

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST-1, SUMMER SEMESTER EXAMINATION - JUNE 2018

B. Tech. VI Semester

COURSE CODE: 10B11BT615

MAX. MARKS: 50

COURSE NAME: DIAGNOSTICS & VACCINE MANUFACTURING TECHNOLOGIES

COURSE CREDITS: 04

MAX. TIME: 2HRS

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

5 X 10 = 50

1. Discuss role of biotechnology in the diagnosis of infectious diseases and vaccine development. 5
2. Discuss principle of rocket immunoelectrophoresis and its limitations. 5
3. Compare direct and indirect ELISA with respect to sensitivity, specificity and time required for antigen detection. 5
4. What do you understand by Prozone phenomenon? What are various causes that lead to this phenomenon? 5
5. Discuss direct and indirect immunofluorescence for antigen detection. 5
6. What do you understand by Agglutination Inhibition? Discuss with an example. 5
7. Write note on (a) nested PCR and (b) inverse PCR. 10
8. How would you apply radial immunodiffusion assay for quantitation of an unknown target antigen in a sample? What are its limitations? 10