

O.P.JINDAL SCHOOL, SAVITRI NAGAR
PERIODIC TEST –I (Round-1) (2024-25)

CLASS-IX
SUBJECT-SCIENCE

MAX.MARKS-20
MAX.TIME-1HOUR

General Instruction:-

- (i) All questions are compulsory. There are 11 questions in this question paper with internal choice.
- (ii) **SECTION –A:** Question numbers 1 to 6 are 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.
- (v) There are internal choices in one question of section B and two questions of section C
-

SECTION-A

- Q1.** The area under a speed-time graph is represented by the unit
(a) m (b) m² (c) m³ (d) m⁻¹
- Q2.** If the velocity of a body is reducing, it is said to have
(a) Negative acceleration (b) Retardation
(c) Positive acceleration (d) Both (a) and (b)
- Q3.** Which state of matter has the highest kinetic energy?
(a) Solid (b) Liquid
(c) Gas (d) Plasma
- Q4.** The particles of matter are in constant motion. This motion is more in:
(a) Solids (b) Liquids
(c) Gases (d) All states equally
- Q5.** Cell arises from pre-existing cell was stated by
(a) Haeckel (b) Virchow
(c) Hooke (d) Schleiden
- Q6.** The only cell organelle seen in prokaryotic cell is
(a) Lysosomes (b) Ribosomes
(c) Plastids (d) Mitochondria

SECTION-B

- Q7.** The maximum speed of a train is 80 km/h. It takes 10 hours to cover a distance of 400 km. Find the ratio of its maximum speed to its average speed.

OR

A boy leaves his house at 9.30 a.m. for his school. The school is 2 km away and classes start at 10.00 a.m. If he walks at a speed of 3 km/h for the first kilometer, at what speed should he walk the second kilometer to reach just in time?

Q8.(a) Why are gases compressible but not liquids?

(b) Convert 500K into $^{\circ}\text{C}$.

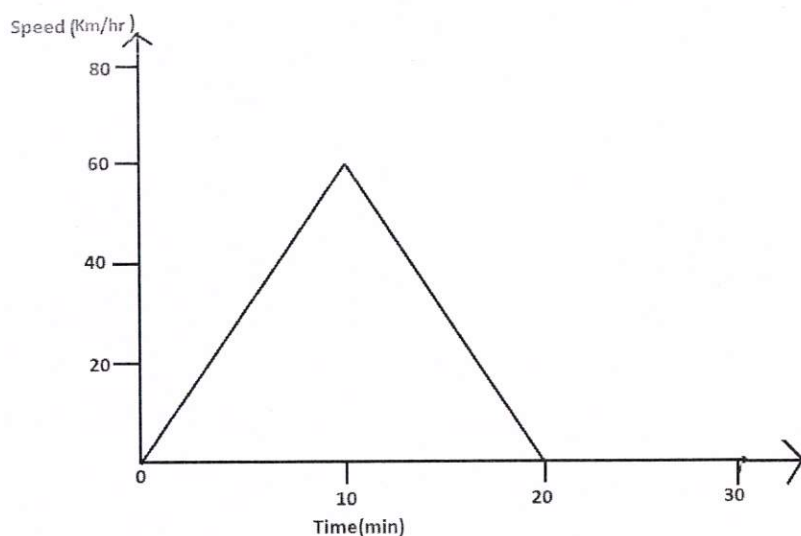
Q9. Substance 'A' has high compressibility and can be easily liquefied. It can take up the shape of any container. Predict the nature of the substance. Enlist three properties of this state of matter.

Q10.(a) Write two points of difference between nuclear region of a bacterial cell and nuclear region of an animal cell.

(b) Which structure present in the nuclear region of a living cell bear genes ?

SECTION-C

Q.11 Figure shows speed –time graph of bus.



- In which period is the bus accelerating?
- In which period is the bus decelerating?
- What is the distance covered during its acceleration?
- What is the average speed in the entire journey?

OR

A car moving along a straight line at a speed of 54 km/h stops in 5 seconds after the brakes are applied.

- Find the acceleration, assuming it to be constant.
- Plot the graph of speed versus time.
- Using the graph, find the distance covered by the car after the brakes are applied.

Q12. Name the three major functional regions of cell. Briefly explain the function of each.

OR

How are chromatin, chromatid and chromosomes related to each other.
