

Discipline: Mechanical Engineering	Semester : 3 <sup>rd</sup> Semester-2020-21	Name of the Teaching Faculty: Shri Arun kumar Sahu, Ptgf mechanical engineering	
Subject: Production Technology	No. of Days/week Class Allotted: 60	Semester from date: 01/09 / 2020 to date: 19/03/2021 No of weeks: 18	
week	Class Day	Theory Topics	
1 <sup>st</sup>	1 <sup>st</sup>	Extrusion :Definition & Classification.	
	2 <sup>nd</sup>	Explain direct,indirect and impact extrusion process.	
	3 <sup>rd</sup>	Define rolling. Classify it.	
	4 <sup>th</sup>	Differentiatebetween coldrollingandhotrollingprocess.	
2 <sup>nd</sup>	1 <sup>st</sup>	Listthedifferenttypesofrollingmillsused inRollingprocess.	
	2 <sup>nd</sup>	Defineweldingand classifyvarious weldingprocesses.	
	3 <sup>rd</sup>	Explainfluxesusedinwelding.	
	4 <sup>th</sup>	ExplainOxy-acetyleneweldingprocess.	
3 <sup>rd</sup>	1 <sup>st</sup>	Explain various types of flames used in Oxy-acetylene weldingprocess.	
	2 <sup>nd</sup>	ExplainArcweldingprocess	
	3 <sup>rd</sup>	Specifyarcweldingelectrodes.	
	4 <sup>th</sup>	Defineresistanceweldingandclassifyit.	
4 <sup>th</sup>	1 <sup>st</sup>	Describe various resistance welding processes	
	2 <sup>nd</sup>	buttwelding	
	3 <sup>rd</sup>	spot welding, flash welding,	
	4 <sup>th</sup>	projection welding andseamwelding.	
5 <sup>th</sup>	1 <sup>st</sup>	ExplainTIGweldingprocess	
	2 <sup>nd</sup>	ExplainMIGweldingprocess	
	3 <sup>rd</sup>	Statedifferentweldingdefectswithcausesandremedies.	
	4 <sup>th</sup>	DefineCastingandClassifythevarious Castingprocesses.	
6 <sup>th</sup>	1 <sup>st</sup>	Explaintheprocedureof Sandmouldcasting.	
	2 <sup>nd</sup>	Explain different types of molding sands with their compositionandproperties.	
	3 <sup>rd</sup>	Classifydifferentpattern andstatevariouspattern allowances.	
	4 <sup>th</sup>	Classifycore.	
7 <sup>th</sup>	1 <sup>st</sup>	Describe construction and working of cupola and cruciblefurnace.	
	2 <sup>nd</sup>	Explaindie castingmethod.	
	3 <sup>rd</sup>	Explain centrifugal casting	

	4 <sup>th</sup>	true centrifugal casting	
8 <sup>th</sup>	1 <sup>st</sup>	centrifuging with advantages, limitation and area of application.	
	2 <sup>nd</sup>	Explain various casting defects with their causes and remedies.	
	3 <sup>rd</sup>	Define powder metallurgy process.	
	4 <sup>th</sup>	State advantages of powder metallurgy technology technique	
9 <sup>th</sup>	1 <sup>st</sup>	Describe the methods of producing components by powder metallurgy technique.	
	2 <sup>nd</sup>	Explains sintering.	
	3 <sup>rd</sup>	Economics of powder metallurgy.	
	4 <sup>th</sup>	Describe Press Works	
10 <sup>th</sup>	1 <sup>st</sup>	blanking, piercing and trimming.	
	2 <sup>nd</sup>	List various types of die and punch	
	3 <sup>rd</sup>	Explains simple, Compound & Progressive dies	
	4 <sup>th</sup>	Describe the various advantages & disadvantages of above dies	
11 <sup>th</sup>	1 <sup>st</sup>	Define jigs and fixtures	
	2 <sup>nd</sup>	State advantages of using jigs and fixtures	
	3 <sup>rd</sup>	State the principle of locations	
	4 <sup>th</sup>	Describe the methods of location with respect to 3-2-1 point location of rectangular jig	
12 <sup>th</sup>	1 <sup>st</sup>	List various types of jig and fixtures.	
	2 <sup>nd</sup>	Revision of Chapter – 1.1	
	3 <sup>rd</sup>	Revision of Chapter – 1.2	
	4 <sup>th</sup>	Revision of Chapter – 1.3, 1.4	
13 <sup>th</sup>	1 <sup>st</sup>	Revision of Chapter – 1.5	
	2 <sup>nd</sup>	Revision of Chapter – 2.1, 2.2	
	3 <sup>rd</sup>	Revision of Chapter – 2.3, 2.4	
	4 <sup>th</sup>	Revision of Chapter – 2.5, 2.6	
14 <sup>th</sup>	1 <sup>st</sup>	Revision of Chapter – 2.7, 2.8	
	2 <sup>nd</sup>	Revision of Chapter – 2.9, 2.10	
	3 <sup>rd</sup>	Revision of Chapter – 3.1, 3.2	
	4 <sup>th</sup>	Revision of Chapter – 3.3, 3.4	
15 <sup>th</sup>	1 <sup>st</sup>	Revision of Chapter – 3.5, 3.6, 3.7	
	2 <sup>nd</sup>	Revision of Chapter – 3.8, 3.9	
	3 <sup>rd</sup>	Revision of Chapter – 4.1, 4.2, 4.3	
	4 <sup>th</sup>	Revision of Chapter – 4.4, 4.5	
16 <sup>th</sup>	1 <sup>st</sup>	Revision of Chapter – 5.1, 5.2	
	2 <sup>nd</sup>	Revision of Chapter – 5.3, 5.4	
	3 <sup>rd</sup>	Revision of Chapter – 6.1, 6.2	
	4 <sup>th</sup>	Revision of Chapter – 6.3	

17 <sup>th</sup>	1 <sup>st</sup>	Revision of Chapter – 6.4	
	2 <sup>nd</sup>	Revision of Chapter – 6.5	
	3 <sup>rd</sup>	Discussion of Probable Questions and Answers (1)	
	4 <sup>th</sup>	Discussion of Probable Questions and Answers(2)	
18 <sup>th</sup>	1 <sup>st</sup>	Discussion of Probable Questions and Answers (3)	
	2 <sup>nd</sup>	Discussion of Probable Questions and Answers(4)	
	3 <sup>rd</sup>	Discussion of Probable Questions and Answers (5)	
	4 <sup>th</sup>	Discussion of Probable Questions and Answers (6)	