



## Production Technology

Th-1

Semester-3rd

### Unit-1 (Metal Forming Processes)

2 Mark

1. Define Extrusions?
2. What is the type of Extrusions?
3. Define rolling?
4. Write different types of rolling process?
5. Write down two applications of Extrusions?
6. Define four high rolling?

5 Marks

1. Define Extrusions and classified it?
2. Explain direct, indirect and impact Extrusions?
3. Difference between indirect and direct Extrusions?
4. Define rolling and classify it?
5. Different between cold rolling hot rolling processes?
6. Write the advantage, disadvantage and application of Extrusions process?

10Marks

1. Explain direct, indirect and impact Extrusion process with figure?
2. Define rolling and classified it with figure?



## Welding

### Unit -2

2 Marks

1. Define Welding?
2. Classify various welding process?
3. What is the function of Flux used in welding?
4. Define Resistance welding?
5. Define Neutral Flame?
6. Define carburising Flame?
7. Write down two advantages of resistance welding?
8. Define projection welding?

5 Marks

1. Define Welding and classify various Welding process?
2. Write various flames used in Oxy-acetylene Welding process?
3. Explain Resistance Welding?
4. Explain Projection Welding?
5. Explain Butt Welding?
6. Explain TIG Welding process and write the advantage and application?
7. Explain MIG Welding process write the advantages and application?
8. Difference between TIG and MIG Welding process?

10 Marks

1. Explain Oxy-acetylene Welding Process with figure?
2. What is the resistance Welding Process and classify it with figure?



## CASTING

### Unit-3

2 Marks

1. Define Casting?
2. State the different types of cores?
3. What do you mean by pattern in foundry shop?
4. Define casting process?
5. What is core?
6. Define allowances?
7. Define pattern?

5Marks

1. Explain Centrifugal casting?
2. Explain about various pattern allowances?
3. Explain the working of crucible furnace?
4. Explain various casting defects with their causes and remedies?
5. Explain different type of molding sands with their composition?

10 Marks

1. Explain with neat sketch the constructions and working of a cupola furnace?
2. Explain different types of molding sands with their composition and properties?
3. Explain with the neat sketch about Centrifugal casting method?
4. Sketch a cupola and label the essential parts. Describe the operation of a cupola?



## Powder Metallurgy

### Unit-4

2 Marks

1. Define powder Metallurgy Process?
2. Write the products of Powder Metallurgy?
3. Define Sintering?
4. Write two application of Powder Metallurgy?

5 Marks

1. Write the advantage of Powder Metallurgy?
2. What are the effects of Sintering on the Powder compact Produced by Pressing?
3. Explain Sintering?

10 Marks

1. State advantages and applications of Powder Metallurgy Processes over Conventional Processes?
2. Explain Various Methods employed to Produce Metal Powders for powder Metallurgy Process?
3. Explain various methods for Powder Metallurgy Process?



## Press Work

### Unit-5

2 Marks

1. What is Blanking?
2. What is piercing?
3. What is trimming?
4. Name the various sheet metals cutting operation?
5. State various press operations with tools used?

5Marks

1. Difference a simple die and compound die?
2. Describe the advantages and limitations of simple and compound die?
3. Explain a progressive die. How does it differ from a compound die?

10Marks

1. With neat sketch explain the working of compound dies?
2. Describe various advantages and disadvantages of simple and compound dies?



## JIGS & FIXTURES

### Unit-6

2 Marks

1. Define Jigs?
2. Define Fixtures?
3. Write short note on plate jig?
4. Write short note on Diameter Jig?
5. What is the difference between blanking and punching operation related to sheet metal working?

5 Marks

1. What are the advantages of using Jigs and Fixture?
2. Explain various types of Jig?

10 Marks

1. Describe the Methods of location with respect to 3-2-1 point location of rectangular Jig?
2. What is the "Six- point location principle" and neat sketch?