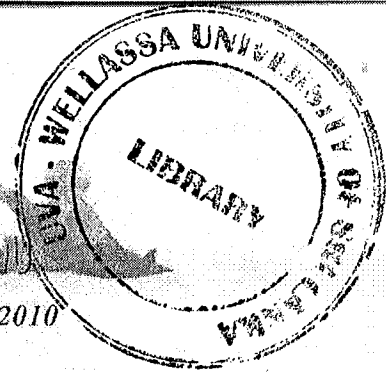


Uva Wellassa University
Faculty of Management



Year 2 Semester I - Examination December/January 2009/2010

EMG 102-3 Economics and Project Management

Section II - Project Management

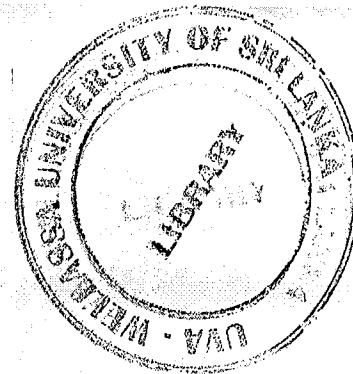
Time : 15 minutes
Total marks : 15 marks

Index No:

05. Which is **not** a core project management tool?
- a) Human resource
 - b) Project charter
 - c) Work breakdown structure
 - d) Project budget

06. The smallest component of a project breakdown is;
- a) work breakdown structure
 - b) work package
 - c) event
 - d) cost center

PART C



Answer any two (02) questions
Each question carries 25 marks

- I.
- I. What is the role of a good project management structure?
 - II. What is functional project management structure?
 - III. Explain the factors to be considered when selecting an appropriate project management structure.
 - IV. You work for Vendol Lanka (Pvt.) Ltd, which manufactures and distribute herbal products and pharmaceutical items. Vendol has been the market leader nearly for the past 12 years and has decided to diversify into leisure and hospitality sector by developing an Ayurvedic hotel.
 - a) What kind of project management structure would you recommend for this project?
 - b) Briefly explain what information support you for your answer?

2.

- I. ABC Group of Companies is considering the following project options for their next financial year. Calculate the Return On Investment (ROI) for each project and recommend the appropriate option for ABC group.

Project Option	Estimated Cost of the project (Rs in millions)	Expected profit from the project (Rs in millions)
Development of existing products	2,000	3,000
Project on sales and marketing	5,000	7,500
Diversify into new venture	10,000	25,000

- II. XYZ Ltd has a cost of capital of 12% and is considering which project or projects it should initiate, using the Net Present Value method (NPV), give your recommendations.

The following projects are being considered. (values are given in Sri Lankan Rupees)

Project	Year 0	Year 1	Year 2	Year 3	Year 4
A	-150,000	-250,000	300,000	300,000	200,000
B	-250,000	-150,000	300,000	290,000	300,000
C	-350,000	-150,000	400,000	440,000	300,000

- III. During the monitoring stage a project manager has found that the planned value to complete the work package is Rs. 150,000, scheduled to have been finished today. Actual expenditure to date is Rs.135,000. Estimate work is 1/2complete. You are required to calculate;

- Cost Variance
- Schedule Variance
- Cost Performance Index (CPI)
- Schedule Performance Index (SPI)

3. The following information has been given pertaining to a project to you.

Activity (ID)	Description	Preceding Activity	Time Duration (Days)
A	External Specs	None	8
B	Review design features	A	2
C	Document new features	A	3
D	Write software	A	60
E	Programme & test	B	60
F	Edit & publish notes	C	2
G	Review manual	D	2
H	Alpha site	E,F	20
I	Print manual	F,G	10
J	Beta site	H,I	10
K	Manufacture	J	12
L	Release and ship	K	3

- I. Develop the network diagram for the above project activities. Use the Activity on Node technique. (AoN)
- II. Calculate the minimum overall project completion time and identify which activities are critical.
- III. Briefly explain two (02) project crashing options available for a project manager.
- IV. The following information is given pertaining to a project. You are required to calculate:
 - a) Slope
 - b) Maximum crash time
 - c) Normal time for the project completion
 - d) Total direct normal cost for the project completion

Activity	Slope	Maximum crash time	Direct costs			
			Normal		Crash	
			Time	Cost	Time	Cost
A			3	50	2	70
B			6	80	4	160
C			10	60	9	90
D			11	50	7	150
E			8	100	6	160
F			5	40	4	70
G			6	70	6	70