

The Open University of Sri Lanka  
Faculty of Engineering Technology



Study Programme	: MASTER OF TECHNOLOGY IN INDUSTRIAL ENGINEERING
Name of the Examination	: Final Examination
Course Code and Title	: <b>MEX7120 PROJECT MANAGEMENT</b>
Academic Year	: 2012/13
Date	: 18th August 2013
Time	: 0930 am -1230 pm
Duration	: 3 hours

**General instructions**

1. Read all instructions carefully before answering the questions.
2. This question paper consists of 8 questions. All questions carry equal marks.
3. Answer any 5 questions only.

- 
- 1) Selection for project teams, particularly matrix structured teams, is normally a pragmatic process of finding who has the skills required and who is available. How should a project manager seek to influence the process?
  - 2)
    - a) A project requires an investment of \$200,000 and estimated net cash follow of: year 1, (-)\$20,000, year 2, \$26,750, year 3, \$32,000, year 4, \$45,500, year 5, \$65,500, year 6, \$70,000, year 8, \$80,000, year 9, \$80,000 and year 10, \$80,000. Find out whether the project is financially viable if the rate of discount is 12%.
    - b) **Some projects were not successful even though they had a promising feasibility study.** Critically analyze the statement with examples.
  - 3) As a project manager how do you manage project complexities and conflicts? Substantiate your answer with your experience.

- 4) a) Why is controlling is more difficult than monitoring?

Activities, their duration, precedence and budget of an inspection of a machine are as tabulated below:

activity	Duration (WKS)	precedence	Budget(\$) X 20
GH	1	-	840
EL1	2	GH	840
EN12	6	EL1	3900
AF12	14	EL1	16100
EL2	6	EL1	2520
AV12	6	EL1	2940
AR12	4	EL1	2380
AF3	2	AF12	1400
EN3	1	AF3	350
AR3	1	AF3	210
AV3	2	AF3	1470
EL3	3	AF3	1260
TEST	2	AF3,EN3,AV3,AR3,EL3	27800
H/O	1	TEST	900

- b) What is the Budgeted Cost of Work Performed (BCWP) at the end of the 9<sup>th</sup> week?
- c) If the Actual Cost of Work Performed (ACWP) at the end of the 17th week is \$26,645.00 what is the state of the project? (Assume that the budget is evenly rated).
- 5) a) Why is change inevitable in project management?
- b) What is the scope of configuration management when it is used throughout the project life cycle?
- c) Explain the principal elements of configuration management. Substantiate your answer with experience.
- 6) a) You may have encountered managers who hold the view that “**staff should be told only what they need to know for their job—nothing more, nothing less.**” List the advantages and disadvantages of such an approach.
- b) You, as the head of projects of a company, how do you use the project reports that are regularly sent to you by project managers?

- 7) a) How does WBS support to achieve project deliverable(s)?
- b) Argue with your previous know-how why **“an essential, a quality system is in place to ensure quality of the project deliverable(s)”**.
- 8) a) Describe the benefits of organizing a project schedule using WBS in outline form.
- b) Deduce a resource loading schedule for the activities given below if the staff is restricted to six workers.

Activity	Duration (WKS)	Precedence
GH	1	-
EL1	2	GH
EN12	6	EL1
AF12	14	EL1
EL2	6	EL1
AV12	6	EL1
AR12	4	EL1
AF3	2	AF12
EN3	1	AF3
AR3	1	AF3
AV3	2	AF3
EL3	3	AF3
TEST	2	AF3,EN3,AV3,AR3,EL3
H/O	1	TEST

- c) What is the percentage of staff –week lost of the project?

\*\*\*END\*\*\*