

M.Sc. BOTANY  
FOURTH SEMESTER  
PLANT ECOLOGY  
MSB-402 D

**SET  
A**

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 1hr. 30 mins.

Full Marks: 35

Time: 15 mins.

( Objective )

Marks: 10

*Choose the correct answer from the following:*

$1 \times 10 = 10$

- Which is not indicator of climate change?
  - Floral indicator
  - Cryogenic indicator
  - Long term change
  - None of the above
- Good ozone is found in the:
  - Stratosphere
  - Troposphere
  - Ionosphere
  - Mesosphere
- Remote sensing records:
  - Radio wave
  - Frequency wave
  - Electromagnetic energy
  - Microwave
- Which of the following is not the branch of geo-informatics?
  - Remote Sensing
  - Cartography
  - Centesis
  - Photogrammetry
- Which of the following gasses is the most responsible for acid rain?
  - Carbon dioxide and carbon monoxide are two types of gasses
  - Carbon dioxide and sulfur dioxide
  - Nitrogen dioxide and sulfur dioxide
  - Nitrous oxide and sulfur dioxide
- Which is an example of restricted area endemic?
  - Mangroove
  - Rhododendron
  - Orchid
  - Shirui lily
- Which of the following is not the vegetation of alpine zone?
  - Shorea robusta and Amara trees
  - Cushion plants and perennial grass
  - Mosses and lichens
  - Sedges and oak
- The area where a plant first evolved and from where it dispersed to new areas is known as:
  - Center of dispersal
  - Migratory
  - Centre of replacement
  - All of the above
- Which of the following is/are natural contributor(s) to atmospheric sulfur dioxide?
  - Sprays from the sea
  - Eruption of a volcano
  - Vegetation deterioration
  - All of the above

10. Endemic species are:

- a. Rare species
- c. Imported species

b. Endangered species

d. Species found in a particular area

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**( Descriptive )**

Time : 1 hr. 15 mins.

Marks : 25

[ Answer question no.1 & any two (2) from the rest ]

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| 1. What is GIS? Discuss in details the application of GIS in environmental management.                                     | 1+4=5  |
| 2. What is plant migration? Discuss in brief the barrier of plants distribution.   | 2+8=10 |
| 3. Write short notes on the following:<br>a) Global warming<br>b) Acid rain  | 5×2=10 |
| 4. What is phytogeographical regions of India? Discuss in detail the different phytogeographical region of India with Map. | 2+8=10 |
| 5. Write short notes on the following:<br>a) Principles and concept of remote sensing<br>b) Greenhouse gases               | 5×2=10 |

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