

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

Paper ID : 2012347

Roll No.

B.TECH

Regular Theory Examination (Odd Sem- III) 2016-17

BIO CHEMISTRY

Time : 3 Hours

Max. Marks : 100

SECTION - A

1. Attempt All the following: (10×2=20)
- Write the reaction of fatty acid activation and list the enzyme that involve in this reaction ?
 - What is hydrophobic effect?
 - Write structure and unusual properties of water?
 - What are Zwitter ions?
 - Which was the first protein whose structure was determined by X - ray. crystallography?
 - Write the important function of protein
 - What is salvage pathway?
 - Write the name of the some peptide hormones.

- What are non covalent interactions?
- What is the difference between essential and non-essential amino acids?

SECTION - B

Note: Attempt any Three questions with Answer in 100 - 200 words. (3×10=30)

- Write the reactions of glycolysis and list of the enzymes that catalyze the reaction?
- Write the brief description of disorders of purines and pyrimidines metabolism?
- Describe the biosynthesis of fatty acids in details?
- Write the structure and properties of purines and pyrimidines?
- Explain urea cycle in detail ? Discuss its importance.

SECTION - C

Note: Attempt all questions with answer in 300-500 words (5×10=50)

- What are carbohydrates ? Describe classification of carbohydrates?
- Explain TCA cycle in detail with the reaction that is involved in TCA cycle?
- Explain the biosynthesis and biodegradation of amino acids?

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4. Describe the classification and structure of proteins with suitable examples.
 5. Write short notes on **any two**.
 - a) Gluconeogenesis
 - b) Electron transport chain
 - c) Disorders of lipid metabolism.
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