

General Instructions:

1. This question paper consists of four sections A,B,C and D.
2. All the questions are compulsory.
3. Section A: 10 questions of MCQ type and each question carries 1 mark.
4. Section B: 4 Short answer type questions that carry 2 marks each.
5. Section C: 4 Short answer type questions that carry 3 marks each.
6. Section D: 2 Long answer type question that carries 5 marks.
7. Draw a neat labelled diagram wherever necessary.

Section-A

1X10=10 M

1. When a cell divides by mitosis it produces
 - a. two daughter cells
 - b. four daughter cells
 - c. one daughter cell
 - d. three daughter cells
2. Silver nitrate solution is used to study
 - a. Endoplasmic reticulum
 - b. Golgi apparatus
 - c. Nucleus
 - d. Mitochondria
3. The cell organelles involved in forming complex sugars from simple sugars are
 - a. endoplasmic reticulum
 - b. ribosomes
 - c. plastids
 - d. Golgi apparatus
4. When heat is constantly supplied by a burner to boiling water, then the temperature of the water during vaporisation:
 - (a) Rises very slowly
 - (b) Rises rapidly until steam is produced
 - (c) First rises and then becomes constant
 - (d) Does not rise at all
5. The process in which solid is directly converted to vapour state is called — — — —
 - a. vaporisation
 - b. solidification
 - c. deposition
 - d. sublimation
6. A particle is moving in a circular path of radius r. The displacement after half circle would be ____
 - (a) 0
 - (b) 2r
 - (c) πr
 - (d) $2\pi r$
7. A body is moving with a uniform velocity of 20 m/s. After 10 seconds ,its velocity would be
 - (a) 200m/s
 - (b) 20 m/s
 - (c) 30 m/s
 - (d) 10m/s

Directions: Question numbers 8,9 and 10 consists of two statements--Assertion (A) and Reason (R).

Answer these questions by selecting an appropriate option from below:

- a) Both assertion and reason are true and reason is the correct explanation of assertion .
 - b) Both assertion and reason are true but reason is not the correct explanation of assertion .
 - c) Assertion is true but reason is false.
 - d) Assertion is false but reason is true.
8. Assertion : The endoplasmic reticulum which lacks ribosomes is called smooth endoplasmic reticulum
Reason : SER is mainly involved in protein synthesis.
 9. Assertion : The rate of evaporation increases with increase in temperature.
Reason: Increase in temperature decreases the kinetic energy of the particles.
 10. Assertion : An object gradually increasing its speed is said to be accelerated .
Reason : Acceleration is the rate of change of velocity.

