

GUJARAT TECHNOLOGICAL UNIVERSITY**Diploma Engineering - SEMESTER-III • EXAMINATION – SUMMER • 2014****Subject Code: 3335504****Date: 19-06-2014****Subject Name: Welding Technology-I****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) Describe meaning and Classify “Welding Process”. **07**
(b) Explain Advantages and Limitations of Welding Processes. **07**
- Q.2** (a) Describe SEVEN types of Weld Joints with neat sketches. **07**
(b) Draw typical Welding Rectifier and Describe its Specifications. **07**
OR
(b) Draw typical Welding Transformer and Describe its Specifications. **07**
- Q.3** (a) Describe OCV, CCV, Duty Cycle and Current Rating. **07**
(b) Describe coding and specification method of Welding Electrode with example **07**
OR
- Q.3** (a) Draw neat sketch of Inverter type Welding Equipment and write its Specifications. **07**
(b) Give Classification of Welding Electrodes and describe its Selection criteria. **07**
- Q.4** (a) Describe Arc Physics with neat sketch. **07**
(b) Describe Arc blow and Arc Stability with neat sketches. **07**
OR
- Q. 4** (a) Describe principle of SMAW with neat sketch. **07**
(b) Draw neat sketches of any FIVE Welding Position and State their features **07**
- Q.5** (a) Describe principle of SAW with neat sketch. **07**
(b) Explain Scope of ASME Welding Codes in Fabrication Industries. **07**
OR
- Q.5** (a) State advantages, disadvantages and application of SAW. **07**
(b) Describe need of WPS, WPQ and PQR for coded Fabrication. **07**
