

**End Semester/Reappear (Semester VII) Examination December, 2024**

**Programme: B.Tech (MiE)**  
**Course: Mine Legislation & Safety I**  
**Course Code: 8PCCMiE404**  
**Enrolment no. \_\_\_\_\_**

**Full Marks: 70**  
**Time: 3 Hrs.**

Q.No.	Questions	CO	Bloom Taxonomy	Marks
<b>Section I</b>				
1	<b>Short Answer type questions.</b>			
a	Describe the provisions regarding extra wages for overtime & limitation of daily hours of work including overtime work as per provision of Mines Act 1952.	CO1	Understand	<b>4 x 5 = 20</b>
	or			
b	Mention the provisions regarding employment of persons below eighteen years of age as per Mines Act 1952.	CO1	Understand	
	or			
c	Mention the provisions regarding persons holding positions of supervision or Management as per Mines Rule 1955.	CO2	Understand	
	or			
d	Discuss the provision regarding employment of apprentices & Trainee as per Mines Rules 1955.	CO2	Understand	
	or			
e	Describe the surface precautions against fire as per CMR 2017.	CO3	Understand	
	or			
f	Define fiery seam & gassy seams of first degree, second degree & third degree as per CMR 2017.	CO3	Remember	
	or			
<b>Section II</b>				
<b>Long Answer type questions.</b>				
2	Describe the provisions regarding hours of week above grounds & hours of working below grounds as per Mines Act 1952.	CO1	Understand	<b>3 x 10 = 30</b>
	or			
3	Discussion the provisions regarding Medical Appliance as per Mines Act 1952.	CO1	Understand	
	or			
4	Write down the provision regarding leave wages due if a person dies as well as exemption from this provision as per Mines Rules 1955.	CO2	Understand	
	or			
5	Mention the provision regarding carrying of First-Aid outfit by official as well as provisions regarding medical attention in case of injury.	CO2	Understand	
	or			
6	Describe the provisions of MMR 1961 regarding underground working.	CO4	Understand	
	or			
	Discuss the provisions of MMR 1961 regarding travelling roadways.	CO4	Understand	
<b>Section III</b>				
<b>Application based questions</b>				
5	a. Mention the provision of CMR 2017 regarding production drilling and extraction of methane from borehole as well as ventilation plan for methane exploration or extraction below ground.	CO3	Apply	<b>1 x 20 = 20</b>
	b. Elaborate the provisions regarding depillaring operations as per CMR 2017.	CO3	Apply	

or		
In CMR 2017, the provisions regarding Manual Opencast working & mechanized opencast working are mentioned. Enumerate the provisions & explain.	CO3	Apply

**On the completion of the Course, the students will be able to:**

CO1 Understand the knowledge on implementation of provisions of mines act related to Mine, Open cast working, underground working, Relay, Shift, Serious bodily injury, Provisions for health and safety, Provisions regarding leave with wages.

CO2 Apply knowledge of legislation in mines for the implementation of mine rules, various committee & provisions related to First Aid.

CO3 Learn the various duties & responsibilities of mine managers, Asst/under Managers, Overman, foreman and surveyor.

CO4 Explain the implementation of the safety management plan to reduce the accident and various type of mine accident.