



ANGEL'S PUBLIC SCHOOL

SAMPLE PAPER

PERIODIC TEST – I SESSION 2024 – 25

CLASS – IX

TIME : 2 HRS

SUBJECT : SCIENCE

M.M:40

General Instruction.

- (a) All questions are compulsory.
- (b) Section – A contains ten multiple choice questions of 1 mark each.
- (c) Section–Bcontains eightquestionsof 2 marks each.
- (d) Section – C contains three questions of 3 marks each.
- (e) Section – D contains one questions of 5 mark.

SECTION – A

1. Multiple choice Questions

- (a) Which of the following situations is true and possible?
 - (i) If the velocity of a body is zero, then the acceleration can be non-zero.
 - (ii) A body moving at a constant velocity can have acceleration.
 - (iii) The magnitude of distance and displacement are equal in a circular motion.
 - (iv) All of the above
- (b) A cell will swell up if_____
 - (i) The concentration of water molecules in the cell is higher than the concentration of water molecules in the surrounding medium.
 - (ii) The concentration of water molecules in surrounding medium is higher than water molecules concentration in the cell.
 - (iii) The concentration of water molecules is same in the cell and in the surrounding medium.
 - (iv) Concentration of water molecules does not matter.

(c) In all the three states of water, (i.e. ice, liquid and vapour) chemical composition of water

(i) is very different. (ii) remains same

(iii) sometimes same and sometimes different. (iv) none of these

(d) The numerical ratio of displacement to Distance for a moving object is

(i) always less than 1 (ii) always equal to 1

(iii) always more than 1 (iv) equal or less than 1

(e) Ribosomes are the site of

(i) photosynthesis (ii) respiration (iii) protein synthesis (iv) absorption

(f) The process which occurs when dry raisins are soaked in water is called _____.

(i) osmosis (ii) endosmosis (iii) endocytosis (iv) diffusion

(g) Suppose a boy is moving with a uniform velocity of 10 m/s on a merry-go-round ride. Which of the following is true of the given scenario?

(i) The boy is at rest. (ii) The boy is moving with no acceleration.

(iii) The boy is moving with accelerated motion. (iv) The boy is moving with uniform velocity.

(h) Which of the following phenomena would increase on rising temperature?

(i) Diffusion, evaporation, compression of gases

(ii) Evaporation, compression of gases, solubility

(iii) Evaporation, diffusion, expansion of gases

(iv) Evaporation, solubility, diffusion, compression of gases

(i) What does the slope of the velocity-time graph give?

(i) Speed (ii) Velocity (iii) Acceleration (iv) Displacement

(j) Which one of the following has their own DNA?

(i) Vacuole (ii) Mitochondria (iii) Golgi bodies (iv) Ribosome

SECTION – B

- (a) Under what condition the magnitude of distance and the displacement is equal?
- (b) How does amoeba consume food?
- (c) Why do people sprinkle water on a roof after a hot summer day?
- (d) What is the importance of nucleus?
- (e) Convert the following temperatures:
- (i) -78.0°C to Kelvin (ii) 775 K to $^{\circ}\text{C}$
- (iii) 489 K to $^{\circ}\text{C}$ (iv) 24°C to Kelvin
- (f) What is cell theory? Who formulated it?
- (g) Why do gases diffuse rapidly?
- (h) Why do we see water droplets on the outer surface of a glass containing ice- cold water?

SECTION – C

- (a) A motorcyclist drives from point A to point B with a uniform speed of 30 km/h and returns back to point A with a uniform speed of 20 km/h . Find the average speed of the motorcyclist.
- (b) Draw and label a Plant cell neatly.
- (c) Explain why, a solution of salt in water is considered a mixture and not a compound.

SECTION – D

- (a) Draw velocity-time graph for an uniformly accelerated object. Using velocity-time graph, derive $v^2 - u^2 = 2as$.