

Code: ME4T5

II B.Tech - II Semester – Regular Examinations - JUNE 2015

**PRODUCTION TECHNOLOGY
(MECHANICAL ENGINEERING)**

Duration: 3 hours

Marks: 5x14=70

Answer any FIVE questions. All questions carry equal marks

1. a) Explain various types of pattern allowances. 6 M

b) Explain the following. 8 M
 - i) Grain fineness test
 - ii) Permeability test

2. a) Write the advantages and limitations of centrifugal casting and Investment casting. 6 M

b) Explain two types of crucible furnaces with neat diagrams. 8 M

3. a) Describe the characteristics of welding process. 6 M

b) Draw a neat sketch and explain the submerged Arc welding. 8 M

4. a) Explain the process of TIG welding with neat sketch. 8 M

b) Describe different types of defects in welding. 6 M

5. a) Differentiate between cold working and Hot working processes. 6 M

b) Explain different types of rolling mills. 8 M

6. a) Discuss the “wire drawing” process with neat sketch. 7 M

b) Draw a neat sketch of Hydraulic press and explain the working principle. 7 M

7. a) What is extrusion? List the advantages, limitations and application of extrusion process. 6 M

b) Briefly describe the drop forging and roll forging processes. 8 M

8. a) Write short notes on the following. 6 M

i) Thermosetting plastics ii) Thermoplastics

b) Describe the Injection moulding process with neat sketch and write the advantages and limitations of the process. 8 M