SYLLABI OF COURSES FOR DIPLOMA PROGRAMME IN MINING ENGINEERING, LEVEL IV, V & VI

I.

		4300 – 1	MINE S	AFF	ETY & I	EG	ISL	ATION	ł			
Teachin	Progressive			Examination Schedule (Marks)								
Lectures	Practical	Credits	Assessment		t	Theory			ractical	I Ex.	Total	
4		4 .	-	5	0 3 E	Irs	1	00	50		200	
Pre-re	quisite	Source		Th		T	est	Total	TW	PR	Gr Total]
4293		MIN	Semester		75	0.	25	100	-	50	150	

Rationale: Mine Legislation is complicated & most important course in Mining Engineering Course. Diploma holders are placed on supervisory capacity in mines after completion of diploma. As supervisor and further manager of mining enterprise, this is essential for him to be well versed in his role in industry, to get the production safely & lawfully. Objectives: After completion of this course a diploma student may be able to understand the rules & regulations applicable to mines & perform safe working.

COURSE CONTENTS	Hrs	Mks
1. MINE SAFETY AND ACCIDENTS	10	15
Safety objective, planning of safety, factors affecting safety in mines, safety organisation in mining, safety awareness, safety campaign, safety sampling, organisation chart of safety department, safety and productivity, safety education and training.	x	
Accident definition- event, incident, accident disaster, accident proneness, accident statistics.		
Classification of accident by place, cause etc. cost of accident, causes and remedial measure of various accidents, unsafe act and condition, principle of accident prevention, zero accident potential, accident notice, enquiry and investigation. Accident report, accident compensation. Accident statistics.		
2. THE MINES ACT 1952, THE CMR/MMR-1957	15	25
Definition of adult, agent, day, employed in mine, office of the mine, owner, minor injury, reportable injury, serious bodily injury, week; Inspectors and certifying surgeon; Committees; Mining operation and management of mines; Provision as to health and safety; Hours and limitation of employment; Penalties and procedure; Duties, responsibilities and qualifications of manager, asst. manager, safety officer, surveyor, foreman, shotfirer, mate, magazine in charge, attendance clerk, competent person, lamp room in charge, winding engine man; Notice of opening: Monthly return, annual return, notice of amendment and discontinuance, Notice of re- opening, notice of accident & disease, practical experience for manager, foreman, surveyor, shotfirer. CMR regulation Nos. 66, 67, 68, 69,70, 191, 191(D), 193, 197,		
199(A), 201, 202.	10	15
3. THE MINES RULE - 1955 Medical examination employed or to be employed in mine; Workmen inspector and safety committee; Health and sanitation provision; First aid and medical appliances; Employment of person; Welfare amenities; Registers notices and returns.		
4. MINES V. T. RULE	9	15
Application of rule, training of person previously employed, training of person already employed standard of training. Dispute regarding training, arrangement for refresher		

training of person- handling explosive shot firing. Time limit for training, training centres arrangement, training officer, and duties of training officer. Trainer – Qualification duties, allowance to trainee & stipend, certificate to be delivered to management, inspection, power to relax.

HUMAN RESOURCE AND CURRICULUM DEVELOPMENT CELL, DIRECTORATE OF TECHNICAL EDN, GOA.

SYLLABI OF COURSES FOR DIPLOMA PROGRAMME IN MINING ENGINEERING, LEVEL IV	, v & vi	
5. MINES & MINERALS	10	
Definitions. The mines & minerals (development & regulation) Act -1957; General restrictions on undertaking prospecting & mining operations; Procedure for obtaining prospecting licences or mining lease; Rules for regulating the grant of prospecting licences & mining lease; Special powers of Central Government; Development of minerals; Miscellaneous Acts related to prospecting or lease.		
6. THE MINERAL CONCESSION RULES - 1960	10	1
Definitions Certificate of approval; Grant of prospecting licences; Grant of Mining Leases; Procedure for obtaining a prospecting licence; The provision of mineral conservation and development rules-1988.		
Total	64	10
REFERENCE BOOKS:		
1. The Mines Rule 1955 by L.C. Kaku / Harihar Nath.		
2. The Coal Mines reg. 1955 by Coal Field Publications/ L.C. Kaku		
3. Mine Management, Legislation & General Safety by S.K. Ghatak		
4. Mine Management, Legislation & General Safety by Rakesh & Prasad.		
5. The Mines Act 1952 by L.C. Kaku / G.O.I.		
6. Mine Management, Legislation & General Safety by B.Ghosh.		
7. The Intent & Content of Legislation by L.C. Kaku		

8. Safety & Opencast Mines by Rezisky
 9. MMRD/MCDR (IBM Publications)

