



# MACHAKOS UNIVERSITY

University Examinations for 2022/2023

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

SECOND YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF SCIENCE (CLOUD COMPUTING AND INFORMATION SECURITY)

SCC 270: CLOUD PROJECT MANAGEMENT

DATE:26/7/2023

TIME:2:00-4:00 P.M

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## INSTRUCTIONS

- i) Answer question ONE and other TWO questions
- ii) Write on both sides of the answer sheet

### QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Define
  - i) Site Reliability Engineering (SRE) (2 marks)
  - ii) DevOps (2 marks)
  - iii) Project Management Life Cycle (2 marks)
  - iv) Cloud Migration (2 marks)
- b) Explain why project management is important (6 marks)
- c) List down the main tools required in cloud migration (5 marks)
- d) Effective project management requires that the project management team acquire three main dimensions of project management competencies. Briefly describe these competencies (6 marks)
- e) Explain why SRE important in cloud migration (6 marks)

### QUESTION TWO (20 MARKS)

- a) Briefly Describe the phases in Project Management Life Cycle (8 marks)
- b) Explain the main Interpersonal Skills required in project management (5 marks)
- c) What is driving business to migrate to the cloud/what are the benefits of operating in the cloud (7 marks)

### QUESTION THREE (20 MARKS)

- a) Migration strategies generally fall into one of five categories. Explain the FIVE migration strategies (10 marks)
- b) Describe FIVE main steps to migration (10 marks)

### QUESTION FOUR (20 MARKS)

Give the Table below. Answer the following questions as applicable in project management

	Activity	Activity Duration(Days)	Predecessor(s)
1	A	5	-
2	B	2	A
3	C	12	B
4	D	9	C
5	E	5	C
6	F	8	C
7	G	10	E
8	H	7	E
9	I	5	H

- a) Draw the Activity Network (8 marks)
- b) Indicate the Critical Path in the Network diagram (3 marks)
- c) Compute the following:
  - i) Most Likely Time (2 marks)
  - ii) Optimistic Time (2 marks)
  - iii) Pessimistic Time (2 marks)
  - iv) Expected Time of Completion of the Project (3 marks)

### QUESTION FIVE (20 MARKS)

- a) Explain the advantages of migrating to a cloud (10 marks)
- b) Describe THREE SRE principles you need to instate at the beginning of your SRE journey (6 marks)
- c) What are the typical roles in an SRE team (4 marks)