

ADMISSION NUMBER											

**School of Business**  
**Bachelor of Business Administration**  
**Mid Term Examination - May 2024**

**Duration : 90 Minutes**  
**Max Marks : 50**

**Sem IV - D1UB402T - Aviation Transport Safety and Security**

General Instructions

*Answer to the specific question asked*

*Draw neat, labelled diagrams wherever necessary*

*Approved data hand books are allowed subject to verification by the Invigilator*

- 1) FoC airlines register their aircraft in countries with less stringent safety regulations to reduce costs. With reference to this, discuss how the registration of aircraft in countries with lax safety regulations can compromise flight safety. Provide examples to support your answer. K3 (6)
  
- 2) State-sponsored terrorism, religious extremism, and ideological terrorism pose significant threats to the aviation industry, impacting passenger safety, airline operations, and global security. With reference to this statement, discuss how state-sponsored terrorism, religious extremism, and ideological terrorism affect the aviation industry. Provide examples of incidents or threats and analyze their implications for airline security measures and international cooperation in counterterrorism efforts. K3 (9)
  
- 3) Examine how threat of nuclear terrorism evolved over time, particularly concerning the potential use of aircraft as missiles? Analyze historical events and contemporary security concerns in your response. K4 (4)
  
- 4) Examine the effectiveness of communication and coordination protocols between airport security personnel, airlines, and law enforcement agencies in responding to hijacking threats. K4 (8)
  
- 5) Broadly classify and explain the Five key ingredients of effective safety culture. K4 (8)

K5 (5)

6) The second hijacking in India took place in 1984 when an Indian Airlines flight was hijacked shortly after takeoff from Srinagar. The hijackers, who were armed with knives and grenades, demanded the release of prisoners and the payment of ransom. The aircraft was diverted to Lahore, Pakistan, where the hijackers surrendered to Pakistani authorities. What were the key events of this hijacking, and how did it differ from the first hijacking in India? Evaluate, how did this incident influence aviation security measures and responses to hijackings in India?

K5 (10)

7) A commercial airliner crashes shortly after takeoff from a major airport. The NTSB is called in to investigate the accident. The investigation team arrives at the crash site and begins the process of gathering evidence and conducting interviews with witnesses, air traffic controllers, and airline personnel. The wreckage is carefully examined, and data from the flight data recorder and cockpit voice recorder are analyzed.

Question:

a) Describe the role and responsibilities of the NTSB in investigating transportation accidents. How does the NTSB work with other agencies and organizations during an investigation? (2 marks)

b) What are some of the challenges faced by NTSB investigators during the investigation process? How does the NTSB ensure the independence and integrity of its investigations? (2 marks)

c) How does the NTSB determine the probable cause of an accident? What factors are considered in making this determination? (2 marks)

d) Discuss the role of NTSB recommendations in improving transportation safety. How are these recommendations implemented by regulatory agencies and industry stakeholders? (2 marks)

e) How has the NTSB's investigation process evolved over time to address new challenges and technologies in transportation? (2 marks)