

GUJARAT TECHNOLOGICAL UNIVERSITY**PDDC - SEMESTER-V • EXAMINATION – SUMMER 2013****Subject Code: X 51902****Date: 14-05-2013****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) Explain different criteria for selection of manufacturing process. **07**
(b) Define Pattern. List out the materials commonly used for pattern. **07**
Why is wood generally used as pattern material?

- Q.2** (a) Explain investment casting process. State its advantages and applications. **07**
(b) What is Riser? "Riser location always affects solidification process of casting" Justify. **07**

OR

- (b) Explain importance of allowances in casting. **07**
Q.3 (a) Explain centrifugal casting process. What is the main difference between Semi-centrifugal and centrifuging casting process. **07**
(b) Describe different defects in casting. **07**

OR

- Q.3** (a) Explain the principle of arc welding with neat sketch. State the parameters affecting the arc. **07**
(b) Explain different types of welding defects and methods to reduce these defects. **07**
Q.4 (a) Explain working principle, process and application of MIG welding. **07**
(b) Explain the factors involved in electrode selection in arc welding processes. **07**

OR

- Q.4** (a) Explain tube drawing and wire drawing process. **07**
Q.4 (b) Explain Blanking, Piercing, Coining and Embossing. **07**
Q.5 (a) Classify metal forming process. List the factors influencing rolling process. Explain the effect of roller diameter and metal friction on rolling process. **07**
(b) Explain working principle, process and application of Deep drawing. **07**

OR

- Q.5** (a) Explain **07**
(i) Difference between thermoplastic and thermosetting.
(ii) Process of polymerization.
(b) (i) Define Honing & Lapping. **07**
(ii) Explain blow molding process stating its advantages, limitations and applications.
