15

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
SEMESTER II
SESSION 2021/2022

COURSE NAME	:	SOFTWARE PROJECT MANAGEMENT
COURSE CODE	:	BIE 30503
PROGRAMME CODE	:	BIP
EXAMINATION DATE	:	JULY 2022
DURATION	:	3 HOURS
INSTRUCTION	:	1. ANSWER **ALL** QUESTIONS.
		2. THIS FINAL EXAMINATION IS AN **ONLINE** ASSESSMENT AND CONDUCTED VIA **CLOSED BOOK.**
		3. STUDENTS ARE **PROHIBITED** TO CONSULT THEIR OWN MATERIAL OR ANY EXTERNAL RESOURCES DURING THE EXAMINATION CONDUCTED VIA CLOSED BOOK.

THIS QUESTION PAPER CONSISTS OF **SEVEN (7)** PAGES
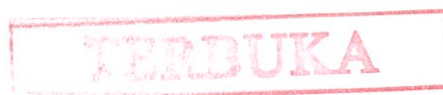
Q1   Questions **Q1(a) – Q1(c)** are based on **Table Q1**.

      (a)   Draw a network diagram. Show the earliest and the latest completion time for each node.

                                                    (15 marks)

      (b)   Determine the earliest time in weeks to complete the project. Justify your answer.

                                                    (5 marks)

      (c)   Draw a histogram diagram.

                                                    (10 marks)

Q2   Determine the best communication methods classification and media for the following scenario.

      (a)   You want the client to be able to look at the project details whenever they want.

                                                    (4 marks)

      (b)   You were providing senior executives with an update of the progress of a project.

                                                    (4 marks)

      (c)   Stakeholders can use the search function to find the information they need.

                                                    (4 marks)

      (d)   You were trying to assess commitment of project stakeholders.

                                                    (4 marks)

      (e)   You require an update from a contractor or supplier.

                                                    (4 marks)

Q3   List **FIVE (5)** possible reasons for a company to outsource.

(5 marks)

Q4   Calculate Expected Monetary Value (EVM) for the scenario in **Figure Q4**.

(10 marks)

Q5   Answer **Q5(a)** and **Q5(b)** based on the case study in **Figure Q5**. Use the factors in **Table Q5(a)** and **Table Q5(b)**.

(a)   Calculate the software size in terms of use case points. Please show your works and state your assumptions.

(20 marks)

(b)   Calculate the duration in week for the project. Assuming that each use case point will take 28 hours and there will be two developers that will spend 30 hours per week for the development.

(15 marks)

- END OF QUESTIONS -

FINAL EXAMINATION

SEMESTER/SESSION	:	SEMESTER II 2021/2022	PROGRAMME CODE	:	BIP
COURSE NAME	:	SOFTWARE PROJECT MANAGEMENT	COURSE CODE	:	BIE 30503

Table Q1: List of activities in a project

Activity	Weeks	Number of people
1-2	2	3
1-3	4	2
1-4	5	4
2-5	6	5
3-5	6	3
4-6	7	4
5-6	5	2

You're in charge of an IT project and have discovered a potential danger relating to client demand. You did, however, notice an opportunity to raise the selling price. Risk, on the other hand, is a 10% chance, and if it occurs, you will lose RM5000. The chance of opportunity, on the other hand, is 15%, and if it occurs, you will earn RM30,000.

Figure Q4

FINAL EXAMINATION

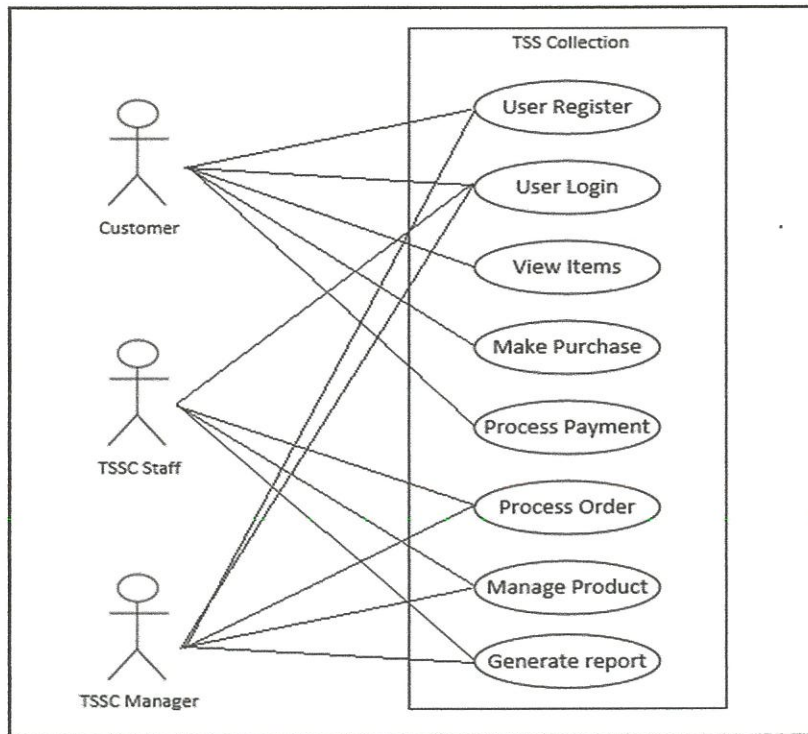|				
SEMESTER/SESSION	: SEMESTER II 2021/2022	PROGRAMME CODE	:	BIP
COURSE NAME	: SOFTWARE PROJECT MANAGEMENT	COURSE CODE	:	BIE 30503

Everyone using the system will be able to view the products sold by TSSC. Stock and delivery updates are made by the staff in charge of the day to update on the list of delivered dresses and new stocks update. The delivery function is to notify registered customers that their items purchased have been delivered and will monitored by staff to keep in track of the items in case customers have not received the items.

This system will be used by TSSC manager, TSSC staffs and customers. TSSC manager will be able to generate report on highest dress sale and peak hour which is visited by customers. A statistic based on age, gender and dresses mostly viewed can be also generated. TSSC staffs will be able to update product details and delivery of products. Customers will be able to view products available, order and pay using this system. The main functions are described in the following use case diagram.

TSSC Use Case Diagram
Figure Q5

FINAL EXAMINATION

SEMESTER/SESSION	: SEMESTER II 2021/2022	PROGRAMME CODE	: BIP
COURSE NAME	: SOFTWARE PROJECT MANAGEMENT	COURSE CODE	: BIE 30503

Table Q5(a): Technical Complexity Factor (TCF)

Factor	Description	Weight
T1	Distributed system	2
T2	Response time/ performance objectives	1
T3	End-user efficiency	1
T4	Internal processing complexity	1
T5	Code reusability	1
T6	Easy to install	0.5
T7	Easy to use	0.5
T8	Portability to other platforms	2
T9	System maintenance	1
T10	Concurrent/parallel processing	1
T11	Security features	1
T12	Access for third parties	1
T13	End user training	1

Table Q5(b): Environmental Complexity Factor (ECF)

Factor	Description	Weight
E1	Familiarity with development process used	1.5
E2	Application experience	0.5
E3	Object-oriented experience of team	1
E4	Lead analyst capability	0.5
E5	Motivation of the team	1
E6	Stability of requirements	2
E7	Part-time staff	-1
E8	Difficult programming language	-1

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