

(LQ 2018)

MARCH 2020

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. Explain the De novo synthesis of Palmitic acid.
2. Define Oxidative Phosphorylation. What is the cellular site of Oxidative phosphorylation?
3. Explain the steps involved in Biosynthesis of Nucleotide.

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

1. Write a note on the Pathway of synthesis Catecholamines.
2. Describe Urea Cycle.
3. Explain Inhibitors of Protein synthesis.
4. Write short note on NAD<sup>+</sup> and NADP<sup>+</sup>.
5. Heme.
6. Write the conversion of cholesterol to Vitamin D3.
7. Explain Bioenergetics and concept of free energy.
8. Explain in detail about the clinical significance of Isoenzymes.
9. What are Glycolipids? Explain with suitable examples.

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

1. Explain Endergonic reactions.
2. Write the significance of ATP.
3. Hypercholesterolemia.
4. Ketone bodies.
5. Alkaptonuria.
6. Gout.
7. What are essential fatty acids?
8. Define codons.
9. Define lysosomes.
10. Write the therapeutic applications of enzymes.

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