

Printed Pages : 3



FT402

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 182404

Roll No.

--	--	--	--	--	--	--	--	--	--

B. Tech.

(SEM. IV) THEORY EXAMINATION, 2014-15

FOOD BIOCHEMISTRY

Time : 3 Hours]

[Total Marks : 100

- Note :**
- (1) Attempt all questions.
 - (2) All questions carry equal marks.

1. Attempt any four of the following : $4 \times 5 = 20$
 - (a) Differentiate between biological catalyst and chemical catalyst.
 - (b) What is line weaver burk plot. Why it is preferred over michaelis Menten plot?
 - (c) Discuss Enzyme inhibition.
 - (d) How Enzyme activity is assayed? Define unit of enzyme and specific activity.
 - (e) Discuss the effect of temperature and pH on enzyme activity.
 - (f) With suitable examples, discuss the enzyme classification.

2. Write short notes on any four of the following : $4 \times 5 = 20$
- (a) Digestive enzymes and their sources.
 - (b) Membrane transport system.
 - (c) Digestion of lipids.
 - (d) Enzymatic routes for initial degradation of carbohydrates.
 - (e) Absorption of fat from intestines.
 - (f) Regulation of Proteolytic enzymes.
3. Attempt any two of the following : $2 \times 10 = 20$
- (a) Describe phosphate pentose pathway and its objective.
 - (b) Discuss β -oxidation of fat and outline major steps of palmitic acid breakdown.
 - (c) Discuss transamination and Deamination reaction in protein metabolism.
4. Attempt any two of the following : $2 \times 10 = 20$
- (a) Explain the term Growth, Maturation, Ripening and Senescence with respect to fruits and vegetables.
 - (b) Enlist and discuss any five important changes that occur during ripening in fruits.
 - (c) Explain Rigor mortis Discuss the effect of postmortem changes on the quantity attributes of meat.

5. Attempt any two of the following : $2 \times 10 = 20$
- (a) Discuss useful role of enzymes in food processing.
 - (b) Explain the role of enzymes in brewing and bakery industry.
 - (c) Comment on meat tenderizing enzymes.
-