



UNIVERSITY COLLEGE TATI (UC TATI)

FINAL EXAMINATION QUESTION BOOKLET

COURSE CODE	: BME 4093
COURSE	: PROJECT MANAGEMENT
SEMESTER/SESSION	: 1-2022/2023
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

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Answer ALL questions.

QUESTION 1

Work Breakdown Structure (WBS) will serve as the database for developing the project network which establishes the timing of work, people, equipment and costs. The project network is a tool used for planning, scheduling and monitoring project progress. The network is developed from the information collected for the WBS and is a graphic flow chart of the project job plan.

- a) **Illustrate how** a work breakdown structure (WBS) for manufacturing a custom order of a bicycle and **determine** cost estimation by using apportion method. (8 marks)
- b) By using WBS information in a), **designate** network information in Table 1. Consider forward and backward pass, **calculate** how many days will the project takes. Then, **identify** its critical path. **Analyse** your answer. (12 marks)

Table 1: Custom Order of Bicycle's Project

ID	Description	Predecessor	Time
A			
B			
C			
D			
E			
F			
G			
H			

QUESTION 2

Project network times are not a schedule until resources have been assigned. Resources are limited in quantity or availability. Activities are scheduled using heuristics (rules-of-thumb). Figure 1 shows current resource schedule network for activity.

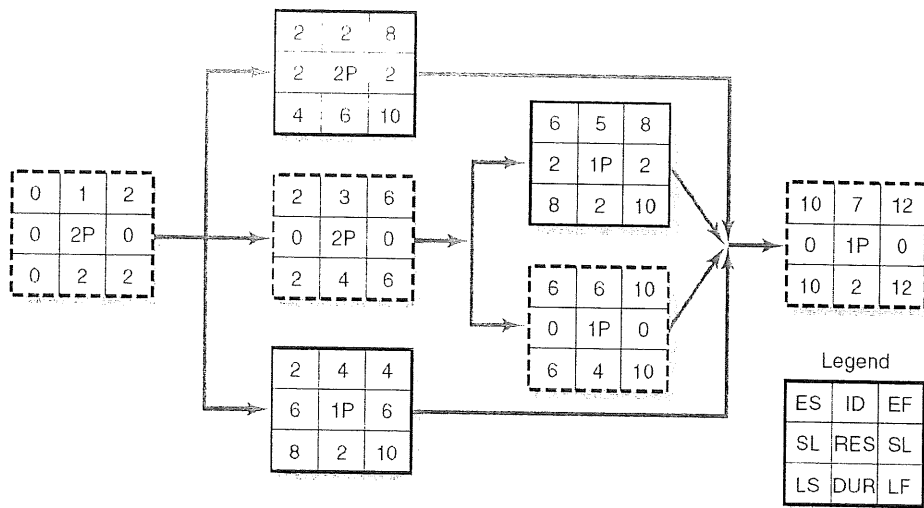


Figure 1: Current Resource Schedule Network

- Predict what are "rules-of-thumb" focus on. (3 marks)
- Designate a resource-constraint schedule in the loading chart and new resource schedule by using the parallel method and heuristics. (17 Marks)

QUESTION 3

Risk management attempts to recognize and manage potential and unforeseen trouble spots that may occur when the project is implemented.

- a) **Differentiate** between mitigating risk, avoiding a risk, transferring risk and retaining risk. (8 marks)

- b) Malaysian Football Association will be held an international football tournament by next year. Any possible risks and its contingency plans must be considered.
 - i. **Identify** six (6) potential risks of football tournament project. (6 marks)

 - ii. **Designate** contingency plan to manage potential risks in b) i. (6 marks)

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QUESTION 4

A positive example can define how team members respond to changes and risks, how they handle new tasks and how they relate to one another and the rest of the organization.

