7th Semester	RML7D001	Mine and Mineral Economics	L-T-P 3-0-0	3 Credits

Module I: (10 hours)

Economic importance of the mineral industry; mining economy, risky nature of the mining industry, State and the mining industry; national mineral policy. Royalty, taxes and duties; imports and exports. Mineral resource concept, classification and estimation. Conservation of mineral resource scope and limitations. Standard controlling factors, calculation of tonnage factors and mineable ore limitations.

Module II: (10 hours)

Classification and incorporation of loss of mineral; coefficient of completeness of mineral extraction; dilution and recovery. Capital and operating costs; factors affecting operating cost; methods of estimating future costs; standard cost and forecast; budget and budgetary control.

Module III: (10 hours)

Mine Sampling: Theory of sampling, method of sampling employed in different cases, precaution to be taken; Reduction, Calculation of overage reef values and widths; average stopping values and width and average milling values and widths; estimation of average-tonnages and value in mine-percentage sorted, percentage recovered, sampling procedure and precaution of sampling alluvial deposits and dumps, estimation of reserves

Mine Valuation: Different methods and their application; depreciation and amortisation and redemption of capital; Life of mine; its present value, Reports on valuation.

Module IV: (10 hours)

Role of mineral industry in National Economy. Elements of economic activities – production and Productivity. Demand, Supply and Distribution of Income. Economic organization of industry, Private and Public sector, Costs and cost accounting. Capital interest and annual charges, obsolescence, depreciation and valuation. International Trade related to Mineral Industry. Economic selection of equipment, estimating the cost of equipment. Capital and operative cost. Milling calculations and Mill reports.

Books:
[1]   Mineral and Mine Economics R.T. Deshmukh, Myra Publications, Nagpur, 1986.
[2]   Mineral Economics N. L. Sharma and Sinha Oxford and IBH, 1992