

Model Question Paper-2 with effect from 2019-20 (CBCS Scheme)

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Fourth Semester B.E. Degree Examination Underground Metal Mining

TIME: 03 Hours

Max. Marks: 100

Note: 01. Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.

Module -1			*Bloom's Taxonomy Level	Marks
Q.01	a	Define the following terminologies with neat sketch i) Shaft Station ii) Grizzly iii) Ore pass iv) Waste bin	L1	10
	b	Explain the present status of underground metal mining industry in India.	L2	10
OR				
Q.02	a	Define the following terminologies with neat sketch i) Cross Cut ii) Vein iii) Hang wall iv) Foot wall	L1	10
	b	List out the required arrangements for dumping of ore into main ore pass.	L1	10
Module-2				
Q. 03	a	Draw a flow chart for classification of various stoping methods in U/G metal mines.	L1	08
	b	Explain Jora-Lift raising method with well labeled neat sketch.	L2	12
OR				
Q.04	a	Illustrate vertical crater retreat method for raising operation with neat sketch.	L2	10
	b	Define the following terminologies i) Stopping ii) Rib Pillar iii) Sill Pillar iv) Crown Pillar	L1	10
Module-3				
Q. 05	a	Describe Shrinkage method of stoping with well labeled neat sketch.	L2	10
	b	Explain Sub Level method of stoping operation with neat sketch.	L2	10
OR				
Q. 06	a	Describe Cut and fill method of ore extraction with well labeled neat sketch.	L2	10
	b	Summarize square set method of ore extraction in underground metal mining industry.	L2	10
Module-4				
Q. 07	a	Illustrate innovations made in supporting system in underground metal mining industry.	L2	10
	b	Describe sub level caving method of extraction with neat sketch.	L2	10
OR				
Q. 08	a	Illustrate stope preparation work in underground metal mining industry.	L2	10
	b	Describe Block caving method of ore extraction with neat sketch.	L2	10
Module-5				
Q. 09	a	Describe bore hole mining with well labeled neat sketch.	L2	10
	b	Describe In-situ leaching method with well labeled neat sketch.	L2	10
OR				
Q. 10	a	Explain underground retorting method with well labeled neat sketch.	L2	10
	b	What are the problems associated with deep belowground metal mines?	L1	10

*Bloom's Taxonomy Level: Indicate as L1, L2, L3, L4, etc. It is also desirable to indicate the COs and POs to be attained by every bit of questions.