## ASSIGNMENT III

## Subject: Applied Medical Microbiology and Advanced Technique

## Subject Microbiology II

## **Topics: Affinity, avidity and Precipitation reaction**

Q1Multiple choice questions/ Fill in the blanks

i)The major forces linking antigen to antibody are

- A) hydrogen bonds
- B) van der Walls
- C) hydrophobic bonds
- D) ionic bonds
- E) all of the above
- ii) The strength of binding between an antigen and the Fab of its antibody is called
- A) avidity
- B) valency
- C) hydrophobicity
- D) electrophoretic mobility
- E) affinity
- iii) Immune complexes precipitates are formed in
- A) antigen excess
- B) antibody excess
- C) the zone of equivalence of antigen and antibody
- D) the presence of concentrated acid
- E) the absence of electrolyte

iv) For many uses in the laboratory, polyclonal antibodies work well, but for some types of assays, they lack sufficient \_\_\_\_\_\_ because they cross-react with inappropriate antigens.

- a. specificity
- b. sensitivity
- c. accuracy
- d. reactivity

- v) the cross-linking of soluble antigen to create an insoluble precipitate that is visible.....
- vi) the part of the precipitation curve that represents an equal concentration of antibodies and antigens.....
- vii) A polyclonal response to an infection occurs because most antigens have multiple
- Q2. Differentiate between avidity and affinity.
- Q3. Discuss the term lattice formation.
- Q4.What two factors are important in the development of precipitin reactions?
- Q5.What do you understand by cross reaction?
- Q6.Explain in detail prozone phenomenon and precipitation curve.
- Q7.Why do polyclonal antibodies produce better precipitin?