Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
SEMESTER I
SESSION 2019/2020

COURSE NAME	:	PROJECT MANAGEMENT
COURSE CODE	:	BIT 30403
PROGRAMME CODE	:	BIT
EXAMINATION DATE	:	DECEMBER 2019 / JANUARY 2020
DURATION	:	3 HOURS
INSTRUCTION	:	A) ANSWER **ALL** QUESTIONS
		B) PLEASE WRITE YOUR ANSWERS IN THIS QUESTION BOOKLET

THIS QUESTION PAPER CONSISTS OF **SEVENTEEN (17)** PAGES

Instruction: Circle the BEST answer for the following questions.

Q1 During your assignment as project manager you add a new member to your project team. This new team member was recently hired from a competitor and offers to share a substantial amount of proprietary information from his previous company. This information could put you and your team in a very strong position for future business. You are aware of a non-compete clause in the new hire's condition of employment. You should:

A. Accept the information and agree to keep it confidential between you and the new hire.
B. Review the information and only accept only what may have a direct impact on the project's financial status.
C. Ignore the offer to share and move forward with the project.
D. Review the condition of employment with the new hire and advise her to reconsider the offer.

(2 marks)

Q2 Two of your project team members approach you with a conflict that they are having with each other over the technical approach to their work. One of the two people is very aggressive, and tries to get you to make a decision quickly. The other team member is quiet, and seems less willing to talk about the issue. The conflict is starting to cause delays, and you need to reach a decision quickly. What's the **BEST** approach to solving this conflict?

A. Tell the team members that they need to work this out quickly, because otherwise the project could face delays.
B. Since it's a technical problem, tell the team members that they should take it to the functional manager.
C. Confront the issue, even though one team member is hesitant.
D. Escalate the issue to your manager.

(2 marks)

Q3 All the following statements relating to communication management are correct **EXCEPT** _____.

A. communication planning involves determining the information and communication needs of the stakeholders
B. communicating is the most critical skill that a project manager should possess
C. project managers spend as more than 85% of their time communicating
D. to be effective, a Project Manager should control all communications

(2 marks)

Q4 You are managing a software engineering project. Your team is having trouble completing their object design tasks. One of your team members tells you that her friend at another company sent her a copy of their software package that will help your team meet its deadline. Without that software package, your project will probably be late. But you don't have enough money in the budget to purchase it. What is the **BEST** way to handle this situation?

A. Tell the team member not to use the software, and accept that the project will be late.
B. Use the software so that your project comes in on time.
C. Purchase the software so that you have a licensed copy.
D. Tell the team member that you need to maintain plausible deniability, so she should just do what's necessary and not tell you about it.

(2 marks)

Q5 Nurul Izzah is a project manager on a software project. About halfway through development, her team found that they had not estimated enough time for some of the technical work they needed to do. She requested that the new work be added to the scope statement and that the time to do the work be added to the schedule. The change control board approved her change. What's her next step?

A. Update the scope and schedule baselines to reflect the approved change.
B. Start doing the work.
C. Gather performance metrics on the team's work so far.
D. Perform Quality Assurance.

(2 marks)

Q6 You are currently performing the Select Sellers process. You are considering two bids from companies on your qualified sellers list. Your project is on a tight budget, and you have been instructed by senior management to consider the cost over any other criteria. You used the company that submitted the lower bid on a previous project, and you were not happy with their work. The company that submitted the higher bid has a reputation for treating their clients well, flying project managers' first class and giving them accommodations in five-star hotels. What is the **BEST** way to handle this situation?

A. Select the company with the lowest bid.
B. Give the manager at the company with the higher bid information that will allow him to tailor his bid so that it better meets your needs.
C. Rewrite the Request for Proposal (RFP) so that the company with the lowest bid is excluded.
D. Select the company with the higher bid.

(2 marks)

Q7 When you need to get staff from the manager of the QA department, he suggests a few test engineers with performance problems for your team. Which is the **BEST** response to this situation?

A. Stop talking to the QA manager.

B. Call a meeting with the QA manager to try to figure out why he suggested those candidates and how the two of you can work together to find team members with suitable skills and interests for your team.

C. Tell the QA manager that the staffing problems are really no big deal, and you're sure that the two of you can eventually figure out the right answer together.

D. Tell the manager that you know which team members you want for your team and he needs to give them to you.

(2 marks)

Q8 Given the network diagram in Figure **Q8**, what is the Late Finish (LF) of activity F?

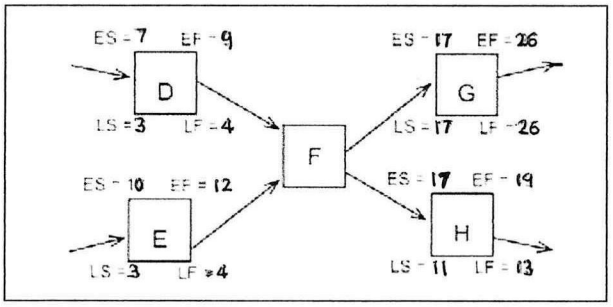

FIGURE Q8

A. 10

B. 11

C. 16

D. 17

(2 marks)

Q9 You are managing a project with a total budget of RM450,000. According to the schedule, your team should have completed 45% of the work by now. But at the latest status meeting, the team only reported that 40% of the work has actually been completed. The team has spent RM165,000 on the project so far. How would you **BEST** describe this project?

