

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2008-09 & thereafter)

SUBJECT CODE: BT/AC/GB13

B. Sc. DEGREE EXAMINATION, NOVEMBER 2009
BRANCH VI (a) – ADVANCED ZOOLOGY AND BIOTECHNOLOGY
FIRST SEMESTER

COURSE : ALLIED – CORE

PAPER : GENERAL BOTANY-I

TIME : 2 ½ HOURS

MAX.MARKS:100

SECTION – A

ANSWER ALL QUESTIONS

(20 x 1 = 20)

I. FILL IN THE BLANKS

(5 x 1 = 5)

1. *Cocos nucifera* belongs to the family _____.
2. Milky latex is present in the family -----
3. The female sex organ in *Chara* is known as _____ .
4. The fruit body of *Polyporus* is _____.
5. Medullary bundles are seen in _____

II. MATCH THE FOLLOWING

(5 x 1 = 5)

- | | |
|--------------------|------------------|
| 6. Hooded anther | bread mould |
| 7. Rhizopus | Cucurbitaceae |
| 8. Tendril climber | <i>Sargassum</i> |
| 9. Receptacle | mushroom |
| 10. Spawn | Annonaceae |

III. ANSWER TRUE OR FALSE

(5 x 1 = 5)

11. In *Chara* the main axis shows distinct nodes and internodes.
12. Bisexual flower is seen in Cucurbitaceae.
13. Sexual reproduction is absent in Cyanophyceae.
14. *Sargassum* is a fresh water alga.
15. The art of Bonsai originated in Japan.

IV. CHOOSE THE CORRECT ANSWER

(5 x 1 = 5)

16. Verticillaster type of inflorescence is found in
a) Annonaceae b) Lamiaceae c) Amaranthaceae d) Cucurbitaceae
17. Prokaryotic cell structure is seen in
a) Chlorophyceae b) Phaeophyceae c) Cyanophyceae d) Rhodophyceae
18. Cryptoblasts are seen in
a) *Nostoc* b) *Chara* c) *Sargassum* d) *Chlorella*
19. *Aspergillus* belongs to the class
a) Ascomycetes b) Basidiomycetes c) Oomycetes d) Zygomycetes
20. Zygospore is formed in
a) *Rhizopus* b) *Polyporus* c) *Albugo* d) *Agaricus*

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

21. Merits of **Bentham** and **Hooker** system of classification
22. Spike
23. Hypogynous flower
24. Gynoecium of Cucurbitaceae
25. Fruits of Annonaceae
26. Bicollateral vascular bundle
27. Air bladder
28. Bulbils
29. Phycobilin

SECTION – B

ANSWER ANY FOUR QUESTIONS. EACH ANSWER NOT TO EXCEED 200 WORDS.
(4 x 8 = 32)

30. Enumerate the salient features of Arecaceae.
31. Elucidate the floral characters of Lamiaceae
32. Describe the method of asexual reproduction in *Aspergillus*.
33. Describe the sex organs of *Chara*
34. With a help of a diagram describe the structure of female conceptacle in *Sargassum*.
35. Describe the structure of fruit body in *Polyporus*.

SECTION – C

ANSWER ANY TWO QUESTIONS. EACH ANSWER NOT TO EXCEED 1000 WORDS.
(2 x 15 = 30)

36. Describe the structure and reproduction of *Nostoc*.
37. Describe the secondary growth in dicot stem
38. Describe the characteristic features of Apocynaceae, Add a note on any 2 economically important plants belonging to this family.
39. Write an essay on Bonsai technique.
