Seat No.:	Enrolment No.
-----------	---------------

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

## **B.PHARM – SEMESTER –4 EXAMINATION – SUMMER-2024**

Subj	ect (	Code: BP401TT	Date: 06/06/2024	
Subj	ect N	Name: Pharmaceutical Organic Chemistry II	II	
Instru	etions Atte Mak	a.30 a.m. to 1.30 p.m.  s:  empt any five questions.  se suitable assumptions wherever necessary.  ares to the right indicate full marks.	Total Marks: 80	
Q.1	(a) (b) (c)	What is stereospecific and stereoselective reactions explain with examples?  Describe various methods for resolution of racemic mixture.  Define conformation. Explain stability of various conformer of cyclohexane.		06 05 05
Q.2	<ul><li>(a)</li><li>(b)</li><li>(c)</li></ul>	Define the following with examples; a) Mesomer b) Diasteriomer c) Enantiomer Why biphenyls are chiral even though it is not having any chiral carbon? Justify by giving relevant examples. Discuss R, S and D, L nomenclature of stereo compound.		06 05 05
Q.3	(a) (b) (c)	What is heterocyclic compounds? Give two synthetic methods for furan. Explain the reaction and its mechanism of Skraup quinoline synthesis. Give any two reactions of pyrrole.		06 05 05
Q.4	(a) (b) (c)	<ol> <li>Aromaticity of thiophene is more than furan.</li> <li>Pyridine is more basic than pyrrole.</li> <li>Furan, thiophene and pyrrrole undergo electrophilic reaction at 2<sup>nd</sup> position.</li> <li>Write any two method for preparation of imidazole.</li> </ol>		06 05 05
Q.5	(a) (b) (c)	Write the following chemical structure: 1) Pyrimidine 2) Acridine 3) Indole 4) Quinoline 5) Isoxazole 6) Thiazole Give any two reactions and uses of thiazole. Discuss aromaticity and reactivity of Pyrrole.		06 05 05
Q. 6	(a) (b) (c)	Write a note of wolff Kishner reduction.		06 05 05
Q.7	(a) (b) (c)	Give synthetic importance of Birch reduction. Write a note on Fischer Indole synthesis. Give the medicinal uses of Purine and Pyrimidine.		06 05 05

\*\*\*\*\*