

Roll No.

(12/24)

5244

B.Sc. EXAMINATION

(For Batch- 2011 & Onwards)

(Fifth Semester)

BOTANY

Paper I

Plant Physiology

Time : Three Hours

Maximum Marks : 40

Note : Question No. 1 is compulsory. Attempt *four* more questions, selecting *two* questions from each Unit. Support your answers with labelled diagrams wherever necessary.

1. Answer the following questions in short :

- (a) What do you mean by a biocatalyst ? 1
- (b) Define Differentiation. 1
- (c) What are Saturated Fatty acids ? 1

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- (d) What are nodulated plants ? 1
- (e) Define Morphogenesis. 1
- (f) Write full form of PCR. 1
- (g) Define cellular totipotency. 1
- (h) What are conjugated Enzymes ? 1

Unit I

- 2. Discuss the properties of Enzymes in detail. 8
- 3. Define Lipids. Classify them and discuss their functions. 8
- 4. Write notes on the following :
 - (a) Phases of Growth 4
 - (b) Auxines. 4
- 5. Write notes on the following :
 - (a) Competitive Inhibition 3
 - (b) Apical Dominance 2
 - (c) Characteristics of Fats. 3

Unit II

- 6. Give a detailed account of Nitrogen fixation. 8
- 7. Write notes on the following :
 - (a) Vector 4
 - (b) Genomic Library. 4
- 8. Discuss the process of rDNA technology. 8
- 9. What is plant tissue culture ? Discuss its method and applications. 8