

SEMESTER EXAMINATION-2021
CLASS - MSC SUBJECT- ENVIRONMENTAL SCIENCE
PAPER CODE: MEN-C101 PAPER TITLE: Fundamentals
of

Time: 3 hour

Environmental Science

Max. Marks: 70

Min. Pass: 40%

Note: Question Paper is divided into two sections: **A and B**. Attempt both the sections as per given instructions.

SECTION-A (SHORT ANSWER TYPE QUESTIONS)

Instructions: Answer any five questions in about 150 words each. Each question carries six marks. (5 X 6 = 30 Marks)

- Question-1: Define concept of primary productivity.
Question-2: What would you understand by habitat nibbling?
Question-3: Explain ecological significance of temperature.
Question-4: What is pH, how it regulates various ecological function?
Question-5: Explain environmental perception of fire and earth in vedic literature.
Question-6: Name and describe the properties of three main soil textures.
Question-7: Differentiate between the concept of food chain, food web and trophic levels of an ecosystem.
Question-8: Distinguish between population, biotic community and association.
Question-9: State two energy laws. How do they relate to entropy?
Question-10: Explain mutualism with the help of suitable example.

SECTION-B (LONG ANSWER TYPE QUESTIONS)

Instructions: Answer any FOUR questions in detail. Each question carries 10 marks. (4 X 10 = 40 Marks)

- Question-11: Describe biogeochemical cycle of phosphorus and nitrogen as it moves into and through organisms and back to the environment.
Question-12: Describe prey-predator relationship with the help of suitable examples.
Question-13: What is meant by zoo-geographical classification? Describe different zoo-geographical regions.
Question-14: Describe each of four zones of a lake (littoral, limnetic, profundal and benthic) in terms of light availability, nutrient level, oxygen concentration and life forms.
Question-15: What is the difference between primary and secondary succession? Why does secondary succession generally occur more rapidly than primary succession.
Question-16: Describe light as abiotic factor and state its significance.

Question-17: Explain the concept of heat transfer process and state its significance.
Question-18: Describe biomes of the earth with their key features.

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