

7 th Semester	RMN7D001	Mine & Mineral Economics	L-T-P 3-0-3	3 Credits
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Module I:**(12 hours)**

Overview of the mineral industry in India: characteristics and special problems related to mining, Domain of Mineral Economics, Mine productivity concepts, principles and calculations, Mine Organization. Special considerations for strategic minerals, Indian National Mineral policy

Module II:**(12 hours)**

Concept of resource and reserve, Ore reserves: classification and estimation. Difference of tenor, grade and specifications of ore, Mineral sampling techniques and ore grade control. Sample salting and error in sampling, Concepts of strategic mineral

Module III:**(12 hours)**

Mine Valuation - Different methods, Depreciation, Amortization and Redemption of capital, life and present value of a mine. Financial Management - Methods of framing and financing industrial enterprises, Memorandum and articles of association, shares, debentures, dividends and interest. Break even chart and inventory control

Module IV:**(12 hours)**

Investment Decisions - discounted cash flow methods, non-discounted cash flow methods, advantages and disadvantages of them, Internal rate of return, Net Present Value. Book Keeping, Preparation of Balance sheet, Profit and Loss Account

Books:

- [1] Mine and Mineral Economics by S C Roy & I N Sinha, Eastern Economy Edition, PHI Learning Pvt. Ltd.
- [2] Mineral Economics by R K Sinha & N L Sharma, CBS Publishers and Distributors Pvt. Ltd., 4th Edition
- [3] The economics of mining by Thomas Arthur Rickard, Walter Renton Ingalls, Herbert Hoover, R. Gilman Brown - Hill Pub. Co.
- [4] The Cost of Mining by James Ralph Finlay, McGraw-Hill
- [5] Evaluating Mineral Deposits by Thomas F. Toeies – SME