

End Semester/Reappear (Semester III) Examination December, 2024

Programme:B.Tech (MiE)

Course:Elements of Mining Technology

Course Code: 8PCCMiE201

Enrolment no. _____

Full Marks: 70

Time: 3 Hrs.

Q.No.	Questions	CO	Bloom Taxonomy Category	Marks
Section I				
1	Short Answer type questions.			
a	Enumerate the various formations of occurrence of mineral deposits.	CO1	Understand	4 x 5 = 20
	or			
b	Summarize the function of Indian Bureau of Mines (IBM).	CO1	Understand	
	or			
c	Enlist the factors affecting selection of site of box cut.	CO2	Remember	
	or			
d	Why underground mining method choose over opencast mining method?	CO2	Understand	
	or			
e	Name any three modes of access to reach the deposit with suitable diagram.	CO3	Understand	
	or			
f	Define Adit with neat sketch a diagram.	CO3	Understand	
	or			
g	Write down the conditions favoring the adoption of open cast mining.	CO4	Understand	
	or			
	What do you understand by ore pass system in metal mining explain in detail.	CO4	Understand	
Section II				
Long Answer type questions.				
2	Elaborate the engineering parameters of opencast mining methods.	CO2	Apply	3 x 10 = 30
	or			
3	Discuss the production process in surface mining. Illustrate the five processes in detail with equipment's required in that production process.	CO2	Apply	
	or			
4	Explain the method of metal mining in which long hole drilling is being done for the stoping purpose.	CO3	Analyze	
	or			
5	Differentiate between hydraulic shovel and rope shovel.	CO3	Understand	
	or			
6	Elaborate the three development methods of Bord & pillar method with a neat sketch.	CO4	Apply	
	or			
	What do you understand by cut and fill metal mining methods, explain with suitable diagram.	CO4	Analyze	
Section III				
Application based questions.				
7	Being a mining engineer the role of statutory bodies of mining are very important. Describe the role and functions of important organizations like CIL, CIMFR, MECL, IBM etc.	CO1	Apply	1 x 20 = 20
	or			
	Elaborate about DGMS. Suppose you are Director of DGMS, Enlist the role and function of DGMS.	CO1	Apply	

Course Outcome:

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

CO1 Understand the history & significance of mining and mineral resources of India.

CO2 Gain the basic concept of mining, its terminology and classification.

CO3 Explain the technical knowledge of mode of access to deposit, type of mining & advantages & disadvantages.

CO4 Understand the different mining methods, its applicability & limitation.