

## **MOI UNIVERSITY**

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

# UNIVERSITY EXAMINATIONS 2022/2023 ACADEMIC YEAR

**THIRD YEAR SECOND SEMESTER EXAMINATION** 

FOR THE DEGREE OF

# BACHELOR OF CIVIL AVAIATION MANAGEMENT

COURSE CODE:

**BCM 325** 

**COURSE TITLE:** AVIATION SAFETY AND SECURITY MANAGEMENT

DATE:

16<sup>TH</sup> AUGUST, 2023

**TIME:** 2.00 P.M. - 5.00 P.M

### **INSTRUCTION TO CANDIDATES**

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#### **MOI UNIVERSITY**

#### **BCM 325 AVIATION SAFETY AND SECURITY**

Please answer Q1 (mandatory) and choose any 3 (three) other questions.

- Q1. International Civil Aviation Organization (ICAO) has scheduled Universal Safety Oversight Audit Programme (USOAP) to monitor the fulfillment of the safety oversight obligations by the State. Being the State regulator, the Director General has directed that you undertake an audit of the service providers/certificate holders to determine the level of implementation of Safety Management Systems (SMS).
  - A) List the service providers within which your audit program would include?
  - B) What are the key components and elements of SMS that your audit will cover? (25 Marks)
- Q2. (a) List five (5) contents of an SMS implementation plan. (10 Marks)
- (b) Using the detect, decide, and act principle, list the five (5) classifications of controls/barriers that can be deployed to deter hazard propagation. (10 Marks)
- (c) Errors are the greatest contributor of accidents and incidents in the aviation industry. Illustrate the difference between Active Errors and Latent Errors. (5 Marks)
- Q3. (a) List and explain three generic risk control and mitigation strategies, explaining what perspectives each strategy should be examined. (15 Marks)
- (b) Identify and explain the four (4) Generic classifications of Aviation Hazards. (10 Marks)
- Q4. List and give examples of dangerous goods that airport screeners could encounter during the course of their work (15 Marks)
- (b) State the purpose of a Security Manual. (10 Marks)
- Q5. (a) Describe 5 (five) objectives of the National Civil Aviation Security Program (NCASP). (15 Marks)
- (b) List the parts of an Integrated Aviation Security System. (5 Marks)
- (c) List the National Civil Aviation Security Program requirements for security personnel. (5 Marks)