

#### GANDHI SCHOOL OF ENGINEERING BHABANDHA, BERHAMPUR SESSION PLAN

**3RD SEMESTER, BRANCH-MECHANICAL(GROUP 1)** 

## **PRODUCTION TECHNOLOGY(TH-1)**

# Name of the Faculty –ER. ASISH KUMAR BEHERA

	uity Litt	Topics to be taken	Actually Taken			
SL NO & CHAPTER	No. of Periods assigned by SCTE & VT	Details of the topics	PLANNING DATE	Details of the topics	ACTUAL DATE	Remarks
1. Metal Forming Processes	7	<ul> <li>1.1 Extrusion: Definition &amp; Classification</li> <li>1.2 Explain direct, indirect and impact extrusion process.</li> <li>1.3 Define rolling. Classify it.</li> <li>1.4 Differentiate between cold rolling and hot rolling process.</li> <li>1.5 List the different types of rolling mills used in Rolling process</li> </ul>	16/09/2022 TO 28/09/2022	<ul> <li>1.1 Extrusion: Definition &amp; Classification</li> <li>1.2 Explain direct, indirect and impact extrusion process.</li> <li>1.3 Define rolling. Classify it.</li> <li>1.4 Differentiate between cold rolling and hot rolling process.</li> <li>1.5 List the different types of rolling mills used in Rolling process</li> </ul>	16/09/2022 20/09/2022 21/09/2022 23/09/2022 24/09/2022 27/09/2022 28/09/2022	

2. Welding	16	<ul> <li>2.1 Define welding and classify various welding processes</li> <li>2.2 Explain fluxes used in welding</li> <li>2.3 Explain Oxy-acetylene welding process</li> <li>2.4 Explain various types of flames used in Oxy-acetylene welding process</li> <li>2.5 Explain Arc welding process</li> <li>2.6 Specify arc welding electrodes</li> <li>2.7 Define resistance welding and classify it</li> <li>2.8 Describe various resistance welding processes such as butt welding, spot welding, flash welding, projection welding and seam welding</li> <li>2.9 Explain TIG and MIG welding process</li> <li>2.10 State different welding defects with causes and remedies.</li> </ul>	30/09/2022 TO 5/11/2022	<ul> <li>2.1 Define welding and classify various welding processes</li> <li>2.2 Explain fluxes used in welding</li> <li>2.3 Explain Oxy-acetylene welding process</li> <li>2.4 Explain various types of flames used in Oxy-acetylene welding process</li> <li>2.5 Explain Arc welding process</li> <li>2.6 Specify arc welding electrodes</li> <li>2.7 Define resistance welding and classify it</li> <li>2.8 Describe various resistance welding processs such as butt welding, spot welding, flash welding, projection welding and seam welding</li> <li>2.9 Explain TIG and MIG welding process</li> <li>2.10 State different welding defects with causes and remedies.</li> </ul>	30/09/2022 11/10/2022 12/10/2022 14/10/2022 15/10/2022 15/10/2022 21/10/2022 26/10/2022 28/10/2022 28/10/2022 29/10/2022 29/10/2022 29/10/2022 2/11/2022 2/11/2022 5/11/2022	
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<ul> <li>3.1 Define Casting and Classify various Casting processes.</li> <li>3.2 Explain the procedure of Samould casting.</li> <li>3.3 Explain different types of m sands with their composition a properties.</li> <li>3.4 Classify different pattern ar state various pattern allowance 3.5 Classify core.</li> <li>3.6 Describe construction and working of cupola and crucible furnace.</li> <li>3.7 Explain die casting method.</li> <li>3.8 Explain centrifugal casting strue centrifugal casting, centrif with advantages, limitation and of application.</li> <li>3.9 Explain various casting defewith their causes and remedies</li> </ul>	and holding nd es. 9/11/2022 TO 7/12/2022	<ul> <li>3.1 Define Casting and Classify the various Casting processes.</li> <li>3.2 Explain the procedure of Sand mould casting.</li> <li>3.3 Explain different types of molding sands with their composition and properties.</li> <li>3.4 Classify different pattern and state various pattern allowances.</li> <li>3.5 Classify core.</li> <li>3.6 Describe construction and working of cupola and crucible furnace.</li> <li>3.7 Explain die casting method.</li> <li>3.8 Explain centrifugal casting such as true centrifugal casting, centrifuging with advantages, limitation and area of application.</li> <li>3.9 Explain various casting defects with their causes and remedies.</li> </ul>	9/11/2022 11/11/2022 12/11/2022 15/11/2022 19/11/2022 22/11/2022 23/11/2022 25/11/2022 26/11/2022 29/11/2022 30/11/2022 30/11/2022 3/12/2022 6/12/2022
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4. Powder metallurgy	7	<ul> <li>4.1 Define powder metallurgy process.</li> <li>4.2 State advantages of powder metallurgy technology technique</li> <li>4.3 Describe the methods of producing components by powder metallurgy technique.</li> <li>4.4 Explain sintering.</li> <li>4.5 Economics of powder metallurgy.</li> </ul>	9/12/2022 TO 20/12/2022	<ul> <li>4.1 Define powder metallurgy process.</li> <li>4.2 State advantages of powder metallurgy technology technique</li> <li>4.3 Describe the methods of producing components by powder metallurgy technique.</li> <li>4.4 Explain sintering.</li> <li>4.5 Economics of powder metallurgy.</li> </ul>	9/12/2022 10/12/2022 13/12/2022 14/12/2022 16/12/2022 17/12/2022 20/12/2022	
5. Press Work	7	<ul> <li>5.1 Describe Press Works:</li> <li>blanking, piercing and</li> <li>trimming.</li> <li>5.2 List various types of die and</li> <li>punch</li> <li>5.3 Explain simple, Compound</li> <li>&amp; Progressive dies</li> <li>5.4 Describe the various</li> <li>advantages &amp; disadvantages of</li> <li>above dies.</li> </ul>	21/12/2022 TO 31/12/2022	<ul> <li>5.1 Describe Press Works:</li> <li>blanking, piercing and trimming.</li> <li>5.2 List various types of die and punch</li> <li>5.3 Explain simple, Compound &amp; Progressive dies</li> <li>5.4 Describe the various advantages &amp; disadvantages of above dies.</li> </ul>	21/12/2022 23/12/2022 24/12/2022 27/12/2022 28/12/2022 30/12/2022 31/12/2022	

