

APRIL 2016**50133/TAP2A**

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer any TEN questions each in 30 words.

1. What are nucleopores? State their function.
2. Give the basis of classification of viruses.
3. What is tight Junction?
4. What are the main functions of plasma membrane?
5. Define antiport.
6. Mention the two types of cell transport.
7. Which tissue has little intercellular material?
8. What is an organized group of cells?
9. Define genome.
10. What are the phases of cell cycle?
11. Comment on the shapes of Prokaryotic cells.
12. List the stages of mitosis.

SECTION B — (5 × 5 = 25 marks)

Answer any FIVE questions each in 200 words.

13. Differentiate between prokaryotic and eukaryotic cells.
14. Briefly describe the structure of eukaryotic cells.
15. What are the morphological, chemical and functional similarities and differences between lysosomes and peroxisomes?
16. Explain Cotransport by Symporters and Antiporters.
17. Comment on cell adhesion.
18. How are cells organized in bone tissue?
19. Differentiate between mitosis and meiosis.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions each in 500 words.

20. How are bacteria classified?
21. What are chloroplasts? What are the main functions of chloroplasts?
22. Explain the fluid mosaic model of biomembrane.
23. Describe the structure and functions of microtubule?
24. Differentiate between prokaryotic and eukaryotic chromosomes.