

B. Sc. DEGREE EXAMINATION, APRIL 2019
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)

- Which of the following is called living fossil?
a) Ephedra b) Pinus c) Cycas d) Ginkgo
- The End Product of Glycolysis is
a) Pyruvic Acid b) Acetic Acid c) Oxalo Acetic Acid d) Phosphoglyceric Acid
- Phytochrome is involved in
a) Phototropism b) Photoperiodism c) Photorespiration d) Geotropism
- Defoliation is commonly practiced in
a) Jasmine b) Chrysanthemum c) Rose d) Petunia
- Which one of the following media is most commonly used in plant tissue culture?
a) Whites medium b) B5 medium c) Nitsch medium d) MS medium

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

- Adiantum* belongs to the class _____.
- Dark reaction takes place in _____ of chloroplast.
- The plant hormone that helps in breaking the dormancy of plants is _____.
- Gerbera* is widely used as _____.
- Oyster mushroom is species of _____.

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

- Gymnosperms do not have naked ovules.
- The first stable compound produced in Calvin cycle is 3-Phosphoglyceric Acid.
- Long Day plants are those that require less than 12hrs of daylight for flowering.
- Freezing is a method for increasing the shelf life of cut flowers.

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

- Maiden hair fern a) Kranz anatomy
- C₄ plants b) *Volvariella*
- Florigen c) *Adiantum*
- Paddy straw mushroom d) Flowering hormone

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

19. Secondary Protonema in *Funaria*.
20. Cycas male cone
21. Red drop
22. Phosphorescence
23. Vernalization
24. ABA.
25. Bonsai.
26. Ikebana?
27. Totipotency.

SECTION – B**ANSWER ANY FOUR IN 200 WORDS. DRAW DIAGRAMS WHEREVER NECESSARY****(4 x 6=24)**

28. Describe the salient features of Bryophytes.
29. Differentiate cyclic and non-cyclic photophosphorylation.
30. Draw the flowchart for Glycolysis.
31. Explain Photoperiodism.
32. Explain different types of Bonsai styles.
33. Briefly explain the sterilization techniques in plant tissue culture.

SECTION – C**ANSWER ANY TWO QUESTIONS IN 1000 WORDS. DRAW DIAGRAMS WHEREVER NECESSARY****(2 x 20=40)**

34. Explain in detail the life cycle *Cycas*.
35. Give an account of Calvin cycle.
36. Give the schematic representation only of Krebs's cycle and oxidative electron transport chain.
Add note on its energy budget.
37. Give an account on the cultivation of Button mushroom.
