

Code: 13R00403

B.Pharm IV Year II Semester (R13) Regular &amp; Supplementary Examinations April 2018

**PHARMACEUTICAL BIOCHEMISTRY**

Time: 3 hours

Max. Marks: 70

**PART – A**  
(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Define redox potential.
  - (b) Name different types of jaundice.
  - (c) Name four metabolic disorders of urea cycle with enzyme defect.
  - (d) Define  $K_m$  value and write its significance.
  - (e) What is fatty liver?
  - (f) What are triglycerides?
  - (g) Define enzyme repression.
  - (h) What is the importance of SGPT and SGOT?
  - (i) What is translation and transcription?
  - (j) What are Okazaki fragments?

**PART – B**  
(Answer all five units, 5 X 10 = 50 Marks)**UNIT – I**

- 2 List out energy rich compounds and explain in detail with biological significance.

**OR**

- 3 Describe the components of ETC. Explain chemiosmotic theory of oxidative phosphorylation.

**UNIT – II**

- 4 What are isoenzymes? Describe their diagnostic applications. Explain biochemical role and deficiency symptoms of niacin.

**OR**

- 5 Define enzyme inhibition and discuss different types of enzyme inhibitions.

**UNIT – III**

- 6 Explain the reaction sequences, significance and energetics of TCA cycle.

**OR**

- 7 Explain reactions of HMP pathway with its significance.

**UNIT – IV**

- 8 Name aromatic amino acids. Explain the catabolism of any one aromatic amino acid.

**OR**

- 9 Explain the de novo biosynthesis of fatty acids.

**UNIT – V**

- 10 List out different kidney function tests Explain any two of them. Write a note on urinary tract calculi.

**OR**

- 11 Enlist different liver function tests. Explain the tests for hepatic dysfunction.

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