

T.I. SCHOOL
AMBATTUR, CHENNAI
QUARTERLY EXAMINATION
SUBJECT: BIOLOGY

x1

DURATION: 2 Hrs

MARKS: 50

PART A- BIO-BOTANY

I) Choose the correct answer:

5x1=5

1. Which plant group has gametophyte as the dominant phase? **A01**
a) Pteridophytes b) Bryophytes c) Gymnosperms d) Angiosperm
2. Endosperm in gymnosperm is formed **A01**
a) At the time of fertilization. b) Before fertilization.
c) After fertilization. d) Along with the development of embryos.
3. Which among the following statements is correct? **A02**
a) In *Pisum sativum* leaflets modified into tendrils
b) In *Atalantia* terminal bud is modified into thorns
c) In *Nepenthes* midrib is modified into lid
d) In *Smilax* inflorescence axis is modified into tendrils
4. Select the mismatch pair: **A02**
a) *Musa* –Unicostate b) *Aegle marmelos*- Trifoliolate
c) *Acalypha* - Leaf mosaic d) *Allamanda* - Ternate phyllotaxy
5. Which of the following is polycarpic plant? **A02**
a) *Mangifera* b) *Bambusa* c) *Musa* d) *Agave*

II) Answer any three of the following questions in two or three sentences each:

3x2=6

6. What is caudex? **A01**
7. Define cladode. **A01**
8. What is plectostele? Give example. **A01**
9. Mention any two characters shared by gymnosperms and angiosperms. **A01**

10. Distinguish between phylloclade and cladode. **A03**

III) Answer any three of the following questions in brief. Question No. 13 is compulsory. 3x3=9

11. Write any three characteristic features of Pteridophytes. **A01**

12. Write the economic importance of Gymnosperms. **A01**

13. Draw and label the parts of regions of root. **A02**

14. Differentiate haplontic and diplontic life cycle. **A03**

15. Differentiate between pycnoxylic wood and monoxylic wood. **A03**

IV) Answer the following question in detail: 1x5=5

16. a) Describe the different types of steles in Pteridophytes with neat, labelled diagrams. **A01/A02**

OR

b) Explain phyllotaxy with a neat, labeled diagram. **A01/A02**
