

Badriprasad Institute of Technology, Sambalpur

Lesson plan for Theory -1, Production Technology

Semester & Branch : 3rd Sem Mechanical Engineering

Total Periods-60

Name of the faculty : Mr. Paresh Kumar Pradhan

No of periods /week-4

Week	Day	Topics
1 st	1 st	Extrusion :Definition & Classification.
	2 nd	Explain direct,indirect and impact extrusion process.
	3 rd	Define rolling. Classify it.
	4 th	Differentiatebetweencoldrollingandhotrollingprocess.
2 nd	5 th	Listthedifferenttypesofrollingmillsused inRollingprocess.
	6 th	Defineweldingand classifyvarious weldingprocesses.
	7 th	Explainfluxesusedinwelding.
	8 th	ExplainOxy-acetyleneweldingprocess.
3 rd	9 th	Explain various types of flames used in Oxy-acetylene weldingprocess.
	10 th	ExplainArcweldingprocess
	11 th	Specifyarcweldingelectrodes.
	12 th	Defineresistanceweldingandclassifyit.
4 th	13 th	Describe various resistance welding processes
	14 th	buttwelding
	15 th	spot welding, flash welding,
	16 th	projection welding andseamwelding.
5 th	17 th	ExplainTIGweldingprocess
	18 th	ExplainMIGweldingprocess
	19 th	Statedifferentweldingdefectswithcausesandremedies.
	20 th	DefineCastingandClassifythevarious Castingprocesses.
6 th	21 st	Explaintheprocedureof Sandmouldcasting.
	22 nd	Explain different types of molding sands with their compositionandproperties.
	23 rd	Classifydifferentpattern andstatevariouspattern allowances.
	24 th	Classifycore.
7 th	25 th	Describe construction and working of cupola and cruciblefurnace.
	26 th	Explaindie castingmethod.
	27 th	Explain centrifugal casting
	28 th	Explainvariouscastingdefectswiththeir causes andremedies.
	29 th	Definepowder metallurgyprocess.
8 th	30 th	Stateadvantages ofpowder metallurgytechnologytechnique
	31 st	Describe the methods of producing components by powdermetallurgytechnique.
	32 nd	Explainsintering.
	33 rd	Economicsofpowdermetallurgy.
9 th	34 th	DescribePressWorks
	35 th	blanking,piercingandtrimming.
	36 th	List various types of die and punch
10 th	37 th	Explainsimple,Compound&Progressivedies
	38 th	Describethevariousadvantages&disadvantagesofabovedies

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11th	39 th	Definejigsandfixtures
	40 th	Stateadvantagesofusingjigsandfixtures
	41 st	Statethe principleoflocations
	42 nd	Describe the methods of location with respect to 3-2-1 pointlocationofrectangularjig
	43 rd	Listvarioustypesofjigandfixtures.
12th	44 th	Revision of Chapter – 1.1
	45 th	Revision of Chapter – 1.2
	46 th	Revision of Chapter – 1.3,1.4
	47 th	Revision of Chapter – 1.5
	48 th	Revision of Chapter – 2.1,2.2
13th	49 th	Revision of Chapter – 2.3,2.4
	50 th	Revision of Chapter – 2.5,2.6
	51 st	Revision of Chapter – 2.7,2.8
	52 nd	Revision of Chapter – 2.9,2.10
	53 rd	Revision of Chapter – 3.1,3.2
14th	54 th	Revision of Chapter – 3.3,3.4
	55 th	Revision of Chapter – 3.5,3.6,3.7
	56 th	Revision of Chapter – 3.8,3.9
	57 th	Revision of Chapter – 4.1,4.2,4.3
	58 th	Revision of Chapter – 4.4,4.5
15th	59 th	Revision of Chapter – 5.1,5.2
	60 th	Revision of Chapter – 5.3,5.4

Sign of Faculty

Sign of HOD