

**Exam. Code : 103201**

**Subject Code : 1289**

**B.A./B.Sc. 1<sup>st</sup> Semester**

**BIOINFORMATICS**

**(Fundamentals of Computers, Molecular Biology & rDNA Technology)**

Time Allowed—3 Hours] [Maximum Marks—75

**Note :—** Attempt *five* questions. Select at least **ONE** from each section.

**SECTION—A**

1. (a) Discuss types of input output devices.  
(b) Write in detail text formatting in MS-PowerPoint. 8,7
2. (a) Enlist steps to insert pictures in the slide of MS-PowerPoint.  
(b) Compare memory features of various types of computers. 7,8

**SECTION—B**

3. (a) Discuss the concept of internet domain.  
(b) Explain in detail various network topologies. 5,10
4. (a) Explain internet services like e-mail, Chat and News Groups.  
(b) Explain the use of Router and Switch in a computer network.  
(c) Explain various types of Web Browsers in use currently. 5,5,5

**SECTION—C**

5. (a) Write the organization of DNA in a prokaryotic chromosome.
- (b) Describe the replication of DNA. 6,9
6. (a) Write salient features of Aromatic amino acids.
- (b) Explain the process of translation in Bacterial cells. 5,10

**SECTION—D**

7. Write brief notes on any *three* of the following :
- (a) Restriction Enzymes
- (b) Phage Lambda
- (c) Genetic Map
- (d) Transgenic Plants
- (e) Vector. 5,5,5
8. (a) Write positive regulation of Lac operon.
- (b) Write the procedure of PCR. 7,8