

- Q – 2 Attempt ANY SEVEN from the following: (14)**
1. Write the types of Ion channels.
 2. Write the difference between mitochondrial genetic code and universal genetic code.
 3. Differentiate cilia and flagella.
 4. Tabulate the classification of Intermediate filaments.
 5. Explain the role of Calcium in muscle contraction.
 6. Define paracrine and autocrine signals.
 7. Write about calcium-calmodulin complex.
 8. Write the significance of the NF- κ B dependent signaling.
 9. How differentiated neural cells inhibit their neighbour cells to differentiate into neural cells?
- Q – 3 (a) Write an explanatory note on active transport mechanisms. (06)**
(b) Explain the classification of membrane lipids. (06)
OR
(b) Give a detailed account on Endocytosis. (06)
- Q – 4 (a) Explain the structure and dynamic organisation of microtubule. (06)**
(b) Give an overview of the cell cycle. (06)
OR
(b) Write a note on cell junctions. (06)
- Q – 5 (a) Explain in brief the structure and activation of Receptor Tyrosin kinases and signal transduction involving Ras and MAP Kinase. (06)**
(b) Describe the role of cyclic AMP as a second messenger used by G proteins. (06)
OR
(b) Discuss the extrinsic and intrinsic pathways of Apoptosis. (06)
- Q – 6 (a) Write an explanatory note on Wnt/ β -catenin pathway. (06)**
(b) Explain the Smad-dependent signalling pathway activated by TGF- β . (06)
OR
(b) What is Src family? Explain any one cytokine receptors activated signalling pathway. (06)
