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

SUBJECT CODE: 11BT/AC/GB23

B. Sc. DEGREE EXAMINATION, APRIL 2014
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)

1.The end product of glycolytic pathway is
a) Pyruvic acid b) Phospho pyruvic acid
c) Glucose d) Glyceric acid.

2. *Cycas* is
a) Dioecious b) Monoecious
c) Bisexual d) None of them.

3. Japanese style of flower arrangement is
a) Bonsai b) Ikebana
c) Moribana d) Nageire.

4. The medium used for tissue culture is
a) MS medium b) ER Medium
c) B 5 Medium d) PDA.

5. The plant body in *Funaria* is a
a) Sporophyte b) Gametophyte
c) Protonema d) Thallus.

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

6. Hill reaction is also known as _____.
7. Auxanometer is used to measure _____.
8. When antheridia and archegonia are intermingled it is called as _____.
9. A mass of undifferentiated cells is called _____.
10. The longevity of the fresh flowers is called _____.

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

11. The ratio of Carbon dioxide released to the amount of Oxygen absorbed in respiration is Respiratory Quotient.
12. *Adiantum* is also referred to as Club Moss.

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13. Best time to harvest cut flowers is at afternoon.
14. Oyster mushroom is *Pleurotus*.

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

15. Dwarfing	-	Red Drop effect
16. Diploxylic	-	Pruning.
17. Explant	-	*Cycas*
18. Emerson	-	Callus

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

19. Fermentation.
20. Importance of Gibberellins.
21. Diagram of *cycas* L.S. of microsporangium.
22. Sorus in *Adiantum*.
23. Cut flowers preservation.
24. Styles of Bonsai.
25. Practical applications of Ethylene.
26. Salient features of Bryophyta.
27. Schematic cycle of Hatch – Slack pathway.

SECTION – B

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

28. Explain photophosphorylation.
29. Draw a neat labelled diagram of the L.S. of capsule of *Funaria*.
30. Draw a neat labelled diagram of the L.S. of *Cycas* ovule.
31. What are components used in the flower arrangement?
32. Describe electron transport pathway.
33. Discuss the lab requirements for tissue culture.

SECTION - C

ANSWER ANY TWO QUESTIONS IN 1000 WORDS. DRAW DIAGRAMS WHEREVER NECESSARY (2 x 20=40)

34. Explain Kreb's cycle in detail.
35. Describe the life cycle of *Adiantum*.
36. Explain the techniques involved in creating a Bonsai.
37. Describe the procedure involved in cultivation of oyster mushroom.

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