

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION SEMESTER II **SESSION 2018/2019**

COURSE NAME

: PROJECT MANAGEMENT

COURSE CODE

: BIT 30403

PROGRAMME CODE : BIT

EXAMINATION DATE : JUNE / JULY 2019

DURATION

: 3 HOURS

INSTRUCTION

: A) ANSWER ALL QUESTIONS

B) PLEASE WRITE YOUR ANSWERS

IN THIS QUESTION BOOKLET

THIS QUESTION PAPER CONSISTS OF FIFTEEN (15) PAGES UKA

CONFIDENTIAL

Instruction: Choose the BEST answer for the following questions.

| $\mathbf{Q}1$ | You and several of your key team leader are really struggling with estimating the |
|---------------|---|
| | overall cost of the project. The most probable cause for this estimating difficulty |
| | can be contributed to |

- A. initial poor scope definition.
- B. lack of required resources.
- C. insufficient funds.
- D. problems with the overall schedule.

(1.5 marks)

- Q2 Which factors should you consider when adding a resource to your project team?
 - A. The impact the resource will have on the cost of the system
 - B. The impact the resource will have on the duration of the system
 - C. The impact the resource will have on the histogram.
 - D. Whether the resource is available, and if it will have impact on the cost and duration of the system

(1.5 marks)

- Q3 Your technical team leader who you highly respect has identified a design error that will mostly likely interfere with the meeting documented technical performance objectives. The best action to take is to
 - A. decrease the performance value to equal the assessed value.
 - B. reduce the overall technical complexity of the project.
 - C. increase the specified value to set a new performance goal.
 - D. develop alternative solutions to the problem.

(1.5 marks)

- As the project manager you will be required to report periodically to upper management on the progress of the project. What item below will you require to report your progress as the basis for the budget, schedule, resource allocation and scope definition?
 - A. Precedence Diagramming Method (PDM).
 - B. Project character.
 - C. Work Breakdown Structure (WBS).
 - D. Project management plan.

TERBILKA

CONFIDENTIAL

- Q5 Brandi 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?
 - Update the scope and schedule baselines to reflect the approved change. A.
 - Start doing the work. B.
 - C. Gather performance metrics on the team's work so far.
 - D. Perform Quality Assurance.

- One way to shorten your project schedule is to assign three developers to each Q6activity in the project design phase instead of two. Although you are considering this approach, your design phase project team would double in size as a result. This approach tends to –
 - reduce productivity. A.
 - increase productivity. B.
 - C. reduce the need for quality auditing, thereby reducing overall resource
 - D. improve production proportionately more than the increase in resources. (1.5 marks)

- **Q**7 On his first project assignment as the project manager, the project manager encounters disagreements among highly technical team members. How would the project manager **BEST** deal with the conflict?
 - He should listen to the differences of opinions, determine what the best A. choice and implement that choice is.
 - B. He should postpone further discussions, meet with each individual, and determine the best approach.
 - He should listen to the differences of opinions, encourage logical C. discussions, and facilitate an agreement.
 - He should help the team focus on agreeable aspects of their opinions and D. build unity by using relaxation techniques and common focus team building.

(1.5 marks)



- You are the project manager for a railroad construction project. Your sponsor has asked you for a forecast for the cost of project completion. The project has a total budget of RM 80,000 and CPI of 0.95. The project has spent RM 25,000 of its budget so far. How much more money do you plan to spend on the project?
 - A. RM 59,210.
 - B. RM 80,000.
 - C. RM 84,210.
 - D. RM 109,210.

- Your lead software engineer estimates that a work package will most likely require 50 weeks to complete. It could be completed in 40 weeks if all goes well, but it could take 180 weeks in the worst case. What is the PERT estimate for he expected duration of the work package?
 - A. 65 weeks.
 - B. 70 weeks.
 - C. 75 weeks.
 - D. 80 weeks.

