

*PART A*  
*Answer any TEN questions*

1. Autophagy
2. Oxidative Phosphorylation
3. Peroxisome
4. Microtubule
5. Euchromatin
6. Cell cycle
7. Stem cell
8. Cell motility
9. Nuclear pore
10. Transcription
11. Carcinogenesis
12. Tumor virus

*PART B*  
*Answer any TWO questions*

(2 x 5 = 10)

13. Describe the types and functions of the Endoplasmic reticulum.
14. Write notes on the Polymorphism in lysosomes.
15. What are microtubules? Describe their structure and functions in the cell.
16. Discuss the functions of chloroplast.
17. Describe the structure and function of the nucleolus. How is it formed?
18. Explain cell to cell signaling in relation to hormones and receptors.
19. Differentiate between normal and cancer cell.
20. Discuss the Environmental factors inducing cancer.

*PART C*  
*Answer any TWO questions*

(2 x 10 = 20)

21. Discuss in detail various functions of the Plasma membrane.
22. Describe the ultrastructure of the basal body and centrioles. What are its main functions?
23. Give an account of the morphology, ultrastructure and chemistry of the chromosomes
24. Describe in detail the molecular structure of genes and chromosomes
25. Describe the theories of carcinogenesis

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