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UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER I
SESSION 2014/2015**

COURSE NAME : CONSTRUCTION PROJECT
MANAGEMENT
COURSE CODE : BPD 23603
PROGRAMME : 2 BPC
EXAMINATION DATE : DECEMBER 2014/JANUARY 2015
DURATION : 3 HOURS
INSTRUCTION : ANSWER ALL QUESTIONS

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

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- Q1** Site development activities may take place during planning and design phases which cover before completion of construction contract documents. One of the main activities is constructing access roads.

Explain **FIVE (5)** others main activities of site development.

(15 marks)

- Q2** Renovation is the process of improving a broken, damaged or outdated structure. Consider a renovation project with the **Table Q2** information as below.

Table Q2: Precedence Diagram for Renovation Project

Activity	Duration (weeks)	Predecessors
A	3	-
B	5	A
C	7	A
D	3	B, C
E	5	B
F	4	D
G	2	C
H	5	E, F, G

- (a) Calculate total of duration to complete the project.

(15 marks)

- (b) Demonstrate the critical path on the network.

(5 marks)

Q3 Table Q3 shows Resources-Constrained Schedule for housing project.

Table Q3: Resources-Constrained Schedule

Activity	Precedence	Resource	Duration (Days)	ES	LF	TS
1	-	2R	2	0	2	0
2	1	2R	6	2	10	2
3	1	2R	4	2	6	0
4	1	1R	2	2	10	6
5	3	1R	2	6	10	2
6	3	1R	4	6	10	0
7	2,4,5,6	1R	2	10	12	0

(a) Prepare a resource profile with:

(i) Gantt Chart

(5 marks)

(ii) Resource Requirement Graph

(5 marks)

(b) Analyse **FIVE (5)** procedures for leveling resource.

(10 marks)

- Q4** Cost analysis will help reduce guesswork in measuring performance and forecasting the project. Based on **Table Q4** as shown below:

Table Q4: Budgeted Costs for Renovation Project

Activities	Duration (weeks)									
	5	10	15	20	25	30	35	40	45	
Architectural Design	4	4	2							Cost (RM'000)
Structural Design	3	6	12	8						
Installation			4	12	24	6				
Testing					2	6	6	4	2	

- (a) Calculate monthly budget and monthly cumulative budgets for the project. (10 marks)
- (b) Analyse the project S-curve to identify the relationship between the project budget baseline and project schedule. (10 marks)
- Q5** Project termination consists of several activities. It is a process to provide the acceptance of the project including project audit work.
- (a) Prepare a project audit cycle. (5 marks)
- (b) Compare **FOUR (4)** types of project termination with examples. (20 marks)

- END OF QUESTION -