



REFORMED CHURCH UNIVERSITY

FACULTY OF EDUCATION AND SOCIAL SCIENCES

BACHELOR OF SCIENCE HONOURS DEGREE IN INFORMATION
TECHNOLOGY

IT Project Management

HICT 402

Part 2 Semester 2 Examination

Total Marks [100]

Date: July 2022

Time: 3 Hours

INSTRUCTIONS

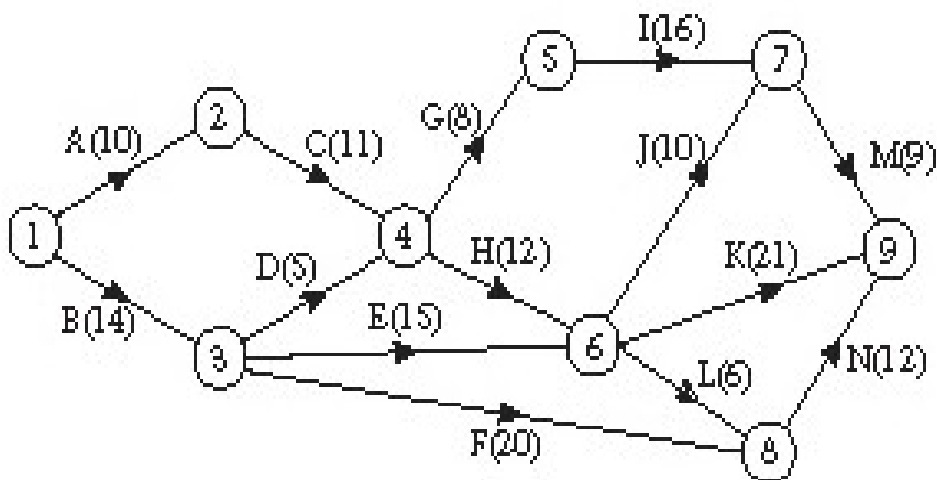
1. This paper has *six (6)* questions
2. Answer any *four (4)* questions
3. Each question carries *25 marks*
4. Start each question on a new page

QUESTION 1

- (a) With reference to a specific example, analyse the Project Life Cycle. (10)
- (b) With the aid of a diagram, discuss the concept of the Triple constraint and its effect on a project. (10)
- c) Analyse the relevance of needs analysis in project management. (5)

QUESTION 2

(a)



An engineering project is modelled by the activity network shown above. The activities are represented by the arcs. The number in brackets on each arc gives the time, in days to complete the activity. Each activity requires one worker. The project is to be completed in the shortest time.

- (i) State the critical paths and activities. (4)
 - (ii) Find the total float on activities D and F. You must show your working. (4)
- (b) A WBS can be created by using a number of tools and methodologies. One of the commonly used methodologies for creating a WBS in MS Project is the top-down methodology. Identify the steps followed in the top-down approach and analyse how each step is implemented in MS Project. (8)

- (c) To integrate the WBS in the project schedule using MS Project, one needs to add more information to the indented tree-structure of the WBS that one would have already created in (b). List and briefly evaluate the important information that you need to add to your project. (9)

QUESTION 3

- a) Analyse the concept of leadership and discuss at least five differences between a leader and a manager in project management. (7)
- (b) Team development has been broken into five stages. In their order of precedence, list and explain them. (5)
- (c) Examine the Project Risk Management processes. (8)
- (e) State and explain five specific factors to consider when identifying an IT project. (5)

QUESTION 4

- (a) Your resource, Kelly, originally scheduled time off the Friday after Christmas, and the project was scheduled knowing she was out. Due to a strict deadline, your resource is now working the Friday after Christmas. Describe how you would update the project to reflect this change? (4)
- (b) Justify placing milestones in project schedules. (3)
- (c) You create a project plan and have two tasks that need to be linked. You want to ensure the "Define Business Model" task does not end before you complete the "Define Outsourcing Strategy" task. Explain how you would link the two tasks. (5)
- (d) The project manager would like to see a list of all the resources and the tasks that they are assigned to. Describe the view that best displays this information. (3)
- (e) Explain any five reasons why MS Project performs better than MS Excel in project management. (10)

QUESTION 5

- (a) Analyse any three factors to consider as part of a feasibility study in assessing the business case for a project. (9)
- (b) Examine the merits and demerits three methods that might be used in the requirements gathering phase of a development project. (9)
- (c) Assess the use of the iterative process in an agile software development project. (7)

QUESTION 6

Discuss how one would transform a WBS into a Network Diagram and draw a network diagram for the following set of activities. (25)

Activity	Predecessors	Duration in working days
A	Start None Above	5
B	A	15
C	A	5
D	A	10
E	C and D	15
F	B and E	5
G	F	5