

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI • EXAMINATION – SUMMER • 2014****Subject Code: 162502****Date: 21-05-2014****Subject Name: Welding Technology****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.

- Q.1** (a) Define Welding Process. Classify the welding Processes with Advantages and disadvantages. **07**
(b) Discuss working principle of arc welding with neat sketch. **07**
- Q.2** (a) Explain types of flames of gas welding with neat sketch **07**
(b) Define terminology of weld joints and types of joints. **07**
- OR**
- (b) Explain Sub Merged Arc Welding with neat sketch. **07**
- Q.3** (a) Explain the Spot Welding with neat sketch and merits, demerits and application. **07**
(b) Explain any one thermo chemical welding process with neat sketch. **07**
- OR**
- Q.3** (a) Explain type of welding defects its causes and remedies **07**
(b) Explain any one solid state welding process with neat sketch. **07**
- Q.4** (a) Explain the process of Plasma Arc Welding Process with its merits and demerits **07**
(b) Explain the process of Upset welding process. **07**
- OR**
- Q.4** (a) Write short note on source of power supply of welding processes. **07**
(b) Differentiate TIG and MIG welding. **07**
- Q.5** (a) Explain the Ingredients of coating and their functions **07**
(b) Explain the process of selection of electrodes. **07**
- OR**
- Q.5** (a) Discuss hydrostatic pressure testing and hydraulic pressure testing for leakage of weld joint. **07**
(b) What are the functions of flux and filler material at different welding processes? **07**
