MBBS: Biochemistry Paper 2 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 protien
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. pCO2 increases
A. pO2 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 protiens

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

31 Jan 2022. Max marks 50

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
b) Detoxification by conjugation
c) Tumor markers
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

31 Jan 2022 Max marks 50