B.Sc Part III

Paper III : Ecology, Microbiology, Animal Behaviour and Pollution & Toxicology

PRACTICE QUESTIONS

Unit I: Ecology

1. The term ecology was coined by

(a) Ernst Haeckel (c) R. Mishra

(b) Odum (d) Blackman

2. The physical environment consists of

(a) Temperature, light, gases

(b) Water, temperature, light

(c) Lithosphere, hydrosphere, atmosphere

(d) Landscape, individuals, gases

3. The gradual ascending order of level of organization are

(a) Landscape → ecosystem → Biosphere → Biome

(b) Ecosystem → landscape → Biome → Biosphere

(c) Landscape → Biome → Ecosystem → Biosphere

(d) Biosphere → landscape → Biome → ecosystem

4. The basic unit of ecology is

(a) Cell (c) Organism

(b) Gene (d) Community

5. In which of the following atmospheric layer life exist

(a) Stratosphere (c) Ionosphere

(b) Mesosphere (d) Troposphere

6. **In which atmospheric zone, ozone exist**

(a) Ionosphere (c) Troposphere

(b) Thermosphere (d) Stratosphere

7. **The wavelength of U.V. Rays are**

(a) 0.4 – 0.7 mm

(b) 0.1 – 0.4 mm

(c) 0.7 – 1.0 mm
(d) None of these

8. Law of tolerance was put forward by

(a) V. Shelford (c) Ramdeo Misra
(b) Haeckel (d) Liebig

9. Organism having wide range of degree of tolerance are

(a) Stenotopic (c) Ecotypics
(b) Eurytopic (d) Ecophenes

10. Adaptation of organism to freezing temperature is due to the presence of

(a) Proline (c) antifreezing protein
(b) Chaperonin (d) Analine

11. Animals period of inactivity in summer is

(a) Hibernation (c) Dormancy
(b) Aestivation (d) Resting

12. Which is a correct matching

(a) Autecology – Interrelationshin of a organism to environment
(b) Synecology -- Interrelationships of the organisms of a species in a given environment
(c) Ecotone -- It is the regulation of organisms behaviour.
(d) Pedology -- It is the study of foot adaptations of different adaptations of different organisms.

13. Mutualism and proto- cooperation are

(a) Positive interactions (c) Both of these
(b) Negative interactions (d) None of these

14. Association of nitrogen fixing bacteria with the leguminous roots is

(a) Mutualism (c) Neutralism
(b) Commensalism (d) Parasitism

15. **Female mosquitoes sucking human blood at intervals are**

(a) Permanent parasites (c) Endoparasites

(b) Semiparasites (d)Intermittent parasites

16. Association between sea anemone and hermit crab is gastropod shell is that of

(a) Symbiosis (c) Parasitism

(b) Commensalism (d) Amensalism

17. Zoochlorellae in *Hydra* produce an association called

(a) Symbiosis (b) Parasitism (c) Mutualism (d) Predation

18. **The association between ants and some members of family Rubiaceae is**

(a) Ornithology (c) Mrymecophily

(b) Entomophily (d) Anemophily

19. Plants obtaining nourishment from other plants by haustria are

(a) Epiphytes (b) Parasites (c) Xerophytes (d) Halophytes

20. **In pond ecosystem pyramid of number is**

(a) Upright (c) Anything is possible

(b) Inverted (d) None of the above

21. Graphic representation of relationship between the producers and consumers in an ecosystem is known as

(a) Ecological niche (c) Ecological system

(b) Ecological pyramid (d) Trophic levels

22. In grassland ecosystem the pyramid of energy is

(a) Inverted (c) Inverted or upright

(b) Upright (d) None of the above

23. **In an ecosystem the population of**

(a) Producers is the largest

(b) Primary consumers is the largest

(c) Secondary consumers is the largest

(d) None of the above

24. **Which of the following is a man made artificial ecosystem?**

(a) Grassland ecosystem
(b) Agroecosystem
(c) Ecosystem of artificial lakes and adams
(d) Forest ecosystem

25. Ecological niche is

(a) The surface area of the ocean
(b) An ecologically adapted zone
(c) The physical position and functional role of a species within the community
(d) Formed of all plants and animals living at this bottom of a lake

ANSWERS

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