

Seat No.: \_\_\_\_\_

Enrolment No.: \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**DIPLOMA ENGINEERING - SEMESTER -VII EXAMINATION – SUMMER - 2017**

**Subject Code:372303**

**Date: 06 -05 -2017**

**Subject Name: High performance and green plastics**

**Time: 2:30 PM TO 05:00 PM**

**Total Marks: 70**

**Instructions:**

1. Attempt all 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 the properties and application of PC-ABS. **07**  
(b) Write the advantages and disadvantages of biodegradable polymers. **07**
- Q.2** (a) Write the properties and application of chlorinated polyether. **07**  
(b) Explain the solution blending method for alloys and blends. **07**
- OR
- (b) Write the properties and application of PPO-NYLON. **07**
- Q.3** (a) Write the short note on Barrier polymers. **07**  
(b) Write the properties and application of polyimides **07**
- OR
- Q.3** (a) Write the short note on biomedical polymer. **07**  
(b) Write the properties and application of high temperature polymer. **07**
- Q.4** (a) Explain the injection molding method of biodegradable polymer. **07**  
(b) Write the short note on polymer compatibility for alloys and blend. **07**
- OR
- Q.4** (a) Explain the blow molding method of biodegradable polymer. **07**  
(b) Write the properties and application of ABS-PBT. **07**
- Q.5** (a) Write the properties and application polyhydroxyalkanoate(PHA) **07**  
(b) Write the short note on Additives use to make plastic biodegradable. **07**
- OR
- Q.5** (a) Explain the factors affecting biodegradable polymer. **07**  
(b) Write the properties and application of Poly lactide. **07**

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