

Dr. Rahul

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- Feb 2020

B.Tech VI Semester

COURSE CODE: 10B11BT615

MAX. MARKS: 15

COURSE NAME: DIAGNOSTICS & VACCINE MANUFACTURE TECHNOLOGIES

COURSE CREDITS: 4

MAX. TIME: 1Hr

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

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Q1. Write Short Note on:

[CO-II] [2.5 X 2 = 5]

- a. Quantitative Radial Immunodiffusion
- b. Crosses (2D) Immunoelectrophoresis

Q2. Provide reason(s) for the following correct statements: (ANY FOUR)

[CO-I] [1.5 X 4 = 6]

- a. Rocket Immunoelectrophoresis is preferred over Immunoelectrophoresis for study of antigen-antibody interaction although it can be used for only negatively charged antigen.
- b. SDS-PAGE allows better separation of proteins than Immunoelectrophoresis.
- c. Monovalent antigens cannot be used for precipitation based techniques.
- d. Common milk powder can be used as blocking agent in Western Blot Experiments.
- e. Urine samples are most commonly used to detect drugs/toxin in humans.

Q3. A bacterial infection can be diagnosed by interaction of any of its immunogenic antigen with a complementary antibody; using either precipitation or agglutination based technique. Design an experiment using a method of your choice for diagnosis of such infection, with suitable reasons for your choice. Discuss the logistics and steps you would follow for diagnosis.

[CO-II] [4]