



iiPM SCHOOL OF ENGINEERING & TECHNOLOGY

LESSON PLAN: 2023-24

Sub: Th.3 MINE LEGISLATION & GENERAL SAFETY- I

Branch : Mining Semester : 5th
Faculty name : R.K BARIK
Duration : 60 hours

Unit – 1	Mines Act 1952 ○ Discuss various provisions of Mines Act 1952.
Unit – 2	Mines Rules 1955 ○ Discuss various provisions of Mines Rule 1955.
Unit – 3	Coal Mines Regulation 2017 □ Discuss various Provisions of C.M.R. 2017.
Unit – 4	Mines Rescue Rules 1985 □ Discuss various provisions of Mines Rescue Rules 1985.
Unit – 5	Indian Explosive Rules 2008 ○ Discuss various provisions of Indian Explosive Rules 2008.
Unit – 6	Central Electricity Authority 2010 ○ Discuss various provisions of Central Electricity Authority 2010.

Sl. No.	Title of the Book	Name of Authors
1	Mines Act - 1952	
2	Mines Rules - 1955	
3	Coal Mine Regulations - 2017	
4	Mines Rescue Rules - 1985	
5	Indian Explosive Rules - 2008	
6	Central Electricity Authority - 2010	

Books Suggested:

- Mines act 1952 B.K Kejriwal
- Mines Rules1955 From D.G.M.S circular
- CMR 2017 L.C Kaku
- Mines Rescue Rules1985 From D.G.M.S circular
- Indian Explosive Rule2008
- Central Electricity Authority2010 L.C Kaku

Objective :

- Describe various aspects of Mines Act 1952.
- Describe various aspects of Mines Rule 1955.
- Describe various aspects of Coal Mines Regulations 2017.
- Describe various aspects of Mines Rescue Rules 1985.
- Describe various aspects of Indian Explosive Rules 2008.
- Describe various aspects of Central Electricity Authority 2010.

Learning Outcome: Since Mining operations involve frequent accidents, it is very important for a mining engineer to be thoroughly conversant with various acts & rules framed for providing safety to workers.

Sl. No	Chapter	Proposed Week for Teaching	Lecture No.	Sub. Topic	Important Teaching Points	Content Source
01	I	1 ST	01	Mines Act 1952	Intro.&impt. terms	Mines Act 1952 B.K Kejriwal
02			02	Mines Act 1952	Qualification,Powers,role & function of Chief Inspector & Inspector	Mines Act 1952 B.K Kejriwal
03			03	Mines Act 1952	Committee,Composition ,Powers& Function of Committee	Mines Act 1952 B.K Kejriwal
04			04	Mines Act 1952	Duties,Role& Responsibilities of Manager	Mines Act 1952 B.K Kejriwal
05		2 ND	01	Mines Act 1952	Duties,Role& Responsibilities of Owner & agent	Mines Act 1952 B.K Kejriwal
06			02	Mines Act 1952	DrinkingWater,Latrines &Urinals,Employment of age below 18 years& Women in mines	Mines Act 1952 B.K Kejriwal

07	II		03	Mines Act 1952	Notice to Given& investigation of accidents	Mines Act 1952 B.K Kejriwal	
08			04	Mines Act 1952	Notice to Given& investigationof Diseases	Mines Act 1952 B.K Kejriwal	
09			3 RD	01	Mines Act 1952	Weekly Day of Rest,compensatory day of rest,Hours of work both U/G & O/C mines,overtime	Mines Act 1952 B.K Kejriwal
10				02	Mines Act 1952	Power of Central govt. to make rules and regulations	Mines Act 1952 B.K Kejriwal
11		03		Mines Act 1952	Penalty on Falsification of records,falsecertificate,o mission of plans & employment of below 18 years age	Mines Act 1952 B.K Kejriwal	
12		04		Mines Act 1952	Penalties on accident,Failure to appoint manager,provision for regulation, & law	Mines Act 1952 B.K Kejriwal	
13		4 TH	01	Mines Act 1952	Doubt class on previous topic	Mines Act 1952 B.K Kejriwal	
14			02	Mines Act 1952	Unit Test on Ch-01	-----	
15			03	Mines Rules1955	Intro.&impt. Terms	From D.G.M.S circular	
16			04	Mines Rules1955	Qualification,Duties& responsibilities of Surgeon	From D.G.M.S circular	
17		5 TH	01	Mines Rules1955	Initial ,Periodical Medical Examination & standard report	From D.G.M.S circular	
18			02	Mines Rules1955	Qualification,Duties& Responsibilities of Workmen's Inspector	From D.G.M.S circular	
19			03	Mines Rules1955	Composition & Function of Safety committee	From D.G.M.S circular	
20			04	Mines Rules1955	Quantity,storage of drinking water,Standards of surface & u/g laterines&urinals,sanitati on	From D.G.M.S circular	

