

**D.PHARM.
SECOND YEAR
BIOCHEMISTRY & CLINICAL PATHOLOGY
ER20-23T**

Duration : 3 hrs.

Full Marks : 80

(PART-A : Objective)

Choose the correct answer from the following:

1×20=20

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

[PART-B : Short Answers]

[Answer any ten (10) from the following]

[3x10=30]

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|--|---------------|
| 1.. What is water turnover and electrolyte balance? | 1.5+1.5
=3 |
| 2.. Define lipid peroxidation, rancidity, and cholesterol. | 1+1+1=3 |
| 3.. What is dehydration? Write down the WHO formula of ORS? | 1+2=3 |
| 4.. Describe the induced fit theory of enzyme? | 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=3 |
| 7.. Write down the glycolysis pathway? | 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=3 |
| 10.. Define transamination and deamination? | 1.5+1.5
=3 |
| 11.. Describe the causes of dehydration? | 3 |

[PART-C : Long Answers]

[Answer any six (6) from the following]

[5x6=30]

- | | |
|--|---|
| 1. Write a note on structure of protein? | 5 |
| 2. Describe the types of liver function test? | 5 |
| 3. Explain the Watson and Crick model of DNA? | 5 |
| 4. Write down the application of biotechnology in pharmaceutical sciences? | 5 |
| 5. Describe the types of kidney function? | 5 |
| 6. Describe the qualitative test for lipid? | 5 |
| 7. Explain kreb cycle? | 5 |

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