

EASTERN UNIVERSITY SRI LANKA
FACULTY OF COMMERCE AND MANAGEMENT
FIRST YEAR SECOND SEMESTER EXAMINATION IN MASTER OF BUSINESS
ADMINISTRATION- 2016/2017
(January / February 2018) Proper / Repeat
MBA 1023 Project Planning and Implementation

Answer all five questions

Time: 3 hours

Q1. Read the case study and answer the questions given below.

GAMES LTD

BACKGROUND

Games Ltd manufactures and sells a variety of board games and toys. The board games use dice, cards, paper money etc. and are based on holidays, football, horse racing, mysteries etc. The toys are classified as soft and hard. The soft toys are made from non-toxic, flame resistant polyester fibre, e.g. teddy bears, fur animals etc. The hard toys are made from non-toxic plastic and wood. Games Ltd.'s main customers are large retailers and wholesalers. It employs over 100 people.

The company has four main games-W, X, Y, Z. All four games are currently sold to the trade. All four games are currently sold to the trade for \$20.00 each. Games Ltd.'s management accountant has estimated that the contribution to profit per unit of W, X, Y, and Z is respectively \$3, \$2, \$4 and \$4.

PRODUCTION OF BOARD GAMES

Two games, X and Y, are manufactured in the same way on the same equipment. There are three stages in the manufacture: boarding, printing, and packaging. The manufacturing times required for each game (in minutes) and the total time the equipment is available each week (in hours) are as follows.

	Boarding	Printing	Packaging
Game X	2 mins	3 mins	1 min
Game Y	2 mins	6 mins	2 mins
Total time available each week	70 hours	120 hours	50 hours

The current stock and demand is such that, for the next few weeks, at least twice as many of games X must be produced as games Y. Company policy is to maximize contribution to profit.

STOCK COSTS OF BOARD GAMES W

Special boards for W are bought from a local supplier. The management accountant estimates that the order costs (administration and delivery etc.) of keeping any order are \$100, regardless of its size. The holding costs (storage etc.) of keeping one game in stock for a year are 10% of its ex-factory price to the trade. The supplier is willing to deliver 'same-day', i.e. with no lead time. At present, Games Ltd adopts a policy of ordering a constant amount of boards at regular intervals, although the supplier could provide up to 160 boards a day if necessary. Games Ltd trades for 250 days a year. (The proportion of boards scrapped during production is negligible).

PACKAGING OF TOYS

Many of the toys produced are high-quality and need to be packed with care. Management is concerned about the amount of time which this takes. For several weeks quality control staff has been engaged in "time and motion studies", and analyzing work practices with the operatives directly involved.

Games Ltd has just started to analyze its customer for toys, with a view to reviewing its pricing policy for large orders and/or type of customer.

MODERNISATION PLANS

The Board is working on its medium-term and long-term plans. To meet increased demand, the Board is considering the introduction of semi-automatic or fully automatic equipment for soft toys that are currently made by hand. At present annual cash outflows on toys are about \$ 185,000 and annual cash inflows are about \$225,000. The management accountant and the marketing manager have jointly provide the following estimates of the future likely cash flows

resulting from the use of new equipment, given the scenario the Board specified. All equipment would need replacing in 2024. The cost of capital is 10%.

PROJECTED CASH FLOWS

	2018 (NOW)	2019	2020	2021	2022	2023
Semi-automatic	-50	0	+60	+100	+100	+100
Fully automatic	-150	-50	+50	+150	+200	+200

Games Ltd is currently repaying a fixed interest ($r=10\%$), ten years, \$200,000 mortgage by annual (year-end) amounts, which has just over four years to run. (This has already been taken into account in the estimates above.)

Questions:

- a) Evaluate the three options in Games Ltd.'s modernization plans:
 - i. No change;
 - ii. Semi-automatic equipment;
 - iii. Fully automatic equipment,

Using net present value criteria, recommend, with reasons and comments, a course of action.

(15 Marks)

- b) Calculate how much is outstanding now on Games Ltd.'s \$200,000 mortgage.

(05 Marks)

(Total 20 Marks)

- Q2 a) *“Developing the Work Breakdown Structure is the most critical part of the Joint Project Planning.”*

You as a project manager how would you ensure that you've done this Work Breakdown right.

(06 Marks)

- b) *“Activity duration is a random variable. We cannot know exactly how long it will take, we cannot know what factors will be operative when work is underway on an activity, because there are causes of variation in the actual activity duration.”*

Based on the above statement, explain the causes of variation in the actual activity duration of a project.

(06 Marks)

- c) *“Staff development is an objective of the project manager occurs when the project manager also has line responsibility for the project team. The project manager must develop the skills on his or her project team to handle whatever assignments come along. The manager has some amount of control over the motivators relating to the job.”*

Based on the above statement identify and explain the motivators that are directly controlled or influenced by actions and behaviors of the project manager.

(08 Marks)

(Total 20 marks)

- Q3 a) *“The project plan is a system. As such, it can get out of balance, and a get-well plan must be put in place to restore the system to equilibrium. The project controls are designed to discover out-of-balance situations early and put get-well plans in place quickly.”*

Based on the above statement explain the purpose of the project control and the characteristics of a good reporting system for project monitoring and control.

(08 Marks)

- b) *“A good project management methodology has a change management process in place, because change is constant and inevitable.”*

In view of this situation, list and explain the possible outcomes that can result from a change request.

(06 Marks)

- c) *“Core team members are with the project from cradle to grave. They typically have a major role to play in the project and bring a skill set that has broad applicability across the range of work undertaken in the project. They might also have responsibility for key activities or sets of activities in the project.”*

In view of the above statement, explain the characteristics that are considered important for the core team members in a project.

(08 Marks)

(Total 22 marks)

- Q4 a) *“The Logical Framework Approach (LFA) is used for formulating and preparing development programmes and Projects. Logical frameworks logically summarize what the project intends to do and how, the key assumptions, and outputs and outcomes that will be monitored and evaluated.”*

Based on the above statement briefly explain in what ways the “Logical Framework Approach” will be helpful to a project manager in the effective and efficient management of projects.

(04 Marks)

- b) *“Preparing a Logical Framework Matrix (LFM) is now a requirement as part of its programme and project preparation procedures.”*

Based on the above statement, develop a logical framework matrix for improving the level of standard of living of people in a selected village/ area.

(08 Marks)

- c) Briefly explain the various tools used in the Participatory Rural Appraisal Method in project development.

(06 Marks)

(Total 18 marks)

Q5

The Faculty of Commerce and Management is considering the construction of the second phase of the faculty complex as per the original building plan. The table below shows a list of the required activities, with their immediate predecessors, estimated Human resources and durations to complete the above purpose.

Activity	Preceding activity	Duration (days)	No. of men
A	-	3	6
B	A	2	6
C	A	1	6
D	B,C	4	4
E	B	2	9
F	E	2	9
G	D	4	3
H	F	3	6
I	G	5	6
J	H	2	6

a) Draw up the network diagram and identify the critical path and estimate the normal duration for this project.

(10 marks)

b) Based on the above information, calculate the total human resource required for this project.

(04 marks)

c) If the human resource availability is 12 men per day, how would you reschedule the activities to complete the project within the normal duration?

(06marks)

(Total 20 marks)