

**SEMESTER III
SYNTHESIS OF ORGANIC MOLECULES
PRACTICAL SYLLABUS**

Program: M.Sc
Course Code P20/CHE/DSC/301/P
CourseType: DSC-9
No. of Credits: 2

Max.marks: 50
No. of Hrs week: 4 Hrs

COURSE OUTCOMES:

- CO1:** Will be acquire the skill and acquainted with the knowledge of single and multi step organic preparations.
- CO2:** Understand distillation techniques for purification of organic compounds.
- CO3:** Determine the purity of the synthesized compounds and monitor the progress of a chemical reactions involved in synthesis of organic molecules.

Synthesis of Organic molecules

1. 2-Phenyl Indole (Fischer indole synthesis),
2. 2,5-Dihydroxy acetophenone (Fries reaction),
3. 4- Chlorotoluene from p-toluidine (Sandmeyer reaction),
4. Benzilic acid from Benzoin (Benzillic acid rearrangement),
5. Benzpinacol (Photochemical reaction),
6. 7-hydroxy coumarin (Pechman synthesis),
7. Photo-dimerization of Maleic anhydride,
8. Benzophenone (Friedel-Crafts reaction),
9. Benzanilide (Beckmann rearrangement),
10. Vanillyl alcohol from Vanillin (NaBH₄ reduction),
11. 2- and 4-Nitrophenols (nitration and separation by steam distillation),
12. Acridone from Phthalic anhydride.

SEMESTER -III
SYNTHESIS OF ORGANIC MOLECULES
MODEL PRACTICAL QUESTION PAPER

Course Code: P20/CHE/DSC/301/P
Credits: 2

Time: 3 Hrs
Max. Marks: 50

- Q1. Write the principle involved in the preparation of the given Organic compound. 10 M
(CO1)
- Q2. Synthesize the given organic compound by following systematic procedure and check the purity of the compound by TLC. (CO2 &CO3) 25 M
- Q3. Record + Attendance 5 M
- Q4. Viva 10 M