

Enrol. No. \_\_\_\_\_

International Institute of Health Management Research (IIHMR)

NEW DELHI

Health care IT Batch- 2017- 19

Term Exams

Time – 3 Hrs

Total marks: 70

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Bioinformatics HIT - 711

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**Part A**

**Answer any eight of the following.**

5X8= 30

1. What is the importance of genome databases in bioinformatics
2. Write short notes on any two of the following: a) FASTA Tool b) EMBL database c) GeneBank
3. Structure of Protein
4. Biological databases are source of scientific information. Justify.
5. Define Sequence alignment. What are the types of sequence alignment?
6. What is bioinformatics? Give its application in various field.
7. Explain the structure of Eukaryote Gene
8. Genome Sequencing
9. Concept of homology
10. Explain Central Dogma of Biology

**Part B**

**Answer the following two questions (No Choice)**

2 x 15 = 30

11. Compute the global alignment between the two strings  $s_1 = \text{ACCGTTAGCC}$  and  $s_2 = \text{AGTTCAAGAA}$ , considering the following scoring parameters: +1 for match, -1 for mismatch, and -1 for a gap.

12. Identify the reading frames, start codon, stop codon, ORF in the following sequence

ATGCCGTTTTAATGAAACCTTTCCAATCACCATGCGGGTATTGAA