

GUJARAT TECHNOLOGICAL UNIVERSITY**Diploma Engineering - SEMESTER-III • EXAMINATION – WINTER 2013****Subject Code: 345502****Date: 28-11-2013****Subject Name: Sheet Metal Fabrication****Time: 02:30 pm - 05:00 pm****Total Marks: 70****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Each question carry equal marks (14 marks)

- Q.1** (a) Prepare sheet metal pattern development of Hopper shown in Fig.-1 **07**
(b) List different hand tools used in sheet metal fabrication shop. Explain any five with neat sketch. **07**
- Q.2** (a) Explain duties and quality of sheet metal shop supervisor. **07**
(b) Explain mechanism of shearing action in press tool with neat sketch **07**
OR
(b) List different sheet metal shearing operations & explain any five with neat sketch. **07**
- Q.3** (a) Explain soldering process with neat sketch; write advantages, limitation & application of it. **07**
(b) Write short note on brazing, its consumable and application. **07**
OR
- Q.3** (a) Define “gas welding process”. Explain its principle of operation. **07**
(b) Explain different safety precautions to be taken in gas welding shop. **07**
- Q.4** (a) Explain types and application of different gas welding flames with neat sketch. **07**
(b) Explain gas welding techniques with neat sketch. **07**
OR
- Q. 4** (a) Define “resistance welding process”. Explain different variables of resistance welding process. **07**
(b) Explain quality control in resistance welding. **07**
- Q.5** (a) Explain definition, procedure, advantages, limitation & application with neat sketch of Spot welding **07**
(b) Explain definition, procedure, advantages, limitation & application with neat sketch of Seam welding **07**
OR
- Q.5** (a) Explain advantages & limitation of welded joint over riveted joints. **07**
(b) Explain different sheet metal work application. **07**

