

Code: ME4T5

**II B.Tech - II Semester – Regular/Supplementary Examinations –  
April 2017**

**PRODUCTION TECHNOLOGY  
(MECHANICAL ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

**PART – A**

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

11 x 2 = 22

1.

- a) What are the applications of castings?
- b) What are different pattern allowances?
- c) What is the principle of centrifugal casting?
- d) Define investment casting.
- e) Define principle of ARC welding.
- f) Explain various types of welding processes.
- g) What is Hot and cold working of metals?
- h) List various types of sheet metal operations.
- i) Classify polymers.
- j) Define rolling and forging.
- k) Write about hydro static extrusion and its limitations.

## PART – B

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

3 x 16 = 48 M

2. a) Explain different types of patterns. 8 M
- b) Explain about design of gating systems. 8 M
3. a) Explain brief about shell moulding process with neat sketch. 8 M
- b) Write down the advantages and disadvantages of shell moulding process. 8 M
4. a) Explain TIG welding process with neat sketches. 8 M
- b) Explain thermit welding process with neat sketch. 8 M
5. a) Explain the Bending operations with neat sketches. 8 M
- b) Give the difference between Punching and Blanking. 8 M
6. a) Describe Injection moulding. 8 M
- b) Explain the extrusion of plastics. 8 M