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

**II B.Tech I Semester Examinations,MAY 2011**
**BIOCHEMISTRY**
**Bio-Technology**

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

**Answer any FIVE Questions**
**All Questions carry equal marks**

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1. Explain oxidative and non oxidative reactions of shunt path way. [16]
2. What do you mean by proteoglycans? Explain with Examples. [6+10]
3. Discuss how ATP-producing pathways are co-coordinately regulated. [16]
4. Describe the pathways of glucose-6-phosphate metabolism in the erythrocytes.[16]
5. What are non-essential amino acids give examples? Describe the biosynthetic pathways for any two of them. [6+10]
6. Define essential fatty acids and explain why they are essential. Write the structures of the essential fatty acids. [4+4+8]
7. The MWC theory cannot account for negative co operativity, but the KNF theory can. Explain? [16]
8. Give outlines of purine biosynthesis indicating the steps which can be inhibited to inhibit the growth of:
   (a) Rapidly dividing bacteria
   (b) Cancer cells. [8+4+4]

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

**II B.Tech I Semester Examinations,MAY 2011**
**BIOCHEMISTRY**
**Bio-Technology**

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

**Answer any FIVE Questions**
**All Questions carry equal marks**

⋆ ⋆ ⋆ ⋆ ⋆

1. Define essential fatty acids and explain why they are essential. Write the structures of the essential fatty acids. [4+4+8]
2. Explain oxidative and non oxidative reactions of shunt path way. [16]
3. Discuss how ATP-producing pathways are co-coordinately regulated. [16]
4. Give outlines of purine biosynthesis indicating the steps which can be inhibited to inhibit the growth of:
   (a) Rapidly dividing bacteria
   (b) Cancer cells. [8+4+4]
5. Describe the pathways of glucose-6-phosphate metabolism in the erythrocytes.[16]
6. What are non-essential amino acids give examples? Describe the biosynthetic pathways for any two of them. [6+10]
7. What do you mean by proteoglycans? Explain with Examples. [6+10]
8. The MWC theory cannot account for negative co operativity, but the KNF theory can. Explain? [16]

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

**II B.Tech I Semester Examinations,MAY 2011**
**BIOCHEMISTRY**
**Bio-Technology**

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

**Answer any FIVE Questions**
**All Questions carry equal marks**

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1. The MWC theory cannot account for negative co operativity, but the KNF theory can. Explain? [16]
2. Give outlines of purine biosynthesis indicating the steps which can be inhibited to inhibit the growth of:
   (a) Rapidly dividing bacteria
   (b) Cancer cells. [8+4+4]
3. Discuss how ATP-producing pathways are co-coordinately regulated. [16]
4. Explain oxidative and non oxidative reactions of shunt path way. [16]
5. Describe the pathways of glucose-6-phosphate metabolism in the erythrocytes.[16]
6. Define essential fatty acids and explain why they are essential. Write the structures of the essential fatty acids. [4+4+8]
7. What do you mean by proteoglycans? Explain with Examples. [6+10]
8. What are non-essential amino acids give examples? Describe the biosynthetic pathways for any two of them. [6+10]

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

**II B.Tech I Semester Examinations,MAY 2011**
**BIOCHEMISTRY**
**Bio-Technology**

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

**Answer any FIVE Questions**
**All Questions carry equal marks**

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1. The MWC theory cannot account for negative co operativity, but the KNF theory can. Explain? [16]
2. What are non-essential amino acids give examples? Describe the biosynthetic pathways for any two of them. [6+10]
3. What do you mean by proteoglycans? Explain with Examples. [6+10]
4. Define essential fatty acids and explain why they are essential. Write the structures of the essential fatty acids. [4+4+8]
5. Discuss how ATP-producing pathways are co-coordinately regulated. [16]
6. Explain oxidative and non oxidative reactions of shunt path way. [16]
7. Give outlines of purine biosynthesis indicating the steps which can be inhibited to inhibit the growth of:
   (a) Rapidly dividing bacteria
   (b) Cancer cells. [8+4+4]
8. Describe the pathways of glucose-6-phosphate metabolism in the erythrocytes.[16]

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