

SUBJECT CODE: 15BT/AC/GB24

B. Sc. DEGREE EXAMINATION, APRIL 2018
BRANCH VI(A) – ADVANCED ZOOLOGY AND BIOTECHNOLOGY
SECOND SEMESTER

COURSE : ALLIED – CORE
PAPER : GENERAL BOTANY – II
TIME : 3 HOURS
MAX. MARKS: 100

SECTION – A

ANSWER ALL QUESTIONS

I. CHOOSE THE CORRECT ANSWER: (5 x 1 = 5)

1. Which type of plant tissue is an active site of cell division?
a. Meristematic Tissue b. Epithelial Tissue c. Permanent Tissue d. Connective Tissue
2. Cycas ovule is
a. Anatropous b. Orthotropous c. Hemitropous d. Camphyotropous
3. Artificial or Synthetic Auxin is
a. Indole-3-Acetic Acid b. Indole-3-Pyruvic Acid
c. 2,4-Dichloro Phenoxy Acetic Acid d. Indole-3-Fathanol
4. Kranz-Anatomy is present in
a. C₂ Plants b. C₃ Plants c. C₄ Plants d. CAM
5. Which chemical is used in Mushroom Cultivation to reduce moisture in spawn?
a. Calcium bi-carbonate b. Ammonium sulphide
c. Calcium carbonate d. Sodium carbonate

II. FILL IN THE BLANKS: (5 x 1 = 5)

6. MS medium stands for
7. The enzyme involved in the first major step of carbon fixation in Photosynthesis
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8. Florigen is responsible for the in plants.
9. Plant hormone which induces fruit ripening is
10. *Funaria* belongs to class.

III. STATE WHETHER TRUE OR FALSE: (4 x 1 = 4)

11. Cycas wood is manoxylic.
12. Photorespiration takes place in Chloroplast, Peroxisomes, Cytoplasm and Mitochondria.
13. ABA plays major role in the induction of dormancy in seeds.
14. Liverworts lack well-developed vascular tissues.

IV. MATCH THE FOLLOWING (4 x 1 = 4)

- | | | |
|----------------------|---|--------------|
| 15. <i>Funaria</i> | - | IAA |
| 16. Glycolysis | - | Cytoplasm |
| 17. Krebs's Cycle | - | Peristome |
| 18. Apical dominance | - | Mitochondria |

IV. ANSWER ANY SIX, EACH ANSWER SHOULD NOT EXCEED 50 WORDS
(6 x 3 =18)

- 19. Gemma
- 20. PEP
- 21. Red Drop
- 22. Richmond Lang Effect
- 23. Wet Sterilisation
- 24. Flower arrangement
- 25. Florigen
- 26. Parthenocarpy
- 27. Bulbils

SECTION – B

ANSWER ANY FOUR IN 200 WORDS EACH. DRAW DIAGRAMS WHEREVER NECESSARY
(4 x 6=24)

- 28. Enumerate the salient features of Gymnosperms.
- 29. Describe Bonsai technique.
- 30. What is non-cyclic photo phosphorylation and its significance?
- 31. Graphical representation of Kreb's cycle.
- 32. Write a short note on the cultivation of Oyster mushroom.
- 33. Give an account on Photoperiodism with suitable examples.

SECTION – C

ANSWER ANY TWO QUESTIONS IN 1000 WORDS EACH. DRAW DIAGRAMS WHEREVER NECESSARY
(2 x 20=40)

- 34. Elucidate the detailed life cycle of *Adiantum* with suitable diagrams.
- 35. Explain Calvin cycle.
- 36. Describe the various sterilisation methods used in the Plant Tissue Culture.
- 37. Discuss in detail the physiological role of Plant Growth Regulators and its practical applications.
