SYNERGY SCHOOL OF	F ENGINEERING	
BANAMALIPRASAD,	DHENKANAL	

Discipline MINING Subject MINE HAZARD Days/Week Class Day  1st  2nd Composition of atmospheric air.Different mine gases, their properties and physical effects physical effects  4th Describe damps in mines. State black damp in mines. State stink damp in mines State winite damp in mines. State of Explain gas testing by flame safety lamp by accumulation test & percentage test.  2nd 2nd Explain gas testing by flame safety lamp by accumulation test & percentage test.  2nd 2nd Explain gas testing by flame safety lamp. special features  2nd 3rd State limitations of flame safety lamp.special features  2nd Describe various parts of flame safety lamp.special features  2nd Describe gradual exudation, blower & cubursts of firedamp in U/g workings  2nd Describe gradual exudation, blower & cubursts of firedamp in U/g workings  2nd Describe gradual exudation, blower & cubursts of firedamp in U/g workings  2nd Describe gradual exudation, blower & cubursts of firedamp in U/g workings  2nd Describe gradual exudation, blower & cubursts of firedamp in U/g workings  2nd Describe gradual exudation, blower & cubursts of firedamp in U/g workings  2nd Describe gradual exudation, blower & cubursts of firedamp in U/g workings  2nd Describe gradual exudation, blower & cubursts of firedamp in U/g workings  2nd Describe gradual exudation, blower & cubursts of firedamp in U/g workings  2nd Describe gradual exudation blower & cubursts of firedamp in U/g workings  2nd Describe gradual exudation blower & cubursts of firedamp in U/g workings  2nd Describe coal dust explosion with their causes & prevention  2nd Describe coal dust explosion with their causes & prevention  2nd Describe coal dust explosion with their causes & prevention  2nd Describe fire damp explosion with their causes & prevention  2nd Describe fire damp explosion with their causes & prevention  2nd State infammability of coal dust. State inflammability of fire damp  2nd State prevention, suppression & ktreatment of dust  4th Describe sampling of dust in Mines	1		759001				
Semester:5th Name of the Teaching faculty - @	Dinginti		DEPARTMENT OF MINING ENGINEERING				
MINE HAZARD AND SAFETY  Week Class Day  Toples  1st  Class Day  Toples  1st  Class Day  Toples  1st  Composition of atmospheric air. Different mine gases, their properties and physical effects  Composition of atmospheric air. Different mine gases, their properties and physical effects  State fire damps in mines. State black damp in mines. State stink damp in mines State with damp in mines. State after damp in mines. State stink damp in mines State with damp in mines. State after damp in mines. State stink damp in mines State black damp in mines. State stink damp in mines. State with damp in mines. State after damp in mines. State stink damp in mines. State with damp in mines. State after damp in mines. State stink damp in mines. State stink damp in mines. State stink damp in mines. State with damp in mines. State with damp in mines. State with damp in mines. State stink damp in mines. State with damp in mines. State stink damp in mines. State stink damp in mines. State with damp in mines. State stink damp in mines. State state damp	MINING						
MINE HAZARD AND SAFETY  Week Class Day  Toples  1st  Class Day  Toples  1st  Class Day  Toples  1st  Composition of atmospheric air. Different mine gases, their properties and physical effects  Composition of atmospheric air. Different mine gases, their properties and physical effects  State fire damps in mines. State black damp in mines. State stink damp in mines State with damp in mines. State after damp in mines. State stink damp in mines State with damp in mines. State after damp in mines. State stink damp in mines State black damp in mines. State stink damp in mines. State with damp in mines. State after damp in mines. State stink damp in mines. State with damp in mines. State after damp in mines. State stink damp in mines. State stink damp in mines. State stink damp in mines. State with damp in mines. State with damp in mines. State with damp in mines. State stink damp in mines. State with damp in mines. State stink damp in mines. State stink damp in mines. State with damp in mines. State stink damp in mines. State state damp	Subject:	No of	Name of the Teaching faculty - Biswombox Moduli				
