Code No: 07A32301 **R07** **Set No. 2**

II B.Tech I Semester Examinations,November 2010
BIOCHEMISTRY
Bio-Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Write the structures and properties of the following that are commonly found in DNA and RNA:
   (a) Pyrimidine bases
   (b) Pyrimidine nucleosides
   (c) Pyrimidine nucleotides. [4+6+6]
2. Describe the structural and functional characteristics of LDH isozymes. [16]
3. Give an account of biological oxidation and Energy Transfer in a living system.[16]
4. What are the symptoms of hyperammonia? How is ammonia detoxified in biological systems? [6+10]
5. Explain the relationship between Glyoxylate and citric acid cycle. [16]
6. (a) What is invert sugar? Discuss its properties.
   (b) Explain in detail about the conformations of pyranose and furanose ring structures. [6+10]
7. (a) How are the fatty acids are useful for the living systems.
   (b) Write the structures (two) of the following classes of naturally occurring acids:
      i. Saturated fatty acids
      ii. Mono unsaturated fatty acids
      iii. Poly unsaturated fatty acids. [4+12]
8. Write the kinetics of single-substrate enzyme catalysed reactions. [16]

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Code No: 07A32301 **R07** **Set No. 4**

II B.Tech I Semester Examinations,November 2010
BIOCHEMISTRY
Bio-Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Write the kinetics of single-substrate enzyme catalysed reactions. [16]
2. Describe the structural and functional characteristics of LDH isozymes. [16]
3. Explain the relationship between Glyoxylate and citric acid cycle. [16]
4. (a) How are the fatty acids are useful for the living systems.
   (b) Write the structures (two) of the following classes of naturally occurring acids:
      i. Saturated fatty acids
      ii. Mono unsaturated fatty acids
      iii. Poly unsaturated fatty acids. [4+12]
5. Give an account of biological oxidation and Energy Transfer in a living system.[16]
6. (a) What is invert sugar? Discuss its properties.
   (b) Explain in detail about the conformations of pyranose and furanose ring structures. [6+10]
7. Write the structures and properties of the following that are commonly found in DNA and RNA:
   (a) Pyrimidine bases
   (b) Pyrimidine nucleosides
   (c) Pyrimidine nucleotides. [4+6+6]
8. What are the symptoms of hyperammonia? How is ammonia detoxified in biological systems? [6+10]

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Code No: 07A32301 **R07** **Set No. 1**

II B.Tech I Semester Examinations,November 2010
BIOCHEMISTRY
Bio-Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Describe the structural and functional characteristics of LDH isozymes. [16]
2. (a) What is invert sugar? Discuss its properties.
   (b) Explain in detail about the conformations of pyranose and furanose ring structures. [6+10]
3. What are the symptoms of hyperammonia? How is ammonia detoxified in biological systems? [6+10]
4. Explain the relationship between Glyoxylate and citric acid cycle. [16]
5. Give an account of biological oxidation and Energy Transfer in a living system.[16]
6. Write the structures and properties of the following that are commonly found in DNA and RNA:
   (a) Pyrimidine bases
   (b) Pyrimidine nucleosides
   (c) Pyrimidine nucleotides. [4+6+6]
7. Write the kinetics of single-substrate enzyme catalysed reactions. [16]
8. (a) How are the fatty acids are useful for the living systems.
   (b) Write the structures (two) of the following classes of naturally occurring acids:
      i. Saturated fatty acids
      ii. Mono unsaturated fatty acids
      iii. Poly unsaturated fatty acids. [4+12]

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Code No: 07A32301 **R07** **Set No. 3**

II B.Tech I Semester Examinations,November 2010
BIOCHEMISTRY
Bio-Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. What are the symptoms of hyperammonia? How is ammonia detoxified in biological systems? [6+10]
2. Describe the structural and functional characteristics of LDH isozymes. [16]
3. (a) What is invert sugar? Discuss its properties.
   (b) Explain in detail about the conformations of pyranose and furanose ring structures. [6+10]
4. Write the structures and properties of the following that are commonly found in DNA and RNA:
   (a) Pyrimidine bases
   (b) Pyrimidine nucleosides
   (c) Pyrimidine nucleotides. [4+6+6]
5. Write the kinetics of single-substrate enzyme catalysed reactions. [16]
6. Give an account of biological oxidation and Energy Transfer in a living system.[16]
7. Explain the relationship between Glyoxylate and citric acid cycle. [16]
8. (a) How are the fatty acids are useful for the living systems.
   (b) Write the structures (two) of the following classes of naturally occurring acids:
      i. Saturated fatty acids
      ii. Mono unsaturated fatty acids
      iii. Poly unsaturated fatty acids. [4+12]

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