

Roll No. : _____

Code No. : 2608

ENGLISH VERSION

BIOCHEMISTRY AND CLINICAL PATHOLOGY

Time Allowed : 3:00 Hours

Maximum Marks : 80

- Notes:** (i) Attempt all the questions.
- (ii) Students are advised to specially check the numerical data of question paper in both versions. If there is any difference in Hindi translation of any question, the students should answer the question according to the English version.
- (iii) Use of pager and mobile phone by the students is not allowed.

PART-A

(Long Answer Type Questions)

Note: Answer any six questions. Each question carries equal marks.

[6×5=30]

- Q.1. Define biochemistry and explain the advantages of biochemistry in pharmacy.
- Q.2. Write the classification of carbohydrates with examples.
- Q.3. Define proteins and give its classification with examples.
- Q.4. Define lipoprotein and write its types and functions.
- Q.5. Discuss about the pharmaceutical importance of enzymes.
- Q.6. What are Vitamins? Discuss about the deficiency diseases related with fat and water soluble vitamins.
- Q.7. Describe the TCA cycle.

PART-B

(Short Answer Type Questions)

Note: Answer any ten questions. Each question carries equal marks.

[10×3=30]

- Q.1. Write a note on Fatty Liver.
- Q.2. Write about introduction to biotechnology.
- Q.3. Write a note on biological role of carbohydrates.
- Q.4. What are the diseases caused by the deficiency of proteins?
- Q.5. What is the difference between ketosis and ketoacidosis?
- Q.6. Write about functions of water in the body.
- Q.7. Write a short note on Jaundice.
- Q.8. What is the role of Platelets in diseases?
- Q.9. What is the clinical significance of the Kidney?
- Q.10. Write a note on abnormal constituents of urine.
- Q.11. Write about the regulation of blood glucose level.

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(1)

[P.T.O.]

PART-C

(Objective Type Questions)

Note: Attempt all questions. Each question carries equal marks.

[20×1=20]

- Q.1. Glucose is made up of three elements. Which of the following is not one of those elements?
(a) Phosphorus (b) Carbon (c) Oxygen (d) Hydrogen
- Q.2. Which of the following is known as body building food?
(a) Fats (b) Carbohydrates (c) Proteins (d) Vitamins
- Q.3. Which of the following lipids is the most abundant type found in the body?
(a) Triglycerides (b) Cholesterol (c) Phospholipids (d) Steroids
- Q.4. Name the pyrimidine base which is found in RNA but not in DNA:
(a) Thymine (b) Uracil (c) Adenine (d) Guanine
- Q.5. Which enzyme is responsible for banana ripening?
(a) Lipases (b) Proteases
(c) Polyphenol Oxidase (d) Papain
- Q.6. Which vitamin is abundant in citrus fruits?
(a) Vitamin D (b) Vitamin B (c) Vitamin C (d) Vitamin A
- Q.7. Chemical compounds involved in the process of metabolism is known as
(a) Metabolites (b) Radicals (c) Catabolites (d) Intermediates
- Q.8. Which among the following is a non-essential amino acid?
(a) Serine (b) Threonine (c) Lysine (d) Histidine
- Q.9. Ketone bodies are formed from _____.
(a) Acetone (b) Acetyl CoA (c) Acetoacetate (d) HCl
- Q.10. Goitre occurs due to deficiency of which of the following minerals?
(a) Iodine (b) Calcium (c) Phosphorus (d) All of the above
- Q.11. Glucagon is released from _____. (Pancreas/Kidneys)
- Q.12. Most body water is located in _____. (Plasma/Cells)
- Q.13. What does ORS stand for?
- Q.14. Molecules which play key role in the transfer of genetic information during protein synthesis are _____. (DNA/RNA)
- Q.15. Around _____ % of the human body is water. (60% / 75%)
- Q.16. _____ is the largest organ of our body. (Liver / Pancreas)
- Q.17. If a person is put on dialysis, he is suffering from _____. (Heart disease / Kidney disease)
- Q.18. Beta - Oxidation of fatty acids occurs in _____. (Peroxisome / Mitochondria)
- Q.19. What is the primary lipoprotein secreted from the liver that is at least partially composed of dietary derived lipids _____. (HDL / VLDL)
- Q.20. What is the cause of phenylketonuria _____. (Phenylalanine hydroxylase / Tyrosine)

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