

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted from the academic year 2008-09 & thereafter)
SUBJECT CODE: BT/AC/GB23

B. Sc. DEGREE EXAMINATION, APRIL 2010
BRANCH VI(A) – ADVANCED ZOOLOGY AND BIOTECHNOLOGY
SECOND SEMESTER

COURSE : ALLIED – CORE
PAPER : GENERAL BOTANY – II
TIME : 2 ½ HOURS
MAX. MARKS: 100

SECTION – A

ANSWER ALL QUESTIONS

I CHOOSE THE CORRECT ANSWER : (20 x 1 = 20)

1. Citrus canker is caused by
a) *Cercospora sp* b) *Fusarium sp* c) *Xanthomonas sp*.
2. Pyruvic Acid is the end product of
a) Kreb's cycle b) Glycolysis c) Calvin Cycle
3. Growth Promoting Substance is
a) Abscissic acid b) Ethylene c) Auxin
4. Well known medium for plant tissue culture
a) MS b) CHU IO c) PDA
5. The capsule of *Funaria* has a cap known as
a) Apophysis b) Operculum c) Protonema
6. Auxin promotes
a) Rooting b) Abscission c) Fruit ripening

II FILL IN THE BLANKS:

7. Photosynthesis is an _____ process.
8. _____ ATP molecules are synthesised during aerobic respiration.
9. _____ is a Floral Hormone.
10. *Adiantum* is popularly called _____.
11. _____ coined the term totipotency.
12. Coralloid root of *Cycas* has _____ in the cortical zone.

III STATE WHETHER TRUE OR FALSE:

13. During respiration CO₂ is liberated out.
14. Pteridophytes are the first land plants.
15. Mitochondria is called as the power house of the cell.
16. *Funaria* is called as shoe flower.
17. Light reaction takes place in the stroma of the chloroplast.
18. Gibberellin suppress the growth of axillary bud.
19. Ethylene promotes cell division in plants.
20. Coralloid root is present in *Cycas*.

IV ANSWER ANY SIX, EACH WITH 50 WORDS: (6 x 3 =18)

21. Emasculation
22. Vegetative reproduction of *Funaria*
23. Photoperiodism
24. Transfusion tissue
25. Bakane disease
26. Explant
27. Corolloid root.
28. Anaerobic respiration
29. Photolysis of water

SECTION - B**V ANSWER ANY FOUR IN 200 WORDS EACH: (4 x 8 =32)**

30. List out the practical applications of Auxins.
31. Explain the reactions of Glycolysis.
32. With a neat sketch, describe the L.S. of *Funaria* capsule.
33. Draw and describe the anatomy of *Cycas* Rachis - T.S.
34. What is seed dormancy? What are its causes?
35. List the steps involved in Hybridisation adding a note on each.

SECTION - C**VI ANSWER ANY TWO IN 800 WORDS EACH: (2 x 15 =30)**

36. Trace out the path of carbon in C₃ plants (calvin cycle)
37. Write in detail about the Causal organism, Symptoms and control measures of "Tikka disease of Groundnut".
38. Describe the sexual reproduction in *Adiantum*.
39. Discuss on "In vitro culture" Technique and add a note on its significance.
