

Code No: R10204

R10**SET-1****I B. Tech II Semester Supplementary Examinations, April/May - 2018****ENGINEERING CHEMISTRY-II**

(Com. to All Branches)

Time: 3 hours

Max. Marks: 75

Answer any **FIVE** Questions
All Questions carry **Equal** Marks

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1. a) Explain addition, condensation and Zeigler Natta polymerization with example. (8M)  
b) Discuss the effect of heat and mechanical properties of polymers. (7M)
2. a) Explain the two moulding techniques involved in preparation of thermosetting and thermoplastic polymers. (8M)  
b) How are glass fibre reinforced plastics prepared? Give its properties. (7M)
3. a) Write the engineering applications of elastomers. (8M)  
b) Write the preparation, properties and uses of polyurethane. (7M)
4. a) What are carbon nanotubes? Explain chemical vapour deposition method for preparation of nanotubes. (8M)  
b) Write the applications of fullerenes. (7M)
5. a) Explain the manufacturing of cement by wet process. (8M)  
b) What are ceramics? Explain glazed and unglazed ceramics. (7M)
6. a) Explain fixed bed catalytic cracking with a neat sketch. (8M)  
b) Explain thin film mechanism of lubrication. (7M)
7. a) What are enamels and varnishes and special paints? (8M)  
b) Explain the absorption of oxygen in electrochemical theory of corrosion. (7M)
8. a) Give engineering applications of green chemistry. (8M)  
b) Write the principles of green chemistry. (7M)