UG (CBCS) EVEN SEMESTER EXAMINATION, 2023

EDUCATION (B.Sc. B.Ed.)

BOTANY (PASS)

6th Semester

Course No. : BSBP - 603

(Plant Physiology, Bio Chemistry, Ecology & Utilization of Plants)

Full Marks : 50

Pass Marks : 20

Time : 2 hours

The figures in the margin indicate full marks for the questions

1. (a) Describe the active theory of water absorption in plants. 2+2=4

   (b) Describe diffusion. Give the factors regulating diffusion. 5

   (c) Give importance of water in plant life. 1

Or

2. (a) What is transpiration? How it can be regulated? 2+3=5

   (b) Explain the various types of photosynthetic pigments found in plants. 4

   (c) Determine the direction of water cell A has osmotic pressure of 8 bass and turgor pressure of 6 bars. Cell B has osmotic pressure of 9 bars and turgor pressure of 5 bars. 1

(Turn Over)

3. Write notes on:

   (a) Factors affecting phloem transpiration 5

   (b) Non-cyclic photophosphocylation 5

Or

4. Write notes on :

   (a) C-4 pathway 5

   (b) Photorespiration 5

5. (a) Describe Emersons effects. What is meant by absorption and action spectrum? 3+2=5

   (b) Explain the morphological and anatomical adaptations prevent in hydrophytes. 5

Or

6. (a) How soil development access? 5

   (b) Explain properties of water cycle. 5

7. Write note on :

   (a) Aerobic respiration 5

   (b) Krebs cycle 5

Or

8. (a) What are the specification for an element being essential? Explain the deficiency symptoms exhibited by plants with each of the two macro and micro nutrients. 2+3=5

   (b) Describe biological nitrogen fixation. 5

9. Write notes on :

   (a) Plant movements

   (b) What are Auxins? Describe their physiological role.

Or

10. Write note on :

   (a) Seed dormancy 5

   (b) Describe ecosystem. Explain components of aquatic ecosystem. 2+3=5

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