

**B.Sc. BOTANY
FOURTH SEMESTER
ECOLOGY & PHYTOGEOGRAPHY
BSB – 403**

(Use Separate Answer Scripts for Objective & Descriptive)

Duration:3 hrs.

Full Marks:70

(PART-A: Objective)

Time: 20 min.

Marks:20

Choose the correct answer from the following:

1X20=20

- Which is an example of restricted area endemic ?
 - Mangroove
 - Rhododendron
 - Orchid
 - Shirui lily
- Pesticide, Fertilizer causes which pollution ?
 - Air pollution
 - Water pollution
 - Soil pollution
 - Oil pollution
- Which of the following is not green house gasses ?
 - CO₂, CH₄, N₂O
 - CO₂, Cl₂, K
 - CO₂, CH₄, CFC
 - Both a and b
- Ginkgo biloba is an example of
 - Neo endemics
 - Ancient endemics
 - Palaeo endemics
 - Pseudoendemics
- The mutant form of species which cannot compete with their parental species is known as
 - Pseudoendemics
 - Neo endemics
 - Ancient endemics
 - Palaeo endemics
- How many phytogeography region are there in India
 - 10
 - 11
 - 9
 - 8
- Endemism exhibit
 - Cosmopolitan distribution
 - Restricted to a geographical area
 - Unrestricted geographical area
 - None of the above
- Alpine Zone is characterized by
 - Presence of tree
 - Absence of tree
 - Presence of only dicot
 - Presence of only monocot
- Phytogeographical region is defined as an
 - Area of uniform climatic condition
 - A distinct type of vegetation
 - Indistinct type of vegetation
 - Both a and b

10. Which of the following is not the causes of loss of biodiversity ?
- a. Alteration and loss of the habitats
 - b. Pollution
 - c. Introduction of exotic species and genetically modified organisms
 - d. Afforestation
11. Which is the distinct unit of diversity ?
- a. Population
 - b. Community
 - c. Species
 - d. All of the above
12. Ecosystem diversity refers to
- a. Biotic factors
 - b. Abiotic factors
 - c. Both biotic and abiotic factors
 - d. Climatic factors
13. Good ozone is found in the
- a. stratosphere
 - b. ionosphere
 - c. troposphere
 - d. mesosphere
14. Name the term which defines the ability of community return to its original state after being displaced?
- a. Dispersed
 - b. Clumped
 - c. Resistance
 - d. Resilience
15. In ecological succession, the final stable community is known as
- a. Climax community
 - b. ultimate community
 - c. final community
 - d. seral community
16. Interspecific competition is the competition
- a. Between individuals of same species
 - b. Between individuals of different species
 - c. Between community
 - d. Between same community
17. What is food chain?
- a. A long chain made of food
 - b. Process of preparing food
 - c. Food where locked by chain
 - d. Pathway that energy and nutrients flow through the ecosystem
18. Which of the following is the range of environmental conditions in which each of the species survives ?
- a. Real niche
 - b. Habitary niche
 - c. Optimal niche
 - d. Fundamental niche
19. The term ecosystem was coined by
- a. Mendal
 - b. Tansle
 - c. Odum
 - d. Aristotle
20. Intraspecific competition is the struggle for resources among
- a. Individual of the same species
 - b. Individual of the different species
 - c. Member of different population
 - d. Different population within an ecosystem

PART-B :Descriptive

Time : 2 hrs. 40 min.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

1. Define Phyto geographical region? Write briefly on phyto geographical region of India with a suitable map. 2+8=10
2. What is habitation and niche ? Describe the different types of niches 2+8=10
3. What is population ? Describe the different characteristics of population 2+8=10
4. Write short note on 5+5= 10
 - a. Endemism
 - b. Causes of the loss of biodiversity
5. What is ecological succession ? Describe the different types of succession ? 2+8=10
6. Write short note on 10
 - a. Species diversity
 - b. Age structure
7. What is plant migration? Describe the different barrier of plant distribution 2+8=10
8. What is soil pollution ? Describe the causes and effect of soil pollution 2+8=10

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