ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

VIII SEMESTER B.SC HONOURS CHEMISTRY TIME: 2hrs/week

CODE CH8252(2)

REVISED SYLLABUS UNDER CBCS 2020-21 MARKS: 50

ORGANIC CHEMISTRY: MODERN ORGANIC SYNTHESIS AND NATURAL PRODUCTS

ORGANIC CHEMISTRY PRACTICALS –II

I.

Course Objective: To train students in different techniques involved in organic synthesis

Course Outcomes: On successful completion of this practical course, student shall be able to:

- List out, identify and handle various equipment in Chemistry lab.
- Learn the concepts and procedures of handling chemical reagents appropriately.
- Demonstrate skills to perform reflux, distillation, recrystallisation and vacuum filtration.
- Calculate theoretical yield and percent yield. .
- Dispose chemicals in a safe and responsible manner.

II. Syllabus:

Preparation, recrystallization, and determination of melting point & yield of the following compounds: (i) Aspirin, (ii) Nerolin,(iii)Chalcone, (iv) p-Nitro acetanilide, (v) 2,4,6- Tri bromoaniline, (vi) m-Dinitrobenzene, (vii) Phthalimide,
(viii) Diels-Alder adduct.

III. Co-Curricular Activities

Mandatory

1. **For Teacher**: Training of students by the teacher in laboratory and field for not lessthan15 hours on the field techniques/skills of organic synthesis andrecrystallization of the organic compound

2. **For Students**:

Studentshallvisitarelatedindustry/chemistrylaboratoryinuniversities/research organizations/private sector facility and observes the synthetic reactions. Write their observationsand submit a hand written fieldwork/project workreportnotexceeding10 pages in the given format to the teacher.

3. Max marks for Fieldwork/projectworkReport:05.

4. Suggested Format for Fieldwork/project work**:** Title page, student details, index page, details of place visited, observations, findings, and acknowledgements.

5. Unit tests (IE).

IV. Reference Books:

1. Vogel's Text Book of Quantitative Chemical Analysis, J. Mendham, R. C. Denney, J. D. Barnesand M. J. Thomas, 4th& 6 th Ed. (Pearson Education Asia).

2. Vogel's Text Book of Practical Organic Chemistry, B.S. Furniss, A.J. Hannaford, P.W.G.Smith, A.R. Tatchell, 5 Ed.
(Longman Scientific & Technical)