

Code: 9R01501

B.Pharm III Year I Semester (R09) Supplementary Examinations June 2018

**PHARMACEUTICAL BIOCHEMISTRY**

(For 2009 (LC), 2010, 2011, 2012 regular &amp; 2011 (LC), 2012, 2013 lateral admitted batches only)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

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- 1 (a) Explain active and passive transport processes.  
(b) Highlight the significance of sodium and potassium pumps.
- 2 (a) Discuss the concept of free energy.  
(b) Define redox potential.  
(c) What is the second law of thermodynamics?
- 3 (a) Discuss enzyme activators and de-activators.  
(b) Explain the kinetics of an enzyme-catalyzed reaction.
- 4 (a) Give the classifications of vitamins with examples and their deficiency diseases.  
(b) What is the importance of lipids in our diet?
- 5 (a) Explain the Krebs cycle.  
(b) Compare and contrast Glycolysis with gluconeogenesis.
- 6 (a) Give the general reaction scheme for deamination.  
(b) Write the metabolism of any two amino acids.
- 7 (a) Discuss any oxidation process of a fatty acid.  
(b) How is cholesterol biosynthesized?
- 8 (a) What is conjugation reaction?  
(b) Discuss the importance of eicosanoids.

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