BACHELOR OF PHARMACY (B. PHARM.) (CBCS-2019 COURSE)

B. Pharm. Sem-IV :SUMMER- 2022

SUBJECT : PHARMACEUTICAL ORGANIC CHEMISTRY-III

Day : Saturday
Date : 13-08-2022

S-20670-2022

Time : 02:00 PM-05:00 PM
Max. Marks : 75

N.B.

1) All questions are **COMPULSORY**.
2) Answers to both the section should be written in **SEPARATE** answer books.
3) Figures to the right indicate **FULL** marks.

SECTION – I

Q.1 Answer **All** questions of the following: **2 × 10 = 20** **(20)**

i) Why thiophene is more aromatic than furan and pyrrole?

ii) What does stem and suffix indicate for heterocyclic compounds, write with examples

iii) How do you convert pyrrole to pyridine?

iv) What is center of symmetry give one example

v) Draw the structure of meso and + tartaric acid.

vi) Draw the structure of D and L glyceraldehyde.

vii) Why biphenyl compounds have restricted rotation.

viii) What are sterioselective reactions give one example.

ix) Draw eclipsed, skew and staggered structure for n – butane.

x) Give one example for axis of symmetry.

Q.2 Answer any **TWO** from the following **THREE** **2 × 10 = 20** **(20)**

a) Define enentiomers and diasteriomers. Explain Kahn Ingold nomenclature for assigning the configuration for optical isomers.

b) Explain one method nomenclature of geometrical isomers and how do you determine configuration of geometrical isomers.

c) Write three methods of preparation and two chemical reactions of pyrrole and thiophene.

SECTION - II

Q.3 Answer any **SEVEN** from the following **NINE**: **7 × 5 = 35** **(35)**

a) Give the structures and numbering Pyridine and Pyrrole. Explain why pyridine is stronger base than pyrrole.

b) Explain Oppenauer – oxidation reaction and its applications.

c) Give two methods of preparation and three chemical reactions of Pyrazole.

d) Give two methods of preparation and three chemical reactions of acridine.

e) Give three methods of preparation and two medicinal uses of Pyrimidine and their derivatives.

f) Give three methods of preparation and two chemical reactions of Pyridine.

g) Discuss the Schmidt rearrangement with Mechanism.

h) Give three methods of preparation and two chemical reactions of quinoline.

i) Write a short note on Clemmensen reduction.

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