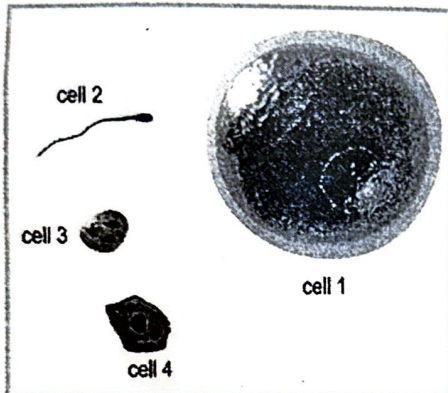


Class-IX
Subject- SCIENCE (086)
General Instructions:

- i) This question paper consists of 10 questions. All questions are compulsory.
- ii) Wherever necessary, neat and properly labelled diagrams should be drawn

Q 1. Shown below are representations of some cells. (1)



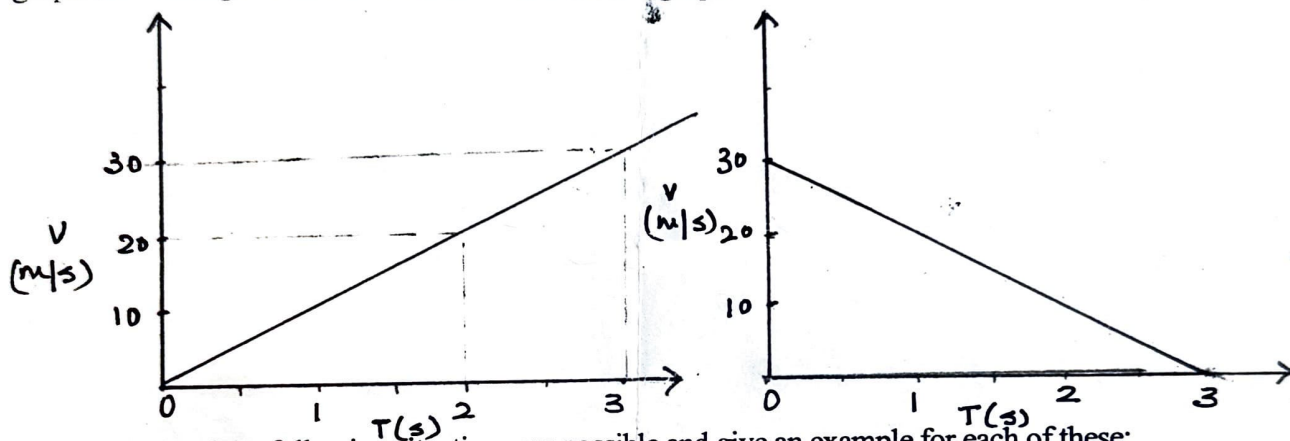
They are all at the same magnification. Which of the following statements about these cells is most likely to be true?

- A) All the cells perform different functions.
 - B) The bigger cells come from larger animals.
 - C) All the cells come from different species of animals.
 - D) The bigger cells can move faster than the smaller cells.
- Q 2.** The unfertilized egg of a hen contains _____. (1)
A) a single cell B) a tissue C) an organ D) an organ system
- Q 3.** The boiling points of diethyl ether and acetone are 35°C and 56°C respectively. Convert them into Kelvin scale. (1)
- Q 4.** What is constant in uniform circular motion-speed or velocity? Justify your choice of answer with a reason. (1)
- Q 5.** If the organization of a cell is destroyed due to some physical or chemical influence, what will happen? (2)
- Q 6.** Ria took two beakers A and B containing hot water and cold water respectively. In each beaker, she dropped a crystal of copper sulphate. She kept the beakers undisturbed. After sometime what will she observe? Why? (2)
- Q 7.** Give reason for the following - (3)
a) Naphthalene balls disappear with time without leaving any solid.
b) A gas occupies more space than a liquid or a solid.
c) A balloon when kept in the sun, bursts after sometime.

Q 8. Soumya was observing live cells of onion peel cells in the Biology laboratory and she observed cell wall, cytoplasm and nucleus clearly. Suddenly her friend who was doing chemistry experiment spilled a few drops of salt water on the slide. After some time Soumya observed the slide and found some changes. (3)

What would have been the change in the live cells of onion peel after adding salt water? Explain your answer. Draw a relevant diagram to show the same.

Q 9. Velocity-time graphs of two cars are shown in the figures given below. (3)
Determine the displacement of the object during the time interval from 2 to 3 seconds in the first graph and during the first 2 seconds in the second graph.



Q 10. State which of the following situations are possible and give an example for each of these: (3)

- an object with a constant acceleration but with zero velocity.
- an object moving with an acceleration but with uniform speed.
- an object moving in a certain direction with an acceleration in the perpendicular direction.

Shipra
Soni