

Devi Ahilya University, Indore, India Institute of Engineering & Technology				I Year M.E.(Industrial Engineering and Management) Full Time			
Subject Code & Name	Instructions Hours per Week			Credits			
IMR2G1 PROJECT MANAGEMENT	L	T	P	L	T	P	Total
	3	1	0	3	1	0	4
Duration of Theory Paper: 3 Hours							

Objective and Pre requisites: To develop the Knowledge & concepts of Project Management. To develop the of Project's Analysis on different criteria like Market potential, Technical & Financial Analysis. To develop the skills of Project Appraisal through different criteria.

COURSE CONTENTS

UNIT-1

Project Management:

Definition characteristics and life cycle, difference with operation s management, steps in PM, projects managers jobs organization for PM, critical chain concepts.

UNIT-2

Market Potentiality & Technical Analysis:

Identification of opportunities of new products.

Materials and input production technology, product mix, plant capacity, project planning and analysis tools.

UNIT-3

Financial Analysis:

Estimation of cost of project, means of finance, estimate of working capital, estimate of cost of production, working result & profitability, projected balance sheet and projected cash flow statements. Project Appraisal Criteria: Payback period, net present value methods, cost benefit analysis, internal rate of return.

UNIT-4

Project Management through Network:

Work break down structure, Gantt chart etc. PERT: - Activity average time variance and project completion time by normal distribution. CPM: - Critical path, floats their interpretation, event occurrence time, slacks, resource allocation, crashing of NW, time cost trade-off, resource smoothing and leveling.

UNIT-5

Monitoring and Control:

Features of control, project control, performance analysis and cost control curves, line of balance, GERT, computer applications.

BOOKS RECOMMENDED:

[1]. Chandra Prasanna, *Project preparation*, Tata Mc.Graw Hill publishing CO. 1, New Delhi

[2]. Jain D.K, *Project planning and appraisal in planned economy*, Uppal publishing house, New Delhi.

[3]. Lock Dennis, *Project management*, Galgotia book service, New Delhi.

[4]. Mohsin M., *Project planning and control* Vikas publishing house, New Delhi.

[5]. Sonha A.K and Sinha Ram, *project engineering and management*, Vikas publishing house, New Delhi.

LABORATORY EXPERIMENTS:

- (1) Case studies related to different types of project and their characteristics.
- (2) Case studies related to responsibilities of project manager related with different projects .
- (3) Case studies related to market potentiality analysis with reference to new product.
- (4) Case studies related to technical analysis with reference to different projects.
- (5) Case studies related to financial analysis with reference to new product.
- (6) Case studies related to project implementation techniques.
- (7) Case studies related to project control techniques.