

School of Business
Bachelor of Business Administration
Semester End Examination - May 2024

Duration : 180 Minutes
Max Marks : 100

Sem VI - D1UB601T - Airline Economics

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) Based on the data shared below, choose which airline has better efficiency and profitability by comparing the operating factors. K3 (6)

Indicator	IndiGo	Air India
Share of International Passengers (%)	5.3	10.4
Share of Domestic Passengers (%)	39.7	12
Available Seat Kilometres (Mn)	63,510	57,723
Revenue Passenger Kilometres (Mn)	55,524	46,027
Passenger Load Factor (%)	87.4	79.7
Operating Cost per Available Seat Kilometre (Rs)	2.9	5.7
Operating Revenue per Available Seat Kilometre (Rs)	3.4	4

- 2) Case Study: To address the challenge of capacity crunch for upcoming summer season, Indigo plans to lease 20 additional aircraft. Notably, IndiGo has previously leased Boeing 777-300ER planes from Turkish Airlines, showcasing its flexibility in acquiring aircraft from different manufacturers. This approach underscores the airline's commitment to maintaining smooth operations amidst fleet disruptions, a common issue faced by carriers operating popular aircraft models like the A320. Logical K3 (9)

Questions:

1. What factors might have contributed to IndiGo's decision to lease additional aircraft rather than purchase them outright? (3marks)
2. Considering IndiGo's reliance on the Airbus A320 family of jets, how can the airline diversify its fleet acquisition strategy to enhance operational flexibility? (3marks)
3. Identify what challenges might other airlines face in implementing a similar strategy of leasing additional aircraft to counter grounded fleets? (3marks)

- 3) Examine the need for maintaining a credit rating for the airline industry. K4 (4)

- 4) Caselet: Amidst efforts to enhance productivity Air India has introduced a new organizational layout for its non-flying staff. The initiative involves assigning new designations by prioritizing performance and productivity. Air India aims to move away from ad hoc policies and foster a culture of efficiency. Additionally, the airline plans to integrate approved mergers within the group from a human resources perspective, further optimizing its organizational structure. The intention is to bring uniformity in the operations of the four airlines under Tata's wings Logical. K4 (8)

Questions:

1. How might Air India's focus on performance and productivity impact employee morale and job satisfaction within the organization? (4marks)

2. Examine how the airline effectively address these challenges to ensure a smooth transition and maximize operational efficiency? (4marks)

- 5) Caselet: Before the pandemic, airports relied heavily on aeronautical charges, such as fees levied on airlines and passengers, which accounted for approximately 60% of their revenue. The remaining 40% was generated from non-aeronautical sources like travel retail, parking, and property development. With air travel virtually at a standstill, many airports are offering concessions such as parking fee waivers and landing fee waivers to provide relief to airlines and passengers navigating through the crisis. K4 (8)

Based on above answer the Questions:

1. How can airports diversify their revenue streams beyond aeronautical charges to enhance financial resilience and mitigate risks?(4marks)

2. In what ways can airports innovate and adapt their business models to capitalize on emerging trends in aviation industry?(4marks)

- 6) Digital transformation programme to enhance customer experience through its Passenger Services System (PSS), which sits at the heart of the airline's commercial has proved quite usefue. This allows customers to book flight tickets wherever they are in the world and then check-in and board them on their flights. Due to this ancillary revenues were INR 15,484 million, an increase of 20.4% compared to the same period last year(2023). Consequently, the total costs also increased by +9.3%. Do you think other airlines also must increase their spending by focussing on customer experience? Justify your answer. K5 (10)

- 7) **Case Study: DGCA's Standard Operating Procedures for Flight Delays** In response to criticism over flight delays and cancellations during foggy conditions at the Delhi airport, the Directorate General of Civil Aviation (DGCA) issued standard operating procedures (SOPs) for airlines which emphasizes the importance of providing real-time updates on flight delays caused by fog, which must be made available on the airline's website and communicated to passengers via SMS, WhatsApp, and email. Additionally, airline staff need to ensure they can appropriately communicate with passengers about ongoing flight delays. Furthermore, airlines are instructed to cancel flights sufficiently in advance to mitigate passenger inconvenience and airport congestion. The issuance of the Standard Operating Procedures (SOPs) comes at a time when numerous passengers took to social media to highlight significant flight delays..

