BRAINWARE UNIVERSITY

Term End Examination 2022
Programme – B.Sc.(CCT)-2021/B.Sc.(CCT)-2022
Course Name – Biochemistry
Course Code - BCCT103/BCCTC103
(Semester I)

Full Marks : 60 **Time : 2:30 Hours**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question) 1 x 15=15

1. *Choose the correct alternative from the following :*

(i) Increased dietary uptake of trans fatty acid causes-

a) Increase HDL in blood
b) Increase LDL in blood
c) Increase LDLand decrease HDL in blood
d) Increase HDL and decrease LDL in blood

(ii) Name of the cell organellie where ATP generation takes place

a) Lysosome
b) Chloroplast
c) Mitochondria
d) Centrosome

(iii) Identify the function of calcium

a) Formation of bone and teeth
b) Digestion of food
c) Formation of urine
d) All of these

(iv) Plasmolysis is defined as

a) Shrinkage of the protoplasm of a plant cell due to loss of water
b) Swelling of the protoplasm of a plant cell due to gain of water
c) All of these
d) None of these

(v) Which of the following method is used for creatinine test-

a) Jeffe method
b) Kinetic jaffe method
c) Technicon method
d) Enzyme assay

(vi) Working principle of ELISA assess-

a) Ag-Ab naturalization
b) Ag-Ab complex
c) 1&2
d) None of these

(vii) Identify which is not the function of plasma membrane-

a) Energy transduction
b) Intercellular interaction
c) Responding to external stimuli
d) Assisting in chromosome segregation

(viii) Select which of the following is not an example of liver disease?

a) Fascioliasis
b) Fatty liver disease
c) Chiken pox
d) Gilbert's syndrome

(ix) Indicate which is buffer-

a) H_2CO_3& $NaHCO_3$
b) NaOH & NaCl
c) HNO_3 &NH_4NO_3
d) None of these

(x) When the passage of water across a selectively permeable membrane is-

a) Osmosis b) Active transport
c) Faciliated diffusion d) pinocytosis

(xi) Sandwitch ELISA is used to predict

a) AIDS b) Syphilis
c) Pernicious anaemia d) All of these

(xii) Highest viscosity among the following is of-

a) water b) Air
c) Blood d) Honey

(xiii) After break down of hemoglobin,fate of globin is-

a) Excreted through Urine b) stored in liver
c) Degraded to its aminoacid d) None of these

(xiv) Normal value of plasma amylase-

a) 25-50U/L b) 28-100U/L
c) 200-500 U/L d) None of these

(xv) Which aminoacids are catagorized as aromatic aminoacid-

a) Tryptophan,asparagine,tyrosine b) Tryptophan,threonine,tyrosine
c) Phenylalanine,tryptophan,serine d) phenylalanine,tryptophan,tyrosine

Group-B

(Short Answer Type Questions) 3 x 5=15

2. Distinguish between RER and SER (3)
3. Write the normal value of serum AST in male and female. Why it is an important diagnostic marker? (3)
4. Write difference between IgG and IgM. Which immunoglobulin is found in colostrum. (3)
5. Explain about poly unsaturated fatty acids with examples (3)
6. Write the regulation of glucose in fasting stage. (3)

OR

Write the regulation of glucose in postprandial stage (3)

Group-C

(Long Answer Type Questions) 5 x 6=30

7. Describe TCA cycle steps with flow chart. (5)
8. Explain the structure and function of Rough Endoplasmic Reticulum with suitable diagram. (5)
9. Write a note about Creatine Kinase focusing its normal concentration in blood. (5)
10. Differentiate between water soluble and fat-soluble vitamins. Write the source and function of folic acid. (5)
11. Write the basic structure of immunoglobulin with suitable diagram. (5)
12. How Glucose Tolerance Test is conducted? (5)

OR

Describe RIA test with diagram (5)

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