

TILOTTAMA SECONDARY SCHOOL

Assignment-2077

Class : 11  
Subject: Biology

F.M. : 75  
P.M : 27

SECTION A: BOTANY

1. Answer any seven in very short. (7 x 1 = 7)
  - a. Mitochondria and chloroplasts are semi-autonomous cell organelles, justify.
  - b. Define incipient nucleus.
  - c. What are chiasmata?
  - d. Define species.
  - e. Write the names of bacteria on the basis of their shape.
  - f. What do you mean by coenocytic mycelium?
  - g. Why is *Spirogyra* slippery in touch?
  - h. Define climax community.
  - i. Define parasitism with example.
  - j. Define nitrogen assimilation.
2. Answer any five in brief (5 x 3 = 15)
  - a. Explain the structure and function of nucleus.
  - b. list out the significance of mitosis.
  - c. Describe the structure of prothallus of fern.
  - d. Explain the characteristics of gymnosperm.
  - e. Describe the structure of yeast and its importance.
  - f. Explain the carbon cycle in nature.
  - g. Describe in brief about green house effect and its consequences on environment.
3. What is alternation of generation? Describe it with the reference of life cycle of *Funaria*.

OR

- Describe the family Leguminosae in semitechnical terms with distinguishing characters, floral formula and floral diagram with any two examples of the economic importance (7.5)
4. What is ecosystem? State in detail about grassland ecosystem with relevant examples. (8)

SECTION B: ZOOLOGY

1. Answer any seven in very short. (7 x 1 = 7)
  - a. Define the term Helminthology and Herpetology.
  - b. Name any two life processes.
  - c. What was Louis Pasteur's view regarding origin of life?
  - d. What are the functions of nuclei found in Paramecium?
  - e. Why *Plasmodium falciparum* is more dangerous than other species?
  - f. Give the zoological name of Jelly Fish and Wall Lizard.
  - g. In which group of animals you find flame cells?
  - h. What do you mean by typhlosole?
  - i. Why ureter is called urinogenital duct in male frog?
  - j. Which is the largest protected area of Nepal?
2. Answer any five in brief (5 x 3 = 15)
  - a. What are the various scopes of biology?
  - b. Explain about erythrocytic schizogony of *Plasmodium*.
  - c. What are the differences between Centipede and Millipede?
  - d. Write short note on setae of Earthworm.
  - e. Describe about the structure of liver of Frog.
  - f. Explain about Serological test in favour of Organic Evolution.
  - g. Describe about adaptive features in birds.
3. Explain about Septal Nephridia of Earthworm with its working mechanism.  
OR  
Describe about structure and working mechanism of heart of Frog. (7.5)
4. Explain about Modern Synthetic Theory of Evolution in detail. (8)