Based on above answer the following questions:

1. Explain how can airlines ensure seamless communication with passengers across various channels such as SMS, WhatsApp, and email, especially during challenging operational conditions? (5marks)
2. Explain what strategies can airlines employ to manage passenger expectations and mitigate inconvenience during adverse weather conditions? (5marks)

- 8) **Case Study: India's Aviation Growth and Future Prospects**

Despite significant growth in India's aviation sector, the country remains under-penetrated in comparison to other major markets. Indian Aviation Minister Jyotiraditya Scindia highlighted this, noting that even with projections of reaching 635 million domestic passengers by 2030, India would still lag behind other large markets. Domestic passenger numbers have seen substantial growth, rising from 60 million in 2014 to over 150 million in 2023, with a daily average exceeding 450,000 passengers. The government has been actively expanding airport infrastructure, doubling the number of airports in the country over the past nine years to 149. Capacity enhancements are underway, particularly in metro cities, with plans to increase overall capacity from 221 million passengers per year to over 468 million passengers per year in the next decade.

Logical Questions:

1. Explain what factors contribute to India's under-penetrated aviation market compared to other major economies?(3 marks)
2. With domestic passenger numbers expected to continue rising, how can airlines and airport authorities effectively forecast demand and plan infrastructure expansions to accommodate future growth? (3 marks)
3. What are the key challenges and considerations involved in doubling the number of airports and enhancing capacity at existing facilities? (3 marks)
4. How might the significant increase in airport capacity influence regional connectivity, passenger experience, and airline competition? (3 marks)
5. How does the government's vision for India's aviation system supporting a \$20 trillion economy by 2047 affect the potential socio-economic benefits and challenges associated with achieving this ambitious goal? (3 marks)

9) Entering new markets:Indigo has identified several key growth opportunities in both domestic and international markets, including Tier II and Tier III cities, popular tourist destinations, and emerging business hubs. It has recently announced plans to add new aircraft to its fleet and launch several new routes, both domestic and international, over the next few years. As the newly appointed Operations Manager at IndiGo Airlines, you are responsible for overseeing the development of a comprehensive flight schedule that aligns with the airline's expansion goals while ensuring operational efficiency, profitability, and customer satisfaction. To achieve this goal, you will need to collaborate closely with cross-functional teams within the airline, including Network Planning, Fleet Management, Crew Operations, Airport Operations, and Revenue Management. Given the dynamic and competitive nature of the aviation industry, you recognize the importance of agility and adaptability in responding to market changes, regulatory requirements, and operational challenges.

Based on the above answer the following questions:

- a) How does IndiGo Airlines identify and prioritize potential growth opportunities in domestic and international markets? (3 marks)
- b) What factors does IndiGo consider when determining the optimal size and composition of its fleet to support the planned route expansion? (3 marks)
- c) How does IndiGo Airlines analyze demand patterns, competition, and regulatory requirements to develop a strategic route plan ? (3 marks)
- d) What measures does IndiGo implement to enhance the overall passenger experience and maintain service quality amidst the expansion efforts? (3 marks)