21	III	6 TH	01	Mines Rules 1955	First-aid: Training, room, station & carrying of first-aid	From D.G.M.S circular	
22			02	Mines Rules 1955	Employment of trainees, Standard of shelter, canteen	From D.G.M.S circular	
23			03	Mines Rules 1955	Qualifications, Duties & Responsibilities of Welfare officers	From D.G.M.S circular	
24			04	Mines Rules 1955	Diff. Types of Registers use in mines & Doubt Class	From D.G.M.S circular	
25		7 TH	01	Coal Mines Regulations-2017	Intro. & impt. Terms	CMR-2017 L.C Kaku	
26				02	Coal Mines Regulations-2017	Notice of opening, reopening, closure, monthly return, quarterly return & annual return	CMR-2017 L.C Kaku
27				03	Coal Mines Regulations-2017	Qualifications, Duties & Responsibilities of manager, asst. manager, safety officer, ventilation officer, engineer	CMR-2017 L.C Kaku
28				04	Coal Mines Regulations-2017	Qualifications, Duties & Responsibilities of overman, sirdar, shotfirer, surveyor	CMR-2017 L.C Kaku
29		8 TH	01	Coal Mines Regulations-2017	Qualifications, Duties & Responsibilities of supportman, lamp room incharge, banksman, onsetter, magazine in-charge & diff. operator	CMR-2017 L.C Kaku	
30				02	Coal Mines Regulations-2017	Diff. Types of plans & survey instruments	CMR-2017 L.C Kaku
31				03	Coal Mines Regulations-2017	Installation of new winding, winding rope, suspension gear & general precautions	CMR-2017 L.C Kaku
32				04	Coal Mines Regulations-2017	Haulage road, Travelling road, tubes & movement	CMR-2017 L.C Kaku
33		9 TH	01	Coal Mines Regulations-2017	Transport rules, codes of practices, working near mine boundaries, SSR & withdrawal of supports & general precautions	CMR-2017 L.C Kaku	

34	IV		02	Coal Mines Regulations-2017	Doubt class	CMR-2017 L.C Kaku
35			03	Coal Mines Regulations-2017	Classification of degree of coal seam,general precautions against fire,spontaneous heating &fire fighting equipment	CMR-2017 L.C Kaku
36			04	Coal Mines Regulations-2017	Precaution against eruption of gas,dust,,stone dust barriers,	CMR-2017 L.C Kaku
37		10 TH	01	Coal Mines Regulations-2017	Danger from surface water,inundation,construction of water dams	CMR-2017 L.C Kaku
38			02	Coal Mines Regulations-2017	Standard of ventilation,MMV,Auxiliary fan,boosterfan,door,air-crossing,stopping	CMR-2017 L.C Kaku
39			03	Coal Mines Regulations-2017	Precautions against inflammable gas & noxious gases,determination of % of gas	CMR-2017 L.C Kaku
40			04	Coal Mines Regulations-2017	General lighting,use of safety lamp,maintenance& repairing of safety lamp	CMR-2017 L.C Kaku
41		11 TH	01	Coal Mines Regulations-2017	Use of diff.Machineries,Equipments& safety precautions against parts of machineries,Provisions on welding,cuttings in u/g coal mines	CMR-2017 L.C Kaku
42			02	Coal Mines Regulations-2017	Unit test ch-03	-----
43			03	Mines Rescue Rules1985	Establishment& function of rescue station,rescue room in mines	Mines Rescue Rules1985
44			04	Mines Rescue Rules1985	Qualification,role& functions of superident,instructor ,incharge& Trainer	Mines Rescue Rules1985
45		12 TH	01	Mines Rescue Rules1985	Duties of manager during emergency,belowground,instrument& rescue apparatus	Mines Rescue Rules1985
46			V	02	Mines Rescue Rules1985	Unit Test (Chapter 4)

47			03	Mines Rescue Rules1985	Doubt clearing class	Mines Rescue Rules1985
48			04	Indian Explosive Rule2008	Impot. Terms & Classification of explosive	Indian Explosive Rule2008
49		13 TH	01	Indian Explosive Rule2008	Storage of explosive & blasting equipments& apparatus, construction of Magazine	Indian Explosive Rule2008
50			02	Indian Explosive Rule2008	Transportation of explosive & explosive vehicle	Indian Explosive Rule2008
51			03	Indian Explosive Rule2008	Licence for magazine & explosive manufacturer	Indian Explosive Rule2008
52			04	Indian Explosive Rule2008	Procedures of Drilling,charging,stemming& firing of shot firing	Indian Explosive Rule2008
53		14 TH	01	Indian Explosive Rule2008	General Precaution regarding explosive & blasting	Indian Explosive Rule2008
54			02	Indian Explosive Rule2008	Unit Test (Chapter 05)& Doubt Clearing Class	Indian Explosive Rule2008
55			03	Central Electricity Authority2010	Intro.&Impot. Terms	L.C Kaku
56			04	Central Electricity Authority2010	General conditions of supply & use of electricity	L.C Kaku
57		15 TH	01	Central Electricity Authority2010	Cables,insulator, earthing& maintenance	L.C Kaku
58			02	Central Electricity Authority2010	Use & maintenance of Intrinsically safe apparatus & flameproof equipments	L.C Kaku
59			03	Central Electricity Authority2010	Circuit Breaker, Gate end box & General precaution	L.C Kaku
60			04	Central Electricity Authority2010	Unit Test (Chapter 06)&Doubt Clearing Class	-----

Signature of Lecturer

Faculty Member

HOD

Principal/ Director