

**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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