

# School of Business

#### Master of Business Administration MBA Dual Specialization Semester End Examination - Jun 2024

**Duration: 180 Minutes** Max Marks: 100

#### Sem II - D1PI201T - MSB23T1001 Foundation of Aviation Business

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) Assess how do the 8th and 9th freedoms of air impact the K5(5) economic viability and competitiveness of airlines, particularly in terms of route planning and revenue generation?
- 2) As a Ground Services Agent, you are tasked with handling Unaccompanied Minors (UMNR) procedures at Vistara Airline.

a) How would you ensure that UMNRs are seated according to Vistara Airline's policy and that they are not assigned seats in emergency exit rows? (3)

- b) What steps would you take to ensure that all necessary procedures are followed for handling UMNRs, including completing the handling advice/declaration form, collecting travel documents, and handing over the UMNR to the designated adult at the arrival station? (3)
- 3) Many countries around the world have traditionally owned and operated national airlines through state ownership. This ownership structure has been seen as beneficial by governments for several reasons, including the promotion of national interests, the development of the aviation industry, and the protection of strategic assets.

Question1: Examine the reasons why states have felt that public ownership of national airlines was beneficial. Discuss the rationale behind governments' decision to own and operate airlines, considering factors such as national pride, economic development, and strategic interests. (4 marks)

Question 2: Evaluate the advantages and disadvantages of state ownership in the context of the aviation industry, comparing the

K3(6)

K4(8)

experiences of different countries with varying ownership models. (4 marks)

Air traffic refers to the movement of aircraft in the airspace, including take-offs, landings, and flights in progress. Air traffic is managed by air traffic control (ATC) systems to ensure the safe and efficient flow of aircraft. The volume of air traffic varies widely, with major airports and airspace corridors experiencing high levels of traffic, especially during peak travel times.

The growth of air traffic has been significant in recent decades, driven by factors such as increasing global travel, economic growth, and the rise of low-cost carriers. This growth has led to challenges such as congestion, delays, and environmental concerns related to aircraft emissions.

To manage air traffic effectively, air traffic control systems use a combination of radar, communication systems, and advanced technologies to track and guide aircraft. Airlines also use sophisticated flight planning systems to optimize routes and schedules, helping to reduce congestion and improve efficiency. Ongoing efforts to modernize air traffic management systems and improve airspace design aim to enhance safety, reduce delays, and minimize the environmental impact of air travel.

Based on the above, answer the following:

a) Investigate the traffic at a local airport or one in which you have contacts. As best you can, estimate the daily flow of passengers, employees, and commercial vehicles. The airport should have data on either these flows or

their contributing factors. (5 marks)

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5)

b) Compare these estimates with the ranges in the text and discuss the factors that account for differences. (3 marks)

CASE STUDY - Airport Customer Excellence Employee Incentive Program—Philadelphia International

Airport (Philadelphia, Pennsylvania) Philadelphia International Airport (the Airport) was ranked "highest in overall customer satisfaction among large airports" in the J. D. Power and Associates 2008 North America Airport Satisfaction Study.a Initiatives such as the Airport Customer Excellence (ACE) Program (an incentive program for Airport employees) enabled the Airport to receive recognition for outstanding customer service, which also encourages employees to "keep up the good work." All Airport employees are eligible to participate in the ACE Program. The focus of the incentive program is to inspire employees to provide exceptional customer service. Employees are nominated by passengers or other employees. Each nomination is verified and ACE Committee. evaluated bν the which consists stakeholdersfrom the Airport community, including airlines and tenants, who determine whether the nominee receives an ACE award. These awards are typically given to employees who have

K4(8)

K3(9)

provided extraordinary service to passengers

and have left the recipients with a positive impression of both the Airport and the city and a belief that the people who represent Philadelphia International Airport care about their customers.

