

1058

B.Sc. (Hons.) Bio-Informatics

Fourth Semester

BIN-4003: Cell Biology and Microbiology

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. Attempt the following:-

- a) What are endospores?
- b) Are there living organisms without cells?
- c) What is unique about eukaryotic cell?
- d) What is growth curve?
- e) Define phylogeny.
- f) What is conjugation?
- g) What is a transduction?
- h) What is the function of microtubules?

(8x1½)

**UNIT – I**

II. a) Discuss about different cell type and their significance?

b) What is Golgi bodies and discuss their role.

(6,6)

III. a) Discuss the role of Endoplasmic reticulum and its significance.

b) Discuss chloroplast structure.

(6,6)

IV. a) Discuss cell membrane structure and its role.

b) Discuss Ribosome.

(6,6)

**UNIT – II**

V. a) Discuss microbial taxonomy and its role in cell.

b) Discuss current classification of bacteria.

(6,6)

P.T.O.

(2)

- VI. a) What is microbial diversity and it helps ecology. (6,6)  
b) Discuss unique features of virus.
- VII. a) Write a note microbial growth curve. (6,6)  
b) Discuss bacterial reproduction and it significance.

x-x-x