

**II B. Pharmacy I Semester Supplementary Examinations, May - 2019**  
**PHARMACEUTICAL BIOCHEMISTRY**

Time: 3 hours

Max. Marks: 70

- Note: 1. Question paper consists of two parts (**Part-A** and **Part-B**)  
2. Answering the question in **Part-A** is Compulsory  
3. Answer any **FOUR** Questions from **Part-B**
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**PART -A**

1. a) Write functions of rough endoplasmic reticulum. (2M)
- b) What is the biological significance of potassium? (2M)
- c) What is insulin? (2M)
- d) What is the biological significance of bile salts? (2M)
- e) Why ATP is called a high energy compound? (2M)
- f) Why LDL is called bad cholesterol? (2M)
- g) What is protein turnover? (2M)

**PART -B**

2. a) Discuss the role of fatty acids in the functioning of cell membrane. (8M)
- b) Write in brief on carrier mediated transport mechanisms across cell membrane. (6M)
3. a) Classify vitamins with examples. Write a note on significance of vitamin A. (9M)
- b) Write a note on chemical reactions of amino acids. (5M)
4. a) With a neat sketch explain the biochemistry and significance of Krebs cycle. (8M)
- b) What is glycogenesis? Discuss its biological role. (6M)
5. a) Outline the biosynthesis of cholesterol. Add a note on mechanisms involved in biological regulation of serum cholesterol. (10M)
- b) Write in brief on hormonal regulation of lipid metabolism. (4M)
6. a) Discuss the catabolic reactions of amino acids. (9M)
- b) Outline the metabolism of phenyl alanine. (5M)
7. a) Classify enzymes with examples. Discuss the factors influencing activity of enzyme. (10M)
- b) Write short notes on coenzymes associated with oxidoreductase enzymes. (4M)