

D 31902

(Pages 2)

Name.....

Reg. No.....

**SECOND SEMESTER B.Sc. DEGREE (SUPPLEMENTARY)
EXAMINATION, DECEMBER 2012**

(CCSS)

II Complementary

BO 2C 02—PLANT PHYSIOLOGY AND ECOLOGY

Time : Three Hours

Maximum : 30 Weightage

I. Objective type questions (include multiple choice, fill in the blanks and answer in a single word)

Answer all *twelve* questions :

Choose the correct answer from the bracket :

1 Halophytes are :

- (a) Plants growing in saline soil. (b) Plants growing in water.
(c) Plants growing in dry soil. (d) Plants growing in sandy soil.

2 Damage of ozone layer caused by :

- (a) CO₂. (b) CO.
(c) CFCs. (d) SO₂.

3 Krebs' cycle occurs in :

- (a) Nucleus. (b) Cytoplasm.
(c) Golgi complex. (d) Mitochondria.

4 Which one is a long day plant ?

- (a) Rice. (b) Cabbage.
(c) Coffee. (d) Tobacco.

Fill in the blanks :

5 Transpiration which takes place through leaves is called _____.

6 Circulation of protoplasm in cells is called _____.

7 The release of ammonia from the dead remains of plants and animal by bacteria is called _____.

8 The germination of seeds while the fruits are still attached to the mother plant is called _____.

Turn over

Answer in one word :

- 9 Diffusion.
- 10 Full form of GTP.
- 11 Name one abiotic component of an ecosystem.
- 12 Name of a wildlife sanctuary.

(12 × ¼ = 3 weightage)

II. Short answer questions. (Answer all *nine* questions) :

- 13 What are the biotic factors of an ecosystem ?
- 14 What is Primary succession ?
- 15 What are the root modifications of Vanda ?
- 16 What is Osmosis ?
- 17 What are antitranspirants ?
- 18 What is Emerson enhancement effect ?
- 19 What are phases of growth ?
- 20 What is Photoperiodism ?
- 21 What are the applications of fermentation ?

(9 × 1 = 9 weightage)

III. Short essay or Paragraph questions. Answer any *five* questions from seven :

- 22 What are the techniques to break dormancy of seeds ?
- 23 Describe Glycolysis.
- 24 Describe the role of any one growth hormone.
- 25 Pigment systems and their role in photosynthesis.
- 26 Transpiration pull theory of ascent of sap.
- 27 What are the edaphic factors of an ecosystem ?
- 28 Discuss the anatomical adaptation of Hydrophytes.

(5 × 2 = 10 weightage)

IV. Essay questions. Answer *two* questions from three :

- 29 What is transpiration ? Explain the mechanism of stomatal movement.
- 30 With help of schematic sketches, describe the photophosphorylations of photosynthesis.
- 31 Describe the structure and functions of an ecosystem.

(2 × 4 = 8 weightage)