SEMESTER III

PAPER3 THIN LAYER CHROMATOGRAPHY & COLUMN CHROMATOGRAPHY

PRACTICAL SYLLABUS

Programme: M.Sc.
Courser code P20/CHE/DSE/301/P **Max. Marks: 50**
Course: DSE-01 **No. of Hrs. allotted: 4 Hrs/Week**
No. of Credits: 2

COURSEOUTCOMES:

CO1: Understand the classical methods of purification and basic principles of distillation.

CO2: Assimilate the knowledge of thin layer chromatography and applications of thin layer chromatography in industrial purpose.

CO3: Understand the significance of the paper chromatography and separation of different compounds in Industries.

CO4: Comprehend the different types of gas chromatography techniques and identification and quantitative analysis of organic compound

Thin layer chromatography: Determination of purity of the compounds, monitoring the progress of chemical reactions (any of the four preparations), identification of unknown organic compounds by comparing the R_f values of known standards.

Column Chromatography: Separation of a mixture of 2-Hydroxybenzaldehydeand3-Hydroxybenzaldehyde, Ortho and para Nitro phenols component mixture using silica gel as adsorbent and chloroform as the eluent. The column chromatography should be monitored by TLC

SEMESTER III

PAPER-3 THIN LAYER CHROMATOGRAPHY & COLUMN CHROMATOGRAPHY

MODEL PRACTICAL QUESTION PAPER

Course Code: P20/CHE/DSE/301/P **Time: 3hrs**
Credits: 2 **Max. Marks: 50**

1. Write the principle involved in thin layer Chromatography/ Column Chromatography **10M (CO1)**

2. a) Separate an unknown binary mixture by Column Chromatography / TLC and calculate the Rf values **.**

   b) Determination of purity of the compounds/Monitor the progress of a chemical reaction **(CO2) (25M)**

3. Record + Attendance **5M**

4. Viva **(CO3 &CO4)** **10M**