

Q.P. Code: 137005

Reg. No.....

**First Professional B.S.M.S Degree Regular/Supplementary Examinations  
June 2024**

**(SIDUG-UV) – Uyir Vedhiyiyal (Bio Chemistry)**

**(2021 Scheme)**

Time: 3 hrs

Max. Marks: 100

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

**1. Multiple Choice Questions**

**(20x1=20)**

The Answers to MCQ questions (Q.No. i to Q.No. xx) shall be written continuously on the first two writing sheets (ie Page No. 3 & 4) only

- Sulphur containing amino acid is  
a) Valine                      b) Leucine                      c) Methionine                      d) Asparagine
- RNA does not contain  
a) Phosphate                      b) Hydroxy methyl cytosine  
c) Adenine                      d) Uracil
- The non protein part in holoenzyme is  
a) Apoenzyme                      b) Substrate                      c) Enzyme                      d) Coenzyme
- Which enzyme is absent in adults  
a) Pepsin                      b) Trypsin                      c) Chymotrypsin                      d) Renin
- Lactose intolerance is due to the deficiency of the enzyme  
a) Amylase                      b) Maltase                      c) Sucrase                      d) Lactase
- Ketone bodies are synthesized in  
a) Adipose tissue                      b) Liver                      c) Muscles                      d) Brain
- Cholesterol molecule has \_\_\_\_\_ carbon atoms  
a) 27                      b) 21                      c) 15                      d) 12
- Which of the following is a tricarboxylic acid  
a) Acetic acid                      b) Succinic acid                      c) Oxaloacetic acid                      d) Citric acid
- Uric acid is the catabolic end product of  
a) Porphyrin                      b) Purines                      c) Pyrimidines                      d) Pyridoxine
- Pellagra is caused due to the deficiency of  
a) Ascorbic acid                      b) Pantothenic acid  
c) Pyridoxine                      d) Niacin
- Which is Cofactor for hexokinase  
a) Ca                      b) Mn                      c) Mg                      d) Ca
- Calorific value of fat is  
a) 4                      b) 9                      c) 1                      d) 7
- Pheochromocytoma is a tumor of  
a) Adrenal medulla                      b) Bone                      c) Head of Pancreas                      d) Pituitary
- Excretion of glucose is known as  
a) Glucosemia                      b) Galactosemia                      c) Fructosemia                      d) Glycosuria
- The hormone measured in urine to test pregnancy is  
a) Anterior pituitary luteinizing hormone                      b) Androgen  
c) Progesterone                      d) Chorionic gonadotropin

**(PTO)**

- xvi. Inflammation of pancreas is  
 a) Flatulence                      b) Steatorrhea                      c) Peptic ulcer                      d) Pancreatitis
- xvii. Glycosylated hemoglobin (HbA1c) is increased in  
 a) Sick cell anemia                      b) Diabetes mellitus  
 c) Thalassemias                      d) Porphyrrias
- xviii. Which type of blotting technique is used to detect specific RNA sequences  
 a) Southern Blotting                      b) Western blotting  
 c) Eastern blotting                      d) Northern blotting
- xix. Which of the following is the first and the most important step in the polymerase chain reaction  
 a) Annealing                      b) Primer extension  
 c) Denaturation                      d) None of the above
- xx. What is the principal cation of Extracellular fluid  
 a) K<sup>+</sup>                      b) Na<sup>+</sup>                      c) Ca<sup>2+</sup>                      d) Mg<sup>2+</sup>

**Short Answer Questions**

**(8x5=40)**

2. Write note on functions of Lipids
3. Explain on active transport Carbohydrate
4. Write note on biosynthesis of ketone bodies
5. Explain caloric value of food stuff
6. Give an account on Progesterone
7. Explain about essential fatty acid
8. Draw and explain structure of DNA
9. Give account on ATP – ADP cycle

**Long Answer Questions**

**(4x10=40)**

10. Draw and explain on citric acid cycle
11. Explain about biochemical functions and deficiency manifestations of hormones of adrenal medulla
12. Give an account on biochemical functions and deficiency manifestations of sodium
13. Give an account on Liver Function Test

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