

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086  
(For candidates admitted in during the academic year 2015 – 16)

SUBJECT CODE: 15BT/AC/GB14

B. Sc. DEGREE EXAMINATION, NOVEMBER 2015  
BRANCH VI (a) – ADVANCED ZOOLOGY AND BIOTECHNOLOGY  
FIRST SEMESTER

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

SECTION – A (18 x 1 = 18 marks)

Choose the correct answer: (1 x 5 = 5)

- Synandrous means  
a. anthers fused but filaments free b. stamens attached to petals c. stamens fused with gynoecium d. anthers and filaments fused
- Lateral roots in dicots arise from  
a. pericycle b. endodermis c. cortex d. epidermis
- Oospore is the fertilized part of  
a. *aspergillus* b. *nostoc* c. *chara* d. *sargassum*
- Wood rot is caused by  
a. *colleterotrichum* b. *polyporous* c. *rhizopus* d. *aspergillus*
- Cercospora* causes  
a. citrus canker b. red rot of sugarcane c. tikka disease d. mucormycosis

Fill in the blanks: (1 x 5 = 5)

- The inflorescence in Areaceae is \_\_\_\_\_
- \_\_\_\_\_ traverses the xylem, phloem through cambium in secondary dicot root.
- \_\_\_\_\_ forms phellem towards outside and phelloderm towards inside.
- Sexual reproduction in *chara* is \_\_\_\_\_
- The formation of compact globular mass of hyphae during the conidial formation in *cercospora* is called \_\_\_\_\_

State whether true or false: (1 x 4 = 4)

- Aggregation of berries is developed from the fusion of flowers.
- Passage cells of endodermis remains opposite to protoxylem.
- Life cycle in *sargassum* is diplontic.
- Trichogyne is the elongated part of antheridium in *aspergillus*.

Match the following : (1 x 4 = 4)

- Verticillaster a. *Colleterotrichum*
- Zygosporangium b. *Nostoc*
- Conidia c. *Rhizopus*
- Endospore d. *Ocimum*

**(V) ANSWER ANY SIX QUESTIONS IN 50 WORDS EACH****(6 x 3 = 18)**

19. Give a brief note on Genera Plantarum
20. Describe cyathium inflorescence
21. Write on fascicular and interfascicular cambium.
22. What are the characteristic features of radial vascular bundle
23. What are conceptacles ?
24. Describe a trichome
25. Mention the importance of clamp connections
26. What is cleistothecium
27. Describe acervulus

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

28. Write the floral characters of Apocyanaceae.
29. Describe the merits and demerits of Bentham and Hookers system of classification
30. Tabulate the differences between a dicot stem and a root
31. Describe the habit of *sargassum*
32. How does aspergillus reproduces asexually?
33. Give a brief account on the causal agent, symptoms and control measures 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. Enumerate the vegetative, floral characters and economic importance of Lamiaceae
35. Explain secondary growth in dicot stem
36. Describe the morphology and vegetative reproduction in *Chara*
37. Explain the life cycle of *Rhizopus*

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