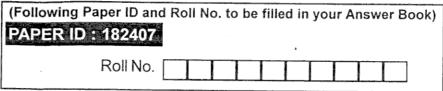
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NFT-402



B.Tech. (Semester-IV)

SPL. THEORY EXAMINATION, 2014-15 FOOD BIOCHEMISTRY & BIOTECHNOLOGY

Time: 3 Hours]

[Total Marks: 100

Note: Attempt all questions. All questions carry equal marks

1. Attempt any four of the following:

- 4×5=20
- a) Discuss Enzyme nomenclature system.
- b) Discuss the enzyme classification with examples.
- c) Describe effect of substrate concentration on enzyme activity.
- d) Discuss competitive inhibition of Enzymes.
- e) How enzyme activity is affected by Temperature & pH.
- Define Co-factors and discuss its types.

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(1)

[Contd...

s sub- following:	4×5=20
Write short notes on any four of the following:	-, 0
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- a) Gastro-intestinal tract.
- b) Digestive enzymes & their role.
- c) Proteolytic enzymes & their zymozen forms.
- d) Active transport system.
- e) Enzymatic routs for initial degradation of carbohydrates.
- Absorption of fat from intestines.
- 3. Attempt any two of the following:

2×10=20

- a) Explain Glycolysis reaction and its importance.
- b) Explain how Palmitic acid is broken down by β -oxidation.
- Explain with reactions how and where ATP molecules are generated TCA cycle.
- 4. Attempt any two of the following:

2×10=20

- a) Explain the term Growth, Maturation, Ripening & Senescence in fresh agricultural produce.
- Enlist & discuss five important changes that occur during ripening of fleshy fruits.
- c) Discuss aging & tenderization in meat.

5. Attempt any two of the following:

2×10=20

- Discuss the advantages of enzyme application in food processing.
- b) Comment on role of enzyme in Bakery and Brewing Industry.
- Explain how endogenous enzymes are useful in the modification of food.

(3)

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