

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2011 – 12 & thereafter)

SUBJECT CODE: 11BT/AC/GB13

B. Sc. DEGREE EXAMINATION, NOVEMBER 2012
BRANCH VI (a) – ADVANCED ZOOLOGY AND BIOTECHNOLOGY
FIRST SEMESTER

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

SECTION – A (36 marks)
(18 x 1 = 18 marks)

(I) CHOOSE THE CORRECT ANSWER: (5 X 1 = 5 MARKS)

1. Synandrous type of androecium is present in
a. Annonaceae b. Cucurbitaceae c. Amaranthaceae
2. Secondary vascular tissues are produced by-----
a. cambium b. apical meristem c. procambium
3. ----- is a blue green algae
a. *Nostoc* b. *Chara* c. *Sargassum*
4. Citrus canker is caused by-----
a. fungus b. algae c. bacterium
5. Which of the following produces basidiocarp-----
a. Polyporus b. *Rhizopus* c. *Aspergillus*

(II) FILL IN THE BLANKS: (5 X 1 = 5 MARKS)

6. The primary xylem in a dicot stem is _____.
7. Nucule is the sex organ of _____.
8. Fungal spore produced at the tips of the hypha are called _____.
9. Air bladders are present in the alga _____.
10. Tikka disease of ground nut is caused by the fungus _____.

(III) STATE WHETHER THE FOLLOWING STATEMENTS ARE TRUE OR FALSE: (4 X 1 = 4 MARKS)

11. *Sargassum* is a sea weed.
12. Woody dicotyledon roots show secondary growth.
13. Natural system of classification was proposed by Bentham and Hooker.
14. Sporangiospores are produced by *Aspergillus*.

(IV) MATCH THE FOLLOWING:**(4 X 1 = 4)**

- | | |
|-------------------|------------------------------|
| 15. Annonaceae | a. <i>Achyranthes aspera</i> |
| 16. Amaranthaceae | b. <i>Cucumis sativus</i> |
| 17. Cucurbitaceae | c. <i>Mentha spicata</i> |
| 18. Lamiaceae | d. <i>Polyalthia</i> |

(V) WRITE IN 30 WORDS. ANSWER ANY 6 OF THE FOLLOWING**(6 x 3 = 18)**

19. Inflorescence of Arecaceae.
20. Three economically important plants of Cucurbitaceae.
21. Vascular bundle
22. Conidiophore
23. Coenocytic
24. Fragmentation
25. Heterocyst
26. Receptacles
27. Bordeaux mixture

SECTION – B**ANSWER ANY FOUR QUESTIONS. EACH ANSWER NOT TO EXCEED 200 WORDS. DRAW DIAGRAMS WHEREVER NECESSARY.****(4 x 6 = 24)**

28. Describe the salient features of Annonaceae.
29. Draw the anomalous structure of the stem of *Nyctanthus*.
30. Describe briefly the anatomy of the leaf of *Sargassum*.
31. With suitable sketches describe the T.S of the Basidiocarp of *Polyporus*.
32. Describe the structure of the globule of *Chara*.
33. Name the causal organism and describe the methods of control of Citrus canker.

SECTION – C**ANSWER ANY TWO QUESTIONS. EACH ANSWER NOT TO EXCEED 1000 WORDS. DRAW DIAGRAMS WHEREVER NECESSARY.****(2 x 20 = 40)**

34. Give a detailed account on Apocynaceae.
35. Describe the secondary growth in a Dicot stem.
36. Describe the causal organism, symptoms and methods of control of Tikka disease.
37. Give an account of the structure and reproduction of *Rhizopus*.