ACE awards are presented four times a year. The recipients are recognized in a ceremony conducted by the Aviation Director. Each award winner receives a special ACE pin, certificate, and small gift and is then eligible for a grand ACE award, such as a plaque and tickets to a special event (e.g., a concert or a sporting event). The ACE Program spotlights and reinforces the importance of customer service. The realization that assisting passengers and fellow workers above and beyond the "call of duty" could result in special recognition can spur an employee to take that extra step. Therefore, serving the customer becomes ingrained in an employee's daily routine and permeates the Airport workforce as a group. The result is a customer-friendly

airport. The ACE Program's customer service focus also encourages employees to become more aware of passengers' needs, pinpoint trouble spots, and seek/offer solutions to improve the Airport experience for all passengers.

Philadelphia International Airport management recommends that airport executives who are considering developing an employee incentive/reward program do the following:

- (1) identify a committee of dedicated, enthusiastic employees to manage the program;
- (2) provide support and guidance to make the program a success;
- (3) include the airport community in the process.

#### Questions:

- a) How does the ACE Program at Philadelphia International Airport align with the broader goal of enhancing customer satisfaction? How does this program benefit both passengers and the Airport as a whole? (3 marks)
- b) What are the key elements of the ACE Program that contribute to its success in motivating employees to provide exceptional customer service? How does the program's structure, including the nomination process and recognition ceremonies, impact employee behavior and engagement? (3 marks)
- c) How might the ACE Program influence the Airport's organizational culture and employee morale? In what ways can similar incentive programs be implemented in other airports or organizations to improve customer service and employee satisfaction? (3 marks)

CASE STUDY - Employee Incentive Programs—Vancouver International Airport (Vancouver, British Columbia, Canada)
Vancouver International Airport (the Airport) is Canada's second busiest airport, with approximately 400 employees. The Airport was

K3(9)

ranked by the International Air Transport Association (IATA) as the #1 Mid-Size Airport in North America for overall passenger satisfaction and eighth in the world.

A significant reason for the Airport's success in being ranked as one of the world's best airports is its innovative team of employees. "The Airport Authority believes the best way to nurture a strong team is to invest in the development of its members." a To assist employees in developing a positive, balanced work and personal life, the Airport Authority has developed several employee incentive programs focused on recognition, health and safety, and wellness. The Airport Authority's recognition programs include Bravo, STAR (Suggestions That Achieve Results), Totem Awards, Long Service Awards, and Scholarships. Bravo allows managers to recognize employees who have given extra effort with cards and gift certificates valued from \$5 to \$100. The STAR encourages employee creativity and continuous improvement in the areas of customer service, financial performance, internal business processes, and learning and innovation. STAR awards range from \$100 to \$2,500. Totem Awards are presented annually to individuals who have been nominated by their coworkers for exceptional effort or performance. Award winners exemplify the Airport's corporate values and, through their actions and achievements, have made an outstanding contribution to the Airport Authority's success. The Totem Award gifts are valued at \$1,000. Long Service Awards are presented by the Board of Directors and the Executive Committee at a yearly luncheon to honor employees who have achieved 5, 10, 15, 20, 25, or 30 years of service with the Airport Authority. Gifts for each level of service range from \$140 to approximately \$2,000. Employees with 30 years of service also receive a cruise to Alaska for two. The Airport Authority's Scholarship program assists children of employees with post-secondary education. Twenty \$750 scholarships are given out each year.

The Airport Authority also provides one health and safety incentive to its employees, as well as one employee attendance incentive program. These incentive programs are referred to as (1) the President's Award for Safety and Excellence and (2) Perfect Attendance. The President's Award recognizes the outstanding efforts of two high-risk and low-risk groups each year for their implementation of health, safety, and wellness goals and action plans. The winners are recognized at an awards banquet and receive a choice of \$150 gift cards. Perfect Attendance is awarded with a congratulatory card form the President of the Executive Committee, along with \$25 in YVR Bucks that may be spent at any of the Airport's vendors.

