

1128

M.Sc. (Bio-Informatics) Third Semester  
MBIN-8015: Genomics and Proteomics – I

Time allowed: 3 Hours

Max. Marks: 60

**NOTE:** Attempt five questions in all, including Question No. 1 which is compulsory and selecting atleast one question from each Unit.

x-x-x

I. Attempt the following:-

- a) Define Genome.
- b) Write two advantages of Native PAGES.
- c) Write the role of Histone modification in human.
- d) What is effect of pH on protein?
- e) What is Phred score?
- f) Define Glycosylation.
- g) Discuss disulphide bonds.
- h) What are covalent linkages?

(8x1½)

UNIT – I

- II. a) Discuss the important features of eukaryote genome?
- b) Write a note of Nucleosomes.

(6,6)

- III. a) Discuss about the Histone modification.
- b) Write a note on Genome assembly.

(6,6)

UNIT – II

- IV. a) Discuss SDS - PAGE and its uses.
  - b) Write a note of proteome analysis.
- V. a) Write a note on spectrometry for proteome analysis.
  - b) Write a note on MALDI-TOFL and It significance.

(6,6)

(6,6)

UNIT – III

- VI. a) What is a Shotgun and Hierarchical method?
  - b) Write a note on Solexa and its advantages.
- VII. a) Discuss about Genome assembly and its applications.
  - b) Write a note on post translational modification.

(6,6)

(6,6)

x-x-x