

**MBBS: Biochemistry Paper 1 Part 1 ABVMUUP Paper Code: 211 21 30003**

- Q1. Describe the phases of activation; initiation; elongation and termination of protein biosynthesis with add a note on inhibitors of translation. (20 marks)
- Q2. Write briefly on: (4X5=20 marks)
- (a) Structure and function Immunoglobulin (b) Polymerase chain reaction  
(c) Liver Function Test (d) Recombinant DNA technology
- Q3. Multiple choice questions. (1X10=10 marks)
- a) The number of hydrogen bonds between guanosine and cytosine in DNA are:  
A. One B. Two C. Three D. Four
- b) Which one of the following nucleotide base is not present in codons?  
A. Adenine B. Guanine C. Thymine D. Cytosine
- c) One of the plasma proteins listed below is not a transport protein  
A. Transferrin B. Haptoglobin C. Albumin D. Alpha-1-antitrypsin
- d) Cardiac arrest may occur due to overdoses of  
A. Sodium B. Potassium C. Zinc D. Magnesium
- e) Adenosine deaminase (ADA) deficiency leads to:  
A. Severe combined immunodeficiency (SCID) B. Orotic aciduria  
C. Gout D. Lesch-Nyhan syndrome
- f) The major fuel for the brain after prolonged starvation is:  
A. Glucose B. Fatty acids C. Ketone bodies D. Glycerol
- g) In compensated metabolic alkalosis  
A. Respiratory center is stimulated B. pCO<sub>2</sub> increases  
A. pO<sub>2</sub> elevated D. Urine becomes acidic
- h) All the following laboratory data are suggestive of acute renal failure, except;  
A. Plasma sodium-150mmol/L B. Plasma potassium -5.6mmol/L  
C. Urea- 220mg/dl D. Creatinine-3.2mg/dl
- i) Which of the following is not a point of care test (POCT):  
A. ABG analysis B. Plasma electrolytes C. Plasma glucose D. Plasma proteins
- j) Immunosorbent assays will use antibody conjugated to all the following reagents, Except:  
A. Alkaline phosphatase (ALP) B. Horse radish peroxidase (HRP)  
C. Riboflavin D. Biotin

**MBBS: Biochemistry Paper 2 Part 2 ABVMUUP Paper Code: 211 22 30003**

Q1. Give an account of sources, chemistry, functions, RDA and deficiency manifestations of ascorbic acid (Vit. C) & Vit. B12. (20 marks)

Q2. Write briefly on (4X5=20)

- a) Glycogen storage diseases  
c) Tumor markers
- b) Detoxification by conjugation  
d) Biological effects of glucocorticoids

Q3. Multiple choice questions (1X10=10)

- a) Branched chain keto acids are excreted in urine in large quantities in  
A. Phenylketonuria  
B. Maple syrup urine disease  
C. Tyrosinosis  
D. Hartnup's disease
- b) Cholecalciferol is synthesized in  
A. Liver  
B. Skin  
C. Kidney  
D. Intestinal mucosa
- c) Vitamin K is inhibited by  
A. Isoniazid (INH)  
B. Methotrexate  
C. Dicoumarol  
D. Avidin
- d) Basal metabolic rate is increased by all the following, EXCEPT  
A. Fever  
B. Thyroxine  
C. Starvation  
D. Cold climate
- e) All the following diseases may be associated with obesity, EXCEPT  
A. Grave's disease  
B. Cushing's syndrome  
C. Depressive psychosis  
D. Diabetes mellitus
- f) Which is a feature of hypothyroidism?  
A. Decreased T3 level in blood  
B. Decreased TSH levels  
C. Weight loss  
D. Increased basal metabolic rate
- g) Oncogenes may be activated by all, EXCEPT  
A. Viral infection  
B. Promotor insertion  
C. Mutations in proto-oncogene  
D. Reverse transcriptase
- h) All the following hormones have membrane receptors, EXCEPT  
A. Insulin  
B. Epinephrine  
C. Glucagon  
D. Thyroxine
- i) Which is an anticancer drug?  
A. Zidovudine  
B. 6-mercaptopurine  
C. Allopurinol  
D. Acyclovir
- j) Which has the highest calorific value?  
A. Glucose  
B. Palmitic acid  
C. Albumin  
D. Ethanol