

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Ph SEM-VI Examination-Nov/Dec.-2011

Subject code: 260003

Date: 25/11/2011

Subject Name: Pharmaceutical Chemistry-VII (Biochemistry)

Time: 10.30 am-01.30 pm

Total marks: 80

Instructions:

- 1. Attempt any five questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

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|-------------|--|-----------|
| Q.1 | (a) Describe biosynthetic pathway of cholesterol. | 06 |
| | (b) Explain ketogenesis and its significance. | 05 |
| | (c) Give detail description about beta oxidation of fatty acids. | 05 |
| Q.2 | (a) Discuss purine biosynthesis. Explain purine nucleotide interconversion. | 06 |
| | (b) Discuss metabolism of sulphur containing amino acids. | 05 |
| | (c) Draw schematic diagram of urea cycle with structural formula and explain about disorders associated with it. | 05 |
| Q.3 | (a) Define Recombinant DNA technology. Write a note on Genetic Engineering. | 06 |
| | (b) Write brief note on replication of DNA. | 05 |
| | (c) Write a short note on Genetic code. | 05 |
| Q.4 | (a) Discuss significance of chromatography technique in Biochemistry. | 06 |
| | (b) Discuss metabolism of water. | 05 |
| | (c) Write a short note on extraction and purification techniques of nucleic acids. | 05 |
| Q.5 | (a) Discuss about respiratory chain. | 06 |
| | (b) Discuss about oxidative phosphorylation. | 05 |
| | (c) Write in detail about enzymes involved in biological oxidation. | 05 |
| Q. 6 | (a) Discuss about Transcription process. | 06 |
| | (b) Describe deamination and transamination reactions of metabolism of amino acids. | 05 |
| | (c) Write a note on damage and repair of DNA. | 05 |
| Q. 7 | (a) Discuss about Translation process. | 06 |
| | (b) Describe polymerase chain reaction. | 05 |
| | (c) Write a note on gene expression in eukaryotes. | 05 |
