# B. PHARM <br> (SEM-IV) THEORY EXAMINATION 2019-20 PHARMACEUTICAL ORGANIC CHEMISTRY III 

Time: 3 Hours
Total Marks: 75
Note: 1. Attempt all Sections. If require any missing data; then choose suitably.
2. Any special paper specific instruction.

SECTION A

1. Attempt all questions in brief.

| a. | Differentiate chiral and achiral molecule. |
| :---: | :--- |
| b. | Explain E and Z isomers with suitable example. |
| c. | Draw conformers of ethane. |
| d. | Write any two synthetic procedures for preparation of pyrrole. |
| e. | Why meso compounds are optically inactive? |
| f. | Draw structure of any two five member heterocyclic compound and their use. |
| g. | Name the reducing agent used in Clemmensen reduction. |
| h. | Give chemical reaction used for conversion of Aldehyde directly into Alkane. |
| i. | Give structure and use of imidazole. |
| j. | Define term d, 1, D and L |

## SECTION B

2. Attempt any two parts of the following:
a. What is racemic modification? How can you resolute racemic mixture?
b. Give definition and reaction mechanism for Wolff kishner and Dakin raction.
c. Give preparation, properties and medicinal uses of pyridine.

## SECTION C

3. Attempt any five parts of the following:

| a. | Give RS system of nomenclature of optical isomers with sequence rules. |
| :--- | :--- |
| b. | Write a note on stereospecific and stereoselective reaction. |
| c. | Explain partial and absolute asymmetric synthesis. |
| d. | Give synthesis and medicinal uses of pyrrole. |
| e. | Give importance of $\mathrm{LiAlH}_{4}$ in metal hydride reduction. |
| f. | Give reaction and mechanism for Schimdt rearrangement. |
| g. | Give synthesis, properties and medicinal use of azepines and their derivatives. |

