

B.Pharm I Year II Semester (R15) Supplementary Examinations December 2017

**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) What is haemostasis?
  - (b) What is the significance of sodium pump?
  - (c) Define the term nucleotides.
  - (d) Write short note on induced fit mechanism of enzyme action.
  - (e) Write a note on significance of GLUT pathway.
  - (f) Write short note on glucagon.
  - (g) Write short notes on basic amino acids.
  - (h) Write the structure of protein.
  - (i) Write the composition of blood.
  - (j) Write any one kidney functioning test.

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

- 2 Discuss about the production of ATP and its biological significance.
- OR**
- 3 (a) Explain the active and passive transport process.  
(b) Write about molecular constituents of cell membrane.

**UNIT – II**

- 4 (a) Discuss the significance of nucleic acids.  
(b) Classify vitamins with suitable examples.

**OR**

- 5 Discuss the role of lipids in biochemical process and mention its applications.

**UNIT – III**

- 6 Describe in detail about glycolysis cycle.

**OR**

- 7 Describe the process of glycogenolysis in carbohydrate metabolism.

**UNIT – IV**

- 8 (a) Discuss about  $\beta$ -oxidation of fatty acids.  
(b) Explain the synthesis pathway of cholesterol.

**OR**

- 9 Discuss the biosynthesis of saturated and unsaturated fatty acids.

**UNIT – V**

- 10 Write the principle involved in the qualitative and quantitative analysis of blood for glucose, SGPT and SGPT.

**OR**

- 11 Explain the qualitative tests used to detect the functioning of liver.

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