JHARKHAND Rai University
UGC RECOGNISED UNIVERSITY
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Lesson Plan & Tracking

Programe : B.TECH	Session : 2022-23	Year : 2nd	Sem: III

Course: MINE SURVEYING I

Name of the Faculty: SUMEET KISHORE	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	Unit1	Surveying: Definition, Objective & application in mining										
2		Unit1	Classification of Surveying and their description										
3		Unit1	Principles of Surveying, Types of Scales										
4	2	Unit1	Linear Measurement: Instruments for measuring distances										
5		Unit1	Ranging and taping of survey lines										
6		Unit1	Chain surveying-Principle, field work, offsets										
7	3	Unit1	Booking and plotting, obstacles in plotting										
8		Unit2	Angular Measurement: Bearing of lines; Rectangular coordinate system										
9		Unit2	Essentials of the micro-optic theodolite; Measurement of horizontal and vertical angles										
10	4	Unit2	Temporary and permanent adjustments; Theodolite traversing										
11		Unit2	Computation of co-ordinates; Adjustment of traverse										
12		Unit2	Levelling-Terminology and its purpose										
13		Unit2	Levelling instruments Types- Tilt, auto & Digital										

14	**5**	**Unit2**	Levelling staffs, different types of levelling										
15		**Unit2**	Booking and reduction methods										
16	**6**	**Unit2**	Differential, profit, cross-sectional and reciprocal leveling										
17		**Unit2**	Underground Levelling and adjustments of levels										
18		**Unit3**	Total Station: Introduction										
19	**7**	**Unit3**	Principle of electronic measurement of distance and angles										
20		**Unit3**	construction and working with Total Station; Errors;										
21		**Unit3**	Application and recent developments in Total Station										
22	**8**	**Unit3**	Application and recent developments in Total Station										
23		**Unit3**	Contours: Concepts; Characteristics of contour										
24		**Unit3**	Contour Interval; Methods of contouring and uses of contours.										
25	**9**	**Unit4**	Plane Table Surveying: Introduction										
26		**Unit4**	Details surveying and contouring using plane table										
27		**Unit4**	Micro-optic alidade and various instruments										
28	**10**	**Unit4**	Computation of area and volumes.										
29			Revision										
30			Revision										