

M.Sc. BOTANY
FOURTH SEMESTER (SPECIAL REPEAT)
PLANT ECOLOGY
MSB-403 D
[USE OMR SHEET FOR OBJECTIVE PART]

SET
A

Duration: 3 hrs.

Full Marks: 70

Time: 30 mins.

(Objective)

Marks: 20

Choose the correct answer from the following:

1 × 20 = 20

- The basic unit of biological organization is:
 - Species
 - Population
 - Both a and b
 - Community
- Many of the species that constitute natural communities are the products of:
 - Ecological process
 - Co evolutionary process
 - Phylogenetic process
 - Evolutionary process
- In wind erosion, what is the diameter of particles that are moved by bounce?
 - 0.1-0.5 mm
 - 0.5-1mm
 - 1-2mm
 - <0.5 mm
- What stage of water erosion represents slash erosion?
 - Second
 - First
 - Third
 - None of the above
- Underground mining is also known as:
 - Surface mining
 - Inner mining
 - Middle layer mining
 - Deep mining
- Green house effect is increasing due to:
 - Change in atmospheric pressure
 - Melting of glaciers and dry atmospheric conditions
 - Change in number of green house gases
 - Change in the concentration of green house gases
- Which of the following are / is the effect of global warming?
 - Rising sea levels
 - Expansion of desert
 - Changing precipitation
 - All of the above
- This is not one of the possible adverse effects of the phenomena of global warming:
 - Extraordinary weather patterns
 - Retreat of glaciers
 - An increase of UVB radiation
 - Rise in the sea level
- Sulphur dioxide is produced by:
 - Nuclear power plants
 - Coal power plants
 - Thermal power plants
 - Hydroelectric power plants
- Good ozone is found in the:
 - Stratosphere
 - Troposphere
 - Ionosphere
 - Mesosphere

11. Which of the following is not the branch of geo-informatics?
 - a. Remote Sensing
 - b. Cartography
 - c. Centesis
 - d. Photogrammetry
12. The protected area is generally considered the core units of:
 - a. In situ conservation
 - b. Ex situ conservation
 - c. Both a and b
 - d. Only a and not b
13. EDM stands for:
 - a. Electromagnetic Distance Measurement
 - b. Electronic Datum Meter
 - c. Electromagnetic diameter Magnitude
 - d. Electrical Distance Meter
14. The most rapidly declining natural resources in the world is:
 - a. Wind
 - b. Forest
 - c. Water
 - d. Sunlight
15. Alpine Zone is found across the Himalayas at an elevation ranging from:
 - a. 3,600 to 5,900 m above the sea level
 - b. 2,900 to 3,500 m above the sea level
 - c. Both a and b
 - d. Only a
16. Which is an example of restricted area endemic?
 - a. Mangroove
 - b. Rhododendron
 - c. Orchid
 - d. Shirui lily
17. Which of the following is the not the vegetation of alpine zone?
 - a. Shorea robusta and Amara trees
 - b. Cushion plants and perennial grass
 - c. Mosses and lichens
 - d. Sedges and oak
18. The area where a plant first evolved and from where it dispersed to new areas is known as:
 - a. Center of dispersal
 - b. Migratory
 - c. Centre of replacement
 - d. All of the above
19. Which plants cannot grow in lime soil?
 - a. Spinach
 - b. Peppers
 - c. Peas
 - d. Onion
20. North East occupies 7.7% of India's total geographical area supporting 50% of the flora, of which:
 - a. 34.34 % are endemic
 - b. 31.58% are endemic
 - c. 35% are endemic
 - d. 23 % are endemic

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(Descriptive)

Time : 2 hr. 30 mins.

Marks : 50

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

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| 1. Write in detail about the nine phytogeographical region of India. | 10 |
| 2. Write short notes on the following:
a) Sustainable development
b) Protected area and their management | 5+5=10 |
| 3. Discuss in detail the Environmental problem associated with coal mining in North East India. | 10 |
| 4. What is endemism? Write down in detail the different types of endemism. | 2+8=10 |
| 5. Write short notes on the following:
a) Climate change
b) Acid rain | 5+5=10 |
| 6. What is GIS? Discuss in detail the application of GIS in environmental management. | 2+8=10 |
| 7. What is shifting cultivation? Discuss its ecological implication. | 2+8=10 |
| 8. What are green house gases? Write down the role of different green house gases responsible for global warming. | 2+8=10 |

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