

MODEL QUESTION SET 2076

Class: 11  
Subject: Biology

Full Mark: 75  
Time: 3 hours

Note: Answer Botany and Zoology in separate answer sheets. Attempt Botany first followed by Zoology.

Zoology

1. Answer any seven in brief: ( $7 \times 1 = 7$ )
    - a. How Osteology differs from Chondrology?
    - b. Define excretion.
    - c. The theory special creation can't be considered as the modern theory, why?
    - d. What is Atavism or Reversion? Define with examples.
    - e. How does sexual reproduction bring variation? Describe shortly.
    - f. Define the term Porifera.
    - g. Coelenterates are triploblastic organism", what does it mean?
    - h. What are pesticides? Define with examples.
    - i. Give the examples of negative chemo taxis.
    - j. Why does IUCN produce Red list or Red data book?
  2. Answer any five in brief: ( $5 \times 3 = 15$ )
    - a. Why do you think land (Terrestrial) Biodiversity to much larger than water (Aquatic)? Justify the answer.
    - b. Differentiate between Autogamy and Endomixes.
    - c. Write shortly on Gamogony in the life cycle of plasmodium.
    - d. Write short notes on cutaneous respiration in frog.
    - e. Describe the striking features of phylum Chordata.
    - f. Describe the problems of Acid – Rain.
    - i. Why do we need to preserve biodiversity? Write Shortly.
  3. Describe the internal and external structure of Heart in Amphibians. (7.5)
- OR**
4. Describe the life cycle of Plasmodium in mosquitoes.
  4. Which theory of evolution (of life) is the most trustable and why? Justify your answer. (8)

(Botany)

1. Answer any seven in very brief: ( $7 \times 1 = 7$ )
    - a. What is coenocytic hyphae?
    - b. Why are lichens called dual organisms?
    - c. What do you mean by coralloid roots?
    - d. Give significance of root nodule.
    - e. Name the indigenous species of *Cycas* found in Nepal.
    - f. What is the function of lysosome?
    - g. Define cell inclusion.
    - h. Define succession.
    - i. What is commensalism?
    - j. Define ozone layer depletion.
  2. Answer any five in brief: ( $5 \times 3 = 15$ )
    - a. Describe gametophyte of *Dryopteris*.
    - b. Describe scalariform conjugation in *Spirogyra*.
    - c. Write down the differences between ray floret and disc floret.
    - d. Describe the structure of yeast.
    - e. Discuss the nitrogen cycle in nature.
    - f. What are proteins? Describe its function.
    - g. Describe the structure of nucleus.
  3. Describe the family Leguminosae in semitechnical terms with necessary diagrams, floral formula, floral diagram and mention two examples of economic importance. (7.5)
- OR**
- Describe alternation of generations with reference to the life cycle of *Marchantia*.
  4. What is ecosystem? Discuss in detail about the main components of ecosystem with suitable examples. (8)