



**UTHM**

Universiti Tun Hussein Onn Malaysia

**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION**

**SEMESTER I**

**SESI 2016/2017**

**TERBUKA**

COURSE NAME : CONSTRUCTION PROJECT  
MANAGEMENT

COURSE CODE : BPD 23603

PROGRAMME CODE : BPC

EXAMINATION DATE : DECEMBER 2016 / JANUARY 2017

DURATION : 3 HOURS

INSTRUCTION : ANSWER ALL QUESTIONS

THIS QUESTION PAPER CONSISTS OF **FOUR (4)** PAGES

Q1 Table Q1 shows project activities for a single storey house.

Table Q1: Project Activities

Activities	Duration (Day)	Predecessor
A	4	-
B	5	A
C	5	B
D	4	C
E	3	A
F	6	C, E
G	8	E
H	7	F, G

- (a) Sketch a Precedence Network Diagram based on Table Q1. (16 marks)
- (b) Based on Precedence Network Diagram in Q1(a):
  - (i) Define the critical path. (2 marks)
  - (ii) Calculate the total duration of this project. (2 marks)



Q2 A project audit provides an opportunity to uncover the issues, concerns and challenges encountered in the execution of a project. It affords the project manager, project sponsor and project team an interim view of what has gone well and what needs to be improved with the project to successfully complete it.

- (a) Describe TWO (2) types of project audit. (6 marks)
- (b) Outline the post project evaluation processes in a project audit. (14 marks)

**Q3** (a) Differentiate between the bottom-up and top-down approaches in project budgeting process. (10 marks)

(b) **Table Q3** illustrates project performance at the end of week 8.

**Table Q3: Project Performance at the End of Week 8**

Activities	Planned Cost (RM)	Actual Cost (RM)	Weeks		Percentage of Completion (%)
			Start	Finish	
A	4,000	4,000	1	1	100
B	7,000	7,949	1	2	100
C	8,000	8,010	2	3	95
D	6,550	7,030	3	4	80
E	12,000	10,050	4	7	75
F	8,400	9,000	7	8	70
G	3,000	2,000	8	8	30
H	7,500	-	8	10	-
I	2,300	-	9	9	-
J	6,000	-	9	10	-
K	1,500	-	10	10	-

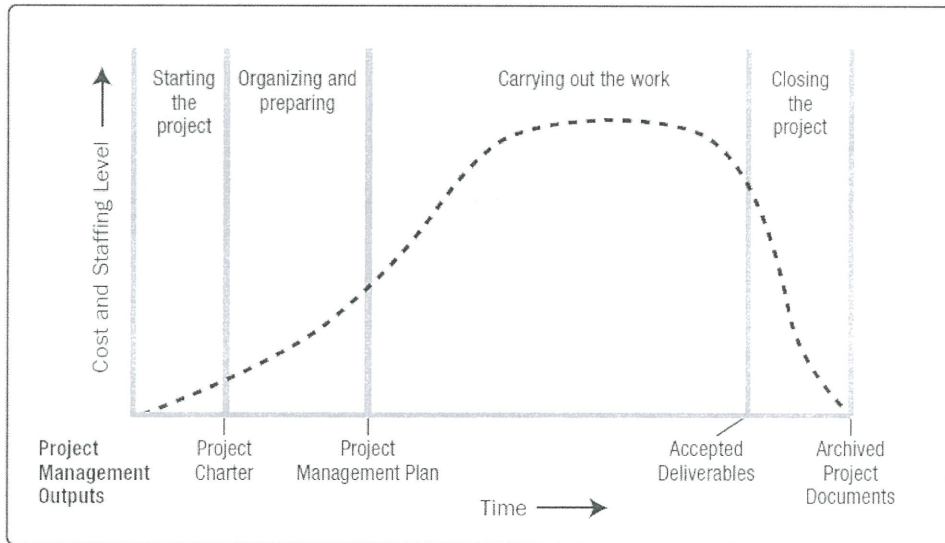
Based on **Table Q3**:

(i) Calculate Schedule Performance Index (SPI) and Cost Performance Index (CPI) at the end of week 8. (10 marks)

(ii) Sketch S-curve for the project. (14 marks)



- Q4 (a) Describe with aid of sketches, **TWO (2)** resource management methods in a project management. (10 marks)
- (b) **Figure Q4** shows a typical cost and staffing level across generic project life cycle structure.



**Figure Q4: Cost and Staffing Level Across Project Life Cycle**

Outline how the cost and staffing level across project life cycle can greatly influence the performance of a project.

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(16 marks)

**-END OF QUESTIONS-**