THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(LN 2018) SEPTEMBER 2018 **Sub. Code: 2018**

B.PHARM. DEGREE EXAMINATION
PCI REGULATION – SEMESTER II
FIRST YEAR
PAPER III – BIOCHEMISTRY

Q.P. Code: 562018

Time: Three hours **Maximum: 75 Marks**

I. Elaborate on: Answer any TWO questions. **(2 x 10 = 20)**

1. Describe the beta oxidation of fatty acids with energetics.
2. Explain Hexose monophosphate shunt pathway and add a note on its metabolic significance.
3. Discuss about semiconservative replication of DNA.

II. Write notes on: Answer any SEVEN questions. **(7 x 5 = 35)**

1. Explain the mechanism of enzyme action.
2. Summarise ketogenesis.
3. Define and classify carbohydrate.
4. Describe urea cycle and its metabolic disorders.
5. Briefly explain Transcription.
6. Discuss the diagnostic applications of isoenzymes.
7. Describe Adenosine triphosphate as an energy rich compound.
8. Explain any two disorders of lipid metabolism.
9. Explain coenzymes.

III. Short answers on: Answer ALL questions. **(10 x 2 = 20)**

1. Define gluconeogenesis.
2. Define hyperbilirubinemia.
3. What is Michaelis-Menten equation?
4. Name the bile salts.
5. Define transamination.
6. What is mutarotation?
7. Write any two functions of nucleic acids.
8. What is isoenzyme?
9. What is Albinism?
10. Name the bases present in DNA.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(LO 2018) MARCH 2019 **Sub. Code: 2018**

B.PHARM. DEGREE EXAMINATION
PCI Regulation – SEMESTER II
PAPER III – BIOCHEMISTRY

Q.P. Code: 562018

Time: Three hours **Maximum: 75 Marks**

I. Elaborate on: Answer any TWO questions. **(2 x 10 = 20)**

1. Describe protein synthesis and its inhibitors.
2. Explain De novo synthesis of fatty acids.
3. Discuss about gluconeogenesis.

II. Write notes on: Answer any SEVEN questions. **(7 x 5 = 35)**

1. Enumerate the IUB classification of enzymes.
2. Summarise glycogenolysis.
3. Outline the biosynthesis of pyrimidine nucleotides.
4. Describe catabolism of aminoacids.
5. Briefly explain organization of mammalian genome.
6. Explain Jaundice and its types.
7. Describe the relationship between free energy, enthalpy and entropy.
8. Explain Alkaptonuria and Phenylketonuria.
9. Define and classify lipids.

III. Short answers on: Answer ALL questions. **(10 x 2 = 20)**

1. Define enthalpy and entropy.
2. Write the energetic for glycolysis pathway.
3. Enlist uncouplers in oxidative phosphorylation.
4. What is fatty liver?
5. Write the conversion of phenylalanine to tyrosine.
6. What is hyperuricemia?
7. What is transcription?
8. What is enzyme induction and repression?
9. What is ketoacidosis?
10. Name essential aminoacids.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(LP 2018) SEPTEMBER 2019 **Sub. Code: 2018**

B.PHARM. DEGREE EXAMINATION
PCI Regulation – SEMESTER II
PAPER III – BIOCHEMISTRY

Q.P. Code: 562018

Time: Three hours **Maximum: 75 Marks**

I. Elaborate on: Answer any TWO questions. (2 x 10 = 20)

1. Describe transamination and deamination reactions with suitable examples.
2. Explain Embden Meyerhof pathway and write its significance.
3. How genetic code is used for amino acid coding and explain with wobbles hypothesis?

II. Write notes on: Answer any SEVEN questions. (7 x 5 = 35)

1. Discuss and detail about the Redox potential.
2. What are phospholipids? Describe the classification and functions of any two Phospholipids.
3. Synthesis and significance of Melatonin.
4. Explain Hyperbilirubinemia and Jaundice.
5. Bio-synthesis of De-novo pathway of purine and explain any one metabolic disorder of purine.
6. Explain Enzyme kinetics with Michaelis plot.
7. Explain allosteric enzymes regulation.
8. Hexose Monophosphate pathway.
9. Explain the conversion of cholesterol into steroid hormones and write its significance.

III. Short answers on: Answer ALL questions. (10 x 2 = 20)

1. What is Atherosclerosis?
2. Define Bio molecules.
3. Diabetes Mellitus.
4. What are exergonic reaction?
5. What is cellular respiration?
6. What is albinism?
7. Differentiation mRNA & tRNA.
8. Define coenzymes.
9. Creatinine.
10. Lipoprotein.

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