February 2010

[KW 706]

Sub. Code: 4181

Maximum : 90 marks

SECOND B.PHARM. DEGREE EXAMINATION (ReRevised Regulations) Candidates Admitted upto 2003-04 Paper I – BIO-CHEMISTRY Q.P. Code : 564181

Time : Three hours

I. Essay Questions : Answer any TWO questions $(2 \times 20 = 40)$

- 1. a) What are proteins? Classify them. Explain urea cycle in detail. (10)
 - **b)** Explain the enzyme kinetics with Michaelis–mention equation.(10)
- 2. a) Describe Glycolysis with its energetics. (10)
 - b) Write in detail about the sources, chemistry, biochemical role and deficiency diseases of thiamine. (10)
- 3. a) Discuss in detail about the biosynthesis of fatty acids. (10)
 - b) Enumerate various liver function tests and explain any two of them.(10)

II. Write Short Notes : Answer any EIGHT questions

- 1. Walds visual cycle.
- 2. Properties of carbohydrates.
- 3. Structure of DNA.
- 4. Biochemical role of thyroxine.
- 5. Calcium.
- 6. Ketosis.
- 7. Vitamin C.
- 8. Enzyme inhibition.
- 9. Nutritional significance of lipids.
- 10. Properties of amino acids.

III. Short Answers: Answer any FIVE questions

(5 x 2 = 10)

 $(8 \times 5 = 40)$

- 1. Examples for bile salts and bile pigments.
- 2. Role of carnitine in lipid metabolism.
- 3. Name the pyrimidine bases with their structure.
- 4. Rothra's test.
- 5. Define mutarotation.
- 6. Co-enzyme activities of niacin.
- 7. Gout.

September 2010

[KX 706]

Sub. Code: 4181 SECOND B.PHARM. DEGREE EXAMINATION (ReRevised Regulations)Candidates Admitted upto 2003-04 Paper I – BIO-CHEMISTRY Q.P. Code : 564181

Time : Three hours

I. Essay Questions :

Answer any TWO questions.

- a) Write in detail about the sources, chemistry, bio-chemical role, daily requirements and deficiency manifestations of vitamin-D.
 b) Discuss the TCA cycle with its energetics.
- 2. a) Explain the bio synthesis of bile pigments in the body.
 - b) Role of Insulin
 - c) What are the nucleosides and nucleotides? Give examples.
- 3. a) Sketch urea cycle and mention the inherited disorders.b) Discuss the metabolism of Sodium

II. Write Short Notes :

(8X 5 = 40)

(5X2 = 10)

Answer any EIGHT questions.

- 1. Clearance tests of urine.
- 2. Prostaglandins
- 3. Basal Metabolic Rate
- 4. Lac-Operon Concept
- 5. Co-Enzymes
- 6. Immunoglobulin
- 7. Nucleo Protein
- 8. Enzyme Inhibition
- 9. Digestion and absorption of Carbohydrate
- 10. Mode of action of drugs.

III. Short Answers:

Answer any FIVE questions.

- 1. What is specific dynamic action?
- 2. Significance of HMP shunt pathway.
- 3. What is Epimer? Give example
- 4. Iodine Number
- 5. Define Detoxication
- 6. Define the terms: transcription and translation
- 7. Give examples of bile pigments and bile salts.

Maximum : 90 marks

(2 X 20 = 40)