Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. – SEMESTER – VI • EXAMINATION – WINTER • 2015

Subject Code: 260004 **Date: 04-01-2016**

Subject Name: Pharmaceutical Chemistry-VIII (Medicinal Chemistry)

Time: 02.30 pm To 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.**

Q.1	**(a)**	Explain various theories of receptors.	**06**
	(b)	What is CYP450? Give its function and important.	**05**
	(c)	Which factors are affecting on drug receptor interaction? Briefly explain.	**05**
Q.2	**(a)**	Which are the major pathways of metabolism? Explain phase-I reactions in detail.	**06**
	(b)	Give the synthesis of adrenaline and amphetamine with its mode of action.	**05**
	(c)	Write a note on Antiparkinson's agent.	**05**
Q.3	**(a)**	What are sympathomimitics? Classify them with examples.	**06**
	(b)	Write a note on antigout agents.	**05**
	(c)	Define Cognition enhancers and its importance.	**05**
Q.4	**(a)**	Give the synthesis of any any three drugs : (i) Dopamine (ii) Naphazoline (iii) Salbutamol (iv) Pethidine	**06**
	(b)	Write a note on Alzheimer's disease.	**05**
	(c)	Define opiod analgesic and write SAR on Morphine.	**05**
Q.5	**(a)**	What is antidepressant? Give SAR of tricyclic antidepressants.	**06**
	(b)	Briefly explain role of Neuromuscular blocking and ganglionic blockers.	**05**
	(c)	Write synthesis of any two : (i) Nikethamine (ii) Imipramine (iii) Amitriptyllin	**05**
Q. 6	**(a)**	What are general anesthetics? Give SAR of local anesthetics.	**06**
	(b)	Define Sedative and Hypnotic agents. Classify with suitable examples.	**05**
	(c)	Write a note on DMARDs.	**05**
Q.7	**(a)**	Give chemical classification of Antipsychotics and discuss SAR of phenothiazine.	**06**
	(b)	Write a SAR on Benzodiazepines.	**05**
	(c)	Define and classify NSAIDs. Give the synthesis of Diclofenac sodium.	**05**

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