

Second Semester Examination 2023/2024 Academic Session

July/August 2024

EPM 432 – Project Management (Pengurusan Projek)

Duration: 3 hours (Masa: 3 Jam)

Please check that this examination paper consists of <u>FOUR</u> (4) pages of printed material before you begin the examination.

[Sila pastikan bahawa kertas peperiksaan ini mengandungi <u>EMPAT</u> (4) muka surat yang bercetak sebelum anda memulakan peperiksaan ini.]

Instructions: Answer ALL **FIVE (5)** questions.

[Arahan: Jawab LIMA (5) soalan]

1. [a] As a new hired project manager, you are analyzing a suitable structure for your project team organization. Compare and contrast the THREE (3) types of organization structures.

(30 marks)

[b] Giant organization may adopt project portfolio management in managing their projects. Define project portfolio management and describe its objectives and initiatives.

(30 marks)

[c] Wise words in project management: "Successful project managers must operate on the boundaries" Explain what is meant by this statement and provide ONE (1) example.

(40 marks)

2. [a] An effective Statement of Work (SOW) is crucial for project management. It outlines detailed description, ensuring clarity and alignment among stakeholders. Define SOW and the key elements it contains.

(30 marks)

- [b] Conflicts between team members erupt even in the healthiest work environments. It is completely normal for some people not to get along so well, either because of their personality or the way they work. However, it is your role as a manager to help your employees resolve their conflicts, especially when they can no longer work together effectively.
 - (i) Suggest THREE(3) primary ways of resolving this conflict.
 - (ii) Among them, identify which is the most effective way and why.

(40 marks)

[c] Harman plans to corner the Malaysia's supply of ruminant silage (fodder produced through the fermentation process of Napier grass in an airtight condition) required detailed planning and an honest assessment of the risks involved in this highly speculative venture.

He first identified the primary factors that might contribute to the project failure. These factors were talent-related; market maturity related; and soil/farm-related. The best estimates he could come up with for these probabilities P were 0.6, 0.2 and 0.3 respectively. The consequences C of failure were less certain, but he finally decided that the cost consequences rated a 0.2, the schedule consequences rated a 0.4, the reliability consequences rated a 0.1, and the company goodwill consequences were a robust 0.6. Calculate the overall project risk factor for this undertaking.

(30 marks)

3. [a] Discuss TWO(2) importances of project cost estimation. Explain project life cycle and project cost with its characteristic diagram.

(30 marks)

[b] The activities outlined in Table 3[b] are associated to Dave Carhart's consulting company project.

Table 3[b]

Activity	Immediate Predecessor(s)	Time (Days)
Α	_	3
В	A	4
С	A	6
D	В	6
E	В	4
F	С	4
G	D	6
Н	E, F	8

- (i) Draw the activity-on-node (AON) project network associated with the project.
- (ii) Calculate how long should it take for Dave and his team to complete this project.
- (iii) Identify the critical path.

(40 marks)

[c] Discuss THREE(3) differences between optimistic and pessimistic approaches of project budget contingency.

(30 marks)

4. [a] Describe THREE (3) logical relationships between tasks with ONE (1) example for each relationship.

(40 marks)

[b] Discuss how Critical Chain Project Management (CCPM) system deals with resource constraints in project management.

(30 marks)

[c] Draw the project cost-duration graph. Provide THREE (3) comparisons between the direct, indirect and total project cost with respect to the graph.

(30 marks)

5. [a] The project was to design, build, and test 20 high-load capacity and high-pressure hydraulic cylinders for a customer in Brazil. Each cylinder was priced at RM200,000 and the total project revenue was RM4 Millions. The material cost was mainly the special steel cost used in building the cylinders. Due to a large demand for steel from China, steel prices skyrocketed, and material costs increased by 80% for each cylinder and this unexpected cost increase in steel has lowered the project margins from 20% to 5%.

Hence, a meeting between the project team and upper management was necessary to be held to discuss about the steel price hike issue and solutions to resolve the issue.

If you were a project manager for this project,

(i) Discuss whether the issue of the unexpected increase in steel price is critical, and whether it must be reported to the customer.

(10 marks)

(ii) Propose ONE (1) feasible solution to resolve the issue by considering critical factors that influence the decision and implementation of the solution.

(20 marks)

(iii) Based on the above scenario, discuss ONE (1) lesson that can be learnt to avoid the unexpected rise in material costs during the execution of a project.

(20 marks)

- [b] Discuss
 - (i) how can project managers effectively integrate TWO (2) ethical values into project monitoring and evaluation.
 - (ii) how these ethical values affect the project success outcomes.

(50 marks)

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