

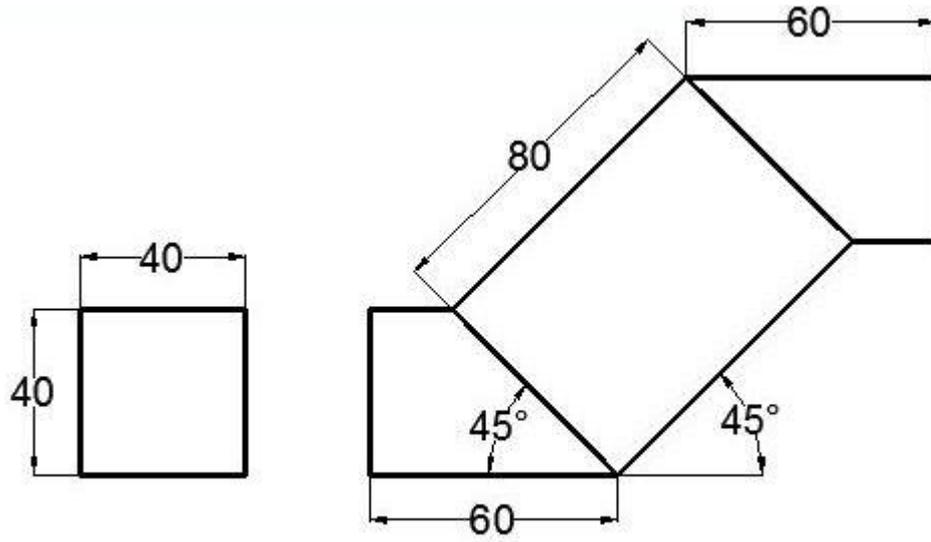
**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**DIPLOMA ENGINEERING – SEMESTER – IV-EXAMINATION – WINTER 2015**

**Subject Code: 3345502****Date: 17/12/2015****Subject Name: Sheet Metal Fabrication****Time: 02:30 PM TO 5:00 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) Draw pattern development of object shown in Fig.-1. 07  
(b) Explain different sheet metal working machines. 07
- Q.2 (a) List different types of press. Explain any one with neat sketch. 07  
(b) List different press working Dies and Explain any three with neat sketch. 07
- OR
- (b) Define the soldering process. Explain principles of good soldering process. 07
- Q.3 (a) Explain advantages, limitation and application of soldering process. 07  
(b) Write definition of brazing and Explain its principle of operation with neat sketch. 07
- OR
- Q.3 (a) List different brazing process and Explain furnace brazing process. 07  
(b) Define “gas welding process” and Explain its principle of operation with neat sketch. 07
- Q.4 (a) Explain chemistry of oxy-acetylene flame. 07  
(b) Write safety precautions required for gas welding cylinder. 07
- OR
- Q.4 (a) Explain different types of resistance to be considered in resistance welding process with neat sketch. 07  
(b) Write advantages, limitation and application of resistance welding process. 07
- Q.5 (a) Explain heat balance in spot welding with neat sketch. 07  
(b) Explain screwed thread terminology with neat sketch. 07
- OR
- Q.5 (a) Write advantages, limitation and application of projection welding process. 07  
(b) Explain application of sheet metal working in following industries. 07
- 1) Refrigeration and air condition industries.
  - 2) Furniture fabrication industries.

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**AC DUCT**

Fig – 1 Que 1-(A)