

Code: ME4T5

**II B.Tech - II Semester – Regular Examinations – May 2016**

**PRODUCTION TECHNOLOGY  
(MECHANICAL ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

**PART – A**

Answer *all* the questions. All questions carry equal marks

11x 2 = 22 M

1. a) What is tundish? Give its application.
- b) List any four pattern materials.
- c) Give any four properties required by moulding sand.
- d) Give any four examples of additives that are used to prepare moulding sand.
- e) What are the applications of investment casting?
- f) What are the various types of resistance welding?
- g) What are the various non-destructive tests for welded components?
- h) Define stretch forming.
- i) Define swaging.
- j) What are the various moulding processes used for plastics?
- k) What are the advantages of transfer moulding?

**PART – B**

Answer any *THREE* questions. All questions carry equal marks.

3 x 16 = 48 M

2. a) Explain various types of pattern allowances. 8 M

- b) Explain various elements of gating system with neat sketches. 8 M
3. a) Explain true centrifugal casting process. Give its limitations. 8 M
- b) Explain the causes and remedies for various casting defects. 8 M
4. a) Explain submerged arc welding process. Give its applications. 8 M
- b) Differentiate soldering and brazing processes. 8 M
5. a) Give the classification of extrusion process. Explain impact extrusion and give its applications. 8 M
- b) Differentiate between piercing and blanking. How and where do you give clearances in each type? 8 M
6. a) Explain compression moulding process. What are the disadvantages of this process? 8 M
- b) Describe the blow moulding process with a neat sketch. 8 M