JHARKHAND Rai University
UGC RECOGNISED UNIVERSITY
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## Lesson Plan & Tracking

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| **Programe : B.TECH** | **Session : 2021-2025** | **Year : 3rd** | **Sem: FIVE** |
| **Course: MINE MACHINERY I** | | | |
| **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) |
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| | | | | ICT Tool/Platform/ LMS | Resources | Activity | | | | | | | |
| 1 | 1 | Unit 1 | Classification, application | | | | | | | | | | |
| 2 | | Unit 1 | constructional features of drilling machines used in coal and metal | | | | | | | | | | |
| 3 | | Unit 1 | Coal cutters | | | | | | | | | | |
| 4 | 2 | Unit 1 | Shearer, plough | | | | | | | | | | |
| 5 | | Unit 1 | Continuous miner | | | | | | | | | | |
| 6 | | Unit 1 | Road header and dint header | | | | | | | | | | |
| 7 | 3 | Unit 1 | Loading | | | | | | | | | | |
| 8 | | Unit 1 | transport equipment | | | | | | | | | | |
| 9 | | Unit 1 | Man riding systems | | | | | | | | | | |
| 10 | 4 | Unit2 | Classification and constructional difference of different types of winders | | | | | | | | | | |
| 11 | | Unit2 | Mechanics of winding | | | | | | | | | | |
| 12 | | Unit2 | Power calculation, rope selection | | | | | | | | | | |

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| **13** | | **Unit2** | Inspection and maintenance | | | | | | | | | | |
| **14** | **5** | **Unit2** | Safety features and contrivances | | | | | | | | | | |
| **15** | | **Unit2** | Classification, construction of pump | | | | | | | | | | |
| **16** | | **Unit2** | Classification, construction of pump | | | | | | | | | | |
| **17** | **6** | **Unit2** | Selection | | | | | | | | | | |
| **18** | | **Unit2** | mine dewatering pumps | | | | | | | | | | |
| **19** | | **Unit3** | Transmission of Power Belt, rope, chain, gear | | | | | | | | | | |
| **20** | **7** | **Unit3** | Hydraulic and electro-hydraulic transmission | | | | | | | | | | |
| **21** | | **Unit3** | Compressed Air Comparison with other sources of power | | | | | | | | | | |
| **22** | | **Unit3** | Air compressors – types, construction, installation and maintenance. | | | | | | | | | | |
| **23** | **8** | **Unit3** | Compressed air transmission and distribution | | | | | | | | | | |
| **24** | | **Unit3** | Compressed air drills, pneumatic picks | | | | | | | | | | |
| **25** | | **Unit3** | pneumatic picks | | | | | | | | | | |
| **26** | **9** | **Unit3** | Air motors | | | | | | | | | | |
| **27** | | **Unit3** | other compressed air equipment. | | | | | | | | | | |
| **28** | | **Unit 4** | Wire Ropes Types | | | | | | | | | | |
| **29** | **10** | **Unit 4** | Construction and uses. | | | | | | | | | | |
| **30** | | **Unit 4** | Rope deterioration and maintenance. | | | | | | | | | | |

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| **31** | | **Unit 4** | Capping and splicing of rope. | | | | | | | | | | |
| **32** | **11** | **Unit 4** | Rope haulages. | | | | | | | | | | |
| **33** | | **Unit 4** | Track, mine tubs and cars. | | | | | | | | | | |
| **34** | | **Unit 4** | Safety appliances on haulage roads. | | | | | | | | | | |
| **35** | **12** | **Unit 4** | Locomotive haulage. Mono rail | | | | | | | | | | |
| **36** | | **Unit 4** | Statutory Provisions | | | | | | | | | | |