

MOI UNIVERSITY

OFFICE OF THE DVC ACADEMIC AFFAIRS, RESEARCH AND EXTENSION

UNIVERSITY EXAMINATIONS 2014/2015 ACADEMIC YEAR

FOURTH YEAR END OF SEMESTER EXAMINATIONS

FOR THE DEGREE OF BACHELOR OF **BUSINESS MANAGEMENT**

EXAM CODE:

BBM 483

EXAM TITLE: CREW RESOURCE MANAGEMENT

DATE: 13TH AUGUST, 2015

TIME: 9.00 A.M. -12.00 NOON.

INSTRUCTION TO CANDIDATES

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COURSE CODE: BBM 483

COURSE TITLE: CREW RESOURCE MANAGEMENT

INSTRUCTIONS

Answer question one and any other three questions

1. Read the Case Study below and answer the questions that follow.

INVESTIGATION INTO THE FRACTURED CRANKCASE THRUBOLT

The management of Msafiri Air Safaris purchased an engine from a salvage yard and had its field overhauled. During its overhaul, the apprentice mechanic who converted the engine from one model to another did not make notes on the engine data plate. During the routine inspections, nuts were found to be consistently loose including the prop to the crankshaft flange attachment. One day while in flight, the number two cylinder departed but the pilot managed to make a successful off field landing that saw him and three others survive with major injuries. KCAA team of Inspectors set to examine the cylinder base studs and thru-bolts that failed. The Inspectors discovered that incorrect and mismatched connecting rods were installed, incorrect cylinder base nuts were installed, and the prop STC was not approved for original the engine model number. Examination on the failed bolts was found to be consistent with a fatigue failure associated with a loss of pre-load. Fretting found on many other surfaces also suggested that a gradual loss of pre-load could have been occurring due to the excessive vibrations created by improperly balanced crankshaft and unapproved propeller installation. The Inspection team concluded that the major cause of the accident could be attributed to human error and recommended a number of measures that the airline must put in place to mitigate against occurrence of such errors in future.

- a) Explain, with evidence from the Case Study why the accident can be attributed to human error. (10 marks).
- b) Outline measures that the airline should put in place in order to minimize future occurrence the errors reported in the Case Study. (10marks)
- c) Drawing your evidence from the case study, classify the type of errors committed by the air operator. (5marks)

Section B (Answer any three questions from this section). All questions carry equal marks

- 2. a) Ethical leadership is a key attribute for successful Crew Resource Management. Explain key principles of ethical leadership desirable for CRM. (8 marks)
 - b) Explain factors that may lead to loss of situational awareness in a crew member. (7 marks).
- 3. a) Failure to manage crew workload effectively may lead to crew fatigue thus degrading performance. Explain ways in which crew fatigue degrades performance. (8 marks).
 - b) Outline factors that may hinder effective implementation of CRM in an organization. (7) Marks)
- a) Communication is a vital component of CRM. Explain ways in which non verbal communication is manifested or visible in an organization. (8 marks)
 - b) Highlight factors that may undermine effective delegation in a formal organization. (7marks)
- 5. a) The last Employee Satisfaction Survey conducted in Biashara Ltd revealed that a reasonable number of crew in the operations department had indicated that they were stressed and required counselling. Highlight causes of stress among crew members. (7marks)
 - b) Explain benefits that may accrue to an organization that counsels its staff. (8marks).
 - 6. a) Explain factors that may undermine accountability in a formal organization. (8marks)
 - b) Assertiveness in communicating critical decisions is a positive attribute. Explain key attributes of assertive behaviour amongst crew. (7 marks)
- 7. a) Explain obstacles that women in leadership at times experience compared to their male counterparts (8 marks)
- b) One of the steps in decision making is 'Implementation of the Solution'. Highlight steps involved at this stage. (7 marks)