

R09

Code No: 56090

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**B. Tech III Year II Semester Examinations, December - 2017****MINE ECONOMICS****(Mining Engineering)****Time: 3 hours****Max. Marks: 75**

Answer any five questions
All questions carry equal marks

- - -

1. Explain the role of Mineral Industry in national Economy. [15]
2. Explain the mineral deficiencies of India with reference to its need. [15]
3. Explain the mechanics of Discounted Cash Flow Analysis (DCF) as applied to a Mining Industry. [15]
- 4.a) List different Mineral Resource Valuation Approaches and Methods.
b) Explain the Income approach method. [8+7]
5. What is the difference between net present value method and IRR? Explain the importance of IRR. [15]
6. Explain statistical and geo statistical techniques in mine sampling. [15]
- 7.a) What is the metallurgical assay?
b) Explain the cupellation process. [7+8]
- 8.a) Describe the Basic Principles of Ore Reserve Calculation.
b) Determine the average grade from the following data: [7+8]

Sample Interval	Length. ft	Assay, oz. Au/ton
A-B	0.6	1.09
B-C	1.6	0.50
C-D	1.3	0.13

--ooOoo--