(1.5 marks)

- Your project has a virtual team. Half of your team members are located in another country, where they are working for a subcontractor. You want to promote the top performing foreign team member to a leadership position, but you are told by the other team members that women are not allowed to hold positions of authority. When you bring it up with their manager, you are informed that it is the subcontractor's policy not to promote women, and that in their country, it is culturally considered offensive for a man to take orders from a woman. What is the **BEST** way to respond to this situation?
 - A. Inform the subcontractor that they must adopt a non-discriminatory policy or you will be forced to terminate the contract and find a subcontractor that does not discriminate against women.
 - B. Do nothing, because discrimination against women is a cultural norm in the subcontractor's country.
 - C. Request that the team attend sensitivity training.
 - D. Promote another team member, but find a different way to reward the woman for her work.

(1.5 marks)
TERBUKA
CONFIDENTIAL

- Q11 The most common communication problem during negotiations is that
 - A. one side may try to confuse the other side.
 - B. one side may be too busy thinking about what to say next to hear what is being said.
 - C. each side may misinterpret what the other side has said.
 - D. each side may give upon the other side.

- Q12 Activity A has a duration of 3 days and begins on the morning of Monday the 4th. The successor activity, B, has a finish-to-start relationship with A. The finish-to-start relationship has 3 days of lag, and activity B has a duration of 4 days. Sunday is a no workday. What can be determined from these data?
 - A. Calendar time between the start of A to the finish of B is 7 days.
 - B. Calendar time between the start of A to the finish of B is 11 days.
 - C. Calendar time between the start of A to the finish of B is 12 days.
 - D. Calendar time between the start of A to the finish of B is 14 days.

(1.5 marks)

- 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.

(1.5 marks)



- Q14 Your project files need to be sent via overnight mail to your company's central office. If the files do not arrive tomorrow, your company will not be able to deliver the project on time and you will lose an important client. The deadline cannot be negotiated. The team worked right up to the last minute in order to give you the files. Due to a traffic jam, you are running late and the overnight delivery company will close in five minutes. You can only make it if you drive over the speed limit. Which one of the following is correct?
 - A. You must drive over the speed limit so that you can save the client relationship.
 - B. You must stay within the speed limit, even if you lose the client.
 - C. You must negotiate a new deadline.
 - D. You can use the earned value metrics to show that the Schedule Performance Index (SPI) is over 1, meaning the project is not late.

- You are managing a software project. You are partway through the project, and your team has just delivered a preliminary version of part of the software. You are holding a weekly status meeting, when one of the team members points out that an important stakeholder is running into a problem with one of the features of the current software. The team member feels that there is a risk that the stakeholder will ask for a change in that feature, even though that change would be out of scope of the current release and if the stakeholder requests that change, there is a high probability that the change control board would approve the change. What is the BEST action to take next?
 - A. Mitigate the risk by asking a team member to get familiar with the feature of the software that might be changed.
 - B. Schedule a meeting with the stakeholder to discuss the risk.
 - C. Add the risk to the risk register and gather information about its probability and impact.
 - D. Add the risk to the issue log and revisit it when there is more information.

(1.5 marks)



- Q16 Based on two case studies, important decisions need to be taken by a project manager either buy products/hardware or lease the requirements. Give a decision need to be taken, advantage and disadvantage of each case.
 - (a) Case 1: The budget is limited and hardware needs to be upgraded frequently for a long running project.

 (3 marks)

Answer:

(b) Case 2: The project is long-running or the hardware will be used for multiple projects and one is certain that the same equipment will be used for a longer period like 3 years or more.

(3 marks)



Q17 (a) Compare the Project Evaluation and Review Technique (PERT) with the Critical Path Method (CPM).

(10 marks)



Q18 Answer Q18(a) – Q18(d) based on Table 1.

Table 1: Task of Planning an e-Commerce Project

| Task | Description | Duration (Working days) | Predecessor/s | No.of Staff |
|------|--------------------------|-------------------------|---------------|-------------|
| A | Requirement Analysis | 5 | - | 2 |
| В | System Design | 15 | A | 4 |
| С | Programming | 25 | В | 6 |
| D | Telecoms | 15 | В | 6 |
| E | Hardware Installation | 30 | В | 4 |
| F | Integration | 10 | C, D | 2 |
| G | G System 10 | 10 | E,F | 6 |
| Н | Training/ Support | 5 | G | 4 |
| I | Handover and Go-Live | 5 | Н | 2 |

(a) Determine the critical path of the project using Network Diagram
(6 marks)

Answer:



(b) Assume the start date of the project is 19 May 2018 and every day is working days. Determine the early start date, late start date, early finish date, late finish date, slack/float for each task. Refer to **Figure Q18**.

