

Th-1 Production Technology

Full Marks: 80

Time- 3 Hrs

**Answer any five Questions including Q No.1& 2
Figures in the right hand margin indicates marks**

1. Answer **All** questions 2 x 10
 - a. What is blanking operation?
 - b. Explain Sintering process.
 - c. State the use of cores in a casting.
 - d. Jigs & Fixtures increases the production cycle time (Yes/No). Justify your answer.
 - e. Name any two materials suitable for Arc- Welding Process.
 - f. What is the use of dies in press work?
 - g. Classify Extrusion process.
 - h. What is economics of casting?
 - i. What are the objectives of studying Production Technology?
 - j. Define Rolling Process.
2. Answer **Any Six** Questions 6 x 5
 - a. Differentiate between Jigs and Fixtures.
 - b. What is Extrusion Process? Discuss briefly about any one type of extrusion process.
 - c. Compare hot rolling and cold rolling process.
 - d. Discuss the significance of oxidizing and reducing zones of a cupola furnace.
 - e. What is punching operation? Discuss about various types of punches.
 - f. Discuss about Resistance Spot Welding process with sketch.
 - g. State the limitations of powder metallurgy process.
3. What are the various types of Press Working Operations? Explain in details. 10
4. Write short notes on 10
 - a) Indirect Extrusion
 - b) Compound Dies
 - c) Cold Shut
 - d) Blending
5. Explain TIG process with a neat sketch. 10
6. Discuss about any five types of casting defects, its causes and remedies. 10
7. Explain 3-2-1 point location of a rectangular jig in details. 10