11/012023 (Morning)

Exam.Code:0442 Sub. Code: 3511

M.Sc. (Bio-Informatics) Fourth Semester MBIN-8017: Genomics and Proteomics – II

Time allowed: 3 Hours

Max. Marks: 60

NOTE: Attempt <u>five</u> questions in all, including Question No. I which is compulsory and selecting atleast one question from each Unit.

x-x-x

- I. Answer briefly:-
 - (a) Triplet repeats
 - (b) Protein crosslinking
 - (c) Homolgy
 - (d) SSCP
 - (e) molecular markers
 - (f) dHPLC sequencing
 - (g) SCOP
 - (h) Polymorphisms

(8x1½)

UNIT - I

- II. a) Write a note on the milestones of HGP.
 - b) Differentiate between RFLP and AFLP.

(2x6)

- III. a) Write a note on the SNP and disease.
 - b) Discuss the construction of physical maps.

(2x6)

UNIT - II

- IV. a) Explain any two methods used for studying protein-protein interactions?
 - b) Discuss the role and significance of Proteomics automation.

(2x6)

V. Write the different methods used for predicting algorithms for pathways and interactions.

(12)

UNIT - III

- VI. a) How is protein structure predicted using fold recognition?
 - b) Explain any software used for analysis of membrane proteins.

(2x6)

- VII. Write notes on:
 - a) BLASTZ
 - b) VISTA

(2x6)