vacuoles? 2. Name the substance present in a. Cork tissue b. Sclerenchyma tissue. OR 1. Write two distinguishing features between the muscle present in the alimentary canal and the limbs of man. 2. State any one difference between bone and cartilage.
28	1. State the reason for the following a. Lysosomes are known as suicidal bags of the cell b. Plant cell shrink when placed in hypertonic solution 2. Mention the use of deep folding in the inner membrane of mitochondria
29	1. Define the term Species . 2. Write any four characteristics of Kingdom Plantae.
30	1. Usually shrubs and herbs grow in open places and are exposed to forceful winds but they do not break. Why? 2. What do you mean by Differentiation?
	SECTION-C
31	a) Derive: $s = ut + \frac{1}{2} at^2$. b) A body starts from rest travels with uniform acceleration. If it travels a distance of 100m in 5 s, find the value of acceleration. OR a) Derive : $v = u + at$ A train running at 108 km/h is brought to a halt in 2 minutes. Calculate the retardation produced by the application of brakes. Calculate the distance the train travels before stopping.
32	a) State Newton's second law of motion. b) Derive the mathematical relation of Newton's second law of motion
33	(a) Is interconversion of three states of matter possible? Illustrate with a schematic diagram. (b) Explain why heat energy is needed to melt a solid. (c) Define latent heat of fusion. OR (a) Difference between evaporation and boiling?(any two)

	<p>(b)List any four factors affecting evaporation (c)Convert the following temperature into Celsius scale: (i)373K (ii) 298K</p>
34	<p>(a)Compare metals and non-metals based on their physical properties(any four points) (b)What are metalloids? Give two example. (c)Identify metals from the following: Boron, aluminium, mercury, carbon</p>
35	<ol style="list-style-type: none"> 1. Why are xylem and phloem known as complex permanent tissues? 2. Write any two characteristics of parenchyma tissues. 3. Draw a well labeled diagram to show the location of the three types of Meristem. 4. What is the function of Apical Meristem? <p style="text-align: center;">OR</p> <ol style="list-style-type: none"> 1. Name the following <ol style="list-style-type: none"> a. Tissue that forms the inner lining of our mouth b. Tissue that connect muscle to bone in human. c. Connective tissue with a fluid matrix. d. Tissue present in the brain. 2. Draw a labelled diagram of a voluntary muscle. <p>State the function of cardiac muscle.</p>
36	<ol style="list-style-type: none"> 1. How do Gymnosperms and Angiosperms differ from each other? 2. Write the basic criteria's for classifying Kingdom Plantae into various groups. 3. Which Kingdom includes unicellular Eukaryotic organisms? Write any one feature of Kingdom Animalia.
End of the Question Paper	