

QP CODE: 20101102



Reg No :

Name :

B.Sc. DEGREE (CBCS) EXAMINATION, NOVEMBER 2020

Second Semester

B.Sc Biotechnology Model III

Core Course - BT2CRT03 - CELL BIOLOGY

2017 ADMISSION ONWARDS

6009A676

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. What are non essential elements ? Give examples for it.
2. What is endosymbiosis theory?
3. What are plastids?
4. What are the different forms of carbohydrate in plasma membrane?
5. What are transmembrane proteins?
6. What is osmosis?
7. Comment on chromomere.
8. What is G-banding?
9. Name the types of plastids.
10. What is M phase?
11. What is lymphoma?
12. Comment on GPCRs.

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Give a brief note on the development of cell biology.
14. Explain briefly the universal features of cell.





15. Explain cell - cell signaling of cadherin and integrins with the help of diagrams.
16. Explain general features of connexions.
17. Describe the functions of nucleus.
18. Explain facultative heterochromatin with example.
19. Explain functions of endoplasmic reticulum.
20. Differentiate and explain mitosis and meiosis.
21. Explain the role of cyclins in cell cycle regulation.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Describe in detail the membrane transport mechanisms present in plasma membrane with the help of diagrams.
23. Describe the nucleosome organization with the help of diagrams.
24. Give a detailed account on the cytoskeleton with its diagrams.
25. Differentiate necrosis and apoptosis and explain both processes.

(2×10=20)

