

Total No. of Pages:

Register Number:

6132

Name of the Candidate:

M.S.c. DEGREE EXAMINATION - 2011

(BOTANY)

(SECOND YEAR)

(PAPER – X)

240. PLANT PHYSIOLOGY AND BIO-CHEMISTRY

December)

(Time: 3 Hours

Maximum: 100 Marks

SECTION-A

Answer ALL questions

(8×3=24)

Each answer not to exceed FIFTY words

All questions carry equal marks

Explain the following:

1. Water Potential
2. Micro nutrients
3. Anti transpirants
4. Red drop
5. Leg hemoglobin
6. Secondary dormancy
7. Coenzyme
8. Fatty acids

SECTION-B

Answer ALL questions

(6×6=36)

Each answer not to exceed 300 words

All questions carry equal marks

9. (a) Explain SPAC concept.

(OR)

(b) Describe the essentiality of N, P & K.

10.(a) Describe the photolysis of the water

(OR)

(b) Discuss the function of Nif genes in Nitrogen fixation

11.(a) Differentiate C₃ and C₄ pathway

(OR)

(b) Explain the role of Ethylene in plant growth

12.(a) Discuss the role of phytochrome in flowering

(OR)

(b) Explain high energy bonds

13.(a) Describe the classification of enzymes

(OR)

(b) Discuss the allosteric control of enzyme behavior

14.(a) Describe the classification of Carbohydrate

(OR)

(b) Describe the synthesis of fat in plants

SECTION-C

Answer ALL questions

(2×20=40)

Each answer not to exceed 1200 words

All questions carry equal marks

15. (a) Describe the theories and mechanism of ascent of SAP

(OR)

(b) Describe the production of ATP from oxidation of glucose

16.(a) Describe the dark reaction in photosynthesis.

(OR)

(b) Describe the protein synthesis with suitable diagrams.
