

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- Sep 2017

B.Tech VII Semester

COURSE CODE: 14B1WBT736

MAX. MARKS:15

COURSE NAME: ANTIBODY ENGINEERING TECHNOLOGIES

COURSE CREDITS: 3

MAX. TIME: One Hr

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

Q1. Explain the following with reasons:

[1.5 X 2 = 3]

- Why do Antibodies need an Fc region?
- Transcytosis of immunoglobulins across the gut epithelium in newborns and its Significance.

Q2. In context of MAbs production using hybridoma technology answer the following: [1.5 X 2 = 3]

- Requirement of using HGPRT (negative) myeloma cells for monoclonal antibody production.
- Significance of use of 'Aminopterin' for selection of Hybridoma cells.

Q3. Write Short Notes on: (ANY TWO)

[2 X 2 = 4]

- ADEPT (Antibody directed enzyme prodrug therapy)
- Gene-Directed Enzyme Prodrug Therapy (GDEPT)
- Modes of Toxicity of Antibody-Drug Conjugates (ADC)s

Q4. What are various generations of Antibodies used for therapeutics? Illustrating their limitations for therapeutics, discuss evolution of antibodies and their advantages.

[5]

BT-9, BT