

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 2 EXAMINATION – WINTER -2019

Subject Code: BP202TP**Date: 17-12-2019****Subject Name: Pharmaceutical Organic 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) Give the methods for the preparation of carboxylic acid.	06
	(b) Explain Aldol and Crossed aldol condensation.	05
	(c) Explain classification of organic compounds with example.	05
Q.2	(a) Give the structure and uses of (i) Formaldehyde (ii) Paraldehyde (iii) Chloral hydrate (iv) Vaniline (v) Cinnamaldehyde (vi) Hexamine	06
	(b) Give the general methods for the preparation of amines.	05
	(c) Explain mechanism of (i) Cannizaro reaction (ii) Perkin condensation.	05
Q.3	(a) Discuss classification of alcohols. What happens when they are dehydrogenated catalytically?	06
	(b) Differentiate markownikoff's and anti- markownikoff's rules with suitable examples.	05
	(c) Give the methods of preparation of carbonyl compounds.	05
Q.4	(a) Give the structure and uses of (i) Dimethyl phthalate (ii) Dichloromethane (iii) Benzoic acid (iv) Ethanolamine (v) Oxalic acid (vi) Amphetamine.	06
	(b) Define saytzeff's rule with one example.	05
	(c) Write note on dimes.	05
Q.5	(a) Give in detail on structural isomerisms in organic compounds.	06
	(b) Describe two methods of preparation and two chemical properties of alcohols.	05
	(c) Explain diels-alder reaction.	05
Q. 6	(a) Give the mechanism of E ₁ and E ₂ reaction.	06
	(b) Give methods for the preparation of Alkanes.	05
	(c) Note on hybridization in alkanes.	05
Q.7	(a) Discuss SN ¹ and SN ² reaction.	06
	(b) How does structure effect the basicity of amines?	05
	(c) How will you separate 1°, 2° and 3° amines by Hinsburg method? Give equations also.	05
