FirstRanker.com
Firstranker's choice
www.FirstRanker.com www.FirstRanker.com

Seat No.: _____ Enrolment No. _____

# 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 dines. | **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** |

**********

www.FirstRanker.com