

II B. Pharmacy I Semester Regular Examinations, Oct/Nov - 2017
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) What is the role of cholesterol in cell membrane? (2M)
- b) Write in brief on Vit A. (2M)
- c) What is diabetes? (2M)
- d) What is "bad cholesterol"? (2M)
- e) Write identification tests for proteins. (2M)
- f) Write the biochemical role of  $\text{Ca}^{+2}$  (2M)
- g) Write in brief on lyases. (2M)

**PART -B**

2. a) With a neat sketch explain the biochemical organization and function of mitochondria. Add a note on mitochondrial disorders. (10M)
- b) Write short notes on vesicular storage and delivery of biochemicals. (4M)
3. a) What is glycogen? Write in detail on glycogenesis. (9M)
- b) Discuss the role of insulin in glucose homeostasis. (5M)
4. a) With a neat sketch explain beta-oxidation of fatty acids. Add a note on metabolism of unsaturated fatty acids. (10M)
- b) Why fatty acids are considered as high energy resources? (4M)
5. a) What are vitamins? Classify with examples. Write in detail on water soluble vitamins. (10M)
- b) Discuss the chemical constitution of DNA. (4M)
6. a) Write in detail on Urea cycle. (8M)
- b) Outline the metabolism of phenylalanine. Add a note on its biological significance. (6M)
7. a) What is a co-enzyme? Write in detail on co-enzymes involved in the functioning of oxidoreductase enzymes. (9M)
- b) Discuss the significance of enzyme inhibitors in health and disease. (5M)