

20/12/17 (M)

Exam. Code : 206601

Subject Code : 5124

M.Sc. Bio-Informatics 1st Semester

**INTRODUCTION TO BIOINFORMATICS &
BIOLOGICAL DATABASES**

Paper—BI-515

Time Allowed—3 Hours] [Maximum Marks—75

SECTION—A

Section A is compulsory.

Explain the following in not more than **four** lines :

1. ORF
2. Promoter
3. Northern blotting
4. PCR
5. Pubmed
6. GBIF
7. EST
8. Entrez
9. PDBsum
10. Prosite.

1.5×10=15

SECTION—B

1. What is central dogma ? Explain differences between intron and exon.

OR

What is a UTR ? Discuss different types of regulatory sequences and their significance in gene regulation.

12

2. Discuss role of bioinformatics in human genome projects. Explain significance of human genome project.

OR

What is a restriction enzyme ? Discuss its application in biological research.

12

3. What is Medline ? Discuss significance of any two literature databases.

OR

Discuss different tools used for data deposition in biological databases.

12

4. What are STS and SNP ? Discuss significance of databases for STS and SNP.

OR

What is Flybase ? Explain the importance of genome databases.

12

5. What type of data you get in NDB ? Discuss importance of structural database.

OR

Define domain. Discuss importance of domain and motif databases with examples

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