6. Jigs and fixtures	7	<ul> <li>6.1 Define jigs and fixtures</li> <li>6.2 State advantages of using jigs and fixtures</li> <li>6.3 State the principle of locations</li> <li>6.4 Describe the methods of location with respect to 3-2-1 point location of rectangular jig</li> <li>6.5 List various types of jig and fixtures.</li> </ul>	3/01/2023 TO 21/01/2023	<ul> <li>6.1 Define jigs and fixtures</li> <li>6.2 State advantages of using jigs and fixtures</li> <li>6.3 State the principle of locations</li> <li>6.4 Describe the methods of location with respect to 3-2-1 point location of rectangular jig</li> <li>6.5 List various types of jig and fixtures.</li> <li>REVISION-</li> </ul>	3/01/2023 4/01/2023 6/01/2023 10/01/2023 10/01/2023 13/01/2023 14/01/2023 20/01/2023 21/01/2023	
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Nochanical Engineering Gendhi School of Engg.

HOD, MECHANICAL

Asish Kumar Behosta **CLASS COVERED BY** 



### GANDHI SCHOOL OF ENGINEERING BHABANDHA, BERHAMPUR SESSION PLAN

**3RD SEMESTER, BRANCH-MECHANICAL(GROUP 2)** 

## **PRODUCTION TECHNOLOGY(TH-1)**

# Name of the Faculty –ER. ASISH KUMAR BEHERA

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3. Casting 16	<ul> <li>3.1 Define Casting and Classify the various Casting processes.</li> <li>3.2 Explain the procedure of Sand mould casting.</li> <li>3.3 Explain different types of molding sands with their composition and properties.</li> <li>3.4 Classify different pattern and state various pattern allowances.</li> <li>3.5 Classify core.</li> <li>3.6 Describe construction and working of cupola and crucible furnace.</li> <li>3.7 Explain die casting method.</li> <li>3.8 Explain centrifugal casting such as true centrifugal casting, centrifuging with advantages, limitation and area of application.</li> <li>3.9 Explain various casting defects with their causes and remedies.</li> </ul>	4/11/2022 TO 7/12/2022	<ul> <li>3.1 Define Casting and Classify the various Casting processes.</li> <li>3.2 Explain the procedure of Sand mould casting.</li> <li>3.3 Explain different types of molding sands with their composition and properties.</li> <li>3.4 Classify different pattern and state various pattern allowances.</li> <li>3.5 Classify core.</li> <li>3.6 Describe construction and working of cupola and crucible furnace.</li> <li>3.7 Explain die casting method.</li> <li>3.8 Explain centrifugal casting such as true centrifugal casting, centrifuging with advantages, limitation and area of application.</li> <li>3.9 Explain various casting defects with their causes and remedies.</li> </ul>	4/11/2022 9/11/2022 10/11/2022 11/11/2022 17/11/2022 18/11/2022 21/11/2022 23/11/2022 24/11/2022 25/11/2022 25/11/2022 28/11/2022 2/12/2022 5/12/2022	
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