1st   Describe various parts of flame safety lamp.special features   2nd   Describe various parts of flame safety lamp.special features   2nd   Describe gradual exudation,blower &outbursts of firedamp in U/g workings   2nd   Describe gradual exudation,blower &outbursts of firedamp in U/g workings   2nd   Describe gradual exudation,blower &outbursts of firedamp in U/g workings   2nd   Describe gradual exudation,blower &outbursts of firedamp in U/g workings   2nd   Describe gradual exudation,blower &outbursts of firedamp in U/g workings   2nd   Describe oal dust explain odd state inflammability of coal dust explasion with their causes &prevention   2nd   Describe coal dust explosion with their causes &prevention   2nd   Describe doubt state prevention, suppression &treatment of dust   2nd   Describe doubt state prevention, suppression &treatment of dust   2nd   Describe gradual exudation, blower &outbursts of firedamp in U/g workings   2nd   Describe gradual exudation, blower &outbursts of firedamp in U/g workings   2nd   Describe gradual exudation, blower &outbursts of firedamp in U/g workings   2nd   Describe gradual exudation, blower &outbursts of firedamp in U/g workings   2nd   Describe gradual exudation, blower &outbursts of firedamp in U/g workings   2nd   Describe gradual exudation, blower &outbursts of firedamp in U/g workings   2nd   Describe gradual exudation, blower &outbursts of firedamp in U/g workings   2nd   Describe gradual exudation, blower &outbursts of firedamp in U/g workings   2nd   Describe gradual exudation, blower &outbursts of firedamp in U/g workings   2nd   Describe gradual exudation, blower &outbursts of firedamp in U/g workings   2nd   Describe gradual exudation, blower &outbursts of firedamp in U/g workings   2nd   State inflammability of coal dust explosion with their causes &prevention   2nd   State inflammability of coal dust. State inflammability of fire damp   2nd   State prevention, suppression &treatment of dust   2nd   State prevention, suppression &treatment of dust   2nd	HAZARD AND SAFETY	Days/Week	No of weeks:15				
1st i)Lesson plan,Syllabus ii)Importance of this Course,Course Outcomes iii)Exams &Class Tests,iv)Introduction to the course  2nd Composition of atmospheric air.Different mine gases,their properties and physical effects  3rd Composition of atmospheric air.Different mine gases,their properties and physical effects  4th State fire damps in mines.State black damp in mines. State stink damp in mines State white damp in mines. State after damp in mines  1st Describe flame safety lamp &its working principle  2nd Explain gas testing by flame safety lamp by accumulation test &percentage test State precaution for gas testing  4th Describe various parts of flame safety lamp,special features  1st Describe various parts of flame safety lamp,special features  2nd Describe various parts of flame safety lamp,special features  2nd Describe various parts of flame safety lamp,special features  3rd State limitations of flame safety lamp.  4th Describe gradual exudation,blower &outbursts of firedamp in U/g workings  2nd Describe gradual exudation,blower &outbursts of firedamp in U/g workings  2nd Describe gradual exudation,blower &outbursts of firedamp in U/g workings  2nd Describe gradual exudation,blower &outbursts of firedamp in U/g workings  3rd Describe gradual exudation,blower &outbursts of firedamp in U/g workings  2nd Describe gradual exudation,blower &outbursts of firedamp in U/g workings  1st Explain CO/O2 ratio.  2nd INTERNAL-I  5th Describe coal dust explosion with their causes &prevention  2nd Describe fire damp explosion with their causes &prevention  3rd State inflammability of coal dust.State inflammability of fire damp  4th Explain Coward's diagram  5th Explain Coward's diagram  2nd State prevention, suppression &treatment of dust  4th Describe sampling of dust in Mines	Week	Class Day					
