



MUEO

MOI UNIVERSITY

OFFICE OF THE DEPUTY VICE CHANCELLOR
(ACADEMICS, RESEARCH, EXTENSION & STUDENT AFFAIRS)

UNIVERSITY EXAMINATIONS 2022/2023 ACADEMIC YEAR FOURTH YEAR FIRST SEMESTER EXAMINATION

FOR THE DEGREE OF BACHELOR OF CIVIL AVIATION MANAGEMENT

COURSE CODE: BCM 411

COURSE TITLE: AIRPORT PLANNING & DESIGN

DATE: 2ND DECEMBER, 2022 **TIME:** 9.00 P.M. – 12.00 P.M

INSTRUCTION TO CANDIDATES

- SEE INSIDE.

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BCM411: Airport Planning and Design

Semester 1 Exam 2022

Time: 03.00Hrs

Instructions:

- i) Answer **Question one** and **any other three** questions.
- ii) Be clear and precise

Question One

Many airports are surrounded by unauthorized buildings and other structures that constitute hazards to air navigation. Such unauthorized buildings and structures present obstacles that pose a great risk to the aircraft operations in and around the airport.

- a) Explain the meaning of the term “obstacle” in air navigation. **(05 Marks)**
- b) Discuss imaginary surfaces in respect to the problem of unauthorized buildings and other structures around the airports.

(20 Marks)

Question Two

Majority of airports are unable to implement their master plans to completion.

- a) Discuss the two major reasons as to why the airports are unable to implement their master plans to completion. **(10 Marks)**
- b) Suggest one workable approach that can be used to help airports in Africa achieve a 100% execution of their master plans.

(05 Marks)

Question Three

- a) Explain the difference between the primary and the secondary runway. **(05 Marks)**
- b) Discuss two main factors that an airport company should consider before committing a budget to construct a secondary runway. **(10 Marks)**

Question Four

Explain the role of the “critical aircraft” in the design of the terminal building.

(15 Marks)

Question Five

Discuss the design considerations for a runway.

(15 Marks)

Question Six

- a) Explain the meaning of a “standard operating procedure” (SOP) of a company.
(05 Marks)
- b) Explain why most airport companies in Africa operate without an SOP.
(10 Marks)

End

