

University of Ruhuna - Faculty of Technology
Bachelor of Information and Communication Technology Honors Degree

Level 3 (Semester I) Examination, June 2023
Academic Year 2021/2022

Course Unit: ICT3123 - IT Project Management (Theory)

Duration: 2 hours

Instructions:

This paper consists of four (04) questions.

Answer ALL questions.

Calculators are allowed.

01)

a.

- i. Define a "Project" and explain how your 3rd year group project or other project align with the written definition. [09 marks]
- ii. State three (03) attributes of a project and explain these using attributes of your 3rd year group project as an example. [15 marks]
- iii. Providing specific examples, explain how a project could be triggered due to any three (03) of the items listed below. [15 marks]
 - A market demand
 - A technological advancement
 - A customer request
 - A business need
 - A social need
- iv. Name and explain each of the project management processes. [25 marks]

b.

- i. State the "Triple Constrain" of a project and explain the triple constrains of your 3rd year project. [08 marks]
- ii. "You cannot do a good job of controlling scope if you do not perform a good job of collecting requirements, defining scope, and validating scope". Explain whether you agree or disagree with the given statement above. [06 marks]
- iii. State three (03) conditions that a project can be stated as "successful". [09 marks]
- iv. "Project Scope Management" ensures project teams and stakeholders have the same understanding of "what products the project will produce" and "what processes the project team will use for that".

Assume that you are developing a Hospital Management System. State six (06) main processes that are involved in "project scope management" for this project. [12 marks]

02)

a.

- i. Briefly explain 03 approaches of developing a WBS. [15 marks]
- ii. Explain the meaning of “scope creep”? [05 marks]
- iii. Assume that you are the head of communication management of Project Nilwala. Project has 07 team members. You need to purchase equipment and infrastructure required for team communication. State the formulae and calculate the number of communication channels exist in this project. [10 marks]
- iv. Explain following two (02) communication methods with possible examples.
 1. Interactive communication
 2. Pull communication[15 marks]

b.

- i. Consider following scenario.

NirSha (PVT) Ltd. is an IT company which is developing Learning Management Systems (LMS) for Education sector. Assume that you are the Project Manager of UOR_FOT LMS project. They are planning to develop Tablet PC system to manage the teaching activities of a school class room. Later, you have discovered that you have to purchase a Tablet PCs for the clients from vendors of Tablet PCs such as Samsung, Apple and Google Nexus.

1. Explain how you utilize the knowledge areas of Communication Management and Procurement Management
2. How to combine above two areas (Communication and Procurement Management) for the above project success?

[20 marks]

- ii. Define “Risk” in project risk management. [05 marks]
- iii. Briefly explain four (04) possible Negative risk response strategies with relevant examples. [16 marks]
- iv. “Facebook” is a well-known social media development software project. There were certain risks associated with it such as production failures etc. Explain difference between the “Contingency plan” and “Fallback plans” in the context of Facebook project. [14 marks]

03)

a.

- i. Assume that you have appointed as the batch representative for the ICT batch for year 2023. In your role, explain how you could use following influence factors to manage the responsibilities.
 1. Expertise influence
 2. Friendship influence

[14 marks]

- ii. Write short notes on “visionary” leadership and “coaching” leadership. Your note should include definition of the terms and brief examples for each. [14 marks]
 - iii. Explain two (02) different conflict management strategies that could be utilized for a project. [14 marks]
 - iv. Briefly explain the “resource leveling” in project. [08 marks]
- b.
- i. Define “Procurement Management” and state the four (04) steps associated with it. [10 marks]
 - ii. Write down four (04) possible reasons for organizations to move to the “Procurement” process. Briefly explain two (02) of them with examples. [20 marks]
 - iii. Explain the term “make-or-buy decision” with an example from your 3rd year group.
 - iv. “Project procurement management should be performed with legal expertise knowledge.” Explain whether you agree or disagree with the above statement. Justify your opinion with an (01) example. [10 marks]

04)

a.

- i. Assume that TechHunters organization is currently undertaking Project SESIP. Further, assume that you are a member of the project financial management team in TechHunters organization. The following details in Table 01 were collected for you.

Table 01

Description	SESIP
Budget (\$)	1,500,000
Project duration	1 year
Completed work	100%
Actual cost (\$)	1,650,000

- 1. Calculate BAC, EV, CV, SV, CPI, and SPI for the project. [36 marks]
- 2. State project’s status in terms of “Schedule” & “Budget”. [14 marks]

b. Consider the following Table 02.

Table 02

Activity	Predecessors	Time estimate (Weeks)
A	-	4
B	-	2
C	-	3
D	A,B	3
E	C	2
F	D	4
G	E	8
H	F,G	5
I	H	5

- i. Develop a Precedence Network Diagram showing the earliest and latest start dates, the earliest and latest finish dates, the duration, ID, and the slack time for each task. [40 marks]
- ii. Write down the critical path and its duration. [10 marks]

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