Exam.Code:0442
Sub. Code: 3514

2071

M.Sc. (Bio-Informatics) Fourth Semester

MBIN-8020: Expression Bio-Informatics

Time allowed: 3 Hours Max. Marks: 45

NOTE: *Attempt five questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.*

x-x-x

I. Answer briefly:-

a) SrRNA

b) K-means clustering

c) Self organizing maps

d) RNAi

e) EST

f) Differential display

g) Normalization

h) Regulatory RNA

i) mRNA (9x1)

UNIT – I

II. a) Explain any microarray database.

b) Discuss k-means clustering. (5,4)

III. a) How is image processed in a microarray experiment?

b) Write a note on cDNA microarray technology. (4,5)

IV. a) Discuss chip-on-chip arrays.

b) Explain the procedure followed for an oligo-nucleotide microarray experiment. (4,5)

UNIT – II

V. a) Write an overview of the protein microarray technology.

b) Write a note on dbEST. (5,4)

P.T.O.

VI. Discuss the different types of protein microarrays. (9)

VII. a) Describe the experimental strategy for making proteome library.

b) Elaborate on subtractive hybridization. (5,4)

VIII. a) Mention the significance and applications of alternative splicing.

b) Differentiate between miRNA and SiRNA. (5,4)

x-x-x