

**II B. Pharmacy I Semester Supplementary Examinations, Oct/Nov - 2020**  
**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 the functions of cell membrane. (2M)
- b) What are essential fatty acids? (2M)
- c) Why do we call glucagon a diabetogenic compound? (2M)
- d) What is hypercholesterolemia? (2M)
- e) Write in brief on protein turnover. (2M)
- f) What is mRNA? (2M)
- g) Write the biological significance of ATP. (2M)

**PART -B**

2. a) Write in detail on chemical constitution of cell membrane. (7M)
- b) With a neat sketch explain the structure and function of mitochondria. (7M)
3. a) Explain how amino acids can be used for energy production in our body? (7M)
- b) Discuss the biological significance of HMP pathway. (7M)
4. a) With a neat scheme explain the beta-oxidation of fatty acids. (9M)
- b) Explain why fatty acids are considered as high energy substances? (5M)
5. a) Write the biochemical role of sodium, potassium and chloride. (9M)
- b) Discuss the significance of folic acid. (5M)
6. a) With a neat sketch explain the process involved in protein synthesis. (9M)
- b) How do gene mutations result in a disease? (5M)
7. a) Classify enzymes with examples. Write in detail on the role of pH and temperature on activity of an enzyme. (7M)
- b) Write a short note on enzyme inhibitors. (7M)