

THE OPEN UNIVERSITY OF SRI LANKA
FACULTY OF ENGINEERING TECHNOLOGY
MASTER OF TECHNOLOGY IN INDUSTRIAL ENGINEERING - LEVEL 7
FINAL EXAMINATION - 2008/2009
MEX 7120 - PROJECT MANAGEMENT
DATE : 28 March 2009
TIME : 0930 hrs - 1230 hrs
DURATION: Three (03) hours



043

This paper consists of eight (08) questions. Answer any five (05) questions.

- (1) Organizations performing projects will usually divide each project into several project phases to provide better management control and appropriate links to the ongoing operation of the performing organization.
- a. Discuss the concept of project life cycle as a means of providing better management control mechanism. (10 marks)
- b. Draw up a sample project life cycle for a pharmaceutical new product development project for a period of 10 years. (10 marks)
- (2) a. Discuss two principal reasons for a tightly controlled capital investment budget. (06 marks)
- b. Assume that you have been appointed as a Chief Executive Officer in a large scale manufacturing plant and you have identified that the company does not have a formal procedure for capital investment approval.
- Design a suitable format for capital project approval process considering five to six investment categories which are suitable for manufacturing company. (14 marks)
- (3) Order-of-magnitude cost estimating may be defined as a quick method of determining an approximate probable cost of a project.
- a. Name different types of Order - of - magnitude estimates and give examples of your choice. (06 marks)

- b. In a construction project, the original total budget for a period of 24 months is \$250,000. The budgeted cost of work scheduled to date is \$ 55,000. However, actual cost of work performed is \$ 45,000 and 20% of the work yet to be completed.

Calculate the following factors and comment on the success of the project.

1. Earned value of the project to date.
2. Cost variance.
3. Scheduled variance.
4. Estimated cost at completion.
5. Estimated time to completion.

(14 marks)

- (4) "The temporary nature of projects means that the personal and organizational relationships will generally be both temporary and new. The project management team must take care to select techniques that are appropriate for such transient relationships."

- a. Identify specific organizational planning output for a political campaign in Sri Lanka.

(10 marks)

- b. "Development as a team is critical to the projects ability to meet its objectives".
Comment on how effectively team building can be done in a project environment.

(10 marks)

- (5) Project communication management provides the critical links among people, ideas and information that are necessary for success.

- a. Identify four key processes that requires ensuring effective Project Communication Management practices from the beginning to an end of project.

(06 marks)

- b. Discuss four different performance reporting tools and techniques used in project Communication management.

(06 marks)

- c. Discuss the importance of an effective project administrative closure.

(08 marks)

- (6) Assume that you have been appointed as a Project Manager in a project, focusing on potential privatization of Sri Lanka Railway Department.
- Develop a risk response development plan for each type of risk category. (10 marks)
 - Identify four key major processes with regard to project risk management and explain each process. (10 marks)
- (7) "The successful contract management is a vital part of effective project management."
- Explain why contract management is vital part of project management. (08 marks)
 - Name three types of contracts used in business and discuss the requirements, advantages and disadvantages in any of the two types mentioned above. (12 marks)
- (8) Activities in a project are given in the table below. Show this information in an A – OA diagram.

Activity	Description	Duration	Proceeding activity
A	Select software	4	-
B	Select hardware	3	A
C	Install hardware	6	B
D	Install software	2	C
E	Test software	3	D
F	Train staff	5	E
G	System run-up	1	F

- From your diagram, identify the total project duration. (05 marks)
- Show which activities you feel could be run alongside others (in parallel, rather than sequentially). (05 marks)
- Redraw the network diagram and calculate the new project duration. (05 marks)
- What benefits may result from using parallel activities, rather than sequential? (05 marks)

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