

R09

Code No: 56087

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year II Semester Examinations, November/December - 2020

UNDERGROUND METAL MINING TECHNOLOGY

(Mining Engineering)

Time: 2 hours

Max. Marks: 75

**Answer any five questions
All questions carry equal marks**

- 1.a) Give the comprehensive Explanation of the term Mine Development.
- b) Give the number and location of main entries for the following deposit conditions
Flat extensive stratified deposit. [6+9]
- 2.a) Describe the terms "Raises" and "Winze" with help of Sketch.
- b) Give in brief the basis of Location of haulage drift in a Level. [7+8]
3. Describe the Alimak raising method. [15]
4. Explain the method of shrinkage stoping with a sketch. [15]
5. Discuss the applicability, merits and demerits of stoping method of Block caving with sketch. [15]
6. Discuss the extraction of low thickness metal deposit without dilution of ore. [15]
7. A 2 m wide gold bearing ore body near vertical and located beyond 1000 m depth has to be mined. Suggest a suitable method of extraction, mucking, ventilation, support, haulage and dumping? [15]
8. Discuss the scope and limitation of In-situ leaching process. [15]

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