

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Semester -III Remedial Examination May - 2011

Subject code:335503

Subject Name: Welding Technology-I

Date: 27 /05 /2011

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.

- Q.1** (a) Define 'WELDING'. State its Advantages & Disadvantages. **07**
(b) Draw neat sketch and describe Working Principle of 'SMAW'. **07**
- Q.2** (a) Give Classification of 'Welding Processes'. State Factors affecting Selection of particular Welding Process. **07**
(b) Give Classification of 'Welding Power Source Equipments'. Explain Typical Specification details of 'Welding Rectifier'. **07**
- OR**
- (b) Draw neat sketch of 'Welding Transformer'. Explain its Typical Specification details. **07**
- Q.3** (a) Give Classification of 'Welding Electrodes'. Explain its 'Coding System' as per AWS giving suitable example. **07**
(b) Prepare list of 'Electrode Coating Ingredients' and State Functions of each Ingredient. **07**
- OR**
- Q.3** (a) Explain Importance of 'Care and Storage of Electrodes'. **07**
(b) State and Explain Information Details provided on the Packet of Electrodes. **07**
- Q.4** (a) Compare AC Polarity, DCSP and DCRP with neat Sketches. **07**
(b) Describe SAW procedure with neat Sketch. **07**
- OR**
- Q.4** (a) Explain 'Metal Transfer Theory'. Explain its types with neat Sketches. **07**
(b) Describe ESW procedure with neat Sketch. **07**
- Q.5** (a) Prepare list of different ASME Codes applicable for Welding. State its meaning, need and application giving suitable Example. **07**
(b) State and Explain different Process Parameters (Variables) of Welding and state its typical Values giving suitable example. **07**
- OR**
- Q.5** (a) Prepare list of different Welding Accessories and Safety Clothings / Equipments. State need and use of any THREE with neat sketches. **07**
(b) Explain 'Over lay Welding' with neat Sketch. State its Advantages and Disadvantages. **07**
