



Shree H.N. Shukla College of Science Rajkot

B.Sc. (Sem. IV) (CBCS)

[201]: CELL BIOLOGY

Biochemistry Unit Test Paper-1

[Time: 2:30 Hours]

[Total Marks: 50]

Date: 21/04/2021.

- Instructions:**
1. all questions are compulsory.
 2. The right-side figure indicates total marks of the question.
 3. Draw the figure wherever necessary.
 4. Write answers of all the questions in main answer sheets.

Question-1

[A] Objective type questions (5 question)

[05]

1. Definition of cell.
2. What is the genetic material found in Viruses?
(A) Double stranded DNA (B) Single stranded RNA
(C) Single stranded DNA (D) All of the above
3. What are the prions?
4. What is the genetic material found in Viroid?
(A) Double stranded RNA (B) Single stranded RNA
(C) Single stranded DNA (D) All of the above
5. Mention elements of cytoskeleton.

[B] Answer in brief. Write any [two out of three]

[04]

1. Difference between Prokaryotes vs Eukaryotes.
2. Give brief introduction about Virus and Viroid.
3. Write history of Cell biology.

[C] Answer in detail. Write any [two out of three]

[06]

1. Give difference between plant cells and animal cells.
2. Explain prokaryotic cell and components with diagram.
3. Explain levels of organization in biology with flow chart.

[D] Answer in detail. Write any [two out of three]

[10]

1. Explain plant cell and animal cell in detail with diagram.
2. Write note about components and structure of cytoskeleton.
3. Explain Animal cell in detail.

Question-2

[A] Objective type questions (5 question)

[05]

1. What is the maternal origin of Mitochondria?
2. What are the components found in plant cell wall?
(A) Cellulose (B) Hemicellulose (C) A & B both (D) None of the above
3. Main component of fungal cell wall is _____.
4. What type of molecules are synthesized in Smooth endoplasmic reticulum?
(A) Extra cellular proteins (B) Intra cellular proteins
(C) Lipids (D) All of the above
5. Difference between cytosol and cytoplasm.

[B] Answer in brief. Write any [two out of three]

[04]

1. Difference between Smooth ER vs Rough ER.
2. Write the sequence of cell organelles and components isolated from differential centrifugation.
3. Brief introduction of homogenization.

[C] Answer in detail. Write any [two out of three]

[06]

1. Give difference between different types of plant cells walls.
2. Explain Plasma membrane with diagram.
3. Explain maternal origin of mitochondria.

[D] Answer in detail. Write any [two out of three]

[10]

1. Explain plant cell wall in detail.
2. Write note about Golgi bodies, Lysosome and Microbodies.
3. Explain endosymbiotic theory in detail.