BRAINWARE UNIVERSITY

Term End Examination 2018 -19

Programme – Bachelor of Pharmacy

Course Name – Biochemistry

Course Code – BP203T

(Semester – 2)

Time allotted: 3 Hours **Full Marks: 75**

[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) 20 x 1 = 20

1. *Choose the correct alternative from the following*

(i) Ribose is a _____

a. Triose b. Pentose
c. Tetrose d. Hexose

(ii) Heparin is a _____

a. Monosaccharide b. Disaccharide
c. Mucopolysaccharide d. Heteropolysaccharide

(iii) Which of this is an essential amino acid?

a. Histidine b. Lysine
c. Leucine d. All of the above

(iv) Proteins are precipitated by adding _____

a. Water b. Sodium hydroxide
c. Formaldehyde d. Trichloro acetic acid

(v) One example of sulphur containing amino acid is:

a. Aspartate b. Cysteine
c. Serine d. Tyrosine

(vi) Cholesterol consists of

a. 27 carbon atoms b. 30 carbon atoms
c. 14 carbon atoms d. 35 carbon atoms

(vii) Oxidoreductase include enzymes:

a. Which are concerned with oxidation and reduction
b. Catalyse the transfer of a group
c. Catalyse hydrolysis
d. None of the above

(viii) Acid phosphatase level is increased in:

a. Rickets
b. Diabetes
c. Prostate cancer
d. Kidney failure

(ix) Ceruloplasmin level is decreased in:

a. von Gierke's disease
b. Wilson's disease
c. Diabetes
d. None of the above

(x) Milk sugar is known as:

a. Lactose
b. Galactose
c. Glucose
d. Sucrose

(xi) Which of the following drugs is used for the treatment of gout?

a. Allopurinol
b. Timolol
c. Penicillin
d. Nimesulide

(xii) Which type of RNA is responsible for transfer of amino acids for protein biosynthesis?

a. mRNA
b. tRNA
c. rRNA
d. None of the above

(xiii) The length of each turn of a helix in DNA is:

a. 3.4 nm
b. 0.34 nm
c. 5 nm
d. None of the above

(xiv) Which lipoprotein fraction is good for health?

a. LDL
b. VLDL
c. HDL
d. None of the above

(xv) Which of the following inhibits eukaryotic protein synthesis?

a. Streptomycin
b. Tetracycline
c. Diptheria toxin
d. None of the above

(xvi) Sucrose is made up of

a. Glucose and fructose
b. Glucose and ribose
c. Fructose and Ribose
d. None of the above

(xvii) Histamine is obtained from_____

a. Serine
b. Histidine
c. Valine
d. Tyrosine

(xviii) Which of the following is an essential amino acid?

a. Valine
a. Serine
c. Alanine
c. None of the above

(xix) The synthesis of glucose from non-carbohydrate precursors is termed as

a. Glycolysis
b. Glycogenesis
c. Gluconeogenesis
d. Glycogenolysis

(xx) The formation of glycogen from glucose is termed as

a. Glycolysis
b. Glycogenesis
c. Gluconeogenesis
d. Glycogenolysis

Group – B

(Short Answer Type Questions) 7 x 5 = 35

Answer any *seven* from the following

2. Write a short note on function of lipids. 5
3. Write a short note on essential fatty acids 5
4. What are saponification number and acid number? 5
5. Give an outline of bile acid synthesis from cholesterol. 5
6. Write a short note on fatty liver. 5
7. Write a short note on hypercholesterolemia. 5
8. Write a short note on Alkaptonuria 5
9. Write a short note on inhibitors of protein synthesis. 5
10. Write short notes on enzyme induction and repression. 5

Group – C

(Long Answer Type Questions) 2 x 10 = 20

Answer any *two* from the following

11. Define Glycolysis. Give an outline of glycolysis with the help of a schematic diagram. 2+8
12. Describe the structure of DNA with the help of a diagram. 10
13. Explain enzyme kinetics with the help of Michaelis Menten plot and Lineweaver Burke plot. 10
