

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATION- Oct 2017

B.Tech BTDD X and M.Tech BT III Semester

COURSE CODE: 14MIWBT332

MAX. MARKS:25

COURSE NAME: Clinical Diagnostics

COURSE CREDITS: 3

MAX. TIME: 1.5 Hrs

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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. What do you understand by assay development and validation? Enlist different criteria to be followed for assay validation. (2+2)
- Q2. Differentiate between: (4)
- a) Analytical sensitivity and specificity
  - b) Diagnostic sensitivity and specificity
  - c) Specificity and sensitivity of Ag-Ab interaction
  - d) Avidity and Affinity of Ag-Ab interaction
- Q3. What types of specimens and their storage conditions you will maintain for the analysis of Cell mediated and humoral immune responses? (3)
- Q4. Describe the principle, protocol, precautions and application of ELISPOT assay. (3)
- Q5. Write brief notes on: (6)
- a) Radioimmuno assays
  - b) Complement fixation assay
  - c) Chemiluminescence assays
- Q6. Describe the quantitative radial immunodiffusion assay and its application in determining the concentration of antigens. (3)
- Q7. Discuss the role of flow cytometry in determining the immunological responses. (2)