

## 0.6.44.8 Construction Engineering Management and Economy

Introduction to engineering management & environment considerations, relationships between project achieving team & project phases, planning techniques: Bar chart , planning technique: critical path method (C.P.M) . planning techniques: line of balance (L.O.B.), time-cost relationship & envelope curve, Resource allocation & leveling, maintenance management system, successful management information system, types of costs & cost control system, linear programming: Transportation problems, graphical method of optimization, Supply and demand. Mathematics of interest: Simple interest, Mathematics' of interest: compound interest, different plans of payment. Comparisons between alternatives: Annual worth method (A.W), future worth method (F.W), internal rate of return (I.R.R), present worth method (P.W). Depreciation methods,(types& calculations), break-even analysis, cash flows, positive & negative cash flows, factors affecting cash flows.