

**Q.P. Code: 137005**

**Reg. No.....**

**First Professional B.S.M.S Degree Supplementary Examinations  
December 2024**

**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**

- Maltose is a disaccharide of
  - Fructose and lactose
  - Glucose and glucose
  - Glucose and galactose
  - Glucose and lactose
- The nitrogenous base present in lecithin
  - Choline
  - Ethanolamine
  - Inositol
  - Serine
- What is a bond between amino acids called
  - Ionic bond
  - Acidic bond
  - Peptide bond
  - Hydrogen bond
- \_\_\_\_\_ stimulates the production of gastric juice in the stomach
  - Gastrin
  - Enterokinase
  - Rennin
  - Digestin
- What is the enzyme that breaks down lactose
  - Lipase enzymes
  - Pepsin
  - Amylase
  - Lactase
- Which out of the following is not a flavoprotein
  - Succinate dehydrogenase
  - Cytochrome c
  - Xanthine oxidase
  - NADH dehydrogenase-Qreductase
- Loss of electrons can be termed as \_\_\_\_\_
  - Metabolism
  - Anabolism
  - Oxidation
  - Reduction
- Which of the following are major sites for glycogen storage
  - Adipose tissue
  - Bones
  - Muscle and liver
  - Kidney and liver
- Which of the following lipids act as lungs surfactants
  - Phosphatidylcholine
  - Phosphatidylethanolamine
  - Ceramide
  - Phosphatidylinositol
- Which of the following vitamin deficiency causes Beriberi
  - Vitamin B<sub>1</sub>
  - Vitamin B<sub>2</sub>
  - Vitamin B<sub>6</sub>
  - Vitamin B<sub>12</sub>
- Which one of the given options is the best source of Vitamin D
  - Sunlight
  - Orange
  - Walnut
  - Apple
- Iodine is a part of thyroid hormone and is essential for the prevention of
  - Goiter
  - Osteoporosis
  - Muscle weakness
  - Diarrhea
- Which hormone stimulates synthesis of milk protein
  - Luteinizing hormone
  - Prolactin
  - Growth hormone
  - Follicle stimulating hormone
- In the regulation of blood pressure the prostaglandin acting as a
  - Vasoconstrictor
  - Vasodialator
  - Lower Blood Pressure
  - Maintain Hemostasis

**(PTO)**

- xv. AIDS is  
 a) Endemic                      b) Epidemic                      c) Pandemic                      d) Sporadic
- xvi. The renal threshold for glucose is  
 a) 180 mg/dl                      b) 3 mg/dl                      c) 10 mg /dl                      d) 30 mg / dl
- xvii. The central Organ for bodys metabolism is  
 a) Kidney                      b) Liver                      c) Stomach                      d) Skin
- xviii. The polymerase chain reaction is \_\_\_\_\_.  
 a) It is a DNA sequencing technique                      b) It is a DNA degradation technique  
 c) It is a DNA amplification technique                      d) All of the above
- xix. DNA replication is  
 a) Conservative  
 b) Conservative and discontinuous  
 c) Semi-conservative and discontinuous  
 d) Semi-conservative and semi-discontinuous
- xx. Which is the principle intracellular cation  
 a) Na<sup>+</sup>                      b) Ca<sup>+</sup>                      c) Mg<sup>+</sup>                      d) K<sup>+</sup>

### Short Answer Questions

(8x5=40)

2. Write about classification of enzymes
3. Explain about the absorption of lipid
4. Draw and explain urea cycle
5. Explain about degradation of Purine
6. Explain about basal metabolic rate
7. Explain on the functions of Prostaglandins
8. Detail about the glucose tolerance test
9. Explain about polymerase chain reaction

### Long Answer Questions

(4x10=40)

10. Explain in detail on electron transport chain
11. Give an account on biochemical functions and deficiency manifestations of Potassium
12. Explain about biochemical functions and deficiency manifestations of Thyroid hormones
13. Give an account on Kidney function test

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