



RE-3690-91

M. Sc. (Part - II) Examination

April / May – 2010

Microbiology : Paper - V

(Microbial Genomics, Proteomics & Bioinformatics)

Time : 3 Hours]

[Total Marks :

Instruction :

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

Name of the Examination :

M. SC. (PART - 2)

Name of the Subject :

MICROBIAL GENOMICS, PROTEOMICS & BIOINFORMATICS - 5

Subject Code No. : **3** **6** **9** **0** Section No. (1, 2.....) : **NIL**

Seat No. :

Student's Signature

- 1 Explain the use of alkaline phosphatase for ligating DNA molecules. What advantage is provided by this approach? 7

OR

- 1 Describe various λ driven vectors used rDNA technology. 7
- 2 Describe automated DNA sequencing in detail. 7

OR

- 2 Write a detailed note on gene therapy. 7
- 3 Write short notes on any three of the following : 12
- (a) Use of adaptors for ligating DNA fragments
- (b) Shotgun libraries
- (c) Immunological method of screening
- (d) Expression vectors.

- 4 Explain the use of mass spectroscopy for proteome analysis. 7

OR

- 4 What do you mean by contigs and super-contigs? Explain how they are derived. 7

5 What do you mean by FTIR? Explain its components in detail. **7**

OR

5 Describe theory and practice of autoradiography in molecular biology. **7**

6 Write short notes on any three of the following : **12**

(a) Geiger-Muller counter

(b) EMBL

(c) Applications of protein microarray

(d) Protein Structure Database.
