

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE SEM-VII Examination-Nov/Dec.-2011

Subject code: 172103

Date: 24/11/2011

Subject Name: Metal Joining Processes

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) What are different metal joining processes? Give its importance. **07**
(b) Explain different joint design and edge preparation with neat sketch. **07**
- Q.2** (a) Discuss common defects in welding with their causes and remedies. **07**
(b) Write a detailed note on friction welding process. **07**
- OR**
- (b) Discuss characteristics of welding arc. **07**
- Q.3** (a) Discuss Tungsten Inert Gas welding process in detail. **07**
(b) Explain spot welding process. **07**
- OR**
- Q.3** (a) What are the functions of flux in submerge arc welding and explain it in detail. **07**
(b) Explain electron beam welding process. **07**
- Q.4** (a) Discuss metal inert gas welding in detail. **07**
(b) Discuss pressure welding process in detail. **07**
- OR**
- Q.4** (a) Explain different types of flames in gas welding process. **07**
(b) Discuss explosive welding process in detail. **07**
- Q.5** (a) Define soldering and discuss it with different type of soldering materials. **07**
(b) What is brazing process? Discuss it in detail. **07**
- OR**
- Q.5** (a) What do you mean by weldability? Explain the test for weldability. **07**
(b) Explain ultrasonic welding and adhesive joining. **07**
