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SC-2719

M. Sc. Microbiology (Sem. II) Examination

April / May – 2011

MB - 204 : Genomics, Proteomics and other Omics

Time : Hours] [Total Marks : **70**

સૂચના :

(1)

નીચે દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of ☛ signs on your answer book.

Name of the Examination :

☛ **M. Sc. Microbiology (Sem. 2)**

Name of the Subject :

☛ **M B 204 : Genomics, Proteomics and other Omics**

☛ Subject Code No. : **2 7 1 9** ☛ Section No. (1, 2,.....) : **Nil**

Seat No. :

Student's Signature

1 Answer the following : (any **three**) **18**

(1) Enlist the different methods of genomic sequencing. Describe in detail about clone sequencing.

(2) Discuss in detail about the insitu hybridization and radiation hybrid mapping.

(3) Briefly explain about the applications of comparative genomics.

(4) Elaborate your views on genome annotation.

(5) Write a note on ELSI of HGP.

2 Answer the following ; (any **three**) **18**

(1) Describe in detail about X-ray crystallography method to detect protein structure.

(2) Elaborate your views about proteome complexity with its diverse perspectives.

(3) Enlist the techniques used to identify proteins. Explain in detail about mass spectroscopy.

(4) Write short note on current technologies used for proteome coverage.

3 Answer the following : (any **three**) **18**

(1) Describe the role of proteonics in the field of medical biotechnology.

(2) Enlist different methods used for protein - protein interactions. Describe in detail about co-immunoprecipitation.

(3) Write short notes on protein microarray and its application.

(4) Elaborate your views about the manufacturing of protein chips.

4 Answer the following : (any **two**) **16**

(1) Give future perspectives of metabolomics

(2) Explain different applications of metagenomics in various field.

(3) Write a note on sequence based analysis of metagenomics.
