

## UNIVERSITI TUN HUSSEIN ONN MALAYSIA

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

COURSE NAME : PROJECT MANAGEMENT

COURSE CODE : BWB 21602

PROGRAMME : 2 BWQ

EXAMINATION DATE : DECEMBER 2014 / JANUARY 2015

DURATION

: 2 HOURS

INSTRUCTION : ANSWER ALL QUESTIONS

THIS EXAMINATION PAPER CONSISTS OF FOUR (4) PAGES

Q1 Calculate the Earliest Start (ES), Earliest Finish (EF), Latest Start(LS) and Latest Finish (LF) times and the slack for each activity in the figure Q1 and identify the critical path for the project. Can the project be completed in 40 weeks?

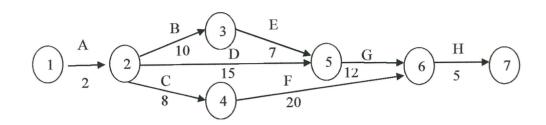


Figure Q1

(25 marks)

Q2 (a) Describe the project budgeting process?

(5 marks)

(b) How cost variance is calculated? What does it mean when it's positive or negative?

(5 marks)

(c) When evaluating a work package with a negative cost variance, on what two types of activities should you focus? Why?

(5 marks)

(d) What are progress reports? What should they include? How are they different from a final report?

(10 marks)

Q3 (a) Differentiate between Resources-Leveling and Resources-Limited Scheduling?

(5 marks)

(b) Using Figure Q3(b), perform resources leveling. Assume that each task can be performed independently of the other task.

	Task 1 (2 workers)				1 1 1	! !	1 ! !	1	† 	 	 
	Task 2 (1 worker)					1 1 1	: : :	1 1 5	t t t		1 1 1
	Task	3 (3 w	orker	s)	! ! !	1 1 1	1	! !	1 1 1 1		1
		: : :	t I	Task	4 (2 v	vorke	-	! ! !	1 1 1	1 1 1	1
		1 1 1	1 1 1	1 1 1	1 1 1	Task	5 (1 v	vorke	)	! ! !	! ! !
		1 1 1	1 1 1 1	1 1 1 1	1 1 1	1	I I I	Task	6 (3 w	orker	s)
	_				_		-		0	10	
Day	1	2	3	4	5	6	7	8	9	10	
Workers	6	6	6	4	2	3	3	4	3	3	

Figure Q3(b)

(10 marks)

- (c) (i) Using answer Q3(b) perform resources-limited-scheduling. Assume that you have only three (3) workers available at any given time.
  - (ii) What is the new completion date for the project?

(10 marks)

Q4 (a) Refer to the Table Q4(a), what is the cumulative budgeted cost at the end of week 6?

Table Q4 (a)

		Weeks									
	TBC	1	2	3	4	5	6	7	8	9	10
Task 1	30	10	15	5							
Task 2	70		10	10	10	20	10	10			
Task 3	40					5	5	25	5		
Task 4	30								5	5	20
Total	170	10	25	15	10	25	15	35	10	5	20
Cumulative											

(Amounts are in thousands of dollars)

(5 marks)

- (b) (i) Table Q4(b) is a table of actual costs. What is the cumulative actual cost at the end of week 6?
  - (ii) Determine whether there is a cost overrun or underrun? What is causing it?

Table Q4(b)

	2.00								
	Weeks								
	1	2	3	4	5	6			
Task 1	10	16	8						
Task 2		10	10	12	24	12			
Task 3					5	5			
Task 4									
Total	10	26	18	12	29	17			
Cumulative									

(Amounts are in thousands of dollars)

(5 marks)

(c) Table Q4(c) is a table of the cumulative percentages of work completed by the end of week 6. What is the cumulative earned value of the project at the end of week 6?

Table Q4(c)

		Weeks								
	1	2	3	4	5	6				
Task 1	30	80	100							
Task 2		10	25	35	55	65				
Task 3					10	20				
Task 4										

(10 marks)

- (d) (i) What is the CPI at the end of week 6?
  - (ii) What is the indicator mean?

(5 marks)

- END OF QUESTION -