

B. Sc. DEGREE EXAMINATION, NOVEMBER 2007
BRANCH VI (a) – ADVANCE ZOOLOGY AND BIOTECHNOLOGY
FIRST SEMESTER

COURSE : ALLIED – CORE
PAPER : GENERAL BOTANY-I
TIME : 2 ½ HOURS
MAX.MARKS:100

SECTION – A

ANSWER ALL QUESTIONS (18 marks)

I CHOOSE THE CORRECT ANSWER:

1. Adnation is seen in
a. Annonaceae b. Solanaceae c. Euphorbiaceae d. Liliaceae
2. Polyarch condition of the stele is a characteristic feature of
a. Dicot stem b. Dicot root c. Monocot stem d. Monocot root
3. Rubber is obtained from the milky latex of
a. *Hevea* b. *Ricinus* c. *Euphorbia* d. *Vinca*
4. Unisexual flowers are seen in
a. Annonaceae b. Apocrynceae c. Euphorbiaceae d. Liliaceae

- II. Fill in the blanks:
 5. Short fragments of *Nostoc* filament, called aid in vegetative reproduction.
 6. The sporangium of *Rhizopus* has a central, sterile surrounded by numerous sporangiospores.
 7. The radial walls of endodermal cells are thickened by,
 8. The activity of results in the formation of periderm.
 9. The flowers of have numerous free carpels spirally arranged on the thalamus.
 10. is used as inoculum for oyster mushroom cultivation.

- III. State whether true or false:
 11. Radial arrangement of the vascular tissues is seen in the root.
 12. Amylum stars are produced during vegetative reproduction in *Nostoc*.
 13. Ascus usually bears eight diploid ascospores.
 14. Many members of cucurbitaceae are tendril Climbers.

- IV. Match the following:
 15. Cyathium - a) *Chara*
 16. Aflatoxin - b) *Sargassum*
 17. Stonewort - c) Euphorbiaceae
 18. Seaweed - d) *Aspergillus*

- V. Answer any six questions. Each answer not to exceed 50 words: (6x3=18)
 19. Heterocyst
 20. Zygosporangium
 21. Cyathium
 22. Cryptoblast
 23. Hymenium

24. Ascospore
25. Stele

SECTION – B

Answer any four questions. Each answer not to exceed 200 words. (4x6=24)

26. Describe the thallus of *Sargassum*.
27. List the salient features of Annonaceae
28. Describe sexual reproduction in *Aspergillus*.
29. Explain the anatomy of dicot leaf with a neat labeled diagram.
30. Give an account of any six economically important plants of Solanaceae.
31. Highlight the different styles of Bonsai technique.

SECTION – C

Answer any two questions. Each answer not to exceed 1000 words. (2x20=40)

32. Explain secondary growth in dicot root.
33. Describe in detail the life cycle of *Chara*.
34. Discuss the salient features of Cucurbitaceae and enlist the economically important plants of this family.
35. Describe the life cycle of a basidiomycetous fungi you have studied.
