JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2026

B.Tech-IV Semester (BT)

COURSE CODE (CREDITS): 25B11BT414 (4) MAX. MARKS: 15

COURSE NAME: Introduction to Bioinformatics

COURSE INSTRUCTOR: Dr. Raj Kumar MAX. TIME: 1 Hour

Note: *(a) All questions are compulsory.*

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

(c) Use of calculators is not allowed

Q.No	Question	CO	Marks
Q1	Discuss the major components of bioinformatics and analyze how each component contributes to solving biological problems. Support your answer with suitable examples.	1	3
Q2	The Human Genome Project laid the foundation for modern genomics. Explain the key goals of the project. Discuss how the methods of modern human genome sequencing differ from those of the HGP?	2	2
Q3	Explain the following in context to the Human Genome Project: a) Funding for the project b) Human genome was a mosaic c) Gene density in human genome	2	3
Q4	Construct an effective PubMed search strategy for locating peer-reviewed studies on the health impacts of passive smoke exposure in children.	1	3
Q5	Discuss how the UniProt Knowledgebase (UniProtKB) is divided into two primary sections based on how they are curated.	1	2
Q6	Write short notes on: a) Entrez b) GenBank file format	2	2

UNIT TEST EXAMINATION- FEB-2026

153