

Subject Code: R10204/R10

Set No - 1

I B. Tech II Semester Supplementary Examinations Dec - 2016  
ENGINEERING CHEMISTRY-II  
(Common to All Branches)

Time: 3 hours

Max. Marks: 75

Answer any FIVE Questions  
All Questions carry equal marks  
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1. a) Illustrate with examples any two different techniques used in polymerisation.  
b) Write the structures and two properties and two uses of i) PTFE ii) polystyrene (8+7)
2. a) Bring out the differences between thermoplastics and thermosetting plastics.  
b) Explain injection moulding with a neat diagram. (8+7)
3. a) How is crepe rubber obtained from latex?  
b) How are the following produced? Mention their properties and uses.  
i) Buna-S ii) polyurethane. (7+8)
4. a) Explain briefly the applications of nano materials.  
b) Discuss the preparation, properties and applications of fullerenes. (7+8)
5. a) Draw a flow diagram to show the various steps involved in the manufacture of Portland cement by rotary kiln technology.  
b) What are refractories? How they are classified? Give example of each type. (8+7)
6. a) What is reforming of petrol? How does reforming increase octane number? Give any two reforming reactions.  
b) Explain briefly the properties of lubricants. (8+7)
7. a) Write notes on enamels and special paints.  
b) Explain hydrogen evolution type corrosion? (8+7)
8. a) Discuss about the need of green chemistry?  
b) Explain any two methods for green synthesis. (7+8)

