AB-3150
B. Sc. (Sem. V) Examination
March/April – 2014
Bioscience : Paper - VI
(Basic Biotechnology)

Time : 2 Hours] [Total Marks : 50

Instructions :

1. Answer as directed : 12
   (1) Explain - cosmid.
   (2) What is BAC and YAC ?
   (3) Give any two examples of blot technique.
   (4) Enlist the various method for insertion of rDNA into host.
   (5) What is EcoRI ?
   (6) Define :
       (a) Restriction endonuclease
       (b) Transfection.

2. Answer any two of the following : 14
   (1) Describe in detail promoter, operator and regulatory genes of lac operon.
   (2) Enlist the basic steps of translation. Explain activation and termination process of protein synthesis.
   (3) Describe in brief basic procedure of DNA amplification.
3 Answer any two of the following:

(1) Describe in brief how cloning is done.

(2) Enlist the characteristics of cloning vector. Explain in detail plasmid.

(3) Write a note on genetically modified organisms.

4 Write short notes: (any two)

(1) Importance of PCR

(2) Blot technique

(3) Blue-white screening.