

Code No: 135CM**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech III Year I Semester Examinations, October - 2020****INTRODUCTION TO MINING TECHNOLOGY****(Civil Engineering)****Time: 2 hours****Max. Marks: 75**

Answer any five questions
All questions carry equal marks

- 1.a) State the distribution of following mineral deposits in Telangana State which is 29th newly formed state in India.
i) Coal ii) Lime stone iii) Iron ore iv) Granite
b) Define the terms “Ore and Ore Deposits” and “Mine and Mining”. [8+7]
- 2.a) Briefly Discuss on “Mining is Basic Industry”.
b) List the Industrial uses of following minerals.
i) Bauxite ii) Hematite iii) Gypsum iv) Uranium [7+8]
- 3.a) List the factors for selection criteria for underground or Opencast mining methods.
b) State the objectives of prospecting. [7+8]
- 4.a) List the Geo-Technical investigations for prospecting.
b) What are the factors to be considered in choosing the mine openings i.e., Shafts or Inclines? [7+8]
- 5.a) Explain the Process of “rotary drilling method” with neat sketches and mention its applications.
b) Explain the terms
i) Rock roller bits
ii) Clay auger [7+8]
- 6.a) List the various types of drill bits and their design aspects.
b) What are the various methods of drilling? [9+6]
- 7.a) Discuss briefly about the
i) Low Explosive
ii) High Explosive.
b) Describe about “ANFO”. [8+7]
8. Write in detail about the following:
a) Shaft Centering arrangement
b) Walling scaffold. [8+7]

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