A-3035
Second Year B. Sc. (Medical Technology) (Sem. III) (CBCS) Examination
March / April – 2015
MT - 05 : Microbial Metabolism & Genetics

Time : 2 Hours] [Total Marks : 50

Instructions :

(1) Fill up strictly the details of signs on your answer book.
Name of the Examination :
Second Year B. Sc. (Medical Technology) (Sem. III)
Name of the Subject :
MT - 05 : MICROBIAL METABOLISM & GENETICS
Subject Code No. : 3 0 3 5
Section No. (1, 2,.....) : Nil

(2) Figures to the right indicate full marks.

(3) Draw labelled diagram wherever necessary.

1 Answer the following briefly : 8
   (a) What are nonsense codons and its role in translation process ?
   (b) Differentiate transition and transversion.
   (c) Enlist the types of plasmids.
   (d) Differentiate microorganisms as per their nutritional requirement.

2 Answer any two of the following : 14
   (a) Explain in detail the process of gene transfer by bacteriophages.
   (b) What are plasmids ? Explain in detail the different types of plasmids.
   (c) Explain in detail the regulation of gene expression.
3 Comment/Explain any two of the following:
(a) ETC consists of electron donors and acceptors
(b) F factor plays an essential role during conjugation.
(c) ATPase plays an important role in ATP generation.

4 Write notes on (any two):
(a) Point mutations Vs. Frame shift mutations
(b) Chemostat Vs. Turbidostat
(c) Thermophiles Vs. Psychrophiles.