

V. P. & R. P. T. P. Science College

B.Sc. (Sixth Semester)

Internal Test

Saturday, 15<sup>th</sup> March, 2014

Subject code: US06CICV06 (Selected topics in industrial chemistry)

Industrial Chemistry Vocational

Time: 3:30 pm to 5:00 pm

Total Marks: 30

- Q-1 **Answer any three of the following:** (6)
- I Continuous stirred tank reactor (CSTR)
  - II Enlist the various properties which are used in Research and Development.
  - III What is homogeneous catalysis? Give its two examples.
  - IV Give two examples of acid base catalysis.
  - V Enlist the various materials which are used as cathode and anode in electro dialysis
  - VI Give the structure of polyether sulfone and polysulfone
- Q-2 Explain Pilot plant and explain check list for investigating pilot plant (8)  
OR
- Q-2 Discuss engineering flow diagram in detail. (8)
- Q-3 Define emulsion and explain its phases in detail. (8)  
OR
- Q-3 Explain the various characteristics of catalytic reactions (8)
- Q-4 Write short a note on: (8)
- (a) Phase inversion
  - (b) Explain the membrane for RO system in liquid separation.
- OR
- Q-4 Explain in brief about the electro dialysis method for separation using neat diagram. (8)

