**WEEK 6: Question paper**

**Course:** B.Sc. Medical Microbiology III Year

**Subject:** Applied Immunology and Sero-Diagnosis

**Subject Code:**

**Teacher’s Name:** Dr. Nidhi Belwal /Dr. S. Dheeman

**By: Dr. Nidhi S. Belwal**

**Topic:** Laboratory test for identification Antigen and Antibody

Q. 1 Recognize the following techniques:

a) A color change is observed when Antibody interacts with respective Antigen.

b) Agglutination is observed if the result is positive.

c) Performed for patients with hemolytic anemia.

d) Point-of-care testing that directly detects the presence or absence of an antigen.

Q. 2 Extend:

a) IFA b) ELISA c) AHG d) RIDT e) RAT

Q. 3 Illustrate the process involved in the Western Blot for detection of Antigen or antibody.

Q. 4 Compare:

a) Direct and Indirect methods Immunofluorescence Assay

b) DAT & IAT

Q. 5 Explain RAT with its significance over antibody test.

**By: Dr. S. Dheeman**

**Topic:** Anti Scl-70 Antibody & Anti Parietal Cell Antibody (APCA)

***Multiple Choice Questions***

Q. 1 Anti Scl-70 antibody is also known as-

 a. Antitopoisomerase – II

 b. Topoisomerase – I

 c. Antitopoisomerase – I

 d. Topoisomerase – II

Q. 2 In a case, a patient of age 65 is suffering with myositis, weight loss, and anemia. CBC diagnosed increase in breadth of red blood cell with decrease in amount. The case is suspected with

 a. Lupus

 b. Sjogren Syndrome

 c. Pernicious anemia

 d. All the above

***Short answer type***

Q. 3 Fill in Blanks for CREST syndrome

 C: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 R: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 E: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 S: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 T: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q. 4 What is systemic scleroderma? Define

Q. 5 What is Anti Parietal Cell Antibody (APCA) and relate with vitamin deficiency.

Q. 6 What is Pernicious Anemia?

***Long answer type***

Q. 7 Describe diagnostics preauction and reference value of Anti Scl-70 antibody

Q. 8 Describe method of detecting APCA, reference value and disease determination.