

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

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

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**DIPLOMA ENGINEERING – SEMESTER – III • EXAMINATION – SUMMER 16**

**Subject Code: 3335504**

**Date: 20.05.2016**

**Subject Name: Welding Technology-I**

**Time: 02:30 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. Use of programmable & Communication aids are strictly prohibited.
5. Use of only simple calculator is permitted in Mathematics.
6. English version is authentic.

- Q.1** (a) Define the term ‘Welding’. Explain ‘SMAW’ Principle with neat sketch. **07**  
(b) State TEN points of ‘Why Power Source is required for welding?’ **07**
- Q.2** (a) State Advantages, Disadvantages and Applications of DC Generator. **07**  
(b) Differentiate between DCSP and DCRP welding. **07**  
OR  
(b) Draw neat sketches of DCSP and DCRP Configurations and Explain it. **07**
- Q.3** (a) Draw neat sketch of Welding Transformer. Describe its working. **07**  
(b) Draw neat sketch of CCV and explain it. **07**  
OR
- Q.3** (a) Draw neat sketch of V-I characteristics of Welding Transformer and explain. **07**  
(b) Draw neat sketch of OCV and explain it. **07**
- Q.4** (a) Draw neat sketch of standard location of elements of Welding Symbols. **07**  
(b) Explain Scope of ASME Welding Codes in Fabrication Industries. **07**  
OR
- Q.4** (a) Describe Arc blow and Arc Stability with neat sketches. **07**  
(b) Draw neat sketch of any SEVEN defects in weld, Explain its causes and remedies. **07**
- Q.5** (a) Describe coding method of Consumable Electrode with suitable example. **07**  
(b) Draw neat sketches of any FIVE Welding Position for butt welds and State their features. **07**  
OR
- Q.5** (a) Describe principle of SAW with neat sketch. **07**  
(b) Give Classification of Welding Electrodes and describe its Selection criteria. **07**

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