

Roll No.

Total Pages : 2

755101

Mar. 2022

M.Sc. (Life Sciences) Ist SEMESTER

Cell Biology (MLS -101)



Time : 90 Minutes]

[Max. Marks : 25

Instructions :

1. *It is compulsory to answer all the questions (1 mark each) of Part-A in short.*
2. *Answer any three questions from Part-B in detail.*
3. *Different sub-parts of a question are to be attempted adjacent to each other.*

PART-A

1. Comment on the following in brief :



- (a) Symports. (1)
- (b) Donnan equilibrium. (1)
- (c) Integrins. (1)
- (d) Myosin. (1)
- (e) Flagella. (1)
- (f) Non-coding DNA. (1)
- (g) Oncogenes. (1)

- (h) Stem cells. (1)
- (i) Cell surface receptors. (1)
- (j) Significance of meiosis. (1)

PART-B

- 2. (a) Describe the molecular composition of biomembranes. (3)
 - (b) Describe the receptor mediated endocytosis. (2)
 - 3. (a) Mention the functions of lysosomes. (2)
 - (b) Explain the mechanism of vesicular transport. (3)
 - 4. Discuss the molecular approaches to cancer treatment. (5)
 - 5. (a) Discuss the regulators of cell cycle progression. (3)
 - (b) Mention the signalling molecules and their receptors. (2)
 - 6. (a) Explain the synthesis of cellulose fibril. (2)
 - (b) Describe the structure and organization of microtubules. (3)
-