

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING –SEMESTER –VII- EXAMINATION – SUMMER • 2015

Subject Code: 372303

Date: 07-05-2015

Subject Name: PERFORMANCE & GREEN PLASTICS

Time: 2.30 PM TO 05.00 PM

Total Marks: 70

Instructions:

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Each question carry equal marks (14 marks)

- Q.1** (a) Write and explain factors affecting the biodegradable polymers. **07**
(b) Define following terms: 1) Polymer Blend 2) Polymer Alloy 3) Compatibilization 4) Bio polymer 5) Biodegradable polymers 6) Miscible Polymer Blend 7) Homologous Polymer Blend **07**
- Q.2** (a) Explain stepwise procedure for Design of a blend. **07**
(b) Discuss Properties and Applications of Poly imides. **07**
OR
(b) Discuss Properties and Applications of Poly etherimides. **07**
- Q.3** (a) State various methods of making polymer blends. Explain any one in detail, including its advantages and dis-advantages. **07**
(b) Explain High Temperature Polymers. **07**
OR
- Q.3** (a) Write Properties and Applications of PP-EPDM blend. **07**
(b) Write a note on Fire Resisting Polymers **07**
- Q.4** (a) Write a note on Measurement of Polymer biodegradability **07**
(b) Discuss properties and Applications of PCL. **07**
OR
- Q. 4** (a) List various processing methods for Biodegradable polymers and explain blow moulding of biodegradable plastics. **07**
(b) Discuss properties and Applications of Poly sachharides. **07**
- Q.5** (a) Write Properties and Applications of Nylon-ABS blend. **07**
(b) Write Properties and Applications of PLA. **07**
OR
- Q.5** (a) Discuss advantages and disadvantages of Biodegradable polymers. **07**
(b) Write Properties and Applications of PC-PBT blend. **07**
