

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – V • EXAMINATION – WINTER • 2016

Subject Code: 250004**Date: 30-11-2016****Subject Name: Pharmaceutical Chemistry-VI (Medicinal Chemistry)****Time: 10:30 am - 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) Define and classify anti-asthmatic agents with examples.	06
	(b) What is Bioisosterism? Classify and Explain in brief with examples	05
	(c) Discuss the SAR of H ₁ -Antagonists.	05
Q.2	(a) What are Eicosanoids? Discuss COX pathway.	06
	(b) Explain hydrogen bonding in detail.	05
	(c) Write a note on antiemetics.	05
Q.3	(a) Write a note on geometric & optical isomerism.	06
	(b) Define Medicinal chemistry and Discuss development of Medicinal chemistry.	05
	(c) Write any two reactions of pyridine and thiophene.	05
Q.4	(a) Discuss biosynthesis, metabolism and stereochemistry of histamine.	06
	(b) What is antidiarrhoeal agents? Classify and explain Antidiarrheals with examples.	05
	(c) Write a note on Mucolytic agents.	05
Q.5	(a) Discuss Proton pump inhibitors. Give synthesis of omeprazole.	06
	(b) Give any two preparation and reactions of quinoline.	05
	(c) Discuss diagnostic agents in brief.	05
Q. 6	(a) Give synthesis, mechanism and therapeutic uses of ranitidine	06
	(b) Discuss Fisher Indole synthesis.	05
	(c) Synthesis of Diphenhyramine and cetirizine.	05
Q.7	(a) Explain complexation and protein binding in detail.	06
	(b) Write a note on nasal decongestants.	05
	(c) Explain Skraup's synthesis with mechanism.	05