Four wellness programs are available to employees: the Wellness Program; Employee Family and Assistance Program; Green

Commuter Rebate Program; and Smoking Cessation Program. The Wellness Program encourages employees to enjoy healthy, balanced lifestyles and reach personal health goals. Using a pointbased system, employees are rewarded for participating in activities that promote wellness, including exercise, recycling, education, training, and community involvement. Gift cards up to \$210 can be earned. Monthly "Lunch n' Learns" are held on a variety of topics, including posture care and stress management. An onsite gym/fitness facility, with exercise classes, is provided exclusively for Airport employees. The Employee Family and Assistance Program provides professional counseling psychological assistance at no cost to employees. Assistance is available 24 hours per day, 7 days per week. The Green Commuter Rebate Program offers a \$50 per month rebate to employees who commute by means other than a single occupancy vehicle. The Smoking Cessation Program provides employees who stop smoking with awards, plus a one-time \$500 payout. The cost of smoking cessation aids is also covered.

### Questions:

- a) How do the various employee incentive programs at Vancouver International Airport contribute to the overall organizational culture and employee satisfaction? How do these programs align with the Airport Authority's values and goals? (3 marks)
- b) What impact do you think these programs have on employee engagement, motivation, and retention? How do they enhance the Airport's reputation as a top-ranked airport in North America and the world? (3 marks)
- c) In what ways do the health and wellness programs offered by the Airport Authority benefit both employees and the organization as a whole? How do these programs reflect the Airport Authority's commitment to employee well-being and work-life balance? (3 marks)

Rajiv Gandhi International Airport is a busy airport with a high volume of passenger and cargo flights. The airport operates a comprehensive Airport Rescue and Fire Fighting (ARFF) service to ensure the safety of passengers, crew, and aircraft in the event of an emergency. One day, a cargo aircraft experiences an engine fire while taxiing for takeoff. The ARFF team is immediately dispatched to the scene to respond to the emergency.

## Question:

- a) Describe the role and responsibilities of the ARFF team in responding to aircraft emergencies at Rajiv Gandhi International Airport. (2 marks)
- b) Outline the steps the ARFF team would take to extinguish the engine fire on the cargo aircraft. Explain how the ARFF team coordinates with other airport personnel and emergency services during an aircraft emergency. (2 marks)

K5(10)

- c) Discuss the importance of training and equipment maintenance for the ARFF team in ensuring effective emergency response. (2 marks)
- d) Evaluate the effectiveness of Rajiv Gandhi International Airport's ARFF service based on its response to the engine fire incident. (2 marks)
- e) Propose any improvements or enhancements that could be made to the ARFF service at XYZ International Airport to improve emergency response capabilities. (2 marks)
- Though air transport is one of the safest modes of transport, different kinds of accidents and incidents occur which are detrimental to the safe and secure air transport operations. With reference to this, critically examine the below mentioned with the help of a hyphothetical scenario: (2 marks each)
- a) Runway related accidents, b) Loss of control, c) Bird strike, e) Poor weather condition, f) Human factors, g) Mechanical errors
- Case: On November 12, 1996, one of the deadliest mid-air collisions in aviation history occurred near Charkhi Dadri, a village in Haryana, India. The collision involved Saudi Arabian Airlines Flight 763, a Boeing 747-100B en route from Delhi, India, to Dhahran, Saudi Arabia, and Kazakhstan Airlines Flight 1907, an Ilyushin Il-76 cargo aircraft flying from Chimkent, Kazakhstan, to Delhi, India.

The two aircraft collided in mid-air at an altitude of 14,000 feet (4,300 meters) over the village of Charkhi Dadri. The impact caused both aircraft to disintegrate, scattering debris over a wide area. All 349 people on board both planes, including passengers and crew, were killed in the crash.

Investigations into the cause of the collision revealed that the primary factor was pilot error on the part of the Kazakhstan Airlines pilot. The pilot had deviated from the assigned flight path without informing air traffic control, leading to a breakdown in communication and coordination between the two aircraft and air traffic control.

