

Jitendra  
Vasist

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATIONS-2022

B.Tech.-IV Semester (Biotechnology)

COURSE CODE: 10B11BT413

MAX. MARKS: 15

COURSE NAME: Molecular Biology

COURSE CREDITS: 3

MAX. TIME: 1 Hour

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

- Q1. What do you understand by nucleotide and nucleoside? (2 mark) (COI)
- Q2. Which of the following segment of DNA show high melting temperature? (2 mark) (COI)
- ATTATATATATGAGATCATATCAGCGC
  - GCGCCGCGATATACATGCAAGCGACGC
- Q3. Differentiate between DNA and RNA. Why DNA is considered more stable than RNA at room temperature? (3 marks) (COII)
- Q4. Explain the principle of gel filtration chromatography. What is the significance of this purification technique? (3 mark) (COM)
- Q5. Define the following in brief along with their significance. (5 mark) (COII)
- Gel retardation assay
  - Polymerase Chain reaction