JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT TEST -1 EXAMINATION- 2016

B.Tech VI Semester

COURSE CODE: 10B11BT615

MAX. MARKS: 15

COURSE NAME: Diagnostics and Vaccine Manufacture Technologies

COURSE CREDITS: 4

MAX. TIME: 1 HR

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

Q1. Give reason for the following: (Any Six)

 $[1.5 \times 6 = 9]$

- a. SDS-PAGE allows better separation of proteins than Immunoelectrophoresis.
- b. Urine samples are most commonly used to detect drugs/toxin in humans.
- c. Monovalent antigens cannot be used for precipitation based techniques.
- d. Polyclonal antibodies are used as capture antibodies in Sandwich ELISA.
- e. Anti-IgG is the preferred secondary antibody for indirect assays.
- f. ELISA and ELISPOT work on similar principles, but they give different set of information as output.
- g. Rocket Immunoelectrophoresis is preferred over immunoelectrophoresis for study of antigen-antibody interaction although it can be used for only negatively charged antigen.

Q2. Write Short Notes on:

 $[2 \times 1.5 = 3]$

- i. Prozone Phenomenon
- ii. Zeta Potential
- Q3. Describe various methods for separation of free antigen from antigen bound to primary antibody in a Radioimmunoassay technique? List disadvantages of Radioimmunoassay. [3]