



QP CODE: 25050600



Reg No :

Name :

MSc DEGREE (CSS) EXAMINATION DECEMBER 2025

First Semester

M Sc MICROBIOLOGY

Core Courses - MG030104 - CELL BIOLOGY

2019 Admission Onwards

FA3FB936

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. What do you mean by autophagolysosome?
2. What do you mean by photoreaction centre?
3. Define voltage gated channels.
4. What is the gap junction?
5. Discuss the importance of cyclic AMP in cell signalling.
6. Define neurotransmitter. Give two examples. Comment on their structure .
7. Discuss Transglutaminase 2
8. Discuss the caspases in xenopus.
9. Give a brief account of tumor viruses.
10. Distinguish between an oncogene and tumor suppressor gene.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Explain briefly about cell division in prokaryotes.
12. Which are the major actin binding proteins? Explain.
13. Write a short essay on Components and functions of plasma membrane.
14. "Active transport of small molecules across the membrane is mediated by carrier proteins" substantiate with relevant types.





15. Explain the importance of receptor tyrosine kinases in cell signalling.
16. Discuss in detail interactions between cells.
17. Analyse the importance of apoptosis.
18. Elaborate TP53 network.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. Explain the functions and types of specialized forms of membranes with example.
20. Explain the types of membrane transport.
21. Elaborate metaphase of mitosis and its regulation.
22. Phosphorylation and dephosphorylation of proteins regulate the various cellular activities. Comment.

(2×5=10 weightage)

