UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2020 – 2nd Year Examination – Semester 4

IT4205: IT Project Management

Part 2 - Structured Question Paper

(ONE HOUR)

To be completed by the candidate

BIT Examination Index No: .....

Important Instructions:

- The duration of the paper is **1 (one) hour**.
- The medium of instruction and questions is English.
- This paper has **02 questions** on **05 pages**.
- **Answer all questions.** All questions carry equal marks.
- **Write your answers** in English using the space provided **in this question paper**.
- Do not tear off any part of this answer book.
- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.
- **Non-programmable calculators are allowed.**

Questions Answered

Indicate by a cross (×), (e.g. [X]) the numbers of the questions answered.

To be completed by the candidate by marking a cross (×).	1	2	
To be completed by the examiners:			

1)

a) Consider the scenarios given below and write the **appropriate risk planning option** represented by each of them

[5 x 02 = 10 marks]

Scenario	Risk Planning Option
I'm worried about drowning. Therefore, I refrain from going into the water.	Risk Avoidance
There is a chance that well trained employees may leave the organization before the project is complete. As a project manager, I refrain from considering this aspect and accept the fact that it might happen.	Risk Acceptance
The software is complex to maintain and costly. Therefore, in order to reduce cost, a component of the software is outsourced to an outside agency for a fixed cost.	Risk Transference
The company is in the process of purchasing a payroll system. As the procurement officer, I see that all finance division employees use a common and a popular data management application. Hence, I specify in the requirements that the payroll mush integrate with most common data management software.	Risk Reduction
As the CEO of a company, I'm in a dilemma to choose between the existing paper based clerical methods or to buy off-the-shelf software solution to automate day to day business. I do not want to tailor make a software due to uncertainties involved in software development.	Risk Avoidance

b) In Earned Value Analysis (EVA), when tasks have been started but are not yet complete, various methods of assigning an earned value are adopted. List and explain five such methods used to assign earned values for tasks related to software projects.

[5 x 03 = 15 marks]

ANSWER IN THIS BOX

1. 0/100 technique: a task is assigned a zero until such time that it is completed when it is given a value of 100% of the budgeted value.

2. 50/50 technique: a task is assigned a value of 50% as soon as it is started and then given a value of 100% once it is complete.

3. 75/25 technique: a task is assigned 75% on the starting and 25% on completion.

4. Milestone technique: a task is given a value based on the achievement of the milestone that have been assigned values as a part of the original budget plan.

5. Percentage complete: actual percentage of the task so far completed is counted.

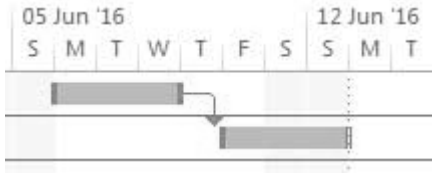
2) a) Consider the **two (02)** tasks **A** and **B**. Using **only these two tasks**, explain the four (04) types of task dependencies in a Gantt chart. Your answer should have the following for each type of dependency: (write each dependency in the separated answer box below)

- name of task dependency
- description of the dependency
- diagrammatic representation of the dependency in a Gantt chart

[20 marks]

ANSWER IN THIS BOX

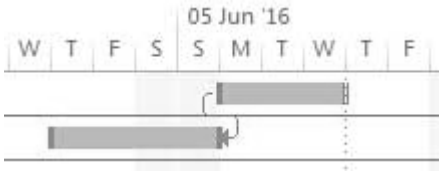
Finish to Start: Task B cannot begin until Task A has completed



Finish to Finish: Task B cannot complete until Task A is complete.

Start-to-Start: Task B cannot start until Task A has begun

Start-to-Finish: Task B cannot finish until Task A has begun.



b) Your project requires the use of an off-the-shelf software product. However, there is a 60% chance that the product needs minor customization and there is a 40% chance that major customization needs to be done before it is used. If, total cost of the product with minor and major customizations are 152,000 LKR and 188,000 LKR respectively. What is the Expected Monetary Value (EMV) of the software product?

[05 marks]

ANSWER IN THIS BOX

Minor Customization Probability = 0.6

Minor Customization Cost = 152,000 LKR

Expected Value of Minor Customization = 0.6 x 152,000 = 91,200 LKR

Minor Customization Probability = 0.4

Minor Customization Cost = 188,000 LKR

Expected Value of Minor Customization = 0.4 x 188,000 = 75,200 LKR

Expected Monetary Value = 166,400 LKR

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