

**UNIVERSITY OF PUNE**  
**[4363]-30**  
**T. E. (Production/ Prod SW),**  
**Examination-2013**  
**Manufacturing Processes II**  
**(2003 Course)**

[Total No. of Questions : 12]  
[Time: 3 Hours]

[Total No. of Printed Pages :2]  
[Max. Marks: 100]

- (1) Answer any three question from each section.
- (2) Answers to the *two sections* should be written in *separate answer-books*.
- (3) Neat diagram must be drawn wherever necessary.
- (4) Figures to the right indicate full marks.
- (5) Assume suitable data, if necessary.

**SECTION-I**

Q1.

- a) Explain with neat sketch Metal Inert Gas welding process and write advantages of it? [8]
- b) Discuss Indian standard marking system for welding electrodes [8]

**OR**

Q2.

- a) Explain stud welding method with sketches [8]
- b) Write role of flux and filler metal in the welding? [8]

Q3.

- a) Explain various types of flames produces in gas welding? [8]
- b) Discuss upset welding process in detail? [8]

**OR**

Q4.

- a) Compare gas cutting flame with welding flame [8]
- b) Explain seam welding processes? [8]

Q5.

- a) Explain any one solid state welding process [10]

**(1)**

b) Write short notes on 'braze welding' [8]

**OR**

Q6.

a) Compare soldering, welding and brazing? [10]

b) Explain various types of solders? [8]

**SECTION-II**

Q7.

a) Explain relationship between riser and directional solidification [8]

b) Compare Pressurized gating system and Unpressurized gating system [8]

**OR**

Q8.

a) Explain with sketch gating system? [8]

b) What is gating ratio? Explain in detail [8]

Q9.

a) What is gear shaving? [8]

b) Explain the gear hobbing methods? [8]

**OR**

Q10.

a) What is the gear shaping? Explain in detail? [8]

b) Discuss the gear generating and gear cutting processes? [8]

Q11.

a) Explain with neat sketch Abrasive Jet Machining in detail? [10]

b) Discuss ECM? [8]

**OR**

Q12.

a) Explain Ultrasonic Machining Process with its application? [10]

b) Discuss laser beam machining? [8]