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FINAL EXAMINATION
SEPTEMBER 2018 SEMESTER

SUBJECT CODE	:	CQR607
SUBJECT NAME	:	MANAGING PROJECT QUALITY AND RISKS
LEVEL	:	MASTER'S DEGREE
TIME / DURATION	:	2.00 PM - 5.00 PM (3 HOURS)
DATE	:	5 JANUARY 2019

INSTRUCTIONS TO CANDIDATES

1. Read the instructions given in the question paper CAREFULLY.

2. This question paper is printed on both sides of the paper.

3. This question paper consists of TWO (2) sections, Section A and B.

4. Answer ALL questions in Section A and Section B.

5. Write your answers in the answer booklet provided.

6. Answer all questions in English.

THERE ARE FOUR (4) PAGES OF QUESTIONS, EXCLUDING THIS PAGE.

SECTION A (Total: 40 marks)

INSTRUCTION: Answer ALL questions.

Please use the answer booklet provided.

Question 1

During the risk identification, you have invited 18 participants for a brainstorming session. You have divided the participants into groups. Determine the recommended size of each group and elaborate how you would conduct the session in order for you to have an effective brainstorming session.

[10 marks]

Question 2

One of the approaches in improving quality in software development projects and project management is the use of maturity models. Describe the **FIVE (5)** maturity levels in the Capability Maturity Model Integration (CMMI).

[10 marks]

Question 3

Consider the following scenario:-

a) Overtime associated with the execution effort of a project is estimated at 120 hours with probability of 0.5, 250 hours with probability of 0.6, and 300 hours with probability of 0.3. Determine the monetary value for the amount of overtime.

(4 marks)

b) If a project has a 60 percent chance of USD100,00 profit and a 40 percent chance of a RM100,000 loss, determine the expected monetory value for the project.

(3 marks)

c) If a risk has a 20 percent chance of happening in a given month, and the project is expected to last five months, determine the probability that this risk event will occur during the fourth month of the project.

(3 marks)

[Total: 10 marks]

Question 4

a) Differentiate between *quality assurance* and *quality control*.

(4 marks)

b) With an appropriate example, explain how cause-and-effect diagrams can be applied to information technology projects.

(6 marks)

[Total: 10 marks]

SECTION B (Total: 60 marks)
INSTRUCTION: Answer ALL questions.
Please use the answer booklet provided.

Question 1

a) Discuss issues unique to the IT industry that are related to and affect the project management in terms of the nature of projects, the characteristics of project team members and the diverse nature of technologies.

(12 marks)

b) Discuss how the trends of increasing globalization affect an information technology project management.

(8 marks)

[Total: 20 marks]

Question 2

You are an IT project manager for a software development project. Your customer, EXYZ Tracking required a new infrastructure and applications to enhance their payment acquisition solution across a number of Asian countries. The scope of the project requires you to work with EXYZ Tracking key suppliers and developed suitable applications which included multiple standards and a variety of features for differing markets. The project must be completed within six months for a specified cost from project requirements to certification and field trials.

The key quality concern for IT projects is providing customers with a system that they need and meet their requirements at a price they can afford. ISO9126-1:2001, is the international standards used to define the standard characteristics by which the software quality is to be

measured. Based on the above scenario, discuss how the quality characteristics which are *functionality, reliability, usability, efficiency* and *maintainability* can be applied in ensuring the quality of the delivered project.

[20 marks]

Question 3

Consider the following scenarios:-

a) Scenario 1

You are the project manager of the SMARTAPP Project. Your team has delivered phase one of the project to the client. Based on the client feedbacks and issues found by them, you have decided to do some introspection in order to identify the root causes so that the subsequent deliverables do not face the same issues.

Some of your team suggested to perform quality audits and some of them suggested to perform process analysis. Determine which technique you would choose to be implemented and provide your justifications.

(5 marks)

b) Scenario 2

You are the project manager for one of the IT projects in your company. During the execution of the project, a risk is identified by one of your team members. This newly identified risk is currently not in the Risk Register.

As a Project Manager, explain the first action that you would take after being notified of the risk.

(5 marks)

c) Scenario 3

You are the project manager for upgrading the Hospital Information System installed at one of your client's site. Your project met with an unexpected problem which the delivery of a critical component of your final product is delayed by 25 days. You need to show a prototype of the product in 15 days.

Explain what would you do to handle this situation.

(5 marks)

d) Scenario 4

After conducting a SWOT Analysis, you have determined that a business deal is worth pursuing. You are required to use Agile development practices. In your company, there is no expertise in Agile development. Hence, you decided to collaborate with another organization that specializes in Agile development.

Determine whether the above scenario is positive or negative risk. Provide the basic response strategies for the risk.

(5 marks)

[Total: 20 marks]

END OF QUESTION PAPER