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Institute of Certified Management Accountants of Sri Lanka
Managerial Level
Pilot Paper

Instructions to Candidates

1. Time allowed is **three (3) hours**.
2. Total **100** Marks.
3. Answer **all** questions.
4. Encircle the number of your choice in relation to Multiple Choice Questions.
5. Candidates are allowed to use non-programmable calculators.
6. The answers should be given in **English Language**.

Note: This is only a guidance to the revised syllabus. The examination will be computer based and the appearance of the paper will be based on the specifications of the on-line platform.

Subject	Subject Code
Managing Projects, Information Systems & Data Analytics	PID/ML 3

Managing Projects – 40%

Answer all questions

Part I

1. Project scope is:
 - a. The features and functions that are to be included in a product or service.
 - b. A narrative description of work to be performed under the contract.
 - c. Technical features of the products that are delivered under the contract.
 - d. All the work that must be done in order to deliver a product/process according to the specified features and functions.

2. One of your contractors sends you an email requesting to use high quality raw materials in your project stating that this will be value-added and improved quality. What should the project manager do FIRST?

- a. Change the scope baseline.
 - b. Ask your sponsor for his or her opinion.
 - c. Ask the contractor to put forth a change request.
 - d. Change the WBS.
3. Which is NOT an outcome of the project initiation phase?
- a. Drafting the project scope statement.
 - b. Appointing a project team.
 - c. Developing the project charter.
 - d. Developing the project budget.
4. Triple constraints on a project are:
- a. Scope and/or quality, cost, and time.
 - b. Time, cost, and risk.
 - c. Time, scope and/or quality, and profitability.
 - d. Cost, risk, and Scope and/or quality.

(Total 08 marks)

Part II

Question 01

- I. Suppose that you are planning to start a delivery service within Colombo district. Identify four (04) risk factors of this project. (04 marks)
- II. Name two (02) outcomes of the human resource planning process? (02 marks)
- III. Answer the questions given below using the work breakdown structure (WBS) shown in the below table.

WBS code	Cost (Rs.)
1	
1.1.	25,000.00
1.1.1	
1.1.2	10,000.00
1.2	
1.2.1	16,000.00
1.2.2	
1.2.2.1	25,000.00
1.2.2.2	35,000.00

- a) The cost of WBS element 1.2.2. is:.....
 b) The cost of the project is.....

(02 marks)
(Total 08 marks)

Question 02

I. Fill the gaps in the following statements,

- a) “Durations of activities A and B are given as 4 weeks and 5 weeks, respectively. Activity B can be started after 1 week of commencing Activity A. Then, thel be week/s.” (02 marks)

- b) The analogous estimation method in duration estimation uses of similar projects as the basis of the duration estimation in (02 marks)

II. Briefly explain two methods that can be used to develop a WBS for a project.

(04 marks)

(Total 08 marks)

Question 03

You are given the following information for a product development project. Duration is given in days and values in LKR. Answer the questions given below using the information provided in the table. Hint: use the Activity On Arrow (AOA) method and Program Evaluation and Review Technique (PERT) to draw the network diagram.

Activity	Immediate Predecessor	Time			Crash Time	Normal Cost	Crash Cost
		Optimistic	Pessimistic	Most likely			
A	None	30	50	47.5	35	7,000	8,000
B	None	30	50	40.0	30	5,000	7,000
C	A	40	60	57.5	45	9,000	10,200
D	B	10	30	27.5	15	3,000	4,500
E	C	20	40	37.5	15	2,000	3,000
F	B	30	50	47.5	25	4,000	7,000
G	E,D	50	70	67.5	45	7,000	8,000
H	F	20	40	37.5	35	5,000	7,000
I	C	10	30	27.5	25	9,000	10,200
J	G,H	20	40	37.5	25	3,000	4,500
K	I,J	10	30	27.5	15	2,000	3,000

- I. Normal duration calculated for the activities A and J are:.....and..... respectively. (02 marks)
- II. How many dummy activities you may use to draw the network diagram of the above project? (02 marks)
- III. What is the normal duration of the project? (02 marks)
- IV. What is the normal cost of the project? (02 marks)

(Total 08 marks)

Question 04

- I. You are given the following activities in relation to a road construction project.

- Signing the contract
- Excavations
- Laying rubble
- Laying asphalt concrete
- Line painting

Which is the statement that BEST describes a Finish-to-Start (FS) dependency among activities in the above road construction project?

- a. Initiation of excavations depends on initiation of laying rubbles.
- b. Completion of line paintings depends on initiation of laying asphalt concrete.
- c. Completion of laying asphalt concrete depends on initiation of line paintings.
- d. Initiation of laying rubbles depends upon the completion of excavations.

(02 marks)

- II. Suppose quality management team discovered a defective item in the production process and has corrected before the product delivery. This is considered as ain project quality management. (02 marks)

- III. “In earned value measurements, earned value is represented by Budgeted Cost of Work Performed.” The above statement is true/ false. (02 marks)

- IV. Which is the best statement that describes the characteristic of a work package?
- Work package may or may not be scheduled
 - Cost can be estimated for a work package
 - It can be further decomposed into small work packages
 - It is not be monitored subject to nature of the project

(02 marks)

(Total 08 marks)

Information Systems & Data Analytics – 60%

Answer all questions

Part I

- 1) The role of Information System in an organization environment is not to,
 - perceive changes in their environments
 - help to act on their environments.
 - promote product and services.
 - work as an instrument for environmental scanning.
- 2) Which of the following is NOT one of the competitive forces of Michal Porter's competitive force model?
 - Suppliers
 - External environment
 - Other competitors
 - Customers
- 3) A DBMS reduces data redundancy and inconsistency by;
 - enforcing referential integrity.
 - uncoupling programme and data.
 - utilizing a data dictionary.
 - minimizing isolated files with repeated data.
- 4) Specific security challenges that threaten the communications lines in a client/server environment include;
 - Tapping; sniffing; message alteration; radiation.
 - Hacking; vandalism; denial of service attacks.
 - Theft, copying, alteration of data; hardware or software failure.
 - Unauthorized access; errors; spyware.

- 5) Which of the following is NOT one of the unique features of e-commerce technology?
- Information density
 - Transparency
 - Richness
 - Social technology
- 6) Which one of the following statements is not describing the digitalization?
- Process of converting data in any form into a digital format that can be processed by a computer and digital technology.
 - Process of digital transformation in the society and economy in the knowledge era.
 - Transition between the analog technologies and digital business innovations.
 - Process of developing an information system.

(Total 12 Marks)

Part II

Question 1

Identify and discuss the major types of information systems that serve the main management groups within a business. What are the relationships among these systems?

(08 marks)

Question 2

Assume that you are advising the owner of “Modern Computer”, a new, local computer repair store that also builds custom computers to order. What competitive strategies could Modern Computer exert? Which ones will have difficulty in exercising?

(08 marks)

Question 3

"Knowledge increases exponentially" is a phrase with which we are all familiar. How does this concept apply to electronic business and the emergence of the digital firm? Support your contentions.

(08 marks)

Question 4

The wave of new technologies associated with the concept of digitalization opens up different kinds of opportunities and challenges. Identify and briefly explain two (02) opportunities and two (02) challenges.

(08 marks)

Question 5

Big data has specific characteristics and properties that can help you understand both the challenges and advantages of big data initiatives. Explain four (04) important characteristics of bigdata.

(08 marks)

Question 6

What are the different types of analytics that are available for organizations to create values? Explain.

(08 marks)

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