JHARKHAND Rai University
UGC RECOGNISED UNIVERSITY
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Lesson Plan & Tracking

Programe : B.TECH	**Session : 2020-23**	**Year : 4th**	**Sem: VII**
Course: MINE ENVIRONMENTAL ENGINEERING			
Name of the Faculty: V F	**Commencement Date: 29/8/2022**		**Date of Closure:**

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	Unit 1	Mine fires: Causes and classification of mine fires;										
2		Unit 1	Spontaneous combustion mechanism,										
3		Unit 1	Stages of spontaneous combustion, susceptibility indices,										
4	2	Unit 1	factors affecting spontaneous combustion,										
5		Unit 1	factors affecting spontaneous combustion, Detection and prevention of spontaneous heating and accidental fires;										
6		Unit 1	Dealing with mine fires direct and indirect methods, fire stopping										
7	3	Unit 1	Re-opening of sealed-off areas; Fires in quarries,										
8		Unit 1	Coal stacks and waste dumps.										
9		Unit 2	Mine explosions:Firedamp										
10	4	Unit 2	coal dust explosions causes										
11		Unit 2	prevention, explosive limits;										
12		Unit 2	Stone- dust and water barriers										

13		Unit 2	Explosion in quarries over developed pillars;										
14	5	Unit 2	Investigation after an explosion.										
15		Unit 3	Inundation:Causes and prevention;										
16		Unit 3	Precautions and techniques of approaching old workings;										
17	6	Unit 3	Dewatering of waterlogged working										
18		Unit 3	safety boring apparatus, pattern of holes;										
19		Unit 3	Design and construction of water dams.										
20	7	Unit 3	Rescue and recovery										
21		Unit 3	Rescue equipment and their uses										
22		Unit 3	classification of rescue apparatus; Resuscitation;										
23	8	Unit 3	Rescue stations and rescue rooms										
24		Unit 3	Organization of rescue work;										
25		Unit 3	Emergency preparedness and response system.										
26	9	Unit 4	Air borne respirable dust:Generation, dispersion										
27		Unit 4	measurement and control;										
28		Unit 4	Physiological effects of dust,										
29	10	Unit 4	dust-related diseases. Illumination										
30		Unit 4	Cap lamps and Layout										

31		**Unit 4**	Organization of lamp rooms;										
32	**11**	**Unit 4**	Standards of illumination;										
33		**Unit 4**	Photometry and illumination survey										
34		**Unit 4**	Lighting from main and other sources.										
35	**12**	**Unit 1 & Unit 2**	Discussion on Doubts of Unit 1 & Unit 2										
36		**Unit 3 & Unit 4**	Discussion on Doubts of Unit 3 & Unit 4										