

**Avinashilingam Institute for Home Science and Higher Education for Women
Coimbatore-641 043
Bachelor's Degree Examination –November 2017
III SEMESTER**

**Class : II UG
Major : Zoology**

**Time :3 hrs.
Max.Marks : 100**

**15BZO104-DSE-III Diversification of Plants
Part-A**

10x1=10

Choose the correct answer

1. Usually the cells of *Chlamydomonas* possess a chloroplast which is
a. Reticulate b. H-shaped c. Cup shaped d. Discoid
2. In *Polysiphonia*, the carospores are
a. Haploid b. Diploid c. Triploid d. Tetraploid
3. The peltate cap of the fruiting body of *Agaricus* is
a. Gill chamber b. Stipe c. Pileus d. Velum
4. In *Polytrichum*, the leaves are arranged in
a. Two rows b. Three rows c. Four rows d. Six rows
5. The "Maiden hair fern" is
a. *Lycopodium* b. *Pteris* c. *Azolla* d. *Adiantum*
6. The coralloid roots of *Cycas* are
a. Apogeotropic b. Aerial c. Phototropic d. Positively geotropic
7. An indehiscent simple fruit showing fusion of ovary wall with seed coat is
a. Caryopsis b. Capsule c. Achene d. Cypsela
8. Vivipary is the characteristic feature of
a. Hydrophytes b. Xerophytes c. Halophytes d. Mesophytes
9. The flowers of Cucurbitaceae are usually
a. Epigynous and Dioecious b. Hypogynous and Monoecious c. Epigynous and Monoecious d. Hypogynous and Dioecious
10. The flower of *Oryza* is
a. Dicyclic b. Tetracyclic c. Tricyclic d. Pentacyclic

PART B**5×6 = 30****Answer the following****Answer should not exceed 400 words or two pages**

- 11 a. Briefly explain the range of sexual reproduction in *Chlamydomonas*.
- 11 b. Comment on post fertilization changes in *Polysiphonia*.
- 12 a. Briefly discuss the vegetative structure of *Penicillium*.
- 12 b. Write a brief note on the external features of *Riccia*.
- 13 a. Comment on the spore bearing structures of *Adiantum*.
- 13 b. Give an illustrated account on the female gametophyte of *Cycas*.
- 14 a. Write short notes on aggregate fruits with suitable examples.
- 14 b. Give a concise account on multiple fruits with suitable examples.
- 15 a. Write the distinguishing characters of Rutaceae.
- 15 b. Describe the nature of inflorescence and flowers of Apiaceae.

PART C**5×12=60****Answer any THREE questions out of five**

- 16 a. Write an essay on the general classification of Cryptogams.
- 16 b. Narrate on the life cycle of *Chara* with neat sketches.
- 17 a. Enumerate on the general characters, systematic position and morphology of *Agaricus* with neat diagrams.
- 17 b. Give an illustrated account on the sporophyte of *Polytrichum* with neat sketches.
- 18 a. Describe the root anatomy of *Lycopodium* with neat labelled diagrams.
- 18 b. Write an essay on the life history of *Cycas* with suitable sketches.
- 19 a. Give a detailed note on morphology of flowering plant parts with neat diagram.
- 19 b. Distinguish between the epigeal germination and hypogeal germination with suitable sketches.
- 20 a. Narrate the taxonomic characteristic features of the family Euphorbiaceae.
- 20 b. Describe the vegetative and floral characters of Poaceae with neat diagram.
