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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- DEC 2018

B.Tech VII Semester

COURSE CODE: 14B1WBT736

MAX. MARKS: 35

COURSE NAME ANTIBODY ENGINEERING TECHNOLOGIES

COURSE CREDITS: 3

MAX. TIME: Two Hours

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

Q1. Write Short Notes on: (ANY FIVE)

(CO-I) [2 X 5 = 10]

- a. Zenapax
- b. Limitations of Humira
- c. Future of Antibody Patents
- d. Mode of action of Xolair
- e. Impact of charge and pI on mAb Pharmacokinetics (PK)
- f. Mode of action of Obiltoxaximab
- g. Mode of action of Alemtuzumab

Q2. What is Phage Display Technology? Describe 'Biopanning' with diagrams and enlist applications of Phage Display Technology.

(CO-III) [5]

Q3. Describe Baculovirus Expression Vector System? Compare are the advantages of using Baculovirus expression vector system over other expression systems?

(CO-II) [5]

Q4. What is Crispr Cas 9 system? Discuss the mechanism of Crispr Cas 9 System explaining the role of Protospacer Adjacent Motif, Spacer and Homology directed repair.

(CO-V) [6]

Q5. Write Short Notes on:

(CO-I) [3 X 3 = 9]

- a. Bispecific Antibody and their Applications
- b. Single Domain Antibodies and their Advantages
- c. Nanobodies and their competitive advantages