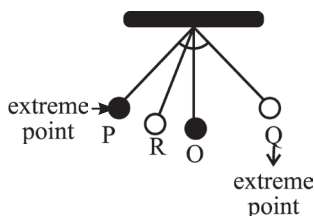


SECTION A : SCIENTIFIC REASONING

1. Cells are the smallest “Building Blocks” which make up the human body. Arrange the following statements in the correct order to describe how the various parts of the body are built up from cells.

- i) Many systems work together to help the functionings of the body properly.
 - ii) Many tissues make up the organs.
 - iii) Many cells make up a tissue.
 - iv) Several organs working together form a system which performs a function.
- a) (i), (ii), (iii), (iv) b) (ii), (i), (iv), (iii)
 c) (iii), (ii), (iv), (i) d) (iv), (iii), (i), (ii)

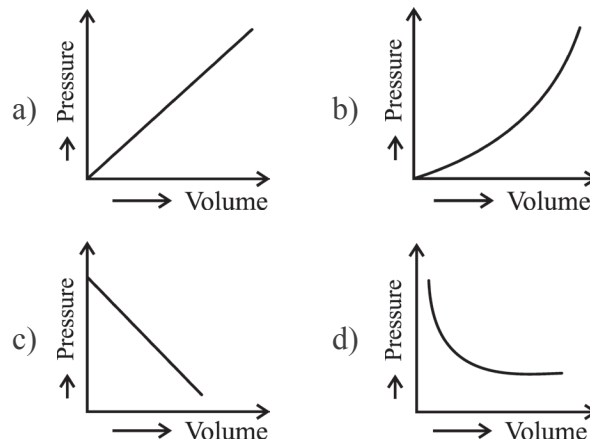
2. A simple pendulum, oscillating with time period T , is shown in the figure. Time taken by the bob to move from P to R is t_1 and R to O is t_2 . Then motion of the bob is



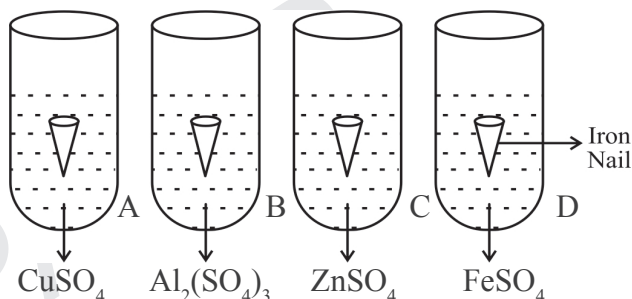
- a) Non-uniform with $T = 4(t_1 + t_2)$
- b) Non-uniform with $T = 2(t_1 + t_2)$
- c) Uniform with $T = 4(t_1 + t_2)$
- d) Uniform with $T = 2(t_1 + t_2)$

3. Which of the given graph shows the relationship between the volume and the pressure of a fixed mass of a gas in the container

at constant temperature?



4. A child dropped iron nail in each test tube and observed the changes occurring in each.



Which of the following statements is correct about the reactions taking place in each test tube?

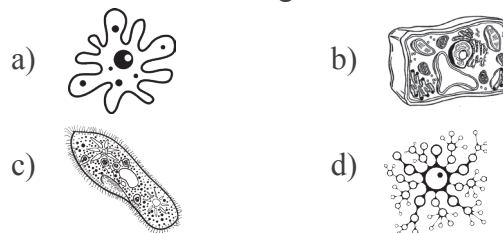
- a) No change is observed in test tube B, C and D.
- b) Solution of test tube ‘A’ becomes greenish.
- c) Zn and Al are more reactive than Fe.
- d) All of these

SECTION B : EVERYDAY SCIENCE

5. The Sun is seen 2 minutes before the actual sunrise and after 2 minutes after the actual sunset. It is because of

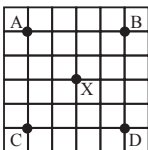
- a) Reflection of light
- b) Atmospheric refraction
- c) Dispersion of light
- d) Both b and c

6. Which of the following cells is taken from onion?



SECTION C : LOGICAL REASONING

7. If A and C interchange their positions and B and D interchange their position, then which point is north-east of X?



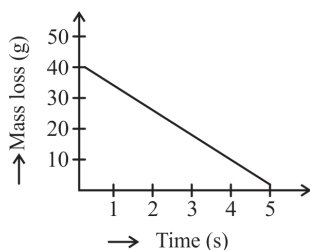
- a) A b) B
c) C d) D

8. If I say, “Sonali is the wife of the son of my grandfather’s only daughter-in-law”, then how is Sonali related to me?

- a) Mother b) Wife
c) Sister-in law d) Sister

SECTION D : BRAINBOX

9. Observe the given graph. It shows the mass loss of a solid substance in a chemical reaction. What is the rate of mass loss of the solid substance?



- a) 200 g/s b) 8 g/s
c) 8 gs d) $\frac{1}{8}$ g/s

10. Aluminium metal is used to make cooking utensils even though it is very high in the reactivity series. Why?

- a) Aluminium has relatively high melting point as compared to other metals.
b) It is a good conductor of heat.
c) It is highly malleable, ductile and good conductor of heat and electricity.
d) It is a good conductor of heat and forms a protective layer of aluminium oxide that prevents further reaction.



ANSWERS

1. (C) 2. (A) 3. (D) 4. (D) 5. (B) 6. (B) 7. (D) 8. (B) 9. (B) 10. (D)