

- All questions are compulsory.
- Figures to Right indicate marks.
- Draw diagram wherever necessary.

Q. I.A. Answer the following questions (any 4)

[8M]

1. Give the different types of RNA present in the eukaryotic cell.
2. Define coacervates.
3. What is a yeast cell?
4. Name the organic compounds formed after Miller's experiment.
5. How was primitive earth's atmosphere?
6. What is panspermia?
7. What do you mean by the term anaerobe?
8. Define prokaryote.

Q. I.B. Answer the following questions in brief (any 2)

[6M]

1. Give a brief account on heterotroph hypothesis.
2. What is spontaneous generation hypothesis/theory?
3. Differentiate between heterotroph and autotroph.
4. Give the evidences supporting RNA world hypothesis.

Q. I.C. Answer the following questions in detail (any 1)

[6M]

1. How was spontaneous generation theory disproved?
2. Differentiate between prokaryotic cell and eukaryotic cell.

Q.II.A. Answer the following (any 4)

[8M]

1. What is peptidoglycan composed of?
2. Define active transport.
3. What are microfilaments?
4. What is osmosis?
5. Give protein present in microtubules and microfilaments.
6. What do you mean by uniport?
7. Give the basic functions of plasma membrane.
8. How are lipids transported through the cell membrane?