

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086  
(For candidates admitted in during the academic year 2015 – 2016 & thereafter)

SUBJECT CODE: 15BT/AC/GB14

B. Sc. DEGREE EXAMINATION, NOVEMBER 2017  
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)

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

- In cyanobacteria the nucleus is surrounded by  
a) Single layered membrane b) Double layered membrane c) No membrane d) Three layered membrane
- In Lamiaceae the fruits are usually.  
a) Follicle b) Capsule c) Nutlets d) Achene
- Basidiospores are  
a) Exogenous spores b) Endogenous spores c) Intracellular spores d) Intercellular spores
- Citrus canker is caused by  
a) *Xanthomonas citri* b) *Xanthomonas campestris* c) *Xanthomonas melonis*  
d) *Xanthomonas frageriae*
- The ground tissues occurring in between the vascular bundles is called  
a) Xylem b) Phloem c) Pericycle d) Medullary ray

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

- The innermost layer of the cortex in young dicot stem is \_\_\_\_\_
- The mycelium of *Cercospora* is \_\_\_\_\_
- In *Leucas aspera* the type of inflorescence is \_\_\_\_\_
- The stonewort belongs to the order \_\_\_\_\_
- The cleistothecium is covered by a \_\_\_\_\_ layer.

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

- The symptoms of red rot of sugarcane appear on all parts of the plants.
- The female sex organ of *Aspergillus* is ascogonium .
- Synandrous and sinuous anthers are common in the family of Cucurbitaceae .
- The protoxylem is the first formed part of the xylem and contains small amount of trachery elements and much parenchyma.

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

- |                           |   |                 |
|---------------------------|---|-----------------|
| 15. Pericycle             | - | (a) Haploid     |
| 16. Ascospores            | - | (b) 3 membrane  |
| 17. Sargassum             | - | (C) No membrane |
| 18. Cyanobacteria nucleus | - | (d) Haplontic   |

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

19. Control measures of Tikka disease
20. Bread mould.
21. Receptacle
22. Cleistothecium
23. Akinetes.
24. Vascular bundle.
25. Palisade parenchyma.
26. Compound spadix .
27. Cyathium.

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

28. Discuss the salient features of Annonaceae.
29. Describe the primary structure of dicot root.
30. Give an account of sexual reproduction in Sargassum.
31. Describe the structure and reproduction of *Colletotrichum falcatum*.
32. Discuss the characteristics features of fungi.
33. Enumerate the economic importance of Euphorbiaceae.

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

34. Discuss the outline of Bentham and Hooker's system of classification.
35. Describe the secondary growth of typical dicot stem.
36. Briefly explain the life cycle of Aspergillus.
37. Describe the structure of sex organs of Chara.

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