Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.PHARM – SEMESTER – 5- EXAMINATION –WINTER - 2018

Subject Code:2250004 Date: 29/11/2018

Subject Name: Pharmaceutical Chemistry - VII (Medicinal Chemistry - I)

Time:10:30 AM TO 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.**

Q.1	**(a)**	Enlist various physicochemical parameters that affect biological activity of drugs. Explain the effect of protein binding and hydrogen bonding on action of drugs.	**06**
	(b)	Write short notes on history and development of medicinal chemistry.	**05**
	(c)	Classify and explain bio isosterism with suitable examples.	**05**
Q.2	**(a)**	What is asthama? Classify antiasthamatics with suitable examples and structure.	**06**
	(b)	Write a short note on Mucolytics & Decongestants.	**05**
	(c)	Explain development of H2- antagonists in detail.	**05**
Q.3	**(a)**	Give any three structure of Proton pump inhibitors & explain mode of action of omeprazole in detail.	**06**
	(b)	Write a short note on Pro kinetic agents & anti secretary agents.	**05**
	(c)	Classify & explain anti emetic agents in detail.	**05**
Q.4	**(a)**	Explain chemistry, biosynthesis, storage & release of Histamine.	**06**
	(b)	Classify anti histaminic agents with suitable examples & structures.	**05**
	(c)	Write a chemical name & synthesis of diphenhydramine & chlorpheniramine.	**05**
Q.5	**(a)**	What is eicosanoids? Explain biosynthesis & drug action mediated by eicosanoids.	**06**
	(b)	Write a short note on diagnostic agents.	**05**
	(c)	Write a chemical name & synthesis of diphenoxylate & ranitidine.	**05**
Q. 6	**(a)**	Classify acetylcholine mimetics with structures & explain mechanism of acetyl choline esterase hydrolysis.	**06**
	(b)	Explain SAR activities of parasympathomimetic agents.	**05**
	(c)	Write a chemical name & synthesis of dicyclomine & propranolol.	**05**
Q.7	**(a)**	Classify sympatholytic agents with structure & explain non selective ß blockers.	**06**
	(b)	Explain biosynthesis, storage & release of norepinephrin, epinephrine& dopamine.	**05**
	(c)	Explain SAR activities of Phenylethanolamine adrenergic agonists.	**05**