



Q3 / A/ Choose the correct answer of the following (Multiple Choice Questions):

14 MARKS

- 1. The nuclear lamina is composed mainly of:**
 - a. Collagens.
 - b. Microtubules.
 - c. Phospholipids.
 - d. Intermediate filaments.
- 2. What is the chemical term for DNA and RNA?**
 - a) Polysaccharides.
 - b) Nucleotides.
 - c) Monomers.
 - d) Polypeptides.
- 3. Which term describes the complex of DNA and proteins in the nucleus?**
 - a) Nucleosome.
 - b) Chromatin.
 - c) Ribosome.
 - d) Nucleolus
- 4. What are the two main outcomes of the cell cycle?**
 - a) DNA replication and transcription.
 - b) Formation of new organelles and cell growth.
 - c) Cell division and the production of daughter cells.
 - d) Synthesis of proteins and lipid membranes
- 5. What is the primary function of vacuoles in cells?**
 - a) DNA replication.
 - b) Energy production.
 - c) Storage.
 - d) Cellular respiration.
- 6. Where are ribosomes located in eukaryotic cells, besides floating in the cytosol?**
 - a) Nucleus.
 - b) Mitochondria.
 - c) Endoplasmic reticulum.
 - d) Golgi apparatus.
- 7. Where is the nucleus often located within a cell?**
 - a) At the cell membrane.
 - b) In the cytoplasm.
 - c) Near the endoplasmic reticulum.
 - d) In the center of the cell.

Q3/ B: Give the following reasons:

6 MARKS

1. The Chloroplasts are green-colored organelle.
2. The second phase in an interphase of the cell cycle called S phase.

Q4/ A: Briefly write about how each of the following functions:

10 MARKS

1. RER and SER membrane.
2. Centrioles.

Q4/ B: Enumerate each the following:

14 MARKS

1. Checkpoints for cell cycle control.
2. Distinct compartments of Structure of Nuclear envelope.

Q4 / C: Give ONE example for each:

6 MARKS

1. A eukaryotic cell with multi nuclei.
2. An organelle contains rRNA molecule type.

Good Luck

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