## M.E. Chemical ( Ist Year) MASS TRANSFER Ist Sessional

Max Marks: 30 Time: 1.0 Hrs

Note: Attempt All Questions. Assume Missing data if Any.

- 1. What are the various separation process and explain any two in detail (7)
- **2.** Write short notes on the following: P- X- -Y diagrams and T X Y diagrams. (6)
- **3.** A liquid mixture of 60 mol % benzene and 40 mol % toluene is charged to a still pot where differential distillation is carried out at 1.2 atm. How much of the charge must be boiled away to leave a residue containing 80 mol% toluene. Bubble point of 60 mol% mixture of benzene is 193 <sup>0</sup> F and 80 mol% toluene mixture is 217 <sup>0</sup> F. Relative volatility changes from 2.36 to 2.54
- **4.** Write short notes on the following: Hengstebeck method and smith Brinkley method (8)