

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
Diploma Engineering - SEMESTER-V • EXAMINATION – WINTER 2013

Subject Code: 3335504

Date: 02-12-2013

Subject Name: Welding Technology-I

Time: 02:30 pm - 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. English version is considered to be Authentic.

- Q.1** (a) Define the term 'Arc Welding'. Describe SMAW Process with neat sketch. **07**
(b) Give Classification of different welding power sources and explain any one with neat sketch. **07**
- Q.2** (a) Differentiate between DCEP and DCEN. **07**
(b) Prepare list of Equipment, Accessories and Tools used for SMAW. **07**
OR
(b) Draw neat sketch of any ONE type of Welding Power source and write its Specifications. **07**
- Q.3** (a) Describe CCV with neat sketch. **07**
(b) Give Classification of Welding Electrodes and describe its Selection criteria. **07**
OR
- Q.3** (a) Describe Thyristor controlled welding Power source with neat sketch. **07**
(b) State Advantages and Disadvantages of DC Generator. **07**
- Q.4** (a) Describe the various Functions of Flux Coating of SMAW Welding Electrode. **07**
(b) Draw neat sketches and state causes and remedies of any SEVEN Welding Defects. **07**
OR
- Q. 4** (a) Describe the process of "Baking of electrodes". **07**
(b) Describe the various functions of flux in SAW. **07**
- Q.5** (a) Draw neat sketch of SAW equipment and describe it's working. **07**
(b) State meaning of P-numbers, F-numbers and A- numbers. State the Typical example of it **07**
OR
- Q.5** (a) Write safety Precautions to be observed in SMAW & SAW. **07**
(b) Draw neat sketches and explain SEVEN different grooved welding Positions. **07**
