

**M.Sc. BOTANY
THIRD SEMESTER
PLANT ECOLOGY
MSB-304D**

[USE OMR FOR OBJECTIVE PART]

**SET
A**

Full Marks: 35

Duration: 1.30 hrs.

(Objective)

Time: 15 min.

Marks: 10

1X10=10

Choose the correct answer from the following:

1. Diversity within species is known as
 - a. Species Diversity
 - b. Genetic diversity
 - c. Beta Diversity
 - d. Gamma Diversity
2. The representation of energy flow in an ecosystem is called
 - a. Trophic level
 - b. Food web
 - c. Nutrient cycle
 - d. Ecological Pyramids
3. Those species in a relatively species rich single taxon thought to represent biological diversity as a whole is known as
 - a. Common species
 - b. Focal species
 - c. Keystones
 - d. Indicator species
4. Critically endangered species means in which a species numbers have decreased or will decrease by
 - a. 80% within three generation
 - b. 80% within two generation
 - c. 60% within three generation
 - d. 60% within two generation
5. The increase in species richness or biodiversity that occurs from the poles to the tropics is known as
 - a. Equatorial gradient in species diversity
 - b. Latitudinal gradient in species diversity
 - c. Polarity gradient in species diversity
 - d. Altitudinal gradient in species diversity
6. Bacteria in the soil breaking down the substances that are harmful is known as
 - a. Bioremediation
 - b. Phytoremediation
 - c. Soil stabilization
 - d. Chemical oxidation
7. 70 % of the earth's total surface covered by
 - a. Desert Ecosystem
 - b. Alpine Ecosystem
 - c. Marine ecosystem
 - d. Grassland Ecosystem
8. Which type of soil erosion is the first stage of erosion
 - a. Rill erosion
 - b. Gully erosion
 - c. Sheet erosion
 - d. Splash erosion
9. Surface mining is often used when coal is less than

- a. 250 feet underground
- c. 300 feet underground

- b. 200 feet underground
- d. 350 feet underground

10. The burning of meteorites occurred in which layer on entering the atmosphere from outer space ?

- a. Thermosphere
- c. Mesosphere

- b. Troposphere
- d. All of the above

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(Descriptive)

Time: 1 hrs. 15 min.

Marks : 25

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

1. What is biodiversity gradient and Magnitude of biodiversity ? 5
2. Write short note on 5x2= 10
 - (a). IUCN threat categories
 - (b). Biodiversity as a source of medicine
3. What is soil Erosion? Write in detail the cause of soil erosion and conservation of soil erosion. 2+8= 10
4. Write short note on 5x2=10
 - (a). Restoration of contaminated soil
 - (b). Watershed Management
5. Discuss in detail the coal mining and its Environmental impact in North Eastern India. 10

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