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**9th Assignment for B.Sc. Medical Lab technology (pathology) Semester 4 subject - Clinical Enzymology**

**Qs.1 Fill ups**

1. Coenzymes are also called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ since thev have affinity with the enzyme as that of the substrates,
2. The non-protein, dialysable substance associated with functional enzyme is called \_\_\_\_\_\_\_\_\_\_\_\_\_.
3. the inorganic cofactor necessary to enhance enzyme activity is called\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. In ATP molecule, 2nd & 3rd phosphate bonds are **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** bonds.
5. The biochemical functions of B-complex vitamins are exerted through their \_\_\_\_\_\_\_\_\_\_\_\_\_.
6. The reactions are carried out with the help of energy released from hydrolysis of ATP are called as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. Give two examples of nitrogenous base containing coenzymes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
8. Give two examples of Copper containing enzymes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
9. Coezyme A is derivative of vitamin\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
10. Specificity of the enzyme is mostly dependent on
    1. Apoenzyme iii. Holoenzyme
    2. Coenzvme iv. Prosthetic group

Qs.2 Explain role of Nicotinamide as conzymes

Qs.3 Write a note on conzymes?

Qs.4 Classify coenzymes with examples?

Qs.5 Differentiate between coenzyme and prosthetic group with examples.

Qs.6 Differentiate between metalloenzyme and metal activated enzymes

Qs.7 Differentiate between apoenzyme and holoenzyme*.*

Qs.8 Write a note on Vitamin B complex functioning as coenzymes.