DG-3135
B. Sc. (Microbiology) (Sem. V) Examination
March/April – 2016
MB - XI : Microbial Genetics

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. (Microbiology) (Sem. V)

Name of the Subject :

MB - XI : Microbial Genetics

Subject Code No. : 3 1 3 5  Nil

Seat No. :

Student's Signature

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

Q 1 Give specific answers: 12

a) What are histones? Enlist its types found in eukaryotic cell.
b) What is central dogma of life?
c) What is recombination? Enlist its types.
d) Define:
   i. Merozygote.
   ii. Host restriction.
e) Differentiate between Mutation and Mutagen.
f) State the significance of RecA protein in repair mechanism.

Q 2 Answer any TWO of the following: 12

a) Describe the patterns of DNA synthesis.
b) Write on the initiation process of protein synthesis.
c) Give the detail account of spontaneous mutation.
Q 3 Attempt any TWO of the following:
   a) Define Replicon. Describe the replication machinery.
   b) Describe the process of transcription in bacteria.
   c) Explain in detail: DNA transformation.

Q 4 Write short note on any TWO of the following:
   a) DNA structure.
   b) Bacterial Plasmids.
   c) Mismatch repair.