

D.PHARM.
SECOND YEAR
BIOCHEMISTRY & CLINICAL PATHOLOGY
ER20-23T [SPECIAL REPEAT]
[USE OMR FOR OBJECTIVE PART]

Duration : 3 hrs.

Full Marks : 80

(PART-A : Objective)

Choose the correct answer from the following:

1×20=20

1. The total body water content is regulated by the brain is?
 - a. Dehydration
 - b. Euhydration
 - c. Rehydration
 - d. All of the above.
2. ALT stands for
 - a. Alkaline transaminase
 - b. Alkaline phosphate
 - c. Alanine transaminase
 - d. None of the above
3. Which of these is not a lipid
 - a. Fat
 - b. Protein
 - c. Oil
 - d. Waxes
4. β -oxidation of fatty acid occurs in
 - a. Liver
 - b. Mitochondria
 - c. Peroxisome
 - d. Muscle
5. Which of the following is an essential amino acid?
 - a. Asparagine
 - b. Cysteine
 - c. Glutamate
 - d. Phenylalanine
6. Which one of the following is a good cholesterol
 - a. HDL
 - b. VLDL
 - c. LDL
 - d. All of these
7. Which of the following is the general formula of carbohydrate
 - a. $(C_4H_2O)_n$
 - b. $(CH_2O)_n$
 - c. $(C_6H_2O)_n$
 - d. $(C_2H_2O)_n$
8. pH of urine is
 - a. 1.2-3.4
 - b. 4.8-7.5
 - c. 7.7-10
 - d. 7.5-8
9. Erythrocyte synonym is
 - a. RBC
 - b. Platelets
 - c. WBC
 - d. All of these
10. The nature of an enzyme is
 - a. Lipid
 - b. Carbohydrate
 - c. Vitamin
 - d. Protein

11. Which of the following is simplest form of carbohydrates
 - a. Carboxyl group
 - b. Alcohol and ketone group
 - c. Aldehyde and ketone group
 - d. Hydroxyl and hydrogen group
12. The functional active form of Vitamin D is
 - a. Cholecalciferol
 - b. Dehydrocholesterol
 - c. Ergocalciferol
 - d. Calcitriol
13. The _____ is the main site for transamination
 - a. Liver
 - b. Skin
 - c. Heart
 - d. None of the above
14. Composition of Normal Saline is
 - a. 0.9% of KCl
 - b. 9.0% of NaCl
 - c. 9.0% of KCl
 - d. 0.9% of NaCl
15. Koshland proposed which model:
 - a. Fluid mosaic model
 - b. Induced fit model
 - c. Reflective index model
 - d. Lock and key model
16. The base pair G-C is more stable and stronger than A-T due to
 - a. 2 Hydrogen bond
 - b. tRNA
 - c. mRNA
 - d. 3 Hydrogen bond
17. Enzymes are made Up of:
 - a. Nucleic acids
 - b. Amino acid
 - c. Vitamins
 - d. ats
18. Which of the following is a fat-soluble vitamin?
 - a. Vitamin B
 - b. Vitamin C
 - c. Vitamin B₁₂
 - d. Vitamin K
19. The sugar molecule present in nucleotide is
 - a. triose
 - b. pentose
 - c. tetrose
 - d. hexose
20. Which of the following vitamins is also known as cobalamin?
 - a. Vitamin B₁₂
 - b. vitamin B₂
 - c. Vitamin B₁₁
 - d. Vitamin B₆

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[PART-B : Short Answers]

[Answer any ten (10) from the following]

[3x10=30]

1. Describe the qualitative test for lipid? 3
2. Define lipid peroxidation, rancidity, and cholesterol. 1+1+1
3. What is dehydration? Write down the WHO formula of ORS? 1+2
4. Explain the Watson and Crick model of DNA? 3
5. Mention the structure of nitrogenous bases present in DNA. 3
6. What is erythrocyte? Write its role in human health and disease? 1+2
7. What is water turnover and electrolyte balance? 3
8. Write down the biological process of β -oxidation of fatty acid. 3
9. What is lymphocyte? Write its role in human health and hygiene. 1+2
10. Define transamination and deamination? 1.5+1.5
11. Describe the causes of dehydration? 3

[PART-C : Long Answers]

[Answer any six (6) from the following]

[5x6=30]

1. Explain kreb cycle? 5
2. Describe the types of liver function test? 5
3. Describe the types of kidney function? 5
4. Write down the application of biotechnology in pharmaceutical sciences? 5
5. Describe the induced fit theory of enzyme? 5
6. Write down the glycolysis pathway? 5
7. Write a note on structure of protein? 5

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