REV-01 MSB/05/10

a. 0

a. Black

c. Green

M.Sc. BOTANY FOURTH SEMESTER ADVANCED PLANT PHYSIOLOGY AND BIOCHEMISTRY

SET

Marks: 20

 $1 \times 20 = 20$

2023/06

MSB-403 B [USE OMR SHEET FOR OBJECTIVE PART]

Full Marks: 70 Duration: 3 hrs. Objective) Time: 30 mins. Choose the correct answer from the following: 1. Sugar translocation is increased by the application of: a. K c. P b. N d. B Photosynthesis is a: a. Reductive process b. Endergonic process d. All of these c. Anabolic process 3. Plastocyanin protein contains: b. Sulphur a. Copper d. Boron c. Cobalt 4. Dormancy occurs due to condition within the dormant organ itself is called: a. Imposed dormancy b. Innate dormancy d. All of above c. Induced dormancy Hill reaction is related to: b. Respiration a. Photosythesis c. Photorespiration d. Photolysis of water What is the temperatue of vernalization? a. 0-6°c b. 0-10°c c. 10-15°c d. 0-2°c 7. Off season flowering in plants is positive by giving treatment of: b. Vernalizationd. Thermopeiodism a. Ptotoperiodism c. Both a and b In which form nitogen is available for plant? a. Nitrate b. Nitrite d. Both b and c c. Nitrogen Water potential of chemically pure water is:

10. The light in which maximum photosynthesis occurs is:

b. 0.5

b. Red

d. Blue

11.	Warburg effect is related to: a. Carbon di oxide c. Respiration		Oxygen Hydrogen sulphide
12.	The light reaction occurs in: a. Stroma c. Grana		Whole chloroplast Both a and b
13.	Which of the following growth hormone pro a. IAA c. ABA	b.	otes femaleness? GA3 Cytokinin
14.	Which of the following growth hormone inc a. IAA c. ABA	b.	e bud dormancy? GA3 Ethylene
15.	Phytochrome is used in: a. Germination c. Flowering		Transpiration All of these
16.	Which nutrient is evolved in chiorophyll str a. Mn c. Mg	b.	
17.	Major limiting factor in C3 plants is: a. Light c. Temperature		Carbondioxide All of these
18.	All cytokinins are derivatives of: a. Adenin c. GA3		Guanines Uracil
19.	In which cell organelle, PEP carboxylation is a. Bundle sheath cell c. Mesophyll cell	b.	king place in C4 plants? Chlorophyll cell None of these

20. A hypotonic solution means:a. Weak solutionc. Both a and b

b. Strong solutiond. Higher sugar containing solution

(<u>Descriptive</u>)

Time: 2 hr. 30 mins. Marks: 50 [Answer question no.1 & any four (4) from the rest] 10 1. Write the differences between C_3 and C_4 pathways of carbon fixation. 4+6=10 2. What is antagonism and synergism of ion? Describe the mechanism of ion uptake in plants. 5+5=10 3. Explain the role of ehylene and cytokinin. 4+6=10 4. What is acid growth effect? Describe the physiological role of auxin. 2+8=10 5. What is dormancy? Describe the causes of dormancy. 2+8=10 What is photoperiodic induction? Explain the role of phytochrome in 7. Describe the Physiology of germination. 10 8. What is red drop? Describe the photorespiration. 4+6=10

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