The collision highlighted the importance of adherence to air traffic control instructions and the need for effective communication and coordination among pilots and air traffic controllers. The tragic loss of lives in the Charkhi Dadri mid-air collision led to significant improvements in aviation safety, including enhanced training for pilots and air traffic controllers, improved collision avoidance systems, and stricter adherence to flight procedures and regulations.

## Questions:

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- a) What were the flight details of Saudi Arabian Airlines Flight 763 and Kazakhstan Airlines Flight 1907 at the time of the collision? (5 marks)
- b) How did the mid-air collision occur between the two aircraft?

K4(12)

K5(15)

What were the findings of the investigation regarding the cause of the collision? (5 marks)

- c) How did pilot error by the Kazakhstan Airlines pilot contribute to the collision? What were the immediate and long-term impacts of the collision on aviation safety and regulations? (5 marks)
- d) How did the aviation industry respond to the collision to prevent similar incidents in the future? (5 marks)
- e) What lessons were learned from the Charkhi Dadri mid-air collision, and how have they influenced aviation safety measures since then? (5 marks)

10) Title: Airbus vs. Boeing: USA and Europe - Subsidies and Competition

Introduction: The rivalry between Airbus and Boeing is one of the most significant in the aviation industry. It is not just about the competition between two companies but also involves geopolitical implications due to the involvement of the United States and European Union. The case study delves into the subsidy wars between Airbus, a European consortium, and Boeing, an American company, highlighting the complexities of competition in the commercial aircraft market.

Background: Airbus and Boeing have been fierce competitors in the commercial aircraft market for decades. Both companies have developed a wide range of aircraft models, from narrow-body jets to wide-body aircraft, catering to different market segments. The competition between Airbus and Boeing has been characterized by innovation, technological advancements, and aggressive marketing strategies.

Subsidies and Government Support: One of the key issues in the Airbus-Boeing rivalry is the issue of government subsidies and support. Airbus, being a consortium of European countries, has received substantial support from European governments in the form of launch aid, loans, and other forms of financial assistance. These subsidies have helped Airbus develop new aircraft models and compete effectively against Boeing.

On the other hand, Boeing has accused Airbus of benefiting unfairly from these subsidies, arguing that they distort competition in the market. The United States has filed several complaints with the World Trade Organization (WTO) against the European Union, alleging that the subsidies given to Airbus violate international trade rules.

Impact on Competition: The subsidies and government support provided to Airbus and Boeing have had a significant impact on competition in the commercial aircraft market. Airbus has been able to develop a competitive product lineup and gain a significant market share, especially in the market for narrow-body aircraft. Boeing, on the other hand, has faced challenges in competing against Airbus, particularly in the wide-body aircraft segment.

K6(18)

The subsidy wars between Airbus and Boeing have also led to trade tensions between the United States and the European Union. Both sides have imposed tariffs on each other's aircraft and other products, further escalating the dispute.

Future Outlook: The rivalry between Airbus and Boeing is likely to continue in the future, with both companies vying for dominance in the commercial aircraft market. The outcome of the subsidy wars and trade tensions between the United States and the European Union will have a significant impact on the future of the aviation industry.

Conclusion: The Airbus-Boeing rivalry is a complex and multifaceted issue that goes beyond mere competition between two companies. It involves government subsidies, trade tensions, and geopolitical considerations. The case study highlights the challenges and complexities of competition in the commercial aircraft market and underscores the importance of fair competition and adherence to international trade rules.

# Questions:

- a) What are the key factors driving the rivalry between Airbus and Boeing in the commercial aircraft market? (3 marks)
- b) How have government subsidies and support impacted the competition between Airbus and Boeing? (3 marks)
- c) What are the main allegations made by Boeing against Airbus regarding subsidies, and how has the European Union responded to these allegations? (3 marks)
- d) How have the subsidy wars between Airbus and Boeing affected trade relations between the United States and the European Union? (3 marks)
- e) What are the implications of the Airbus-Boeing rivalry for the future of the aviation industry? (3 marks)
- f) How can Airbus and Boeing navigate the challenges posed by government subsidies and trade tensions to ensure fair competition in the market? (3 marks)