

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- Dec 2017

B.Tech VII Semester

COURSE CODE: 14B1WBT736

MAX. MARKS: 35

COURSE NAME: ANTIBODY ENGINEERING TECHNOLOGIES

COURSE CREDITS: 3

MAX. TIME: 2Hr

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

Q1: Answer the following related to CRISPR gene editing tool:

[2 X 2 = 4]

- a. Reason for using CRISPR as a tool of preference
- b. Pre-requisites for gene editing in mouse/human.

Q2. Describe the CAR-T Cell gene therapy with help of a diagram.

[3]

Q3. Describe the process and advantage of antibody humanization in brief. Explain with the help of diagram the mechanism of action of Trastuzumab.

[4]

Q4. Write short note on: ANY EIGHT

[3 X 8 =24]

- i. Bevacizumab and its mode of action
- ii. Plantibodies and their applications
- iii. Application of Next Generation Sequencing in Antibody Engineering
- iv. Basiliximab and its utility
- v. Nanobodies and their structure
- vi. Anti- Bacterial Antibodies
- vii. Bispecific Monoclonal Antibodies and Their Applications
- viii. Yeast Display of Antibody and its application
- ix. Road map for the development of antibody using system biology approach