

Seat No.: _____
No. _____

Enrolment

GUJARAT TECHNOLOGICAL UNIVERSITY
Diploma Engineering - SEMESTER-IV • Examination – WINTER • 2014

Subject Code: 3345502

Date: 28-11-2014

Subject Name: Sheet Metal Fabrication

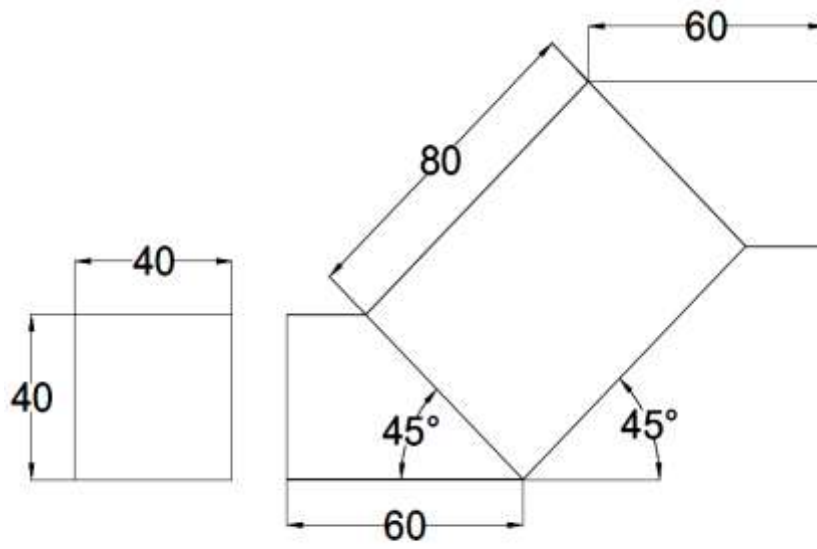
Time: 02:30 pm - 05:00 pm

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.

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|------|---|----|
| Q.1 | (a) Draw pattern development of AC duct shown in Fig.-1. | 07 |
| | (b) Explain different sheet metal hand tool with neat sketch. | 07 |
| Q.2 | (a) List different press working Die's and Explain any three with neat sketch. | 07 |
| | (b) Define the soldering process. Explain principles of good soldering process. | 07 |
| OR | | |
| | (b) Define soldering fluxes. List different types of soldering fluxes. Explain different selection criteria for soldering fluxes. | 07 |
| Q.3 | (a) Write steps of brazing procedure and Explain surface cleaning of base metal in brazing. | 07 |
| | (b) Define "gas welding process" 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) Explain chemistry of oxy-acetylene flame. | 07 |
| Q.4 | (a) Explain gas welding torch with neat sketch. | 07 |
| | (b) Define the resistance welding process. Explain generation of heat of resistance welding process with neat sketch. | 07 |
| OR | | |
| Q. 4 | (a) Comparing soldering, brazing & gas welding process in table Form. | 07 |
| | (b) Explain rocker-arm spot welding machine with neat sketch. | 07 |
| Q.5 | (a) Write safety precaution received for gas welding torch and tips and general precaution. | 07 |
| | (b) Write definition of percussion welding and Explain its principal operation with neat sketch. | 07 |
| OR | | |
| Q.5 | (a) Explain different types of screw fastening with neat sketch. | 07 |
| | (b) Explain application of sheet metal working in following industries. | 07 |
| | 1) Vehicle body building. | |
| | 2) Refrigeration and air condition industries. | |



AC DUCT

Fig - 1