Subject Code: R10204/R10

Set No - 1

## I B.Tech II Semester Supplementary Examinations May - 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) Discuss (i) biodegradable polymers (ii) physical properties of polymers.
  - (b) Write the preparation and applications of PTFE and PVC.

[8+7]

- 2. (a) Explain with neat sketch compression and injection moulding methods.
  - (b) Write notes on glass fiber reinforced plastics.

[8+7]

- 3. (a) What are the drawbacks of natural rubber. How can they be modified?
  - (b) Discuss the preparation and applications of polyurethane and Buna-S.

[8+7]

- 4. (a) What are carbon nanotubes? Describe chemical vapour deposition method for preparation of carbon nanotubes.
  - (b) What are fullerenes? Explain its applications.

[8+7]

- 5. (a) Describe the manufacture of cement by wet process.
  - (b) What are glazed and unglazed ceramics? Give the applications of ceramics.

[8+7]

- 6. (a) Write notes on antiknocking agents and cetane number.
  - (b) Explain fluid film lubrication and thin film lubrication.

[8+7]

- 7. (a) Discuss (i) differential aeration corrosion (ii) cathodic protection
  - (b) Explain the factors affecting the rate of corrosion

[8+7]

- 8. (a) Explain the need of green chemistry.
  - (b) Write the applications of green chemistry.
  - (c) Discuss super critical fluid extraction method of green synthesis.

[5+5+5]

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