

COURSE NAME: CELL BIOLOGY

MAX.MARKS:35

COURSE CODE: 13B11BT112

MAX.TIME: 2 hours

Note: Carrying of mobile phones during examination will be treated as a case of unfair means.**Draw diagrams wherever necessary.**

1. What are membrane proteins? Classify them and write a note on membrane transport proteins. [5MARKS]
2. What is the function of nucleus, endoplasmic reticulum and phospholipids? What is the relation between them and membrane proteins? [5MARKS]
3. What are microtubules? Explain the mechanism of microtubule formation and shrinking. [5MARKS]
4. What is integrin and selectin? How do they assist leukocyte migration in response to chemokines? [5MARKS]
5. Diagrammatically explain the road map of the biosynthetic secretory and endocytic pathway involved in vesicular transport. [5MARKS]
6. Mention the types of cell-cell communication and differentiate apoptosis and necrosis. [5MARKS]
7. What is the effect of
 - a. Stathmin on microtubule polymerization? [1MARKS]
 - b. Thymosin, profiling and gelsolin on actin polymerisation? [3MARKS]
 - c. Calcium on cadherin? [1MARK]