State   State limitations of flame safety lamp, special features	1et	1st	i)Lesson plan,Syllabus ii)Importance of this Course,Course Outcomes iii)Exams &Class				
State fire damps in mines. State black damp in mines. State stink damp in mines State white damp in mines. State after damp in mines. State stink damp in mines State white damp in mines. State after damp in mines. State stink damp in mines State white damp in mines. State after damp in mines. State stink damp in mines State white damp in mines. State after damp in mines. State stink damp in mines State white damp in mines. State stink damp in mines State white damp in mines. State after damp in mines. State stink damp in mines State white damp in mines state white damp in mines. State state after damp in mines. State precaution for gas testing date state state prescribe various parts of flame safety lamp, special features.    State   Describe various parts of flame safety lamp, special features		2nd	Composition of atmospheric air. Different mine gases, their properties and				
State preventive measures against spontaneous heating		3rd	physical effects				
2nd Explain gas testing by flame safety lamp by accumulation test &percentage test  8 Explain gas testing by flame safety lamp by accumulation test &percentage test  8 State precaution for gas testing  4th Describe various parts of flame safety lamp,special features  2nd Describe various parts of flame safety lamp,special features  2nd Describe various parts of flame safety lamp,special features  3rd State limitations of flame safety lamp  4th Describe gradual exudation,blower &outbursts of firedamp in U/g workings  2nd Describe gradual exudation,blower &outbursts of firedamp in U/g workings  2nd Describe gradual exudation,blower &outbursts of firedamp in U/g workings  3rd Define spontaneous heating and its causes and effects.Define incubation period.  4th State preventive measures against spontaneous heating.  1st Explain CO/02 ratio.  2nd INTERNAL-I  3rd Explain CO2/02 ratio.  4th Describe coal dust explosion with their causes &prevention  Describe coal dust explosion with their causes &prevention  Describe fire damp explosion with their causes &prevention.  3rd State inflammability of coal dust.State inflammability of fire damp  4th Explain Coward's diagram  1st Explain Coward's diagram  1st Explain Coward's diagram  2nd State prevention, suppression &treatment of dust  3rd State prevention, suppression &treatment of dust  4th Describe sampling of dust in Mines		4th	State fire damps in mines.State black damp in mines.State stink damp in mines State white damp in mines.State after damp in mines				
State precaution for gas testing by flame safety lamp by accumulation test spercentage test	- 10-	1st	Describe flame safety lamp &its working principle				
State precaution for gas testing  4th Describe various parts of flame safety lamp,special features  1st Describe various parts of flame safety lamp,special features  2nd Describe various parts of flame safety lamp,special features  3rd State limitations of flame safety lamp,special features  3rd State limitations of flame safety lamp  4th Describe gradual exudation,blower & worthursts of firedamp in U/g workings  2nd Describe gradual exudation,blower & worthursts of firedamp in U/g workings  2nd Describe gradual exudation,blower & worthursts of firedamp in U/g workings  3rd Define spontaneous heating and its causes and effects.Define incubation period.  4th State preventive measures against spontaneous heating.  1st Explain CO/O2 ratio.  2nd INTERNAL-1  3rd Explain CO2/02 ratio.  4th Describe coal dust explosion with their causes & prevention  1st Describe coal dust explosion with their causes & prevention  2nd Describe fire damp explosion with their causes & prevention.  3rd State inflammability of coal dust. State inflammability of fire damp  4th Explain Coward's diagram  1st Explain Coward's diagram  2nd State prevention, suppression & treatment of dust  3rd State prevention, suppression & treatment of dust  4th Describe sampling of dust in Mines		2nd	Explain gas testing by flame safety lamp by accumulation test &percentage test				
