## B.E. Mining Engineering Eighth Semester

## **MN803 - Mineral Economics**

P. Pages: 2 GUG/W/18/2083 Time: Three Hours Max. Marks: 80 Notes: 1. Assume suitable data wherever necessary. 2. Illustrate your answers wherever necessary with the help of neat sketches. 3. Marks are indicated right margin. Why the mineral industry is put on altogether different footings than any other industry? 1. 10 a) Discuss the changes made in New national mineral policy. b) 6 OR 2. a) Samples are taken from the stope at regular interval of 2m & the following data was 8 obtained. Sr. No. Width of sample m Assay value in % cu 1 2.0 1.5 2 3.5 2.2 3 1.6 2.4 4 1.8 1.9 5 0.9 1.3 6 1.3 1.75 Calculate Av. assay value of cu. ii) Av. width. Define the following terms & 4 b) Reconnaissance Mineral Resource (334) Inferred mineral resource. ii) iii) Indicated mineral resource. iv) Measured mineral resource. Explain graphical methods of estimating reserves. c) 4 3. Name the places in the mine where channel and chip sampling methods can be adopted? 16 Discuss the procedure of channel sampling. State also the precautions you would take at the time of sample collection. OR 4. What essential requirements should sampling satisfy. 4 a) Write short notes on. 12 b) i) Sample weighting. Errors in sampling. ii) Safeguard against salting. What is the purpose of mine valuation? 5. a) 6

b) A mine is purchased during a period of depression, it is estimated that production can start 10 3 years from the date of purchase and that with an output sufficient to give profit of Rs. 1,00,000/- per year the working life will be 20 years. The speculative rate desired is 15% The interest for the different periods is 10% and safe rate is 8% what is present value of property? OR What is depreciation? What are the various methods of Depreciation? Which method is 16 6. used for economic evaluation of mining projects and why? 7. State the present Govt policy on mineral conservation. Do you think there is scope for 16 improvement. If the answer is affirmative how do you propose to achieve it? OR 8. Define "Budget" and discuss various types of Budget used in industry. 10 a) What is costing? State advantages of costing. b) 6 What are the various sources through which you can raise the capital? 9. a) 6 Compare shares and Debentures. b) 6 Why the capital is required for any industry? 4 c) OR **10.** Write short notes on. Small scale mining & its problems. 8 a) What are the various factors taken into consideration while fixing price of a mineral. b) 8

\*\*\*\*\*