

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

SUBJECT CODE: 11BT/AC/GB13

B. Sc. DEGREE EXAMINATION, NOVEMBER 2013
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)

- Hooded anther is present in
a) Annonaceae b) Arecaceae c) Lamiaceae
- The vascular tissues in dicot root are
a) Radial and Endarch b) Conjoint and Exarch c) Radial and Exarch
- Receptacles are found in
a) *Chara* b) *Nostoc* c) *Sargassum*
- Rhizopus* multiplies by the production of
a) Zoospores b) Conidiospores c) Sporangiospores
- Tikka disease of ground nut is caused by
a) *Xanthomonas* b) *Puccinia* c) *Cercospora*

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

- Hour glass shaped stigma is present in
- is the outermost covering of the root.
- The prokaryotic alga having heterocyst is.....
- Fungi are in nutrition.
- Citrus canker bacteria can enter through.....

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

- Natural system of classification was given by Bentham and Hooker.
- Vascular bundles are scattered in Dicot Stem.
- The study of algae is known as Mycology.
- Plants infected with citrus canker have characteristic lesions on leaves, stems and fruit.

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

- | | |
|-------------------------------|---------------------|
| 15. Betel palm | - <i>Sargassum</i> |
| 16. Inverted cortical bundles | - <i>Rhizopus</i> |
| 17. Marine algae | - <i>Nyctanthus</i> |
| 18. Black mold | - <i>Areca</i> |

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

19. Gynoecium of Arecaceae.
20. Casparian thickenings.
21. Heterocyst
22. Basidiospores
23. Verticillaster
24. Control measures for Bacterial disease
25. Medullary bundles in Boerhaavia
26. Corolla of Lamiaceae
27. Air bladder of Sargassum

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 Apocynaceae.
29. Explain the secondary growth in a dicot Stem.
30. Give an account of globule in *Chara*.
31. Comment on the asexual reproduction of *Aspergillus*.
32. Describe Citrus Canker.
33. List out the economically important plants of Amaranthaceae.

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

34. Give an outline of Bentham and Hooker's system of classification.
35. Describe the characteristic features of the family cucurbitaceae. List the plants of economic importance.
36. With the help of suitable diagrams, describe the life cycle of *Sargassum*.
37. Write an essay on Tikka disease of Ground nut.
