



TEST PAPER: BIOLOGY

Time: 50 Minutes

Class: 9th C.B.S.E.

Max. Marks: 30 Marks

Date: 4th April, 2018

Marking Scheme: Three questions carry 10 marks each. Each question has 3 subparts. Subparts (a) and (b) carry 3 marks each and subpart (c) carries 4 marks.

- Q.1.A. 1. Why the cell is called the structural and functional unit of life? 3
 2. What is Plasmolysis?
 3. Explain how plant cells can withstand much greater changes in the surrounding medium than animal cells.
- B. 1. What is diffusion? 1
 2. Who put forward the Cell Theory? Explain in detail. 2
- C. a) Differentiate (two differences each). 2
 1. Cell wall and cell membrane. 2
 2. Plant and animal cell. 2
- Q.2.A. 1. Explain how the exchange of CO₂ and O₂ takes place in a cell? 2
 2. The flexibility of the cell membrane enables which animal to engulf in food? How? 1
- B. Fill in the blanks. 3
 1. Absorption of water by plant roots is also an example of _____.
 2. _____ suggested that all cells arise from pre-existing cells.
 3. _____ is important in exchange of gases and water in the life of a cell.
 4. The plasma membrane is _____ and is made up of organic molecules called _____ & _____.
- C. a) The three features that almost every cell possesses. 2
 b) Who discovered the cork cells and how? 2
- Q.3.A. Name the following. 3
 1. Two unicellular organisms.
 2. The layer beneath the cell wall of a plant cell.
 3. The plant cell wall is mainly composed of this.
 4. The scientist who coined the term 'protoplasm' for the fluid substance of the cell.
 5. The part of the cell that separates the contents of the cell from its external environment.
 6. A cell is able to live and perform all its functions because of these structures.
- B. Give reason. 3
 1. Resins swell in a hypotonic solution.
 2. Cells shrink in hypertonic solution.
 3. There is no net movement of water between a cell and its surroundings in isotonic solution.
- C. Define osmosis. Explain the terms- Hypertonic, isotonic, hypotonic solutions. 4