Week VII- Assignment

Subject: Applied Medical Microniology and Advanced Technology

Subject Code: Medical Microbiology II

Topic: Immunoelectrophoresis and Widal test

**Q1. Multiple choice questions/ Fill in the blanks:**

i)Widal test is used for the diagnosis of ................................. and ...................................

ii) In typhoid, Widal test detects

* 1. O antigen
  2. H antigen
  3. Vi antigen
  4. Both O and H antigen

iii) Which is the following is true about the Widal reaction ?

* 1. Antibody to H Ag apears first and persist
  2. Antibody to O Ag appears first and persists
  3. Antibodies to H and O Ag appear simulatneously and persist
  4. None of the above

1. In the first week , typhoid is diagnosed by
2. Widal test
3. Stool culture
4. Urine culture
5. Blood culture
6. The Widal test is used for the detection of *Salmonella typhi* and other subspecies. This test is based on the principle where?
7. the antigens are detected using the neutralization assay
8. the antigen combines with its soluble antibody and form a lattice and develops a visible agglutinate
9. the antigens bind to RBCs and form the precipitation
10. None of the above
11. Immunoelectrophoresis techniques are designed to separate the mixture components from each other by using electrophoresis
    1. Prior to reaction with antibody
    2. Prior to reaction with antigen
    3. After reaction with antibody
    4. After reaction with antigen

Q2. Short questions answer:

a) What is the major advantage of immunoelectrophoresis over immunodiffusion? What are the disadvantages?

b) What are febrile agglutinins?

c) What are the different antigens present on *S*. *typhi?*

Q3 Long question answer:

a) Write down different types of Immunoelectrophoresis in brief.

b) Write down the procedure of quantitative estimation of *S. typhi* in clinical sample.