

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Engineering - SEMESTER-VI • EXAMINATION – SUMMER • 2014

Subject Code: 362302

Date: 26-05-2014

Subject Name: Testing and Quality Management

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) Define HDT and write the ASTM procedure for HDT measurement. Draw neat sketch of its apparatus. **07**
- (b) Define “Testing”. Describe importance of Testing. **07**
- Q.2** (a) Draw neat sketch of tensile test specimen according to ASTM. Write the procedure of tensile test. Which factors affect the tensile test result? **07**
- (b) Define conditioning. Give significance of conditioning. **07**
- OR
- (b) Explain procedure for Rockwell hardness test with neat sketch. **07**
- Q.3** (a) Describe factors affecting HDT test results. **07**
- (b) Define Dielectric strength. Write test procedure for dielectric strength with neat sketch of its apparatus **07**
- OR
- Q.3** (a) Write short note on “Arc resistance test”. **07**
- (b) Describe the test for measuring the Vicat softening temperature. **07**
- Q.4** (a) Draw neat sketch of MFI test apparatus. Discuss factors affecting MFI test result. **07**
- (b) Draw neat sketch of ESCR test apparatus. Write test procedure for ESCR. **07**
- OR
- Q. 4** (a) Define: (1) Light transmittance (2) Gloss. Write test procedure for any one of them. **07**
- (b) List various failure analysis techniques. Explain any one. **07**
- Q.5** (a) List advantages of S.Q.C. **07**
- (b) Write full form of :(1) B.I.S. (2) A.S.T.M. (3) I.S.O.. Write brief note on any one of them. **07**
- OR
- Q.5** (a) Write short note on raw material quality control. **07**
- (b) Write a brief note on any one: (1) Cup flow test (2) Outdoor weather resistance test **07**
