


## LESSON PLAN

SWAMI VIVEKANANDA SCHOOL OF ENGG. & TECH, BBSR			REMARK
DISIPLINE-MINING ENGG.	SEMESTER 5TH	NAME OF THE FACULTY- DR. ALOK RANJAN MAHANANDA	
SUBJECT – MH&S	NO. OF CLASS ALOTTED/ WEEK-4	SEMESTER FROM -15.09.2022	
WEEK	DATE	TOPICS	
1ST	15.09.2022	Introduction class about mine hazard and safety.	
	19.09.2022	Composition of atmospheric air & Different mine gases.	
	22.09.2022	Properties and physical effects of gases.	
	24.09.2022	State fire damp, black damp, stink damp, white damp and after damp in mines.	
2ND	30.09.2022	Describe flame safety lamp & it's working principle.	
	07.10.2022	Explain gas testing by flame safety lamp by accumulation test & percentage test.	
	10.10.2022	State precaution for gas testing.	
	14.10.2022	Describe various parts of flame safety lamp, special features.	
3RD	17.10.2022	State limitations of flame safety lamp.	
	19.10.2022	Describe gradual exudation, blower & outbursts of firedamp in U/g workings.	
	21.10.2022	Define incubation period.	
	24.10.2022	Define spontaneous heating and its causes and effects.	
4TH	27.10.2022	Weekly test.	
	29.10.2022	State preventive measures against spontaneous heating.	
	31.10.2022	Explain CO/O <sub>2</sub> ratio & CO <sub>2</sub> /O <sub>2</sub> ratio.	
	02.11.2022	Describe coal dust explosion & fire damp explosion with their causes & prevention.	
5TH	04.11.2022	State inflammability of coal dust & fire damp.	
	05.11.2022	Explain Coward's diagram.	
	08.11.2022	State prevention, suppression & treatment of dust.	
	09.11.2022	Describe sampling of dust in Mines.	
6TH	11.11.2022	Stone dust barrier.	
	15.11.2022	State sources of water in mines & its danger.	
	17.11.2022	State precaution against inundation.	
	18.11.2022	Describe burnside safety boring apparatus.	
7TH	21.11.2022	State precaution while approaching water logged area.	
	22.11.2022	Describe water dams- its construction & design.	
	24.11.2022	Explain water danger plan.	
	25.11.2022	Statutory provision for working near water body.	
8TH	28.11.2022	Define illumination and its units.	
	30.11.2022	Standards of lighting at different parts of mine as per mine regulation.	
	01.12.2022	Mock test.	
	09.12.2022	Explain the effect of noise & vibration on miners.	
9TH	13.12.2022	Mine structures & other surface structure with respect to statutory provision.	
	16.12.2022	Proto-IV, Proto-V.	
	19.12.2022	Drager BG-174.	
	21.12.2022	Self rescuer, Smoke helmet & Gas mask.	
10TH	27.12.2022	Surprise test.	
	29.12.2022	Construction of Rescue brigade and their role in rescue and recovery operation.	
	31.12.2022	Mine Rescue rules 1985 Annexure I,II,III.	
	02.01.2023	Mine Rescue rules 1985 Annexure I,II,III.	
11TH	03.01.2023	Previous year semester question answer solution.	
	04.01.2023	State preventive measures against spontaneous heating.	
	06.01.2023	Explain CO/O <sub>2</sub> ratio & CO <sub>2</sub> /O <sub>2</sub> ratio.	
	09.01.2023	Describe coal dust explosion & fire damp explosion with their causes & prevention.	

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 Principal  
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