

B.Sc. I (Sem.II) Paper IV
Diversity of Cryptogams
Department of Botany

Multiple Choice Questions (I)

- 1) In the life cycle of bryophyte which phase is dominant?
(a) Sporophyte (b) Gametophyte (c) both (d) none of the above
- 2) Spore mother cell in bryophytes is:
(a) Haploid (b) diploid (c) triploid (d) tetraploid
- 3) Bryophytes are.
(a) Aquatic (b) amphibious (c) terrestrial (d) aerial
- 4) In bryophytes, embryonic development of zygote takes place in:
(a) Antheridium (b) sporogonium (c) capsule (d) archegonium
- 5) The development of a sporophyte from the moss gametophyte without sexual fusion is called:
(a) Apomixis (b) Apogamy (c) Apospory (d) Amphimixis
- 6) In which of the following groups a plant must be placed which produces spores and embryos but lacks seeds?
(a) Gymnosperms (b) fungi (c) pteridophytes (d) bryophytes
- 7) In which of the following gametophytic thallus rhomboidal areas are seen?
(a) *Riccia* (b) *Marchantia* (c) *Pellia* (d) *Anthoceros*
- 8) The antherozoid of *Marchantia* are:
(a) Monoflagellate (b) Biflagellate (c) Quadri-flagellate (d) multiflagellate
- 9) Gemma cups are found in:
(a) *Sphagnum* (b) *Marchantia* (c) *Riccia* (d) *Anthoceros*
- 10) Male reproductive receptacle is known as:
(a) Archegoniophore (b) Antheridiophore (c) Sporangium (d) None of the above
- 11) Female reproductive receptacle is known as:
(a) Archegoniophore (b) Sporophyte (c) Antheridiophore (d) None of the above
- 12) Stomata are present in *Funaria* plant in:
(a) Foot (b) Capsule (c) Seta (d) None of these
- 13) Paraphyses are presented in
a. *Riccia* b. *Marchantia* c. *Funaria* d. *Anthoceros*

Multiple choice questions:

1. The gametophyte of *Psilotum* is:
(a) Exosporic (b) Endosporic (c) Dioecious (d) Endoscopic
2. In *Psilotum*, mycorrhiza is associated with:
(a) Aerial stem (b) rhizome (c) root (d) leaves
3. In the rhizomes of *Psilotum*, the stele is a:
(a) Protostele (b) Siphonostele (c) Solenostele (d) Dictyostele
4. In *Psilotum*, vegetative propagation takes place by:
(a) Gemmae (b) Tubers (c) Adventitious branch (d) All the above
5. In *Psilotum*, spore producing organs are called
(a) Sporophyll (b) Indusium (c) Ramenta (d) Synangium
6. In *Lycopodium*, sporangium originates on
(a) Spore (b) Microphyll (c) Sporophyll (d) Ligule
7. Which of the following is 'club moss'?
(a) *Equisteum* (b) *Selaginella* (c) *Lycopodium* (d) *Rhynia*
8. Protocorm is found in :
a. *Lycopodium* b. *Selaginella* c. *Equisetum* d. *Marselia*
9. Which pteridophyte is known as 'ground pine'?
a. *Lycopodium* b. *Selaginella* c. *Marselia* d. *Equisetum*
10. The root hairs arise in pairs in:
a. *Equisetum* b. *Marselia* c. *Psilotum* d. *Lycopodium*
11. Leaves of which have ligule?
a. *Lycopodium* b. *Selaginella* c. *Psilotum* d. *Equisetum*
12. Stele in *Selaginella* stem is:
a. protostele b. siphonostele c. solenostele d. dictyostele
13. Name the plant which have rhizophore.
a. *Lycopodium* b. *Selaginella* c. *Marselia* d. *Equisetum*
14. Which plant is called spike moss?
a. *Selaginella* b. *Lycopodium* c. *Equisetum* d. *Marselia*
15. Ligule and cone are seen in:
a. *Selaginella* b. *Lycopodium* c. *Isoetes* d. *Psilotum*
16. In *Selaginella*, development of female gametophyte is:
a. exosporic b. oxoscopic c. endosporic d. endoscopic
17. In *Selaginella*, the antherozoids are:
a. non-flagellate b. uniflagellate c. biflagellate d. multiflagellate
18. Vallecular canals are found in the stem of:
a. *Lycopodium* b. *Equisetum* c. *Psilotum* d. none of these
19. Peltate disc is characteristic feature of strobilus of:
a. *Equisetum* b. *Selaginella* c. *Marselia* d. *Psilotum*
20. Carinal canals may be seen in:
a. *Marselia* b. *Equisetum* c. *Lycopodium* d. *Selaginella*
21. Horsetail is the common name of:
a. *Selaginella* b. *Equisetum* c. *Psilotum* d. *Lycopodium*
22. Sporangia are developed in *Equisetum* on:
a. Sporophyll b. sporangiophore c. scale leaves d. none of the above
23. Presence of air cavities in the stem of *Equisetum* indicates:

- a. hydrophytic feature b. xerophytic features c. mesophytic features d. halophytic features
24. A cavity formed by the disintegration of protoxylem tracheids in *Equisetum* is called:
a. air chamber b. central cavity c. carinal canal d. vallecular canal
25. In *Equisetum*, the antherozoids are:
a. uniflagellate b. biflagellate c. multiflagellate d. non-flagellate
26. What type of development of sporangium is found in *Marselia*?
a. eusporangiate b. leptosporangiate c. none d. both
27. The species of *Marselia* are:
a. xerophytic b. epiphytic c. amphibious d. none of these
28. Which are the water ferns?
a. *Marselia* b. *Equisetum* c. *Lycopodium* d. *Selaginella*

KEY: 1-a, 2-b, 3-a, 4-a, 5-d, 6-c, 7-c, 8-a, 9-a, 10-b, 11-b, 12-a, 13-a, 14-a, 15-a, 16-c, 17-b, 18-b, 19-a, 20-b, 21-b, 22-b, 23-a, 24-c, 25-c, 26-b, 27-c, 28-a.

