



DE-1342

M. Sc. (Sem. I) (Microbiology) Examination

March / April - 2016

MB - 102 : Molecular Biology & rDNA Technology

Time : 3 Hours]

[Total Marks : 70

Instructions : (1)

नीचे दशांशिक निशानीवाणी विगतो उत्तरवडी पर अवश्य कभवी.  
Fillup strictly the details of signs on your answer book.

Name of the Examination :  
M. SC. (SEM. I) (MICROBIOLOGY)

Name of the Subject :  
MB - 102 : MOLECULAR BIOLOGY & rDNA TECH.

Subject Code No. : 1 3 4 2 Section No. (1, 2.....): Nil

Seat No. :

Student's Signature

(2) Figures to the right indicate full marks of the question.

1. Answer any TWO of the following: 18
- a) Discuss the role of different enzymes in synthesis of DNA.  
b) Give a detail account of Eukaryotic model organisms.  
c) Explain recombination and repair in bacteria,
2. Answer any TWO of the following: 18
- a) "Initiation elongation and termination of translation occurs via special mechanism", explain.  
b) Give important features of genetic code.  
c) Explain: Gene regulation in prokaryotes.
3. Answer any TWO of the following: 18
- a) Explain the types of cloning vectors. Describe the use of cloning vector in eukaryotic microorganism with one suitable example.  
b) Describe southern blot and western blot techniques. How do they differ from eachother.  
c) Discuss in detail: Immunological screening.
4. Write short notes on any TWO of the following: 16
- a) The technique used for gene transfer in plants.  
b) DNA fingerprints in forensic investigation.  
c) Retroviral Vector.