

University of Colombo, Sri Lanka
Faculty of Graduate Studies

Masters in Public Administration 2019/2020 (Classroom Mode)
Semester I Examination – September 2020

MPA6103: Project Management

Three (03) Hours

Answer **any five (05)** questions.

This paper consists of **seven (07)** questions printed on **five (05)** pages.

Question no. 01

- I. Explain the triple constraints of project management. (04 Marks)
- II. Managing stakeholders is very important for the success of a project. Assume that you are working as a project manager of an ERP implementation project in a large manufacturing and distribution organization. The organization is more than 30 years old and most of the employees of it are in high ranks and are also more than 20 years with the company. At the moment, operations are handled using legacy systems and most of the information entered to finance system. This is a family business and the owner's son was recently appointed as a director of it after he returned to Sri Lanka completing his Masters degree in the USA. He is the one who initiated this project hence, he highly engages in the project implementation activities. The Procurement Manager who has 28 years of experience with the company does not believe in systems and he thinks that the systems cannot replace the work managed by his department. The Accountants and Executives in the Finance Department are really interested (even though they do not have power in decision making) to have an ERP system, because they know that the ERP system will reduce the manual work. Further, they believe that working with ERP will support their career development. The Executives in the Production Division believe that the ERP has nothing to do with their work. But the Production module is also considered as one of the main modules to be implemented.
- a) Plot the behavior of key actors mentioned above (i.e. Owner's son, Purchasing Manager, Finance Executive and Production Executive) on the Power Interest Grid. (04 Marks)
- b) Explain the communication strategy and the engagement strategy pertaining to the behavior of each actor mentioned above. (12 Marks)

(Total: 20 marks)

Question no. 02

- I. Name four (04) project selection methods used by organizations. (04 Marks)

- II. Briefly explain the difference between the “payback period” and the “discounted payback period”. (04 Marks)

- III. An initial investment of Rs. 8,000,000/= on plant and machinery is expected to generate cash inflows of Rs. 3,500,000 thousand, Rs. 4,000,000/=, Rs. 5,800,000/= and \$2,000,000/= at the end of the first, second, third and fourth years respectively. At the end of the fourth year, the machinery will be sold for \$900,000/=. Calculate the net present value (NPV) of the investment if the discount rate is 12%. (12 Marks)

(Total: 20 marks)

Question no. 03

- I. “Project charter” is an important document to be prepared at the initial stage of a project. What do you mean by a Project charter? (04 Marks)

- II. “Brainstorming” is a tool used in projects as well. Explain how and when this tool should be used in projects. (04 Marks)

- III. There are three types of change request responses which are listed below. Briefly explain the each response using an example for each.
 - a. Corrective action
 - b. Preventive action
 - c. Defect repair(12 Marks)

(Total: 20 marks)

Question no. 04

- I. The scope baseline includes three components. They are the scope statement, work breakdown structure (WBS), and the WBS dictionary. Write short notes on two of these.
(04 Marks)

- II. Under the Scope management knowledge area, it could be found two areas of scope management. They are the “Project Scope” and the “Product Scope”. Briefly explain the two of these.
(04 Marks)

- III. The following information is given related to the activities of a small project assigned to you.

- a) Draw a network diagram and find the critical path based on the information.
(08 Marks)

Activity	Duration (days)	Dependency
A	7	
B	3	A
C	6	A
D	5	B
E	3	D,F
F	2	B
G	3	C
H	2	E,G

- b) It seems that the task F is dependent upon the task B. It is also identified that the Task F cannot be started immediately after the Task B. **But the Task F can be started after 2 days of completion of the Task B.** What is the impact of the above on the total project duration?
(04 Marks)

(Total: 20 marks)

Question no. 05

- I. There are three major ways of funding a project as discussed in the classroom. Briefly explain any two (02) of them. (04Marks)
- II. Briefly explain the “Management reserve” and the “Contingency reserve” which come under the reserve analysis. (04 Marks)
- III. After reviewing the progress of a project, its Project Manager found the following information.
- a) Total budget of the project is 5,400,000/= and the project duration is 20 months.
 - b) Review done after 8 months.
 - c) 40% of the project should be completed as per the plan.
 - d) 45% of the project work completed.
 - e) 50% of the allocated budget (2,700,000/=) utilized by the date of review.
 - f) Calculate the SPI and the CPI. (06 Marks)
- IV. Calculate the “Estimate at completion” (i.e. Total amount of money required to complete the project) based on the current review information. Clearly state the assumptions made (if any). (06 Marks)

Symbol	Name	Formula
EV	Earned Value	-
AC	Actual Cost	-
SV	Schedule Variance	$SV = EV - PV$
SPI	Schedule Performance Index	$SPI = EV/PV$
CV	Cost Variance	$CV = EV - AC$
CPI	Cost Performance Index	$CPI = EV/AC$

(Total: 20 marks)

Question no. 06

- I. Explain the “internal failure cost” and the “external failure cost” with examples.
(04 Marks)

- II. Write short notes on “Ground rules” and “War room” relating to Team Development.
(04 Marks)

- III. Using communication appropriately is very important for the team development. However, different types of communication barriers intervene the effectiveness of communication.
Briefly explain the following barriers of communication with examples.
 - a) Psychological barriers
 - b) Physiological barriers
 - c) Physical barriers

(12 Marks)

(Total: 20 marks)

Question no. 02

- I. Explain two benefits of “Virtual Teams” compared to “Traditional Teams”.
(04 Marks)

- II. Explain the synchronous and asynchronous communications/meetings with examples.
(04 Marks)

- III. Managing a virtual team is different than managing a traditional team. A Project manager who works with virtual teams may need to focus on different areas and may require additional knowledge and skills. Explain in details what are the additional knowledge and skills required for a Project Manager who manages global virtual teams (i.e. the virtual teams with members who work from different parts of the world).

(12 Marks)

(Total: 20 marks)