QPC: RN22PHD374





GIET UNIVERSITY, GUNUPUR – 765022

Ph.D. (Second Semester) Examinations, November - 2023

WPPECH2014 - Organic Chemistry

(Chemistry)

Time: 3 hrs Maximum: 70 Marks

The figures in the right hand margin indicate marks.

Answer ANY FIVE Questions

 $(14 \times 5 = 70 \text{ Marks})$

		Marks
1.a.	Write the synthesis and retro synthesis of Ibuprofen and mention the synthon, retron and target molecules.	14
2.a.	Give the retro synthesis of Paracetamol.	7
b.	Write explanatory notes on: Guidelines for Chemo selectivity.	7
3.a.	What is oxidation? Mention any 3 oxidising agents useful for the functional group interconverstions in organic chemistry synthesis?	14
4.a.	Give the mechanism action of reagent SeO ₂ .	14
5.a.	Write the electrophilic substitution reactions of aromatic compounds.	14
6.a.	Compare the geometrical features of carbocation and carbon radical.	7
b.	Give the reactions of nitrenes as intermediates.	7
7 a.	What are terms Absorption, Absorption, Mobile phase, Stationary Phase, Capillary Column, Eluate, Eluent, Elution in HPLC?	14
8 a.	Write the principle and applications of Paper chromatography?	7
b.	Write the applications of HPLC.	7

---End of Paper---