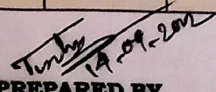
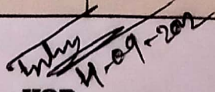


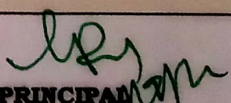
LESSON PLAN

Discipline: Metallurgy Engineering			Semester: 3rd semester	Name of the Teaching Faculty: Mr Tushar Das Pattanayak
Subject: Ferrous Metallurgy-I Sub code: Th.4			No of days /week class allotted: 04/week	Semester from Date: 15/09/2022 to 22/12/2022 No of weeks: 16
Month	Week	No of periods available	Class Day	Theory topics to be covered
September	1 st	02P	15-09-22	Briefing About the Syllabus and Brief Introduction to Iron Making
			16-09-22	Brief description about BF
	2 nd	04P	20-09-22	Explain about BF Process
			21-09-22	Explain Raw materials for BF, Explain Iron Ore ,Flux
			22-09-22	Description about Coke
			23-09-22	Explain Deposits of raw material
	3 rd	04P	27-09-22	Explain Types of ore and characteristics
			28-09-22	Explain Evaluation of iron ores
			29-09-22	Explain Metallurgical Coal, Explain Coke and Coal difference
			30-09-22	Revision
October	4 th	02P	06-10-22	Explain Evaluation of flux, Explain Quality of burden
			07-10-22	Explain Agglomeration process, Explain Sinter and pellets
	5 th	04P	11-10-22	Explain Function of coke, Explain Quality requirement of coke
			12-10-22	Explain Coke preparation
			13-10-22	Explain Auxiliary fuel and fuel injection
			14-10-22	Revision
	6 th	04P	18-10-22	Monthly Test
			19-10-22	Explain Different process in BF
			20-10-22	Explain Blowing in , drying, Explain Filling, blowing out, banking in
			21-10-22	Explain Blowing down ,tapping, fanning, Explain Back draughting , disposal of slag
	7 th	04P	25-10-22	Explain Utilization of slag, Explain BF refractories
			26-10-22	Explain Stack ,hearth ,bosh, Explain BF Cooling , tap hole
			27-10-22	Explain Tuyere, cast house
			27-10-22	Explain Top charging system, Explain BF Gas cleaning

November	8 th	04P	01-11-22	Explain BF stove, Explain Blowers, boilers, pumps
			02-11-22	Explain BF Irregularities, Explain Hanging ,scaffolding
			03-11-22	Explain chilled hearth, Explain Pillaring
			04-11-22	Explain Chocking of gas off take, Explain Flooding
	9 th	03P	09-11-22	Explain Leaking tuyeres tap holes and coolers, Explain channeling
			10-11-22	Explain channeling, Explain Slip and breakout
			11-11-22	Explain Remedies of irregularities
	10 th	04P	15-11-22	Revision
			16-11-22	
			17-11-22	Internal assessment/Class Test
			18-11-22	
	11 th	04P	22-11-22	Explain BF profile
			23-11-22	Explain Thermal profile
				Explain Chemical profile
			24-11-22	
			25-11-22	Explain Reaction in tuyere ,stack
	12 th	03P		Explain Reaction in bosh, hearth
			29-11-22	
			30-11-22	Explain Efficiency of BF
December	13 th	02P	01.12.2022	Monthly Test
			02.12.2022	Explain Direct and indirect reduction, Explain S and Si reaction
	14 th	04P	06-12-22	Explain Burden calculation
			07-12-22	Explain Modern development of BF
			08-12-22	Explain Bell less charging
			09-12-22	Explain High top pressure
	15 th	04P	13-12-22	Explain Humidification of blast
			14-12-22	Explain Humidification of blast
			15-12-22	Explain External removal of S and Si
			16-12-22	Explain External removal of S and Si
	16 th	03P	20-12-22	Revision & Doubt Clearing Class
			21-12-22	
			22-12-22	


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