Seat No.: _____ Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm - SEMESTER–VI- (NEW SYLLABUS) EXAMINATION – SUMMER-2015

Subject Code: 2260004 Date: 07/05/2015

Subject Name: Pharmaceutical Chemistry – VIII (Medicinal Chemistry-II)

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)**	Explain the theory of receptors in detail.	**06**
	(b)	Explain factors affecting the drug-receptor interactions	**05**
	(c)	What are receptors? Give the forces involved in Drug-receptor interactions.	**05**
Q.2	**(a)**	Write structure and IUPAC name of following : 1. Indomethacin 2. Chlorpromazine 3. Halothane 4. Carbamazepine 5. Thiopental Sodium 6. Amphetamine	**06**
	(b)	Write synthesis of one non-heterocyclic antidepressant drug.	**05**
	(c)	Give synthesis and uses of Phenytoin and Amphetamine.	**05**
Q.3	**(a)**	Comment on Benzoic acid and Aniline derivatives as local anesthetics. Give one structural example from each class.	**06**
	(b)	What are tricyclic antidepressants? Write short note on SSRI.	**05**
	(c)	What are antipsychotic agents? Write SAR of Phenothiazine.	**05**
Q.4	**(a)**	Explain the term epilepsy. Discuss types of epilepsy and write a note on Hydantoins.	**06**
	(b)	Write the general method of synthesis of barbiturates? Discuss the SAR of barbiturate.	**05**
	(c)	Write a note on hallucinogens.	**05**
Q.5	**(a)**	Classify CNS depressants and write a note on SAR of Barbiturates.	**06**
	(b)	Discuss treatment of Gout and hyperurecimia in detail.	**05**
	(c)	Write a short note on cognition enhancers OR DMARD's.	**05**
Q. 6	**(a)**	Write a note on Phase II metabolism.	**06**
	(b)	What are the factors affecting drug metabolism and add a note on CYP450.	**05**
	(c)	Classify Xenobiotic metabolism based on functional group with examples.	**05**
Q.7	**(a)**	What are NSAIDs? Classify them with two examples of each class. Write synthesis of one non steroidal NSAID having one chiral center.	**06**
	(b)	Write note on drugs used in Alzheimer's disease OR Parkinson's disease.	**05**
	(c)	Write IUPAC name and synthesis of any two drugs : 1. Diclofenac sodium 2. Naproxen 3. Mefenamic acid	**05**

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