



## UNIVERSITY COLLEGE TATI (UC TATI)

### FINAL EXAMINATION QUESTION BOOKLET

COURSE CODE : BME 4093

COURSE : PROJECT MANAGEMENT

SEMESTER/SESSION : 2-2024/2025

DURATION : 3 HOURS

#### Instructions:

1. This booklet contains 5 questions. Answer **ALL** questions.
2. All answers should be written in answer booklet.
3. Write legibly and draw sketches wherever required.
4. If in doubt, raise your hands and ask the invigilator.

**DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO**

**THIS BOOKLET CONTAINS 7 PRINTED PAGES INCLUDING COVER PAGE**

**Answer ALL questions.**

**QUESTION 1**

Although there are many criteria for selecting projects, selection criteria are typically identified as financial (payback and net present value) and non-financial (checklist model, multi-weighted scoring model etc). Meanwhile, three (3) different project management structures used by firms to implement projects.

- a) Choose suitable project management structure for research and development (R&D) project and discover its characteristics. (4 marks)
- b) Your team is considering two (2) different projects, Project X and Project Y, as depicted in Table 1 and Table 2 respectively. Based on past history, your team expects at least rate of return of 25%. Financial advisors predict inflation to remain at 3% into the foreseeable future. By using suitable financial model, determine which project should be rejected by your team.

Table 1: Project X

Year	External Investment	Revenue Stream
0	RM 10,000	RM 0
1		RM 9,000
2		RM 8,000
3		RM 9,000
4		RM 8,000
5		RM 7,000

Table 2: Project Y

Year	Internal Investment	Revenue Stream
0	RM 10,000	RM 0
1		RM 10,000
2		RM 11,000
3		RM 13,000
4		RM 7,000
5		RM 9,000

(16 marks)

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**QUESTION 2**

Work breakdown structure (WBS) is a visual tool that breaks down the entire project to make it easier to plan, organize, and track progress. Project network is a visual representation of the workflow of a project.

- a) Illustrate a simple WBS for producing a motorcycle. (7 marks)
- b) Table 3 present incomplete network information for producing custom motorcycle. Determine its suitable description, predecessor and time. Complete forward and backward pass, calculate the activity slack and identify its critical path. How many days will the project take? Determine your answer.

Table 3: Custom Order of Motorcycle's Project

ID	Description	Predecessor	Time
A	Order review	?	?
B	Order standard parts	?	?
C	?	?	?
D	Design custom parts	?	?
E	?	?	?
F	Manufacture custom hardware	?	?
G	?	?	?
H	Test	?	?

(13 marks)

### QUESTION 3

Risk management can reduce the number of surprises and lead to better understanding of the most likely outcomes of negative events.

- a) Classify four (4) types of risk response development. (8 marks)
  
- b) 40 students of UC TATI's bachelor degree will hold a "camping" project next month. Any possible risks, impact of risks and its contingency plans must be considered. Identify four (4) potential risks of "camping" project, evaluate its impact of risks and then designate contingency plan to manage those potential risks. (12 marks)

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**QUESTION 4**

You have prepared the following schedule as per depicted in Figure 1 for a project in which the key resource is a truck. There are three (3) trucks available for the project. Activities A and D require one (1) truck to complete, while activities B, C, E and F require two (2) trucks. Activities are scheduled using rules-of-thumb called heuristics.

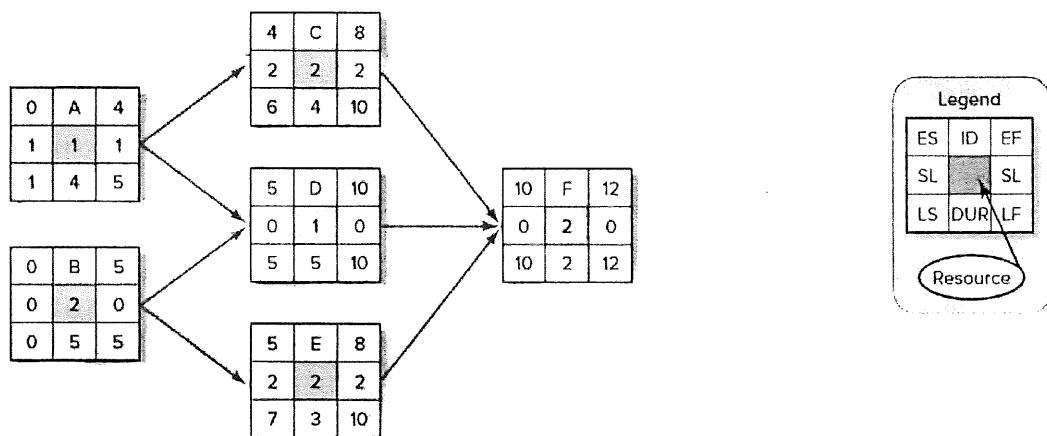


Figure 1: Current Resource Schedule Network

- Predict what are “rules-of-thumb” focus on. (3 marks)
- Illustrate a resource-constraint schedule by using template in Appendix 1. (17 marks)

## QUESTION 5

Leadership and teamwork are interdependent, as effective leadership provides direction and motivation, while strong teamwork relies on collaboration and mutual support to achieve shared goals.

- a) Breakdown four (4) orchestrating the decision-making process. (4 marks)
- b) Identify three (3) challenges in managing virtual teamwork. (6 marks)
- c) During a project, a conflict emerged within the team regarding task allocation and responsibilities. You need to resolve the conflict and restore a harmonious working environment. As a leader, how did you resolve it? Justify your answer. (10 Marks)

----- End of Questions -----

Appendix 1: Resource Constraint Schedule

ID	RES	DUR	ES	LF	SL	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A																						
B																						
C																						
D																						
E																						
F																						
<b>Resource scheduled</b>																						
<b>Resources available</b>																						

ID	RES	DUR	ES	LF	SL	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A																						
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