O.P. JINDAL SCHOOL, SAVITRI NAGAR
PERIODIC TEST –I (Round-2) (2026-27)

CLASS-IX **MAX.MARKS-20**
SUBJECT-SCIENCE **MAX.TIME-1 Hour**

General Instruction:-

(i) All questions are compulsory .There are 12 questions in this question paper with some internal choice in section B and C.
(ii) **SECTION –A:** Question numbers 1 to 6 is MCQs, carrying 1 mark each.
(iii) **SECTION –B:** Question numbers 7 to 10 are short answer questions carrying 2 marks each.
(iv) **SECTION –C:** Question numbers 11 and 12 are long questions carrying 3 marks each.

SECTION A

Q1. Slope of velocity – time graph gives 1M
(a)Speed (b)Acceleration
(c)Displacement (d)Distance

Q2. The component of solution present in a larger amount is called 1M
(a)Solute (b)Solvent
(c)mixture (d)Suspension

Q3. Which cell organelle contains digestive enzymes and helps in the digestion of cellular waste ? 1M
(a)Golgi apparatus (b) Endoplasmic reticulum
(c) Nucleus (d) Lysosomes

Q4. A truck came to rest when the brake was applied for 4s to get retardation of 3 m/s^2. Calculate how far the truck would have travelled after applying the brake? 1M
(a)6m (b)12m
(c)24m (d)48m

Q5. The property which distinguishes a colloid is 1M
(a) Always coloured (b) Shows Tyndall effect
(c) Always solid (d) Transparent

Q6. Lipid molecules in the cell are synthesized by: 1M
(a) Golgi apparatus (b) Plastids
(c) Rough-endoplasmic reticulum (d) Smooth endoplasmic reticulum

SECTION B

Q7. Draw a displacement- time graph of $x = 2t^2$ by tabulating a suitable example and using graph paper. 2M

Q8. Why is distillation an effective method for separating a mixture of water and acetone? 2M

Q9. Attempt either **(A)** or **(B):**
(A):
(i) Why do immiscible liquids form two separate layers in a separating funnel? 2M
(ii) What do you think will happen if you make a saturated solution at a higher temperature and cool it slowly?

OR

(B):
You are given a mixture of sand, common salt and naphthalene. Identify and write down various steps of separation techniques.

Q10. Attempt either **(A)** or **(B):** 2M

(A):
(i) Why mitochondria is called as the powerhouse of the cell ?
(ii) Name the cell organelle which has (a) Cristae (b) Cisternae

OR

(B):
(i)What is the importance of cell sap present in vacuoles of plant cell?
(ii)Where does the synthesis of ribosomal subunits take place?

SECTION C

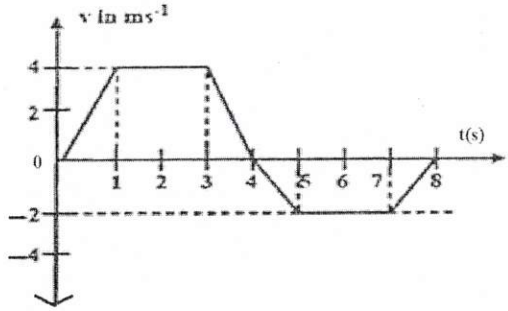
Q11. Attempt either **(A)** or **(B):** 3M

(A):
Prove the following equation of motion graphically,

$$S = ut^2 + \frac{1}{2}at^2$$

OR

(B):
Velocity time graph of an object is given below. Find the ratio of distance to displacement travelled by the particle in 8 second.



Q12. Attempt either **(A)** or **(B):** 3M

(A):
(i)Differentiate between rough and smooth endoplasmic reticulum.
(ii)How is endoplasmic reticulum important for membrane biogenesis ?

OR

(B):
(i)Which type of plastid help in photosynthesis?
(ii)Why are mitochondria able to make their own proteins?
(iii)Why meiosis is known as reductional division?

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