

Cell Biology

QP Code :14662

(3 Hours)

22

[Total Marks : 80

- N.B. : (1) Question No. 1 is compulsory.
 (2) Attempt any 3 questions out of remaining 5 questions.
 (3) Each question is of 20 marks.
 (4) Figures on right side indicate maximum marks.

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| 1. (a) | Explain life cycle of bacteriophage virus. | 05 |
| (b) | What are components of a plant cell wall? | 05 |
| (c) | Write a short note on osmosis. | 05 |
| (d) | What are different types of tumors? | 05 |
| 2. (a) | Explain mitotic cell division with the help of neat labeled diagrams. | 10 |
| (b) | Explain receptor mediated endocytosis with the help of neat labeled diagrams. | 10 |
| 3. (a) | Write a note on microtubule structure and synthesis at centrosome. | 10 |
| (b) | Explain how blood glucose level increases in response to glucagon and epinephrine. | 10 |
| 4. (a) | What are integrins? Explain their role in formation of focal adhesions and hemidesmosomes. | 12 |
| (b) | Explain structure and function of lysosome. | 08 |
| 5. (a) | Write a note on role of oncogenes in causing Cancer. | 12 |
| (b) | Distinguish between Prokaryotic cell and Eukaryotic cell. | 08 |
| 6. (a) | Explain different types of Ion Channels. | 05 |
| (b) | Write a note on structure of Mitochondrion. | 05 |
| (c) | Write a note on Collagen. | 05 |
| (d) | Distinguish between Necrosis and Apoptosis. | 05 |