Maulana Azad College of Arts, Science and Commerce
Department of Botany (Dr. Quazi S.M)
Multiple Choice Questions

B.Sc II year (Semester III); P-VIII Ecology

Unit-1: Plants and Environment

Halophytes are the plants that grow in

- a) Neutral pH
 - b) Acidic pH
 - c) Alkaline pH
 - d) None of the above
- 1) Species referred as content of plants growing in an area is
 - a) Population
 - b) Flora
 - c) Vegetation
 - d) Community
 - 2) Bioenergetic approach to ecological studies was first time made by
 - a) A.G. Tansley
 - b) F.T Clements
 - c) Karl Mobius
 - d) E. Hackel
 - 3) Which of the following is also known as ecology of individuals?
 - a) Auto ecology
 - b) Population ecology
 - c) Community ecology
 - d) Ecosystem
 - 4) Which of the following is also know as community ecology?
 - a) Auto ecology
 - b) Synecology
 - c) Ecosystem
 - d) None of the above
 - 5) Direction of mountain chains, valleys, altitude and exposure of slopes are included among
 - a) Climatic factors
 - b) Physiographic factors
 - c) Edaphic factors
 - d) Biotic factors
 - 6) Incoming solar radiation is called
 - a) Insolation
 - b) Albedo earta
 - c) Terrestrial radiation
 - d) Convection
 - 7) Plants growing best in full sunlight are called
 - a) Sciophytes
 - b) Therophytes
 - c) Heliophytes
 - d) Halophytes
 - 8) Plants growing in shade are called as
 - a) Halophytes
 - b) Epiphyte
 - c) Sciophytes
 - d) Hydrophytes
 - 9) Vegetation dominated by tropical rainforest with high temperature prevailing throughout the year is known as:
 - a) Megatherm
 - b) Mesotherm
 - c) Microtherms
 - d) Hekistotherm

- 10) Which of the following is responsible for global warming?
- a) SO₂
 - b) NO₂
 - c) CO₂
 - d) NO₃
- 11) The most important factor affecting the climate of an area is
- a) Vegetation
 - b) Steepness of slope
 - c) Latitude
 - d) Exposure of earth's surface
- 12) Which of the following is a free floating plant?
- a) *Azolla*
 - b) *Nerium*
 - c) China rose
 - d) *Chara*
- 13) Soil is constituted by
- a) Stone
 - b) Sand
 - c) Silt, clay and sand
 - d) None of the above
- 14) The dark finely divided amorphous organic matter of soil is called as
- a) Mud
 - b) Mineral matter
 - c) Humus
 - d) Litter

UNIT II: Response of plant to water & community ecology

- 15) Lichens are the example of
 - a) Parasitism
 - b) Commensalism
 - c) Symbiosis
 - d) None of the above
- 16) Which of the following is a free floating hydrophyte?
 - a) *Nymphaea*
 - b) *Marselia*
 - c) *Typha*
 - d) *Eichhornia*
- 17) Roots are of secondary importance in
 - a) Xerophytes
 - b) Hydrophytes
 - c) Halophytes
 - d) None of the above
- 18) Aerenchyma is well developed in
 - a) *Eichhornia*
 - b) *Hydrilla*
 - c) *Nymphaea*
 - d) All of the above
- 19) Sclerenchyma is well developed in organs of
 - a) *Bryophyllum*
 - b) *Nymphaea*
 - c) *Casuarina*
 - d) *Aloe*
- 20) Pneumatophores are characteristics of
 - a) Mesophyte
 - b) Heliophyte
 - c) Halophyte
 - d) Xerophytes
- 21) Sunken stomata are characteristics of leaves of
 - a) *Azolla*
 - b) *Nelumbo*
 - c) *Nerium*
 - d) *Nymphaea*
- 22) Lichens are primary coloniser on
 - a) Soil
 - b) Water
 - c) Rock
 - d) Sand
- 23) Which of the following pyramid is always upright?
 - a) Pyramid of number
 - b) Biomass
 - c) Energy
 - d) None of the above
- 24) Interlocking pattern of organism based on their food habit is called
 - a) Food web
 - b) Food chain
 - c) Consumers
 - d) Secondary cause
- 25) Net primary production is higher in
 - a) Temperate scrub land
 - b) Temperate deciduous forest
 - c) Temperate forest
 - d) Tropical humid forest

KEY: (1)c, (2)b, (3)a, (4)a, (5)b, (6)b, (7)a, (8)c, (9)c, (10)a, (11)c, (12)c, (13)a, (14)c, (15)c, (16)c, (17)d, (18)b, (19)d, (20)c, (21)c, (22)c, (23)c, (24)c, (25)a, (26)d