

2012  
B.Sc. (Hons.) Bio-Informatics  
First Semester  
BIN-1004: Life Science

Time allowed: 3 Hours

Max. Marks: 60

**NOTE:** Attempt five questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

I. Answer the following:-

- a) Define cell
- b) Give full form of AIDS and the name of the virus that causes it
- c) What is the need to study biology?
- d) Name two vestigial organs of human
- e) What are the functions of ovaries and testis In reproductive system?
- f) How is the cell cycle regulated? (6x2)

**UNIT - I**

II. Differentiate between the following:-

- a) Prokaryotes and eukaryotes
- b) Cell wall and cell membrane (8,4)

III. a) Enlist any three hormone secreted by endocrine system and give their functions.

b) Enlist fundamental cell types and give their functions. (2x6)

IV. a) Differentiate between mitosis and meiosis.

b) Discuss fluid mosaic model of cell membrane. (8,4)

**UNIT - II**

V. a) Discuss the concept of evolution and give any one example in support of it.

b) Enlist some useful microbes and their functions. (8,4)

VI. a) Give characteristic features of member of algae.

b) Discuss classification of viruses. (2x6)

P.T.O.

(2)

- VII. a) Discuss the growth curve of bacteria in culture.
- b) Give two examples each of diseases caused due to the following:-
- i) Fungi
  - ii) Bacteria
  - iii) Viruses

(2x6)

x-x-x