

**SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI**

**Summer Examination 2020 ( Backlog )  
HVPM's College of Engineering and Technology, Amravati  
Department of Mechanical Engineering  
Bachelor of Engineering Semester – III**

**Subject : Manufacturing Processes-I**

**Code : 3ME05**

**Instructions :**

**1. Solve any two questions**

**2. All questions carry equal marks**

**Total Marks :20**

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**Q1.**

- a) What do you mean by Directional solidification ? (02)
- b) State the various zones of Cupola Furnace (02)
- c) What do you mean by hot chamber die casting machine (02)
- d) Explain the principle of Hot working Process (02)
- e) Define soldering & Brazing (01)
- f) Define Plasma arc welding (01)

**Q2.**

- a) State the principle of sand casting (01)
- b) Explain two differences between Direct & Indirect arc Furnace (01)
- c) What do you mean by continuous casting machine (02)
- d) What do you mean by Roll Piercing (02)
- e) What do you mean by MIG welding (02)
- f) What do you mean by Submerged arc welding (02)

**Q3.**

- a) Explain Gating system in detail (02)
- b) What are the differences between Coke fired & Induction furnace (02)
- c) What is the principle of Centrifugal casting (01)
- d) State the various types of Rolling Mills. (01)
- e) Explain the various flames in Gas welding process (02)
- f) Define Thermit welding (02)

**Q4.**

- a) Discuss two differences between sweep & segmental pattern (02)
- b) what are the various casting defect inspection methods (02)
- c) What is the principle of lost wax or Investment casting (02)
- d) Define Spinning, Coining & Embossing. (02)
- e) What is the difference between Arc Welding & gas Welding (01)
- f) Explain Elecroslag welding (01)