**Dr Mohd Abu Zaid**

**8th Assignment for B.Sc. Medical Lab technology (pathology) Semester 4 subject - Clinical Enzymology and BSc MLT 3rd year subject Clinical Biochemistry-II**

**Fill ups**

1. Ionizing radiation during radioactivity is usually measured by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. At low concentrations, the intensity of fluorescence is related to the intensity of the incident light by the relationship\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. Isotopes used in enzyme assay are mostly \_\_\_\_\_\_\_\_\_\_\_\_\_\_ emitters.
4. In glucometer test oxidation of β-D-glucose by molecular oxygen producing \_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. Number of different anti-hCG antibody used in pregnancy test strip is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Short notes**

1. Explain the working mechanisms of ion selective electrode.
2. Give the example enzymatic reactions assayed by florometric methods.
3. Write a note on radio isotopic method for enzyme assay.
4. What are the importance of chemiluminescent in enzyme assay?
5. Differentiate between heterogeneous and homogenous enzyme immunoassay.
6. Differentiate between competitive and noncompetitive immunoassays

**Essay type questions**

1. Explain the principle and detection of human chorionic gonadotropin by strip test.
2. Write a note on florescence method used for enzymatic assay?
3. Explain the principle and working of sandwich ELISA.
4. Describe the basic concept of the glucose biosensor.