- a) **Identify** challenges to manage a virtual project team. (4 marks)
- b) You work for a large consulting firm and were assigned to the Gold Star LAN project. Work on the project is nearly completed and your clients at Gold Star appear to be pleased with your performance. During the course of the project, changes in the original scope had to be made to accommodate specific needs of managers at Gold Star. The costs of these changes were documented as well as overhead and submitted to the centralized accounting department. They processed the information and submitted a change order bill for your signature. You are surprised to see the bill is 10 percent higher than what you submitted. You contact Jim Messina in the accounting office and ask if a mistake has been made. He curtly replies that no mistake was made and that management adjusted the bill. He recommends that you sign the document. You talk to another project manager about this and she tells you off the record that overcharging clients on change orders is common practice in your firm. Would you sign the document? Why? Why not? **Recommend** your answer and possible actions. (16 Marks)

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QUESTION 5

Hitachi Asia (Malaysia) is company engaged in the business of sales, service and marketing for the Hitachi brand of electrical and electronic consumer and business solutions. Hitachi is considering to upgrade two different air-conditioner projects. Based on past history, Hitachi expects at least a rate of return of 30 percent. The financial advisors predict inflation to remain at 5 percent into the foreseeable future.

- a) **Evaluate** impact of projects on project selection. (5 marks)
- b) **Identify** what kind of project management structure would you recommend Hitachi use. What information would you like to have to make this recommendation, and why? **Evaluate** your answer. (5 marks)
- c) You are head of project team at Hitachi. Your team is considering two different projects, Inverter Air-Conditioner Project and Non-Inverter Air-Conditioner Project. Given the following information for each project, which one should be Hitachi's first priority? Should Hitachi funds any of the other projects? If so, what should be the order of priority based on return of investment? By using suitable financial models of selection criteria, **determine** Hitachi's priority. (10 marks)

Table 2: Inverter Air-Conditioner Project

Year	Investment	Revenue Stream
0	RM 650,000	RM 0
1		RM 650,000
2		RM 70,000
3		RM 21,000
4		RM 13,000
5		RM 9,000

Table 3: Non-Inverter Air-Conditioner Project

Year	Investment	Revenue Stream
0	RM 403,000	RM 0
1		RM 350,000
2		RM 199,000
3		RM 83,000
4		RM 25,000
5		RM 10,000

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APPENDIX 1

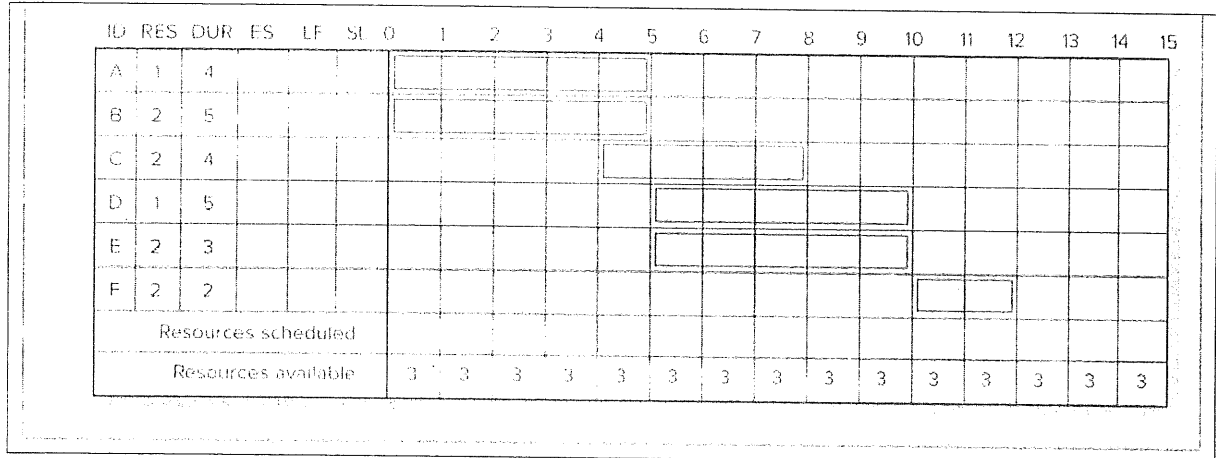


Figure A: Sample Resource Constraint Schedule

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