A. The project is ahead of schedule and within its budget

B. The project is behind schedule and within its budget

C. The project is ahead of schedule and over its budget

D. The project is behind schedule and over its budget

(2 marks)

Q10 You are managing a software engineering project, when two team members come to you with a conflict. The lead developer has identified an important project risk: you have a subcontractor that may not deliver on time. Another developer doesn't believe that the risk is likely to happen; however, you consult the lessons learned from previous projects and discover that subcontractors failed to deliver their work on two previous projects. The lead developer suggests that you have two team members take three weeks to research the component being built by the subcontractor, and come up some initial work that you can fall back on in case that subcontractor does not deliver. You decide to follow the lead developer's advice over the objections of the other team member. Which of the following **BEST** describes this scenario?

A. Transferrence
B. Mitigation
C. Avoidance
D. Acceptance

(2 marks)

Q11 Questions **Q11(a)-Q11(i)** are based on **Table 1**.

Table 1: List of activity in e-inventory project

Activity	Predecessor	Optimistic Estimates (Days)	Most Likely Estimates (Days)	Pessimistic Estimates (Days)	No. of Staff	Cost per day (RM)
A	None	1	2	4	2	3000
B	A	3	5	8	4	4000
C	B	2	4	5	8	4000
D	B	2	3	6	6	2000
E	B	1	1	1	4	1000
F	C,D	2	4	6	2	2000
G	D,E	2	3	4	6	2000
H	F,G	1	2	5	8	1000
I	E,G	4	5	9	2	1000
J	H,I	0.5	1	3	1	4000

(a) Determine expected duration in day for each activity using Program Evaluation and Review Technique (PERT).

(5 marks)

Answer:

Activity	Expected Duration (Days)
A	
B	
C	
D	
E	
F	
G	
H	
I	
J	

(b) Develop a network diagram using Activity on the Node (AON) technique based on the information in the **Table 1** and the answer in **Q11(a).**

(6 marks)

Answer:

(c) Determine the critical path.

(2 marks)

Answer:

(d) Define the shortest possible time needed to complete this project.

(1 marks)

Answer:

(e) Answer **Q11(e)(i)-Q11(e)(iv)** based on the answer in **Q11(b)**. Assume the start date of the project is 19 August 2019 and every day is working days. Determine the early start date, late start date, early finish date, late finish date, slack/float for each of the following tasks.

(i) **Task C**

(5 marks)

Answer:

Task	Early Start Date	Late Start Date	Early Finish Date	Late Finish Date	Slack/Float
C					

(ii) **Task G**

(5 marks)

Answer:

Task	Early Start Date	Late Start Date	Early Finish Date	Late Finish Date	Slack/Float
G					

(iii) **Task H**

(5 marks)

Answer:

Task	Early Start Date	Late Start Date	Early Finish Date	Late Finish Date	Slack/Float
H					

(iv) **Task J**

(5 marks)

Answer:

Task	Early Start Date	Late Start Date	Early Finish Date	Late Finish Date	Slack/Float
J					

(f) Complete the summary of Project Performance Metrics in **Table 3** by using information given in **Table 1** and **Table 2.**

Table 2: Field Report at e-inventory of Day 10

Task	Actual % Complete	Incurred Cost (RM)
Start	-	-
A	100	6000
B	100	3000
C	40	5000
D	50	2000
E	30	500
F	10	500
G	0	0
H	0	0
I	0	0
J	0	0
End	-	-

(15 marks)

Answer:

Table 3: Project Performance Metrics

Task	Earned Value	Cost Variance	Schedule Variance	Cost Performance Index	Schedule Performance Index
A	9,000	3,000	0	1.5	0
B					
C					
D					
E					
Cumulative					

(g) Illustrate a histogram of resource loading for staff usage based on the information in **Table 1** and the answer in **Q11(b)**.

(5 marks)

Answer:

(h) Based on the answer in **Q11(g),** propose a histogram of resource levelling for staff usage.

(5 marks)

Answer:

(i) Based on the answer in **Q11(h),** determine the number of resources required through the project.

(2 marks)

Answer:

Q12 Questions **Q12(a)-Q12(c)** are based on **Table 4.**

Table 4: Costing

Items	Cost (RM)
Cost to build demo system	RM 100,000.00
Probability of customer accepting final product	
• With demo system	70%
• Without demo system	40%
Cost of rework of final product	
• With demo system	RM 20,000.00
• Without demo system	RM 200,000.00

(a) Construct a quantitative risk analysis by using a decision tree and Expected Monetary Value (EMV) technique.

(6 marks)

Answer:

(b) What can be concluded from the answer in **Q12(a)**?

(3 marks)

Answer:

(c) What can you suggest to the top management on cost of the demo system development using the answer in **Q12(b)**?

(2 marks)

Answer:

Q13 Jebat Saiba Consultant Sdn Bhd need an equipment for a Funiture project that has a purchase price of RM 12,000.00. Assume it also had a daily operational cost of RM 400.00. Suppose you could lease the same piece of equipment for RM 800.00 per day, including the operational costs.

(a) Set up Make-or-Buy Analysis to determine whether Jebat Saiba Consultant Sdn Bhd should make the equipment inside the organization or buy it from someone else.

(4 marks)

Answer:

(b) What happen if Jebat Saiba Consultant Sdn Bhd needs the equipment for "less than" and "more than" 30 days?

(4 marks)

Answer:

-END OF QUESTIONS-

FINAL EXAMINATION

SEMESTER/SESSION : SEM I/2019/2020
COURSE NAME : PROJECT MANAGEMENT

PROGRAM: 3 BIT
COURSE CODE: BIT 30403

January

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

February

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

March

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

April

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

May

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

June

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

July

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

August

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

September

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

October

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

November

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

FIGURE Q11