Q.P. Code :02889

[Time: Three Hours] **[Marks:**70**]**

Please check whether you have got the right question paper.

N.B: 1. All questions are compulsory.

Q.1	a)	Draw structure of D-Ribose by fischer projection formula	01
	b)	Draw structure of D-Glucose by Haworth Projection Formula	01
	c)	.....is deficinecy syndrome of Vit-D	01
	d)	Define Mutarotation	01
	e)	Draw structure of Lactose	01
	f)	Draw structure of caphaline	01
	g)	Give Mechanism of thymidyalte synthetase	01
	h)	Name active form of Vit-E	01
	i)	explain enzyme induction in regulation of enzyme activity	01
	j)	Draw strucure of two acidic amino acide with three letter code	02
	k)	Define catabolism with eg.	02
	l)	Define vitamin & enlist soluble vitamins	02
Q.2	a)	Explain the α-helix structure of protien	03
	b)	Explain $FADH_2$ as an energy carrier	03
	c)	Discuss non-competative enzyme inhinition with examples.	03
	d)	Give biochemical roles of Ascorbic acid or folic acid.	02
Q.3	a)	Write a note on disaccharides	03
	b)	Write a note on Vit-A or Vit –K	03
	c)	Derive Michaelis menten equation	03
	d)	State laws of Thermodynamics	02
Q.4	a)	Classify amino acid based on functional group with examples (no structure required)	03
	b)	Write a note on phospholipids or glycolipids	03
	c)	Write a note on Vit -B_{12} or Vit- B_5	02
	d)	Explain thermodynamically favorable reactions.	02
	e)	Give role of kidney in digesion and absorption of food	01
Q.5	a)	Write a note on cellulose	03
	b)	Write a note on vit- D. or vit-E	03
	c)	Discuss compartmentalization of enzymes	02
	d)	Give biochemical role of riboflavin or pyridoxine	02
	e)	GIve sailent features of digestion of fats	01
Q.6	a)	Write a note on vit-B_2 or vit-B_3	03
	b)	write a not on post transcriptional modification	03
	c)	Give two example of drugs that inhibits following enzymes with their clinical significance 1) Angiotensin converting enzyme 2) Cyclooxygenase	02
	d)	Draw Watson-Crick model of DNA	02
	e)	Explain rancidity of oil.	01