

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT**TEST -1 EXAMINATION- FEB-2023****COURSE CODE (CREDITS): 18BIWBI834 (3)****MAX. MARKS: 15****COURSE NAME: NGS Data Analysis & Applications****COURSE INSTRUCTORS: Dr. Shikha Mittal****MAX. TIME: 1 Hour**

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

- Q1. How does NGS differ from traditional DNA sequencing techniques? (3 marks) [CO-1]
- Q2. If the genes that code for proteins are so important, why do they comprise only 2% of the human genome? (2 marks) [CO-1]
- Q3. What is the Human Genome project? Write the salient features of the Human Genome Project. (4 marks) [CO-1 & CO-2]
- Q4. Explain the following – (6 marks) (CO-1 & CO-2)
- (a) Difference between chain termination method and chemical degradation method.
 - (b) What does dNTP stand for? What are the four types of dNTPs?
 - (c) Difference between emulsion PCR and bridge PCR