1st Describe various parts of flame safety lamp,special features 2nd Describe various parts of flame safety lamp,special features 3rd State limitations of flame safety lamp 4th Describe gradual exudation,blower &outbursts of firedamp in U/g workings 1st Describe gradual exudation,blower &outbursts of firedamp in U/g workings 2nd Describe gradual exudation,blower &outbursts of firedamp in U/g workings 3rd Define spontaneous heating and its causes and effects.Define incubation period. 4th State preventive measures against spontaneous heating.  1st Explain CO/O2 ratio. 2nd INTERNAL-I 3rd Explain CO2/02 ratio. 4th Describe coal dust explosion with their causes &prevention 1st Describe coal dust explosion with their causes &prevention 2nd Describe fire damp explosion with their causes &prevention. 3rd State inflammability of coal dust.State inflammability of fire damp 4th Explain Coward's diagram 1st Explain Coward's diagram 2nd State prevention,suppression &treatment of dust 3rd State prevention,suppression &treatment of dust 4th Describe sampling of dust in Mines	2nd	3rd	Explain gas testing by flame safety lamp by accumulation test spercentage test state precaution for gas testing				
2nd   Describe various parts of flame safety lamp, special features		4th	Describe various parts of flame safety lamp,special features				
3rd   State limitations of flame safety lamp		1st	Describe various parts of flame safety lamp, special features				
4th Describe gradual exudation, blower & outbursts of firedamp in U/g workings  1st Describe gradual exudation, blower & outbursts of firedamp in U/g workings  2nd Describe gradual exudation, blower & outbursts of firedamp in U/g workings  2nd Describe gradual exudation, blower & outbursts of firedamp in U/g workings  3rd Define spontaneous heating and its causes and effects. Define incubation period.  4th State preventive measures against spontaneous heating.  1st Explain CO/O2 ratio.  2nd INTERNAL-I  3rd Explain CO2/02 ratio.  4th Describe coal dust explosion with their causes & prevention  1st Describe coal dust explosion with their causes & prevention.  2nd Describe fire damp explosion with their causes & prevention.  3rd State inflammability of coal dust. State inflammability of fire damp  4th Explain Coward's diagram  1st Explain Coward's diagram  2nd State prevention, suppression & treatment of dust  3rd State prevention, suppression & treatment of dust  4th Describe sampling of dust in Mines		2nd	Describe various parts of flame safety lamp, special features				
1st   Describe gradual exudation,blower &outbursts of firedamp in U/g workings	3rd	3rd	State limitations of flame safety lamp				
2nd   Describe gradual exudation,blower &outbursts of firedamp in U/g workings	1	4th	Describe gradual exudation, blower & outbursts of firedamp in U/g workings				
State preventive measures against spontaneous heating.		1st	Describe gradual exudation, blower & outbursts of firedamp in U/g workings				
State preventive measures against spontaneous fleating.		2nd	Describe gradual exudation, blower & outbursts of firedamp in U/g workings				
1st   Explain CO/O2 ratio.	4th	3rd	Define spontaneous heating and its causes and effects. Define incubation period.				
1st   Explain CO/02 ratio.	11 1	4th	State preventive measures against spontaneous neating.				
Sth   State prevention, suppression & treatment of dust		100					
2nd   Describe coal dust explosion with their causes &prevention	F	2nd	INTERNAL-I				
1st   Describe coal dust explosion with their causes &prevention     2nd   Describe fire damp explosion with their causes &prevention.     3rd   State inflammability of coal dust.State inflammability of fire damp     4th   Explain Coward's diagram     1st   Explain Coward's diagram     2nd   State prevention, suppression & treatment of dust     3rd   State prevention, suppression & treatment of dust     4th   Describe sampling of dust in Mines	5th	2	Explain CO2/02 ratio.				
