

Total No. of Questions : 6]

SEAT No. :

**P1979**

**[5145]-303**

[Total No. of Pages : 2

**S.Y. B.Pharmacy**

**233: PHARMACEUTICAL BIOCHEMISTRY**

**(2013 Pattern) (Semester III) (Theory)**

*Time : 3 Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) *All questions are compulsory.*
- 2) *Answers to the two sections should be written in separate answer books.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Figures to the right indicate full marks.*

**SECTION - I**

**Q1)** What is enzyme inhibition? Explain Competitive enzyme inhibition in detail.

Give its significance.

**[10]**

OR

Classify proteins based on biological role and give suitable examples. Comment on secondary structure of proteins.

**Q2)** Attempt short note on any five of the following:

**[15]**

- a) Keratin
- b) t RNA
- c) Lipoproteins
- d) Fatty acids
- e) Cellulose
- f) Globular Proteins
- g) Homopolysaccharides

**P.T.O.**

**Q3)** Write notes on any two of the following: [10]

- a) DNA replication
- b) Applications of Enzymes
- c) End group analysis in proteins

**SECTION - II**

**Q4)** Explain the steps involved in HMP shunt.

Give the significance of this metabolic pathway. [10]

OR

Explain beta oxidation of Fatty acid involving odd no of carbons. Give energetics with suitable example.

**Q5)** Attempt short note on any five of the following: [15]

- a) Ketone bodies
- b) Transamination
- c) Oxidative phosphorylation
- d) Vit D
- e) Biosynthesis of Glycine
- f) Fructose metabolism
- g) Glucogenolysis

**Q6)** Write notes on any two of the following: [10]

- a) Cholesterol synthesis
- b) Purine catabolism
- c) Urea cycle and its significance

