

45014

M.Sc. DEGREE EXAMINATION, APRIL 2015.

FOURTH SEMESTER

Botany

Paper IV — PLANT METABOLISM

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page.

1. Thermodynamics.
2. Isoenzymes.
3. Homo polysaccharides.
4. Ramachandran plot.
5. Legume rhizobium.
6. Nitrogen metabolism.
7. Salinity stress.
8. HSPs.

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each Answer should not exceed 6 pages.

9. Discuss the 'High Energy Phosphates as currency of cell'.  
Or
10. Explain the regulation of enzyme activities.
11. Write a brief account on mono, oligo and polysaccharides.  
Or
12. Give an account on structure and reactions of amino acids and peptides.

13. Describe the structure and functions of lipids.

Or

14. Bring out the salient features of sulphate metabolism.

15. Give a detail account on tolerance mechanisms adopted by plants against abiotic stress.

Or

16. Comment on heavy metal stress in plants.

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