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Student Copy

MCT
 MANJARA CHARITABLE TRUST
RAJIV GANDHI INSTITUTE OF TECHNOLOGY, MUMBAI
Department of Applied Sciences & Humanities

INTERNAL ASSESMENT (IA) - II

Date: -05 '12/24

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| Max. Marks: 15 Class: F.E. Sem-I Name of the Course: Applied Chemistry Branch: All | Duration: 45 minutes |
| Instructions: <ol style="list-style-type: none"> 1. Question 1 (i&ii) is compulsory for 6 Marks 2. From Question 2 (Solve any one) 3. From Question 3 (Solve any one) 4. Figures to the right of the question indicate full marks. 5. Assume the suitable data wherever necessary. 6. Illustrate your answers using neat diagrams wherever necessary. | |

| Questions | Maximum Marks | BT Level | Course Outcomes |
|---|---------------|----------|-----------------|
| Q1. i) Define and give significance of Glass Transition Temperature, Transmittance and photoelectric property of polymer. | 3 | 1 | CO4 |
| Q1. ii) A sample of polymer contains 60% and 40% molecules of the polymer with mol.wts 15000 and 12000 respectively, calculate the number average mol.wt. and weight average mol.wt. of the polymer. | 3 | 3 | CO4 |
| OR | | | |
| Q2. A) Explain the conventional and green route of manufacturing Indigo. Mention the green chemistry principles involved. | 5 | 2 | CO6 |
| OR | | | |
| Q2. b) What is Biodiesel? How biodiesel is prepared from vegetable oil? Give its advantages. | 5 | 1 | CO6 |
| OR | | | |
| Q3. a) Explain Laminar composites with diagram. | 4 | 2 | CO5 |
| OR | | | |
| Q3. b) What are composites? Give its characteristics (any 6). | 4 | 1 | CO5 |