Q.P. CODE: M102A030

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MBBS DEGREE EXAMINATION - OCTOBER, 2024

FIRST M.B.B.S. EXAMINATION

BIOCHEMISTRY- PAPER-I (SET-B)

(Multiple Choice Questions)

Time: 20 Minutes **Max Marks: 20**

Note: Answer all questions.

SECTION-I (MCQs - 20 MARKS) **1X2=20**

1) Cori's cycle transfers

a) Glucose from muscles to liver

b) Lactate from muscles to liver

c) Lactate from the liver to muscles

d) Pyruvate from the liver to muscles

2) Gluconeogenesis is decreased by

a) Glucagon

b) Epinephrine

c) Glucocorticoids

d) Insulin

3) On boiling Benedict's solution is not reduced by

a) Fructose

b) Lactose

c) Maltose

d) Sucrose

4) Two sugars which differ from one another only in configuration around a single carbon atom are termed

a) Epimers

b) Anomers

c) Optical isomers

d) Stereoisomers

5) Among the following, the most sensitive indicator of glomerular function is

a) Serum Urea

b) Serum Creatinine

c) Urea Clearance

d) Creatinine Clearance 1

6) Which of the following metabolite integrates glucose and fatty acid metabolism?

a) Acetyl CoA

b) Pyruvate

c) Citrate

d) Lactate

7) Anaemia can occur due to the deficiency of all of the following except:

a) Thiamine

b) Pyridoxine

c) Folic acid

d) Cyanocobalamin

8) Catalytic activity of salivary amylase requires the presence of

a) Chloride ions

b) Bromide ions

c) Iodide ions

d) All of these

9) HMG CoA is formed in the metabolism of

a) Cholesterol, ketones and Leucine

b) Cholesterol, fatty acid and Leucine

c) Lysine, Leucine and Isoleucine

d) Ketones, Leucine and Lysine

10) All the following statements correctly describe ketone bodies except:

a) They may result from starvation

b) They are present at high levels in uncontrolled diabetes

c) They include – OH β-butyrate and acetone

d) They are utilized by the liver during starvation

11) Phrynoderma is a deficiency of

a) Essential fatty acids

b) Proteins

c) Amino acids

d) None of these

12) Gaucher's disease is due to a deficiency of the enzyme

a) Sphingomyelinase

b) Glucocerebrosidase

c) Galactocerebrosidase

d) β-Galactosidase

13) Serum lactate dehydrogenase rises in

a) Viral hepatitis

b) Myocardial infarction

c) Carcinomatosis

d) All of these

14) Both folic acid and vitamin B12 are required in

a) Deamination of serine

b) Deamination of threonine

c) Conversion of pyridoxal phosphate to pyridoxamine phosphate

d) Methylation of homocysteine to methionine

15) The vitamin required for the formation of hydroxyproline during collagen synthesis is

a) Vitamin C

b) Vitamin A

c) Vitamin D

d) Vitamin E

16) The most potent Vitamin D metabolite is

a) 25-hydroxycholecalciferol

b) 1,25-Dihydroxycholecalciferol

c) 24, 25-Dihydroxycholecalciferol

d) 7-Dehydrocholesterol

17) An example of feedback inhibition is

a) Allosteric inhibition of hexokinase by glucose-6-phosphate

b) Cyanide action on cytochrome

c) Sulpha drug on folic acid synthesizer bacteria

d) Reaction between succinic dehydrogenase and succinic acid

18) 'Clearing factor' is

a) Lipoprotein lipase

b) Crotonase

c) 7-dehydro cholesterol

d) B-sitosterol

19) Acetyl CoA carboxylase is activated by

a) Citrate

b) Insulin

c) Both A & B

d) None of these

20) Glucose-6-phosphate dehydrogenase is induced by

a) 6-Phosphogluconolactone

b) Glucose-6-phosphate

c) Ribose-5-phosphate

d) Insulin

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