USN

10MN56

Fifth Semester B.E. Degree Examination, Dec.2019/Jan.2020
Mineral Economics

Time: 3 hrs.

Max. Marks:100

Note: *Answer any FIVE full questions, selecting atleast TWO questions from each part.*

PART – A

1 a. Describe in detail the role of mineral industry in national economy. **(10 Marks)**
   b. What are the peculiarities of mineral industry over manufacturing industry? Explain. **(10 Marks)**

2 a. What are the parameters/factors that influence the price of mineral? Explain. **(10 Marks)**
   b. Write a note on appraisal of mineral resources. **(05 Marks)**
   c. Explain conservation of minerals from National Mineral Policy 2008 point of view. **(05 Marks)**

3 a. Define sample and sampling. **(02 Marks)**
   b. What are the purposes of sampling? **(04 Marks)**
   c. Describe in detail the channel, borehole, grab and bulk sampling. **(14 Marks)**

4 a. Describe various classifications of ore reserves. **(10 Marks)**
   b. Write a note on assay plan. **(04 Marks)**
   c. Explain briefly with neat sketch the polygonal method of ore reserve estimation. **(06 Marks)**

PART – B

5 a. What are the parameters /factors that affect the mine valuation? **(06 Marks)**
   b. Derive Hoskold's two rate formula for mine valuation. **(08 Marks)**
   c. What remunerative return do you expect from an invest of Rs. 100 lakhs over 20 years if risk rate of return and safe rate of interest are 14% and 8% respectively? **(06 Marks)**

6 Write short notes on the following :
   a. Mining fixed and operating costs
   b. Cut-off grade
   c. Feasibility study
   d. Depreciation. **(20 Marks)**

7 a. Describe various sources of finance for mining enterprise. **(10 Marks)**
   b. Write short notes on profits and loss account and balance sheet. **(10 Marks)**

8 a. Explain various elements of cost of production. **(10 Marks)**
   b. Write short note on overhead costs. **(05 Marks)**
   c. Derive a formula to calculate break–even sales. **(05 Marks)**

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