

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Engineering - SEMESTER-VII • EXAMINATION – WINTER • 2014

Subject Code: 372303

Date: 26-11-2014

Subject Name: High Performance and Green Plastic

Time: 10:30 am - 01:00 pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. English version is considered to be Authentic.

- Q.1** (a) Give the applications of biomedical polymers. **07**
(b) List applications of Poly (amide-imide). **07**
- Q.2** (a) Explain properties of high temperature polymers in brief. **07**
(b) Explain properties of chlorinated polyether. **07**
OR
(b) Give the applications of thermoplastic elastomers (TPE). **07**
- Q.3** (a) Explain the importance of polymer alloys & blends. **07**
(b) Write the applications of PPO-NYLON. **07**
OR
- Q.3** (a) List the preparation methods of alloys & blends and explain dispersion mixing. **07**
(b) Explain properties of ABS-PBT **07**
- Q.4** (a) Write the applications of PC-ABS. **07**
(b) Explain factors affecting biodegradable polymers. **07**
OR
- Q.4** (a) List the additives used to make plastic biodegradable and explain in brief. **07**
(b) Explain properties of polyhydroxybutyrate (PHB). **07**
- Q.5** (a) Give the applications of polylacticacid (PLA). **07**
(b) Write advantages and disadvantages of biodegradable polymers. **07**
OR
- Q.5** (a) List the biodegradable polymers synthesised from petroleum products & give applications of polycaprolactone (PCL). **07**
(b) Explain injection moulding method of biodegradable polymers. **07**
