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

II B.Tech I Semester Examinations,May/June 2012
BIOCHEMISTRY
Bio-Technology

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

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. Explain the opposing pathways of Glycolysis and Gluconeogenesis in rat liver. [16]
2. Explain how pyruvate is involved in the lactic acid fermentation. [16]
3. Distinguish between LDL cholesterol and HDL cholesterol in terms of structural and functional characteristics. [16]
4. Describe the biosynthetic pathway of tryptophan from chorismate. [2+14]
5. What is PRPP? Explain its role in:
   (a) Purine nucleotide biosynthesis
   (b) Pyrimidine nucleotide biosynthesis. [16]
6. Describe the electron transport system and indicate the site-specific inhibition of electron transport system. [16]
7. What is the role of enzymes in biochemical reaction? Explain in detail. [16]
8. Write Short notes:
   (a) Gangliosides
   (b) Lipopolysaccharides.
   (c) Properties of purines and pyrimidines. [6+6+4]

⋆ ⋆ ⋆ ⋆ ⋆

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

II B.Tech I Semester Examinations,May/June 2012
BIOCHEMISTRY
Bio-Technology

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

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. What is the role of enzymes in biochemical reaction? Explain in detail. [16]
2. Explain the opposing pathways of Glycolysis and Gluconeogenesis in rat liver. [16]
3. Describe the biosynthetic pathway of tryptophan from chorismate. [2+14]
4. What is PRPP? Explain its role in:
   (a) Purine nucleotide biosynthesis
   (b) Pyrimidine nucleotide biosynthesis. [16]
5. Write Short notes:
   (a) Gangliosides
   (b) Lipopolysaccharides.
   (c) Properties of purines and pyrimidines. [6+6+4]
6. Distinguish between LDL cholesterol and HDL cholesterol in terms of structural and functional characteristics. [16]
7. Explain how pyruvate is involved in the lactic acid fermentation. [16]
8. Describe the electron transport system and indicate the site-specific inhibition of electron transport system. [16]

⋆ ⋆ ⋆ ⋆ ⋆

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

II B.Tech I Semester Examinations,May/June 2012
BIOCHEMISTRY
Bio-Technology

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

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. Describe the electron transport system and indicate the site-specific inhibition of electron transport system. [16]
2. What is PRPP? Explain its role in:
   (a) Purine nucleotide biosynthesis
   (b) Pyrimidine nucleotide biosynthesis. [16]
3. What is the role of enzymes in biochemical reaction? Explain in detail. [16]
4. Distinguish between LDL cholesterol and HDL cholesterol in terms of structural and functional characteristics. [16]
5. Describe the biosynthetic pathway of tryptophan from chorismate. [2+14]
6. Explain the opposing pathways of Glycolysis and Gluconeogenesis in rat liver. [16]
7. Explain how pyruvate is involved in the lactic acid fermentation. [16]
8. Write Short notes:
   (a) Gangliosides
   (b) Lipopolysaccharides.
   (c) Properties of purines and pyrimidines. [6+6+4]

⋆ ⋆ ⋆ ⋆ ⋆

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

II B.Tech I Semester Examinations,May/June 2012
BIOCHEMISTRY
Bio-Technology

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

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. Write Short notes:
   (a) Gangliosides
   (b) Lipopolysaccharides.
   (c) Properties of purines and pyrimidines. [6+6+4]
2. Explain the opposing pathways of Glycolysis and Gluconeogenesis in rat liver. [16]
3. Describe the biosynthetic pathway of tryptophan from chorismate. [2+14]
4. What is PRPP? Explain its role in:
   (a) Purine nucleotide biosynthesis
   (b) Pyrimidine nucleotide biosynthesis. [16]
5. Distinguish between LDL cholesterol and HDL cholesterol in terms of structural and functional characteristics. [16]
6. What is the role of enzymes in biochemical reaction? Explain in detail. [16]
7. Describe the electron transport system and indicate the site-specific inhibition of electron transport system. [16]
8. Explain how pyruvate is involved in the lactic acid fermentation. [16]

⋆ ⋆ ⋆ ⋆ ⋆