#### THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

# [BPHARM 0122] JANUARY 2022 Sub. Code: 2016 (MARCH 2021 EXAM SESSION)

# B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS) PCI Regulation 2017 – SEMESTER II PAPER II – PHARMACEUTICAL ORGANIC CHEMISTRY I O.P. Code: 562016

Time: Three hours Maximum: 75 Marks

## I. Elaborate on: Answer any TWO questions.

 $(2 \times 10 = 20)$ 

- 1. Write about SN<sup>1</sup> and SN<sup>2</sup> reactions of alkyl halides.
- 2. Explain Diel's aldes reaction and free radical addition reaction of conjugated diene.
- 3. What is Isomerism? Classify them with suitable examples.

#### II. Write notes on: Answer any SEVEN questions.

 $(7 \times 5 = 35)$ 

- 1. Write about allylic rearrangement.
- 2. What is Markownikoff's rule of addition.
- 3. Write a note on ozonolysis.
- 4. What are alcohols? Discuss various types of alcohols.
- 5. Discuss acidity of carboxylic acid.
- 6. Write about aldol condensation.
- 7. Explain why carbonyl carbon undergo nucleophilic addition.
- 8. Give the qualitative test for alcohols.
- 9. Write about Cannizzaro reaction.

### III. Short answers on: Answer ALL questions.

 $(10 \times 2 = 20)$ 

- 1. Define hybridization.
- 2. give the structure and use of
  - a) Dichloromethane
  - b) Amphetamine
- 3. Define Saytzeff's rule.
- 4. Define Isomerism.
- 5. Give the structure and use of
  - a) Chloral hydrate
  - b) Acetone
- 6. What is Inductive effect?
- 7. Define hydrolysis and condensation with example.
- 8. Give the IUPAC name for
  - a) CH<sub>3</sub>OCH<sub>2</sub>CH<sub>3</sub>
  - b) CH<sub>3</sub>CH<sub>2</sub>CH(CH<sub>3</sub>)CN
- 9. Write the structured formula for the following
  - a) 2-propanone
  - b) Chloro-2-methylpropane
- 10. Write the structure and use of
  - a) Methylsalicylate
  - b) Benzylbenzoate