SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Descipline: Mechanical.	Semester: 3rd.	Name of the Teaching Faculty: Sayed Imran Hasan.
Subject: Engineering Materials	No of Days/per week class allotted: 4.	Semester from Date: 1.8.22 To Date: 30.11.22 No of Weeks: 16
Week	Class Day/ Date	Theory/Practical Topics
1st	1st	Classification of Material, Ferrous Material
	2nd	Non-ferrous materials
	3rd	Physical / chemical properties of Material
	4th	Mechanical Properties of Material
2nd	1st	Performance Requirenut of Material
	2nd	Material Reliability ; Safleity.
	3rd	Properties and applicaon of ferrous materia
	4th	Low Carbon Steel - applicaon.
3rd	1st	Medium Carbon Steel, High alloy Steel
	2nd	Tool Steel, Stainless Steel.
	3rd	Tool Steel, Effect of Ni, V, Mo
	4th	Class test.
4th	1st	Iron - Carbon System
	2nd	Phase diagram
	3rd	Iron Carbon diagram
	4th	Micro - Constituent of Iron
5th	1st	Micro - Constituent of Steel.
	2nd	TTT diagram
	3rd	Doubt clearance of diagram
	4th	Revision of Chapter

Sign of Faculty

HOD

Principal 26/11/22

SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Discipline: MECH	Semester:	Name of the Teaching Faculty: S. I Hota
Subject: E M.	No of Days/per week class allotted:	Semester from Date: 1.8.23 to Date: 2.11.23 No of Weeks:
Week	Class Day/ Date	Theory/Practical Topics
1st	1st	Crystal defination, Introduction
	2nd	classification of crystals
	3rd	crystal imperfection, Types
	4th	Point defect - Edge, Vacancies
2nd	1st	dise defect - screw dislocation
	2nd	Effect of imperfection on property
	3rd	Deformation by Slip
	4th	Deformation by Twin.
3rd	1st	Effect of deformation on Mechanical property
	2nd	Introduction to Heat Treatment.
	3rd	Processes of Heat Treatment
	4th	Annealing, Normalising
4th	1st	Hardening, Tempering
	2nd	Stress Relieving Measures.
	3rd	Surface Hardening, carburising.
	4th	Nitriding Process.
5th	1st	Effect of heat treatment on Steel.
	2nd	Hardenibility of steel.
	3rd	class test.
	4th	Quiz test

Sign of Faculty

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Principal 24/7/23

SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Descipline: MECH.	Semester: 3rd	Name of the Teaching Faculty: Syed Imran Hasan.
Subject: Engineering Materials	No of Days/per week class allotted: 4	Semester from Date: 1.8.2023 to Date: 30.11.23 No of Weeks: 4
Week	Class Day	Theory/Practical Topics
1st	1st	• Aluminium Alloys - Composition
	2nd	Properties of Duralmin, Y-alloys.
	3rd	Copper alloys - Composition
	4th	Property and Usage of Copper/Aluminium
	5th	Copper - Tin, Babbit Material.
2nd	1st	Phosphorus bronze, brass
	2nd	Copper - Nickel Alloys.
	3rd	Predominating elements of Lead alloys
	4th	Zinc alloys, Nickel Alloys
	5th	Low alloy materials, P-91, P-22
3rd	1st	Chapter test, Revision
	2nd	classification of Bearing Materials
	3rd	composition, Properties, uses.
	4th	Tin, Lead, Cadmium base bearing Metals
	5th	
4th	1st	Spring Materials, classification
	2nd	composition, Properties, uses
	3rd	Iron Base, Copper Base Spring Materials
	4th	Surprise Test.
	5th	
5th	1st	Polymers - Definition, Types
	2nd	Properties of Thermosetting & Thermo Plastics
	3rd	Elastomers, definition Properties
	4th	
	5th	

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SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Descipline: MECH	Semester: 3rd.	Name of the Teaching Faculty: S. Mohanty
Subject: EM	No of Days/per week class allotted: 4	Semester from Date: 1.8.23 to Date: 2.11.23 No of Weeks:
Week	Class Day	Theory/Practical Topics
1st	1st	Composite Material : Types
	2nd	Properties, uses. FRP, Particulate
	3rd	classification of CERAMICS, Uses.
	4th	Q and Answer discussion.
	5th	
2nd	1st	Semester Preparation of Long type
	2nd	Semester Question Short type.
	3rd	
	4th	
	5th	
3rd	1st	
	2nd	
	3rd	
	4th	
	5th	
4th	1st	
	2nd	
	3rd	
	4th	
	5th	
5th	1st	
	2nd	
	3rd	
	4th	
	5th	

Sign of Faculty HOD Principal 26/7/23