"Investing in Africa's Future"

COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE

NCSE303: SOFTWARE PROJECT MANAGEMENT

END OF FIRST SEMESTER EXAMINATION

NOVEMBER 2022

LECTURER: MR O MAGWAGWA

TIME: 3 HOURS

INSTRUCTIONS

You are required to answer questions as instructed in each section

Start **each** question on a new page in your answer booklet

Answer all questions in **Section A**

Answer any Two (2) questions from **Section B**

Credit will be awarded for logical, systematic and neat presentations

SECTION A

QUESTION ONE

You recently joined Africa University as the project manager for the development of a new Canteen system. Discuss how you would be able to successfully start the project through the following points:

a) What is Project Management   **[3 Marks]**
b) State and justify the contents of your Project Charter   **[10 Marks]**
c) Discuss the importance of a Project Charter and how this is instrumental to measuring the success of any Project   **[6 Marks]**
d) With the use of examples, explain the business case metrics used determine viability of a project   **[6 Marks]**

QUESTION TWO

Below is a Network Data Diagram for the Africa University Canteen Project. All duration estimates times are in weeks, and the network proceeds from Node 1 to Node 8

Activity	Initial Node	Final Node	Estimated Duration
A	1	2	10
B	1	3	12
C	1	4	8
D	2	3	4
E	2	5	8
F	3	4	6
G	4	5	4
H	4	6	8
I	5	6	6
J	5	8	12
K	6	7	8
L	7	8	10

a) Draw an AOA network diagram representing the project. Put the node numbers in circles and draw arrows from node to node, labelling each arrow with the activity letter and estimated time. **[12 Marks]**
b) Identify all of the paths on the network diagram and note how long they are? **[8 Marks]**
c) What is the critical path for this project and how long is it? **[3 Marks]**
d) What is the shortest possible time it will take to complete this project? **[2 Marks]**

SECTION B

QUESTION THREE

a) Discuss in detail the Project Management Life Cycle highlighting the activities done at each stage **[20 Marks]**
b) Highlight the intersection between the Project Management life cycle and the Software Development life cycle **[5 Marks]**

QUESTION FOUR

a) With the use of examples, identify and explain the importance of any Five (5) project stakeholders. **[10 Marks]**
b) With the use of an example, discuss the stakeholder management process and their analysis **[15 Marks]**

QUESTION FIVE

a) Differentiate between a risk and an issue in a project **[4 Marks]**
b) Identify and explain any Three (3) risk categories a Project Manager should be concerned about **[9 Marks]**
c) With the use of examples, discuss methods to manage risk. **[12 Marks]**

END OF PAPER