Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

M.PHARM - SEMESTER- II • EXAMINATION - SUMMER 2016

Subject Code: 2920201 Date: 21/05/2016

Subject Name: Drug Design and Discovery

Time: 10:30 AM To 1:30 PM Total Marks: 80

Instructions:

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

Q.1	(a) (b) (c)	Write a note on drug discovery process. Give importance of drug design. Write a note of drug targets with their mechanism of action. Write a note on docking.	06 05 05
Q.2	(a) (b) (c)	What is chirality? Give importance of it in drug action. Give importance of enzyme inhibition in drug design. Give objectives of prodrug design. Give common functional groups used in prodrug design with examples	06 05 05
Q.3	(a) (b) (c)	How will you improve drug-receptor interaction? What is CADD? Give details of software used for CADD. Give importance of ADME in drug discovery.	06 05 05
Q.4	(a) (b) (c)	Enlist appraches for QSAR? Expalin any one in detail. Write a note on ligand based drug design. Give operational schemes for Analog Synthesis in drug design.	06 05 05
Q.5	(a) (b) (c)	What is computational chemistry? Give details of Molecular mechanics. Enlist various electronic parameters used in QSAR? Explain any one in detail. Write a short note on HTS.	06 05 05
Q. 6	(a) (b) (c)	Write a note on Pharmacophor mapping. Give various approaches for energy minimization. How 3D-QSAR is advantageous than 2D-QSAR? Give a note on COMFA.	06 05 05
Q.7	(a) (b) (c)	Give a brief account on physicochemical parameters affecting drug absorption. Write a short note on bioisosterism. What is hit and lead? Give methods for lead discovery.	06 05 05
