

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086  
(For candidates admitted from the academic year 2011 - 12)

SUBJECT CODE: 11BT/AC/GB23

B. Sc. DEGREE EXAMINATION, APRIL 2012  
BRANCH VI(A) – ADVANCED ZOOLOGY AND BIOTECHNOLOGY  
SECOND SEMESTER

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

SECTION – A

ANSWER ALL QUESTIONS

I. CHOOSE THE CORRECT ANSWER: (5 x 1 = 5)

- The Dark reaction takes place in  
a) Chloroplast      b)Nucleus      c)Mitochondria
- Corrolloid roots are found in  
a)*Funaria*      b)*Adiantum*      c)*Cycas*
- Absence of vascular tissue in  
a)Pteridophytes      b)Bryophytes      c)Gymnosperms
- Pruning in Bonsai will cause the trunk to  
a)Wilt      b)Thicken      c)Weaken
- The best time to harvest cut flower is during  
a)Early morning      b)Latemorning      c)After noon

II. FILL IN THE BLANKS: (5 x 1 = 5)

- In *Cycas* the vascular bundles in petiole are in.....shape.
- ..... is a Japanese art using miniature trees grown in containers.
- The dominant phase in Bryophyte is.....
- The most commonly used medium for tissue culture is.....
- The splitting of water molecule during photosynthesis is called.....

III. STATE WHETHER TRUE OR FALSE: (4 x 1 = 4)

- In *Funaria* the spores germinate to form Protonema
- Cytokinins are hormones that promote cell division in plants.
- Cool water encourages buds and closed flowers to open.
- O<sub>2</sub> is evolved as a by product in cyclic phosphorylation

IV. MATCH THE FOLLOWING (4 x 1 = 4)

- Circinate vernation - *Pleurotus*
- Maiden hair fern - *Funaria*
- Peristome - *Cycas*
- Oyster Mushroom - *Adiantum*

**IV. ANSWER ANY SIX, EACH ANSWER SHOULD NOT EXCEED 50 WORDS  
(6 x 3 =18)**

19. Pigment system-II
20. Prothallus
21. Repotting
22. Totipotency
23. Auxins
24. Spawn
25. Bolting
26. Perichactial leaves
27. Ethylene

**SECTION – B**

**ANSWER ANY FOUR IN 200 WORDS. DRAW DIAGRAMS WHEREVER  
NECESSARY (4 x 6=24)**

28. Give an account of Cyclic Phosphorylation.
29. What are Gibberellins? How are they useful commercially?
30. Describe in detail about the flower arrangement in fresh & dry flowers
31. Describe the sporophyte of *Funaria*.
32. Give an outline of the techniques of tissue culture techniques.
33. Describe about the Bonsai styles.

**SECTION - C**

**ANSWER ANY ONE QUESTION IN 1000 WORDS. DRAW DIAGRAMS  
WHEREVER NECESSARY (2 x 20=40)**

34. Explain Kreb's cycle.
35. Describe the life cycle of *Adiantum*.
36. Give a detail account on the life history of *Cycas*.
37. Write an essay on Oyster Mushroom cultivation.

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