

APRIL 2016

55660/MDH4B

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer any TEN questions each in 50 words.

Write short notes on :

1. Electro genic pumps.
2. Apoplast pathway.
3. Symport.
4. Pytol chain.
5. Cytochrome b₆.
6. PSII.
7. Nitratereductase.
8. t-RNA.
9. Auxins
10. Ethylene role in plants.

11. Heat shock proteins.
12. Circadian rhythms.

PART B — ($5 \times 5 = 25$ marks)

Answer any FIVE questions each in 200 words.

13. Briefly describe the passive absorption of mineral salts.
14. Describe the C_4 cycle in higher plants.
15. Explain the process of Glycolysis in plants.
16. Write notes on biological nitrogen fixation.
17. Briefly describe the biosynthesis of terpenes in plants.
18. Describe the physiological role of abscissic acid in higher plants.
19. Illustrate the biotic stress in flowering plants.

PART C — ($4 \times 10 = 40$ marks)

Answer any FOUR questions each in 500 words.

20. Write an essay on ion exchange theory.
21. Give an account on carbon assimilation and its significance in plants.

22. Explain the mechanism of photorespiration and how it differs from plant respiration.
 23. Explain the biosynthesis of any one amino acid in plants.
 24. Define abiotic stress. Describe the salt water stress in higher plants.
 25. Give an account on nastic and tropic movements in plants.
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