QP Code: 222006 Reg. No......

Second Semester B. Pharm Degree Supplementary Examinations April 2024

Pharmaceutical Organic Chemistry I

(Common for 2017 and 2022 Scheme)

Time: 3 Hours Max. Marks: 75

- Answer all questions to the point neatly and legibly Do not leave any blank pages between answers Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

Essays (2x10=20)

- 1. Describe in detail about the Cannizzaro reaction and aldol condensation reaction.
- 2. Elaborate Markownikoff's and anti- Markownikoff's orientation with suitable examples.

Short Notes (7x5=35)

- 3. Write the structure and uses of cetosteryl alcohol, hexamine, cinnamaldehyde, benzoic acid and methyl salicylate.
- 4. Explain the acidity of carboxylic acids and the effect of substituents on it.
- 5. Explain the qualitative tests for aldehyde and ketones.
- 6. Classify organic compounds. Give the IUPAC nomenclature rules for alkanes.
- 7. Describe structural isomerism with suitable examples.
- 8. Describe ozonolysis of alkene with its mechanism.
- 9. Outline Diel-Alder reaction with suitable examples.

Answer Briefly (10x2=20)

- 10. Any two reactions of carboxylic acids.
- 11. Mention the uses of paraffin.
- 12. Write the factors affecting SN₁ reactions.
- 13. Give the chemical structure and uses of vanillin and paraldehyde.
- 14. Mention four aliphatic carboxylic acids with chemical structures.
- 15. What are conjugated dienes. Give two examples.
- 16. Outline any one test distinguishes primary, secondary and tertiary alcohols.
- 17. Define Perkin condensation.
- 18. Any one method of preparation of aldehyde.
- 19. Write the structure and uses of amphetamine and ethanolamine.
