

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- Vth SEMESTER-EXAMINATION – MAY/JUNE - 2012****Subject code: 151901****Date: 01/06/2012****Subject Name: Manufacturing Process -II****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.

- Q.1** (a) List various materials used for pattern and describe it's merits and demerits. **07**
(b) Classify the metal joining process along with the types of welding process. **07**
Explain oxy-hydrogen welding process with neat sketch.
- Q.2** (a) Distinguish hot working process and cold working process with it's merits and demerits. **07**
(b) Classify the types of pattern. Explain the skeleton pattern with neat sketch. **07**
OR
(b) Describe core making and core materials briefly. **07**
- Q.3** (a) Explain "Centrifugal Casting" method with neat sketch along with it's advantages over conventional green sand moulding. **07**
(b) Classify the types of foundry furnaces. Describe cupola furnace with neat sketch. **07**
OR
- Q.3** (a) Describe casting defects stating their causes and remedies. **07**
(b) Distinguish arc welding process and resistance welding process briefly. **07**
Explain the resistance welding cycles.
- Q.4** (a) What is laser beam welding process? Explain the steps involved in the process and state it's application. **07**
(b) Distinguish TIG and MIG welding process. **07**
OR
- Q.4** (a) Describe wire and tube drawing process with neat sketch. **07**
(b) Classify the cold working processes. Explain Coining and Embossing process with neat sketch. **07**
- Q.5** (a) Explain elastic and plastic deformation process briefly. **07**
(b) Classify the types of plastics along with the general properties of plastics. **07**
OR
- Q.5** (a) Describe injection moulding process of plastic with neat sketch. **07**
(b) Distinguish extrusion and thermoforming process of plastics. **07**
