

**GUJARAT TECHNOLOGICAL UNIVERSITY****Diploma Engineering - SEMESTER-III • EXAMINATION – WINTER • 2014****Subject Code: 3335504****Date: 01-12-2014****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) Explain the term “Fusion Welding Process” with neat sketch. **07**  
(b) Describe factors affecting selection of welding process. **07**
- Q.2** (a) Describe SMAW with neat sketch. **07**  
(b) Differentiate between DCSP and DCRP with neat sketches. **07**  
OR  
(b) Draw Classification Chart of Arc Welding Power sources. State why power source is required for welding. **07**
- Q.3** (a) Draw neat sketch of Welding Transformer. Describe its working. **07**  
(b) Draw neat sketch of OCV 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 CCV and explain it. **07**
- Q.4** (a) Draw neat sketch of Weld bead Geometry and explain it. **07**  
(b) Draw neat sketch of standard location of elements of Welding Symbols. **07**  
OR
- Q. 4** (a) Describe principle of SAW with neat sketch. **07**  
(b) Draw neat sketches of any FIVE Welding Position for butt welds and State their features. **07**
- Q.5** (a) Draw neat sketch of Welding Arc. Describe Arc initiation methods with neat sketches. **07**  
(b) Explain Scope of ASME Welding Codes in Fabrication Industries. **07**  
OR
- Q.5** (a) Describe coding method of Consumable Electrode with suitable example. **07**  
(b) Describe any SEVEN defects in weld with neat sketches, its causes and remedies. **07**

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