(22.5 marks)

| Task | Early Start Date | Late Start Date | Early Finish Date | Late Finish Date | Slack/Float |
|------|------------------------|-----------------------|-------------------------|------------------------|-------------|
| A | | | | | |
| В | | | | | |
| C | | | | | |
| D | | | | | |
| E | | | | | |
| F | | | | | |
| G | | | | | |
| Н | | | | | |
| I | | | | | |



Q19 Answer Q19(a) – Q19(d) based on characteristics in Figure Q19.

- You are the project manager of a project to build system inventory interface.
- You are to build two interface a month for 12 months.
- Each interface is planned to cost RM 100.
- Your project is scheduled to last for 12 months.
- It is the beginning of month 10.
- You have built 20 interface and your CPI is 0.9091.

Figure Q19

(a) How is the project performing and give your reason.

(4 marks)

Answer:

(b) What is the actual cost (AC) of the project right now and prove your answer.

(4 marks)



CONFIDENTIAL

BIT 30403

(c) Assuming that the cost variance (CV) experienced so far in the project will continue, how much more money will it take to complete the project?

(4 marks)

Answer:

(d) Senior management wants to the percentage of the project that is complete. What should you report?

(3 marks)



Q20 Answer Q20(a) - Q20(b) based on Table 2.

Table 2: Summarized four projects to bid on

You are developing a revolutionary new system for the telecom industry. It is a switching product that provides voice, video and data over the same pipeline, but uses a technology that has never been tried before. The potential return on investment for this product is RM 5 billion. Your estimated development costs are RM 150 million. If you go it alone, there is a 65% chance that you will succeed. You also decide to look into developing the product with a partner that has specific experience with this new technology. With a partner, there is an 85% chance that you will succeed, but development costs in this case are RM 250 million, of which the partner is carrying RM 50 million. Because you are shouldering 80% development costs, you decide to split the Return on Investment (ROI) with 80% going to you and 20% going to the partner if the project succeeds.

(a) Draw a diagram and calculate the Expected Monetary Value (EMV).

(5 marks)



CONFIDENTIAL

BIT 30403

(b) What is the best EMV scenario from your organization's point of view?

(3 marks)

Answer:

-END OF QUESTIONS-



FINAL EXAMINATION

SEMESTER/SESSION: SEM II/2018/2019

COURSE NAME

: PROJECT MANAGEMENT

PROGRAM: 3 BIT

COURSE CODE: BIT 30403

| | | Ja | nuar | y | | |
|----|----|----|------|----|----|----|
| S | M | Т | W | Т | 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 | | |
| | | | | | | |

| | | | April | | | |
|----|----|----|-------|----|----|----|
| S | М | Т | 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 | | | | |

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

| | | 0 | ctobe | r | | |
|----|----|----|-------|----|----|----|
| S | М | 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 | | |
| 1 | | | | | | |

| | | Fe | brua | γ | | |
|----|----|----|------|----|----|----|
| S | М | Т | w | Т | F | 5 |
| | | | | | 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 | | |
| | | | | | | |

| | May | | | | | | | | | | | |
|----|-----|----|----|----|----|----|--|--|--|--|--|--|
| S | М | Т | W | Т | 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 | М | Т | 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 | М | Т | W | Т | 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 | | | | | | |
| | | | | | | | | | | | | |

| | March | | | | | | | | | | | |
|----|-------|----|----|----|----|----|--|--|--|--|--|--|
| S | М | Т | 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 | | | | | | |

| | | | June | 11 | | |
|----|----|----|------|----|----|----|
| S | М | Т | W | Т | 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 | | 1 | | | | |

| September | | | | | | |
|-----------|----|----|----|----|----|----|
| S | М | Т | W | Т | F | 5 |
| 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 | М | T | W | T | F | 5 | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 | |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 | |
| 22 | 2.3 | 24 | 25 | 26 | 27 | 28 | |
| 29 | 30 | 31 | | | | | |
| - | | - | | | - | | |

Figure Q21

