



INDIAN INSTITUTE OF MATERIALS MANAGEMENT

Post Graduate Diploma in Materials Management

June 2012

Paper-18.A (New) & 17.A (Old)

Project Management

DATE: 16.12.2012

MAX. MARKS: 100

Time: 2.00 p.m. to 5.00 p.m.

Duration : 03 hrs.

INSTRUCTIONS :

1. From Part 'A', answer four questions (Compulsory). Each sub-question carries 01 mark. **Total: 32 Marks**
2. From 'B', answer any 3 out of 5 questions. Each question carries 16 marks. **Total Marks: 48**
3. Part 'C', is a case study with sub questions (Compulsory) **Total Marks: 20**
4. Use of calculator and/or mathematical table is permitted. Graph sheet can be used wherever necessary.
5. Please read the instruction on the answer sheet.

Part A

(1 x32 = 32 marks)

Q.1 Choose the most appropriate statement out of the alternatives suggested. There is only one right answer.

i.) Which factors require project management ?

- a. Sharing of resources
- b. Size of task involved
- c. Interdependencies of activities undertaken by various departments
- d. Both (a) and (b) above
- e. All of (a),(b),and (c) above

ii) Which of the following are external reasons for project failure ?

- a. Non availability of skilled personnel
- b. Disputes with local population
- c. Inflation

iii) During which stages of a project life cycle is the level of activity at its highest?

- a. Selection and conception
- b. Planning and scheduling
- c. Implementation ,monitoring and control
- d. Evaluation and control

iv) Which of the following statements is true ?

- a. Maximum activity is during concept and selection stage
- b. Material procurement is done during planning & scheduling stage
- c. Project goals are established during planning stage
- d. During implementation stage expenditure on project is maximum

v.) In which situation is the bargaining power of the buyers low ?

- a. Buyers are few and volumes are high
- b. Buyers have alternate sources of supply
- c. Backward integration by the buyers is difficult
- d. Value addition by seller is low
- e. Both (c) and (d) above

vi.) Which of these is not a component of life cycle cost ?

- a. R & D costs
- b. Budgeted cost of the entire project
- c. Production , operation and maintenance costs
- d. Construction cost
- e. .Phase out costs

vii.) When resources show a declining trend , resource allocation should be

- a. by free bargaining between center and divisions
- b. Made strictly based on formula
- c. Made on existing pattern
- d. Allocated by imposed priorities by center or competitive bidding

viii.) If substantial growth of resources occurs and need for change is high ,

resource allocation will be based on

- a. Formula
- b. Competitive bidding
- c. Existing pattern
- d. Competitive bidding and imposed priorities

Q.2. Indicate if the following statements are true or false

i.) PEST analysis is a model designed to analyze if investment opportunities to a firm are feasible in its environment

ii.) Porter's Model of competitive advantage of firms depends on economies of scale.

- iii) According to Porter's Model a firm's competitive position depends upon apart from other factors on the bargaining power of buyers
- iv.) The likely outcome of a group's diversification in terms of profitability, growth and risk respectively is Moderate, High, Low.
- v) When raw materials to sales ratio in a manufacturing project is low ,value addition is low .
- vi).The finance manager of an expansion project has to make assumptions which are valid to determine optimum pattern of financing cost of depreciation generated funds need not be considered in determining WACC.
- vii.) Flexibility option gives a firm flexibility to make incremental investment
- viii.) Investment strategies maximizes profitability while minimizing risk by conglomerate diversification

Q.3. Match the following correctly

	A		B
i.	The investment strategy to widen product range by adding related products is	a.	when the variable is expected to exhibit a steady trend over time
ii.	A Moving Average is an example of time series model used	b.	concentric diversification
iii.	Income elasticity of demand is given by	c.	The ratio of change in demand to change in income
iv.	Facility layout means	d.	Also called functional layouts
v.	Process layouts are	e.	Arrangement of machinery & equipment on shop floor.
vi.	Pre operative expenses may be	f.	Allocated to all depreciable fixed assets in the ratio of their actual costs
vii.	Section 35 of the Income Tax Act	g.	Any expenditure whether capital or revenue is allowed as a deduction
viii.	State level financial institutions provide direct assistance to new projects as	h.	Risk capital assistance

Q.4. Fill in the blanks

- (i) Direct financial assistance schemes to upcoming projects are---- capital assistance scheme
- (ii) Debt Service Coverage Ratio appraises the ability of the project to----- its loan
- (iii) A company's cost of capital is the weighted average of the cost of various ----- of finance
- (iv) In a high risk Project the general practice is to have higher quantum of equity compared to ----
- (v) When the cost of capital of a project is equal to its internal rate of return the NPV will be ----
- (vi) Frequent revision of the plans will result in resource loss , confusion ,lack of confidence amongst personnel and ultimately project -----
- (vii) The two basic network techniques are ---- &-----
- (viii) The difference between budgeted cost of work performed and actual cost of work is called -----

Part B (any three)

(16x 3 = 48 marks)

- Q.5. During various stages for a project life cycle requirement of funds and personnel change significantly. Describe the various stages of a life cycle of a project.
- Q.6. One of the factors responsible for failure of a project is inappropriate location . What are the factors to be considered before deciding on the location of the project ?
- Q.7. An SCBA is performed to avoid complete dichotomy between choice of project and national planning. SCBA has its prime focus to evaluate a project in terms of social costs and which generally vary from the monetary costs and benefits of the project . Discuss the reasons for this discrepancy.
- Q.8. A large corporation is planning to evaluate an investment proposal considering three aspect such as initial investment , useful life of the project and annual cash flows. If the simulation technique is applied , how can the results be used .

Q.9. Table below shows the activities of a project and their optimistic, pessimistic and most likely times.

Activity	t_o	t_m	t_p
1-2	3	6	9
1-3	7	10	19
2-4	5	8	11
3-5	10	13	22
4-5	4	6	14
4-6	4	5	6
5-6	6	6	18

- Draw the network diagram
- find the critical activities and critical path
- find the expected time and variance of the critical path
- What is the probability of completing the project in 30 days.

PART C – Case Study (Compulsory)

20 marks

Q.10

Activity	Preceding Activity	Duration (Hrs)
1-2	----	2
1-3	----	2
1-4	----	2
2-5	1-2	4
3-6	1-3	8
4-6	1-4	4
5-7	2-5	2
6-7	3-6,4-6	5
7-8	5-7,6-7	4

Based on the above information , answer the following questions :

- Draw the network diagram
- Construct a network table
- Find the critical activities and critical path
- Draw the squared network
