Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. - SEMESTER - VI • EXAMINATION - WINTER • 2015 Subject Code: 260003 Date: 01-01-2016 **Subject Name: Pharmaceutical Chemistry-VII (Biochemistry)** Time: 02:30 pm - 05:30 pm **Total Marks: 80 Instructions:** 1. Attempt any five questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. Write a note on β – oxidation in detail. 06 **Q.1** (a) Explain in detail biosynthesis of cholesterol. **(b)** 05 Write down about bio-synthesis and utilization of ketone bodies. 05 (c) **Q.2** Describe about enzymes involved in biological oxidation. **06** (a) Write a note on electron transport chain in detail. **(b)** 05 (c) Describe in detail transamination and deamination reactions for aminoacid 05 metabolism. **Q.3** Write down about biosynthesis of Porphyrin. 06 (a) Write a detail account on urea cycle along with disorders associated with it. 05 **(b)** Describe metabolism of any one sulphur containing amino acid. 05 (c) **Q.4** Explain about conversion of aminoacids to specialized products. 06 (a) Discuss the purine biosynthesis with its interconversion. 05 **(b)** (c) Write a short note on isolation and purification of nucleic acid. 05 **Q.5** Write a note on damage and repair of DNA. 06 (a) Explain in detail about DNA replication in eucaryotes. 05 **(b)** Describe about polymerase chain reaction in detail. (c) 05 What is Translation? Write down the different steps involved in it. 06 **Q.** 6 (a) **(b)** Describe about post transcriptional modifications. 05 Write a note on Gene expression in eucaryotes in detail. 05 (c)

Give detail account on absorption and biochemical role of calcium.

Write a note on distribution of water and water balance in humans.

Enumerate the techniques used in biochemistry. Write down principle of

06

05

05

Q.7

(a)

(b)

(c)

centrifugation.