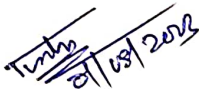


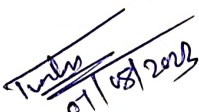
LESSON PLAN

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: 01/08/2023 to 30/11/2023 No of weeks: 20
Month	Week	No of periods available	Class Day	Theory topics to be covered
August	1 st	04P	1-08-23	Briefing About the Syllabus and Brief Introduction to Iron Making
			2-08-23	Brief description about BF
			3-08-23	Brief description about BF
			4-08-23	Brief description about BF
	2 nd	04P	8-08-23	Explain about BF Process
			9-08-23	Explain Raw materials for BF, Explain Iron Ore ,Flux
			10-08-23	Description about Coke
	3 rd	04P	11-08-23	Explain Deposits of raw material
			16-08-23	Explain Types of ore and characteristics
			17-08-23	Explain Evaluation of iron ores
			18-08-23	Explain Metallurgical Coal, Explain Coke and Coal difference
			22-08-23	Revision
	4 th	04P	23-08-23	Explain Evaluation of flux, Explain Quality of burden
			24-08-23	Explain Agglomeration process, Explain Sinter and pellets
			25-08-23	Explain Function of coke, Explain Quality requirement of coke
	5 th	02P	29-08-23	Explain Coke preparation
			31-08-23	Explain Auxiliary fuel and fuel injection
September	6 th	01P	01-09-23	Monthly Test
	7 th	03P	05-09-23	Explain Different process in BF
			07-09-23	Explain Blowing in , drying, Explain Filling,blowing out, banking in
			08-09-23	Explain Blowing down ,tapping, fanning, Explain Back draughting , disposal of slag
	8 th	04P	12-09-23	Explain Utilization of slag, Explain BF refractories
			13-09-23	Explain Stack ,hearth ,bosh, Explain BF Cooling , tap hole
			14-09-23	Explain Tuyere, cast house
			15-09-23	Explain Top charging system, Explain BF Gas cleaning

October	9 th	02P	21-09-23	Explain BF stove, Explain Blowers, boilers, pumps
	10 th	03P	22-09-23	Explain BF Irregularities, Explain Hanging ,scaffolding
			26-09-23	Explain chilled hearth, Explain Pillaring
			27-09-23	Explain Chocking of gas off take, Explain Flooding
			28-09-23	Explain Leaking tuyeres tap holes and coolers, Explain channeling
	11 th	04P	03-10-23	Explain channeling, Explain Slip and breakout
			04-10-23	Explain Remedies of irregularities
December November			05-10-23	Revision
			06-10-23	Revision
	12 th	04P	10-10-23	Internal assessment/Class Test
			11-10-23	
			12-10-23	Explain BF profile
			13-10-23	Explain Thermal profile
	13 th	04P	17-10-23	Explain Chemical profile
			18-10-23	Explain Reaction in tuyere ,stack
				Explain Reaction in bosh, hearth
			19-10-23	
			20-10-23	Explain Efficiency of BF
	14 th	03P	25-10-23	Monthly Test
			26-10-23	Explain Direct and indirect reduction, Explain S and Si reaction
			27-10-23	Explain Burden calculation
	15 th	01P	31-10-23	Explain Modern development of BF
	16 th	03P	01-11-23	Explain Bell less charging
			02-11-23	Explain High top pressure
			03-11-23	Explain Humidification of blast
	17 th	04P	07-11-23	Explain Humidification of blast
			08-11-23	Explain External removal of S and Si
			09-11-23	Explain External removal of S and Si
			10-11-23	Revision & Doubt Clearing Class
	18 th	04P	14-11-22	Revision & Doubt Clearing Class
			15-11-23	
			16-11-23	

			17-11-23	Explain Modern development of BF
	19 th	04P	21-11-23	Explain Bell less charging
			22-11-23	Explain High top pressure
			23-11-23	Explain Humidification of blast & Explain External removal of S and Si
			24-11-23	Monthly Test
	20 th	03P	28-11-23	Explain Direct and indirect reduction, Explain S and Si reaction
			29-11-23	Explain Burden calculation
			30-11-23	Revision & Doubt Clearing Class


 PREPARED BY
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