DMM-3091
B. Sc. (Sem. IV) Examination
April / May - 2016
Bioscience
(403 - Elementary Microbiology)

Time : 2 Hours] [Total Marks : 50

Instructions :
(1) Fill up strictly the details of signs on your answer book.
Name of the Examination : B. Sc. (SEM. 4)
Name of the Subject : BIOSCIENCE
Subject Code No. : 3 0 9 1
Section No. (1, 2, ....) : Nil

(2) Draw neat and labeled diagrams wherever necessary.
(3) Figures to the right indicate full marks of the question.

1 Answer as directed : 12
   (1) Define: Phototroph and Chemotroph.
   (2) What are obligate anaerobes? Give examples.
   (3) What is cell wall free state?
   (4) Name two endospore forming bacteria.
   (5) Define toxigenicity and opportunistic pathogen.
   (6) Name two normal flora of nasal cavity.

2 Describe in detail four phases of bacterial growth. 14
   OR

2 Discuss different cell inclusions in bacterial cell. 14

3 Discuss any two of the following : 14
   (1) Describe in brief nutritional requirements of the bacteria.
   (2) Explain the techniques used for the measurement of cell mass.
   (3) Explain types of pathological conditions.
   (4) Write a note on structure of bacterial flagella.
4 Write short notes on any **two** of the following:  

(1) The mathematics of growth.  
(2) Exotoxins.  
(3) Infection.  
(4) Intestinal Flora.