

Dr. Anilkant

**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT**  
**TEST -1 EXAMINATIONS-2022**  
**B. Tech-IV Semester (BI)**

COURSE CODE: 18B11BI412

MAX. MARKS: 15

COURSE NAME: Genetic Engineering and Genomics

MAX. TIME: 1 Hour

COURSE CREDITS: 3

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

Q.1 Answer following Questions briefly.

[1.0X5=5]

- What is recombinant DNA? Analyze the different aspects from the definition given by NIH?
- Analyze the relationship between gene cloning and genetic engineering?
- Humans have been genetically modifying different organisms for hundreds of years via traditional methods. Justify and give any two striking examples of such modifications.
- Name and explain two gene therapy products?
- Explain any two examples of transgenic animals developed recently with focus on objective?

CO I

Q.2

CO I

Genetic engineering breaks the species barrier? Explain and give two specific of example of following i) bacterial gene transferred to plant ii) Human gene transferred to bacteria

[3]

Q.3

CO II

Briefly explains steps involved in the process of genetic engineering.

[3]

Q.4

CO I

Appraise the application of the genetic engineering area of healthcare and medicine? Explain any two latest examples of bio-pharming.

[4]