

V. P. & R. P. T. P. Science College  
B.Sc. (Sixth Semester)  
Wednesday 12<sup>th</sup> MARCH 2014  
Subject code: US06CICH03 (Polymer Technology)  
Industrial Chemistry

Time: 03:30 am to 05:00 pm

Total Marks: 30

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

**Marks-06**

- i. Give the comparison of thermosetting & thermoplastic.
- ii. Name of methods and techniques of polymerization.
- iii. Give the reaction & its condition for the preparation of phenol formaldehyde novaloc as well as Resole type.
- iv. Explain different methods for the preparation of formaldehyde.
- v. Name of different types of polyethylene and their density range.
- vi. Write the properties of polypropylene.

**Q-2 Give the classification of polymer based on molecular arrangement & tacticity.**

**Marks-08**

**OR**

**Q-2 Write the mechanism of Free radical polymerization.**

**Marks-08**

**Q-3 Give the properties, uses and process of manufacturing phenol formaldehyde resin.**

**Marks-08**

**OR**

**Q-3 Give the important properties, uses and manufacturing of urea formaldehyde resin.**

**Marks-08**

**Q-3 Described the manufacturing process for LDPE by High pressure process.**

**Marks-08**

**OR**

**Q-3 Write a note on PTFE.**

**Marks-08**

