



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2016/2017**

COURSE NAME : PROJECT MANAGEMENT
COURSE CODE : BPA 31803
PROGRAMME CODE : BPA / BPB / BPP
EXAMINATION DATE : JUNE 2017
DURATION : 3 HOURS
INSTRUCTION : ANSWER **ALL** QUESTIONS

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THIS QUESTION PAPER CONSISTS OF **FIVE (5)** PAGES

- Q1**
- (a) Explain the needs of accurate estimates for effective project management. (2 marks)
 - (b) State **THREE (3)** major types of cost and determine which costs are controllable by the project manager. (6 marks)
 - (c) Calculate the direct cost of labor for a project team member using the data from **Table Q1**.

Table Q1: Data for direct labour calculation

| No. | Description | Value |
|-----|-----------------------|-------|
| 1 | Hourly rate (RM/hour) | 40.00 |
| 2 | Hours needed (hours) | 90 |
| 3 | Overhead rate (%) | 40 |

(5 marks)

- Q2**
- (a) Distinguish between the WBS and project network. (4 marks)
 - (b) Illustrate the relationship between WBS and project networks. (4 marks)
 - (c) Explain the importance of slack to the project manager. (4 marks)
 - (d) State **TWO (2)** reasons for the use of lags in developing project networks. (4 marks)
 - (e) The activity time estimates and their dependencies for a market research project of Joy Park are shown in **Figure Q2** and **Table Q2**.
 - (i) Compute the forward pass, backward pass and the activity slack. (6 marks)
 - (ii) Identify the critical path. (2 marks)
 - (iii) Create a Gantt chart for the project. (8 marks)

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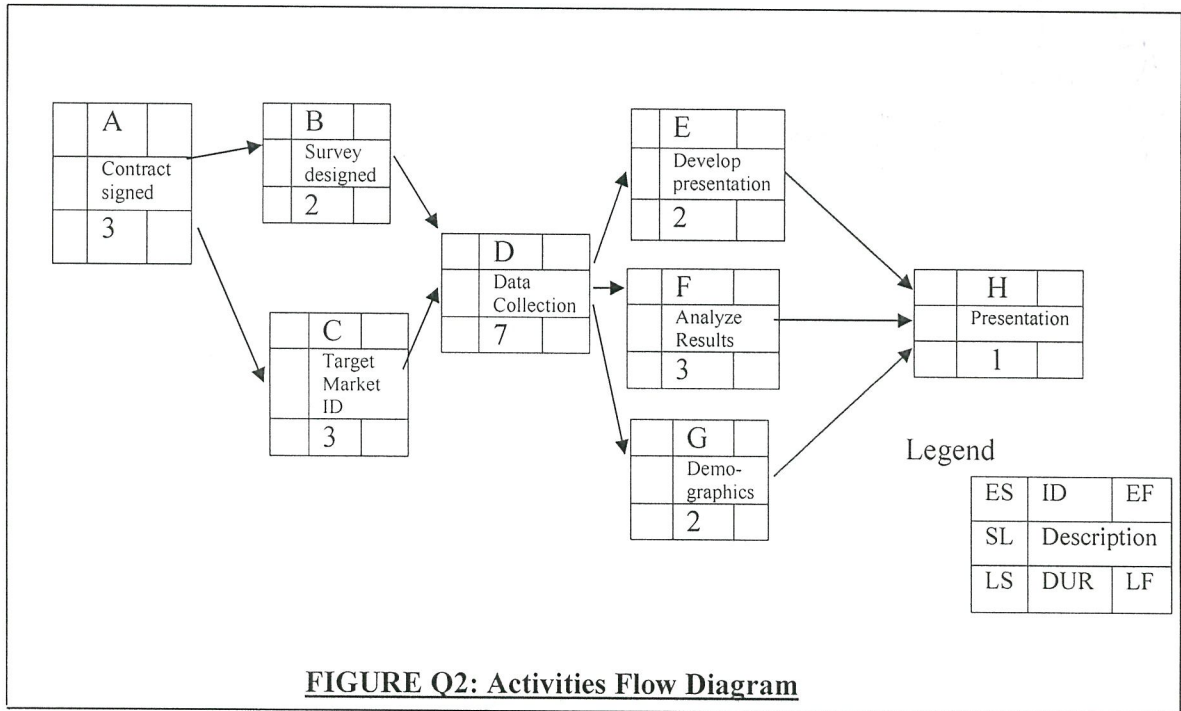


TABLE Q2: Chart for Q2

| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|---|----------------------|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| A | Contract sign | | | | | | | | | | | | | | | | | | | |
| B | Survey design | | | | | | | | | | | | | | | | | | | |
| C | Target market ID | | | | | | | | | | | | | | | | | | | |
| D | Data collection | | | | | | | | | | | | | | | | | | | |
| E | Develop presentation | | | | | | | | | | | | | | | | | | | |
| F | Analyze results | | | | | | | | | | | | | | | | | | | |
| G | Demographics | | | | | | | | | | | | | | | | | | | |
| H | Presentation | | | | | | | | | | | | | | | | | | | |

- Q3**
- (a) State **FIVE (5)** common reasons for crashing a project. (5 marks)
 - (b) Explain why the use of scheduling overtime is popularly use for getting projects back on schedule. (3 marks)
 - (c) Explain how it is possible to shorten the critical path and save money. (2 marks)

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- (d) Use the information contained below to compress one time unit per move using the least cost method. Reduce the schedule until you reach the crash point of the network is tabulated in **Table Q3**.

Table Q3

| Activity | Predecessor | Crash Cost (Slope) | Maximum Crash Time | Normal Time | Normal Cost |
|----------|-------------|--------------------|--------------------|-------------|-------------|
| A | None | 0 | 0 | 3 | 150 |
| B | A | 100 | 1 | 4 | 200 |
| C | A | 60 | 1 | 3 | 250 |
| D | B,C | 40 | 1 | 4 | 200 |
| E | C | 0 | 0 | 2 | 250 |
| F | B | 30 | 2 | 3 | 200 |
| G | F | 20 | 1 | 2 | 250 |
| H | D,E | 60 | 2 | 4 | 300 |
| I | G,H | 200 | 1 | 2 | 200 |

- (i) For each move identify what activity(s) was crashed. (2 marks)
- (ii) Compute the adjusted total cost. (3 marks)
- (iii) If the indirect cost for each duration are:
 RM1,500 for 17 weeks,
 RM1,450 for 16 weeks.
 RM1,400 for 15 weeks.
 RM1,350 for 14 weeks.
 RM1,300 for 13 weeks.
 RM1,250 for 12 weeks.
 RM1,200 for 11 weeks.
 RM1,150 for 10 weeks.

Determine the optimum cost-time schedule for the project.

(20 marks)

- Q4** (a) Project Manager conducts a project evaluation meeting with all the project team members to review the project performance, problems faced, issues that cropped up in the project and conflicts.

Discuss **FIVE (5)** topics normally discussed by Project Manager in post evaluation.

(5 marks)

- (b) In month 9 the following project information is available: actual cost is RM2,000.00, earned value is RM2,100.00, and planned cost is RM2,400.00.

Compute the schedule variance (SV) and cost variance (CV) for the project.

(5 marks)



- (c) On day 51 a project has an earned value of RM600.00, an actual cost of RM650.00, and a planned cost of RM560.00.
- (i) Compute the variance (SV), cost variance (CV), and cost performance index (CPI) for the project. (5 marks)
- (ii) Explain your assessment of the project on day 51. (5 marks)

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- END OF QUESTIONS -