## V. P. & R. P. T. P. Science College B.Sc. (Sixth Semester) Subject code: US06CICV03 (Polymer Technology) Wednesday 12th march-2014

**Industrial Chemistry** 

Time: 03:30 pm to 05:00 pm Total Marks: 30

## Q-1 Answer any three of the following:

(06)

- 1. Why do all Simple Organic Molecules not produce polymer?
- 2. Give the name of Methods & Techniques of Polymerization.
- 3. Explain different methods for the preparation of formaldehyde.
- 4. How is melamine prepared commercially from urea?
- 5. What are the reaction condition for preparation of LDPE respected by the conventional process & the slurry process?
- 6. Give the name of several processes for polymerization of ethylene to polyethylene.
- Q-2 Define the term functionality and justify that functionality of monomer is not a constant Parameter. (80)

OR

- Q-2 Give the classification of polymer based on molecular arrangement & tacticity. (08)
- Q-3 Give the important properties & Explain the manufacturing of phenol formaldehyde Resin (Resole type). (80)

OR

- Q-3 Giving a neat sketch diagram, describe the process for manufacturing of polyurethane. (80)
- Q-4 Describe a commercial process for the manufacturing of isotactic Polypropylene. (08)

OR

Q-4 Describe with neat sketch of flow diagram, the suspension process of manufacturing of PVC. (80)