Date: 11-12-2016

# Preli

# First Year MBBS Examination

# I MBBS Biochemistry Paper 2

Time: 3 hours

Max Marks: 50

**Instructions:** 1. Answer to the points. 2. Figure to the right indicates marks. 3. Use separate answer books for each section. 4. Draw diagrams wherever necessary. 5. Write legibly.

## Section 1

**1. Give an account of any two** (10)

a. Detoxification of ammonia and disorders of urea cycle
b. PCR technique & its medical applications
c. Role of Vitamin D in regulation blood calcium levels and deficiency manifestations of vitamin

**2. Write Short notes on (any three)** (9)

a. Post translations modifications

b. Genetic Code
c. Structure & functions of t-RNA
d. Gene expression & explain Lac Operon
e. Southern blot technique

**3. Explain any two** (6)

a. Metabolic adaptation during starvation
b. Importance of dietary fibers
c. Protein energy malnutrition

## Section 2

**4. Write briefly on (any two)** (10)

a. Hyperuricemia and Gout
b. Fate and functions of Methionine and cysteine amino acids
c. Inborn errors of Phenylalanine and tyrosine amino acid metabolism



**5. Write Short notes on (any three) out of five)** (9)

a. Biochemical functions of vitamin C
b. Biologically active nucleotides
c. Wald's visual cycle
d. One carbon metabolism
e. Antioxidant vitamins

**6. Read the case report and answer the**

**following questions** (6)

A 37 year old male was admitted in a hospital in Patan with complaints of Pain in abdomen. Anorexia vomiting and passing yellow colored urine since 10 days. On examination liver was tender and palpable. Icterus was seen his LFT reports were. Scrum Alnine transaminase (ALT) 2971 JU/L (Normal: Q-40 ig/L) Scrum Aspartate transminased (AST) 3148 IU/L (Normal Q-4Q IU/L) Scrum Alkaline phosphate (ALP)27 kA units (Normal 3-13 kA units) Scrum Bilirubin Total 22 mg/dl (Normal: 0.3-3 mg/dl) Scrum Bilirubin Direct:12 mg/dl (Normal 0.2-0.8 mg/dl)

a. Which are the different types of Jaundices?
b. Write clinical significance of serum bilirubin.
c. Write the causes of jaundices
d. Name the bile salts and bile pigments
e. Enlist the other LFT's apart from mention above
f. What is van den Bergh reaction and write what is its significance in differential diagnosis of jaundice?

***