

JAYPEE UNIVERSITY OF INFORMATRION TECHNOLOGY, WAKNAGHAT

T1 EXAMINATION - February 2020

BTech IV Semester

COURSE CODE: 18B11BI412

MAX. MARKS: 15

COURSE NAME: Genetic Engineering and Genomics

COURSE CREDITS: 03

MAX. TIME: 1.0 HRS

*Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.*

(CO; Marks)

1. What are Isoschizomers, Neoschizomers and Isocaudomers? Discuss with examples. (CO2; 3)
2. What are applications of genetic engineering? (CO1; 2)
3. Describe polymerase chain reaction. What are its applications? (CO2; 2)
4. What are linkers and adapter? What are their applications? (CO2; 2)
5. What are alkaline phosphatase and polynucleotide kinase? What are their roles in gene cloning? (CO2; 2)
6. What are various steps in gene cloning? (CO1; 2)
7. You are given a vector cut with a restriction enzyme. What modifications would you do in this vector to prevent its self ligation? (CO2; 2)