

DEPARTMENT : MECHANICAL SEMESTER : 5 SUBJECT NAME : MANUFACTURING TECHNOLOGY II SUBJECT CODE : 3152510 FACULTY NAME: ASSIST. PROF. KEDAR BADHEKA

#### ASSIGNMENT:1 INTRODUCTION OF MANUFACTURING TECH.

- 1. Importance of Manufacturing Technology in Global world.
- 2. Classification of Manufacturing processes.
- 3. Mention the factors are consider during the selection of manufacturing process.
- 4. Economical Factor of Manufacturing Process.



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### Assignment -2

# **Ch-2 Foundry Technology**

1. What is pattern? List different types of pattern? Explain any three.

2 What is pattern allowances? List different types of pattern allowances and explain draft allowance.

3 Differentiate between hot and cold die chamber casting.

4 What is gating system? Explain with neat sketch.



### ASSIGNMENT: 3 METAL JOINING PROCESSES

1.List out the various Metal Joining Processes and Its Importance with Unique feature regarding Selection.

- 2.Write a Short note on Following.
- 1. Brazing Process
- 2. Soldering Process.
- 3.Define the term welding. Classification of Welding Processes.
- 4.Explain the Rightward and leftward welding technique with figure.
- 5. Draw the different welding position and welding Joint Symbol.
- 6. Write the designation of welding Electrode for E-6013.
- 7. Explain on three Flame generated during gas welding process with fig. and Temp details.
- 8. Write a short note on Oxy-Acetylene gas welding Process.
- 9. Write a Short note with suggested sequence: Full name of Process, Definition, Process figure, Procedure, Advantage, Dis-advantages, application. (For All Below Process)
  - 1. SMAW
  - 2. SAW
  - 3. GTAW
  - 4. GMAW
  - 5. Spot Welding
  - 6. Seam Welding
  - 7. Projection Welding
  - 8. Ultrasonic welding
  - 9. Electron beam welding
  - 10.Laser Beam Welding

10. Explain the various Welding defects with Figure, it's causes, and Remedies.

11. How to Protect the Electrode from Atmospheric contamination, Humidity etc.

12. What are the safety measures are taken during welding process.



### ASSIGNMENT: 4 FORMING AND SHAPING PROCESSES.

1.Explain the Metal working process with the concept of stain Harding process.

2. Explain the Rolling process with Principle, Hot and cold rolling process, different Roll pass cycle, and Different types of rolling mill.

- 3. Write a Short note on Following with Figure.
  - ➢ Extrusion Process.
  - ➢ Wire & Tube Drawing Process.
- 4. Write a short note on Forging process with different forging method.
- 5. Tool design for forging process.
- 6. Write a Short note on below mention sheet metal forming processes with figure.
  - Shearing
  - Drawing, Deep Drawing
  - Squeezing
  - Piercing
  - Blanking
  - Coining & Embossing.
- 7. List out the various metal forming defects with Figure.
- 8. Explain the cold heading Process.



#### **ASSIGNMENT: 5 PLASTIC TECHNOLOGY**

- 1. Introduction of Plastic. Classification of Plastic. Properties of Plastic.
- 2. Write down the short note on Plastic part Manufacturing process such as.
  - Compression Molding
  - Transfer molding
  - Injection molding
  - Extrusion molding
  - Blow molding
  - Slush molding
- 3. Laminating Process of plastic.



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### Assignment -6

# **Ch-6 Advance Super finishing Technology**

- 1 What is honing process.
- 2 Explain lapping process.
- 3 Explain powder coating.