



- (ix) Write the correct Location where MM-CK is abundant.
- a) Skeletal muscle  
b) Cardiac muscle  
c) Brain tissue  
d) None of these
- (x) Fecal urobilinogen increase is related to \_\_\_\_\_.
- a) Hemolytic jaundice  
b) Obstruction of biliary duct  
c) Extrahepatic gall stones  
d) Enlarged lymphnodes
- (xi) Hepatocellular jaundice as compared to pure obstructive type of jaundice is illustrated by \_\_\_\_\_.
- a) Increased serum alkaline phosphatase, LDH and ALT  
b) Decreased serum alkaline phosphatase, LDH and ALT  
c) Increased serum alkaline phosphatase and decreased levels of LDH and ALT  
d) Decreased serum alkaline phosphatase and increased serum LDH and ALT
- (xii) Trace the location where degradations of Hb takes place in \_\_\_\_\_.
- a) Mitochondrion  
b) Erythrocytes  
c) Cytosol of cell  
d) R.E. cells
- (xiii) Predict the vitamin which would most likely become deficient in an individual who develop a completely carnivorous lifestyle \_\_\_\_\_.
- a) Thiamin  
b) Niacin  
c) Vitamin C  
d) Cobalamin
- (xiv) Chymosin is related to \_\_\_\_\_.
- a) Lipase  
b) amylase  
c) trypsin  
d) rennin
- (xv) Enterokinase is employed in the conversion of \_\_\_\_\_.
- a) Lactose to Sucrose  
b) Trypsinogen into trypsin  
c) Pepsinogen into pepsin  
d) Proteins into polypeptide

**Group-B**

(Short Answer Type Questions)

3 x 5=15

2. Illustrate the function of Thiamin mentioning disease seen in adult due to Thiamin deficiency. (3)
3. Define acidic buffer. (3)
4. Differentiate between Nucleotide and Nucleoside. (3)
5. Explain angiogenesis for cancer development. (3)
6. Explain the principle of Competitive ELISA and how it differs from Direct ELISA. (3)
- OR**
- Why is Competitive ELISA preferred for detecting small molecules or haptens? (3)

**Group-C**

(Long Answer Type Questions)

5 x 6=30

7. Explain the role of Phosphatidyl choline. (5)
8. A solution of tryptophan(trp) has an absorbance at 280nm of 0.54 in a 0.5cm length cuvette. Absorbance coefficient of trp is  $6.4 \times 10^3$  L/mol/cm. Calculate the concentration of solution. (5)
9. Enumerate water soluble vitamins mentioning name of some disease and their symptoms that occur due to deficiency of water soluble vitamin. (5)
10. Explain indirect ELISA test with diagram. (5)
11. In hemolytic and hepatic jaundice Ehrlich test for urobilinogen is positive-judge the statement. (5)

12. A 45-year-old patient presents with jaundice, fatigue, and abdominal discomfort. LFT results show elevated ALT (200 U/L), AST (180 U/L), normal ALP, and elevated total bilirubin (3.5 mg/dL). What type of liver injury does this pattern suggest, and what is the likely cause? (5)

**OR**

A patient with jaundice has an isolated elevated direct (conjugated) bilirubin with normal ALT, AST, and ALP levels. What can be inferred about the type of jaundice and its possible cause? (5)

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