



**AFRICA
UNIVERSITY**

(A United Methodist-Related Institution)

"Investing in Africa's Future"

COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE

MMS503: PROJECT ANALYSIS AND MANAGEMENT

FINAL EXAMINATION AUGUST 2021

PROF S. MURAIRWA

7 HOURS

INSTRUCTIONS

Answer **ONE** question.

The marks allocated to **each** question are shown at the end of the question.

Credit will be given for logical, systematic and neat presentations.

1. The owner of a small supermarket has decided to install new electronic point of sales equipment in place of older ones. This will involve physical changes to the workplace for the check-out staff, new wiring and changes to the way the staff work. The equipment is to be interfaced with an existing stock control, which will require some modification. An equipment supplier has been contracted to design, supply the system, make modifications to the stock control software, train staff and supervise the initial operation.
 - a) Develop a project tactical risk assessment plan. **[25 Marks]**
 - b) Explain the life cycle of the project. **[25 Marks]**
 - c) Discuss the theories of motivating the project team. **[50 Marks]**

2. The table below shows the information for constructing a new house

Activity	Preceding	Time (Weeks)		
		Optimistic	Most Likely	Pessimistic
A	-	5	8	17
B	-	3	12	15
C	A	4	7	10
D	A	5	8	23
E	B,C	1	1	1
F	B,C	1	4	13
G	D,E	3	6	9
H	D, E	1	2.5	7
I	H	1	1	1
J	F,G	2	2	2
K	G,I	5	8	11

- a) Determine the description of the project activities **[25 marks]**
 - b) Explain the information required to crush the project **[25 marks]**
 - c) Explain the process of motiving the project team **[50 marks]**
3. Given the following information for a one-year market complex construction project, answer the following questions. Assume that you have the actual and earned value at the end of the second month.
 - Planned Value (PV) = \$23 000
 - Earned Value (EV) = \$20 000
 - Actual Cost (AC) = \$25 000
 - Budget at Completion (BAC) = \$120 000.
 - a) Analyse the project and compile a report. Explain the limitations of the results. **[50 marks]**
 - b) Discuss the mental building activity tools. How can they be used in managing the project? **[50 marks]**

End of paper