1st   Describe coal dust explosion with their causes &prevention     2nd   Describe fire damp explosion with their causes &prevention.     3rd   State inflammability of coal dust.State inflammability of fire damp     4th   Explain Coward's diagram     1st   Explain Coward's diagram     2nd   State prevention, suppression & treatment of dust     3rd   State prevention, suppression & treatment of dust     4th   Describe sampling of dust in Mines	, · · ·	4th	Describe coal dust explosion with their causes & prevention				
State inflammability of coal dust.State inflammability of fire damp	1		Describe coal dust explosion with their causes & prevention				
State inflammability of coal dust. State inflammability of fire damp  4th Explain Coward's diagram  1st Explain Coward's diagram  2nd State prevention, suppression & treatment of dust  3rd State prevention, suppression & treatment of dust  4th Describe sampling of dust in Mines	t	2nd	Describe fire damp explosion with their causes aprevention.				
7th Explain Coward's diagram  1st Explain Coward's diagram  2nd State prevention, suppression & treatment of dust  3rd State prevention, suppression & treatment of dust  4th Describe sampling of dust in Mines	6th	3rd	State inflammability of coal dust. State inflammability of fire damp				
7th Explain Coward's diagram  2nd State prevention, suppression & treatment of dust  3rd State prevention, suppression & treatment of dust  4th Describe sampling of dust in Mines		4th	xplain Coward's diagram				
7th State prevention, suppression & treatment of dust  3rd State prevention, suppression & treatment of dust  4th Describe sampling of dust in Mines		7011	II II augus				
7th 3rd State prevention, suppression & treatment of dust 4th Describe sampling of dust in Mines	-	7.01	State prevention, suppression & treatment of dust				
4th Describe sampling of dust in Mines	7th		State prevention, suppression & treatment of dust				
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			Stone dust barrier				

8th	2nd	Stone dust barrier.		
	3rd	Stone dust barrier.  State sources of water in mines &its danger.State precaution against inundation.		
	4th	Describe burnside safety boring apparatus		
	1st	State precaution while approaching water logged area.  State precaution while approaching water logged area.		
9th	2nd	Describe water dams-its construction &design.(Without derivation of formula)		
	3rd	Explain water danger plan.		
	4th	CLASS TEST-I		
	1st	Statutory provision for working near water body		
10th	2nd	Define illumination and its units.		
1001	3rd	Standards of lighting at different parts of mine as per mine regulation.		
	4th	Standards of lighting at different parts of mine as per mine regulation		
	1st	Explain the effect of noise &vibration on miners &mine structures & other surface structure with respect to statutory provision.		
11th	2nd	Explain the effect of noise &vibration on miners &mine structures & ourselvers with respect to statutory provision.		
	3rd	Explain the effect of noise &vibration on miners &mine structures & other surface structure with respect to statutory provision.		
,	4th	Explain Proto-IV		
	1st	Explain Proto-IV		
	2nd	Proto-V		
12th	3rd	Smoke helmet		
	4th	Gas mask		
	1st	Explain Drager BG-174,Self rescuer		
	2nd	Construction of Rescue brigade and their role in rescue and recovery operation		
13th	3rd	Construction of Rescue brigade and their role in rescue and recovery operation		
. ,	4th	Mine Rescue rules 1985 Annexure I,II,III.		
	4m 1st	Mine Rescue rules 1985 Annexure I,II,III		
,	1st 2nd	Mine Rescue rules 1985 Annexure I,II,III.		
14th		INTERNAL-II		
1-1611	3rd	REVISION/DOUBT CLEARING CLASS		
	4th			
	1st	REVISION/DOUBT CLEARING CLASS		
	2nd REVISION/DOUBT CLEARING CLASS			
15th	3rd	REVISION/DOUBT CLEARING CLASS		
	4th	REVISION/DOUBT CLEARING CLASS		

eaning Resourses: SI.No.	Title of the Book Mine Yentilation EMT-II	Name of Authors  G B Mishra  OJ Deshmukh
2	Coal Mine Practices	E Mason
3 4	UMS Vol -1 Coal mine Regulations -2017	
5	Coal mine Regulations -2017  Mine Rescue	M A Ramlu

Signature of Faculty