JHARKHAND Rai University
UGC RECOGNISED UNIVERSITY
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Lesson Plan & Tracking

Programe : Diploma	**Session : 2022-2023**	**Year : 2nd**	**Sem: III**
Course: Mechanical Engineering			
Name of the Faculty: Om Prakash Satyam	**Commencement Date:29.08.2022**		**Date of Closure:30.12.2022**

Lecture No.	Week	Unit	Topics to be Covered	Blended Mode			Date	Duration	Tracking of Lectures	Related Course Outcome	Signature of Faculty	Signature of HoD	Remarks (if any)
				ICT Tool/Platform/ LMS	Resources	Activity							
1	1	I	Units and Dimensions, Units of pressure, Volume, Temperature, Work, Power, Energy in SI system only										
2			Engineering Materials										
3			Chemical composition, properties and uses of following ferrous Metals: Cast iron, steel, Wrought iron,										
4	2		Chemical composition, properties and uses of following ferrous Metals: manganese steel, nickel steel, chromium steel, nickelchromium steel, stainless steel.										
5			Chemical composition, properties and uses of following Non ferrous: Aluminum, copper, nickel, bronze, brass										
6			Chemical composition, properties and uses of following Non ferrous: copper nickel alloys, Aluminum alloys etc.										
7	3		Classification, Construction & working of block brakes, internal expanding brakes,										
8			Classification, Construction & working of hydraulic brakes, vacuum brakes										
9			Construction & working of plate clutches, cone clutches,										

10	4	II	Construction & working of centrifugal clutch, and claw clutch										
11			IC Engine: Classification, Otto cycle, Diesel cycle.										
12			IC Engine: Two stroke petrol engine & Two stroke Diesel engine										
13	5		IC Engine: Four stroke petrol engine & Four stroke Diesel engine										
14			Different systems like fuel injection, fuel ignition for petrol & diesel engines.										
15		III	Air Compressor: Classification, Definitions of different terms such as inlet pressure, discharge pressure, capacity, theoretical power, break power, free air delivery.										
16	6		Air Compressor: Classification, Definitions of different terms such as inlet pressure, discharge pressure, capacity, theoretical power, break power, free air delivery.										
17			Air Compressor: Classification, Definitions of different terms such as inlet pressure, discharge pressure, capacity, theoretical power, break power, free air delivery.										
18			Air Compressor: Classification, Definitions of different terms such as inlet pressure, discharge pressure, capacity, theoretical power, break power, free air delivery.										
19	7		Air Compressor: Classification, Definitions of different terms such as inlet pressure, discharge pressure, capacity, theoretical power, break power, free air delivery.										
20			Hydraulics Machines: Properties of fluid,										

21		IV	Components of hydraulic circuits and their symbols,										
22	8		Components of hydraulic circuits and their symbols,										
23			Constructional details and working of hydraulic of shaper and hydraulic press.										
24			Types of pumps. Working principle of centrifugal pump.										
25	9		Working principle of reciprocating pump, Uses of pumps in mining industry.										
26			Normalizing, annealing, hardening or quenching										
27			Hardening or quenching, empering.										
28	10		Case hardening of steel.										
29			Revision										
30			Revision										
31	11		Revision										
32			Revision										
33			Revision										
34	12		Revision										
35			Revision										
36			Revision										