Indigo's Global Ascent: Navigating International Operations with Low-Cost Strategies: The company has believed in three main ideas. These ideas were the low airfare charges, best and professional customer service, single-class configuration, and transparency in the cancellation of flights. The business practice followed by Indigo was LCC which is a low-cost carrier. As India is an under developed country, many facilities to LCC were not being provided. Consequently, Indigo has to face many disadvantages that includes increasing cost such as parking fees and taxes for the infrastructure being used by the company. Many strategies have been played by Indigo Management which includes leasing of aircrafts on contractual basis. As a result, the cost of purchasing is minimized. Moreover, the aircrafts are changed in every 3-4 years. In addition, to decrease the cost of aircraft management and maintenance, the company had made contracts with Airbus to maintain air crafts immediately, if any fault arises. Also, the company used Airbus Aircrafts as they are higher fuel saver than Boeing's air crafts, which is up to 3%. For the growth and expansion, unlike other airlines, company purchased one aircraft rather than many. However, as per the growth, company purchased more crafts whenever needed or required. To reduce the company's operating costs, the company planned to keep lower cutlery and food items for customer servicing. Indigo airline wants to expand its business by introducing international airlines. However, the business model of both lines are very different. Therefore, Indigo have to analyze whether they can enter in the international business while being profitable and successful. The problem that have been identified in the company is that Indigo airline is changing its cost structure from low cost to hybrid cost. Moreover, the company wants to expand itself by introducing international flights along with domestic flights. However, company is confused if that would be able to maintain their competitive advantage along with all the cost effective and high earning strategies. Please find below the attached proof for your reference Image A, Image B and Image c.

Based on above answer the following questions:

1. How can Indigo adapt its low-cost model to effectively compete in international markets where operational costs and regulations may differ significantly from those in India?(6 marks)
2. What strategies can Indigo implement to maintain its competitive advantage while transitioning from a purely low-cost carrier to a hybrid model that includes international flights?(6 marks)
3. Considering the difference in business models between domestic and international operations, how can Indigo ensure a seamless transition while still prioritizing cost-effectiveness and customer satisfaction?(6 marks)

Chart 5: Domestic market share (%) in terms of passengers carried, 2022-23

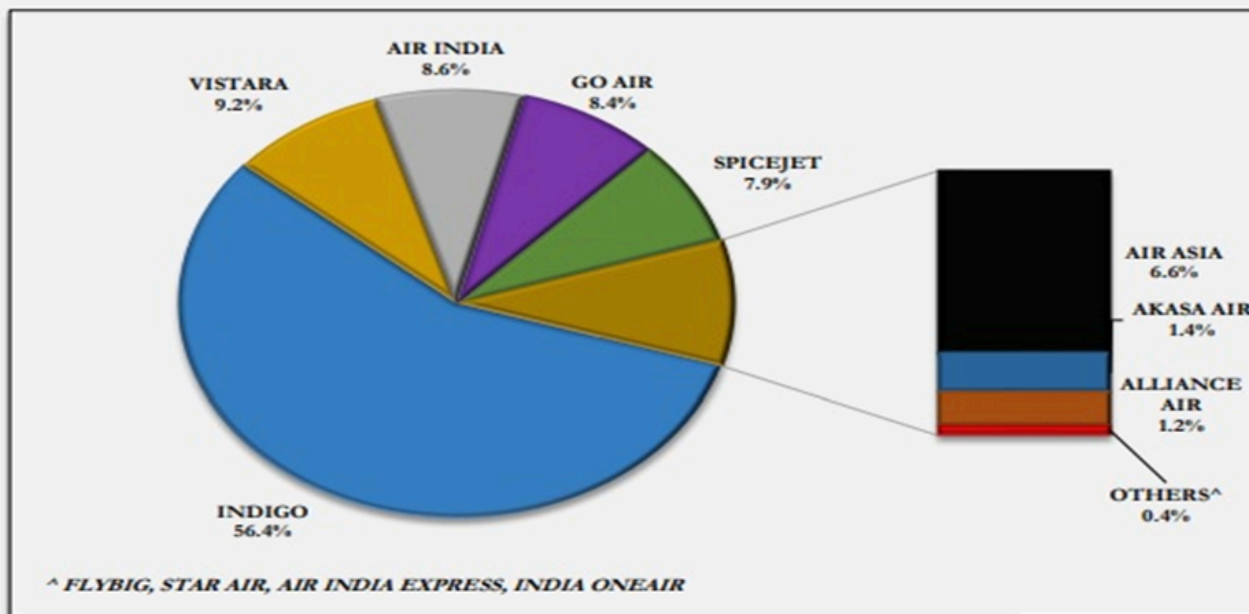
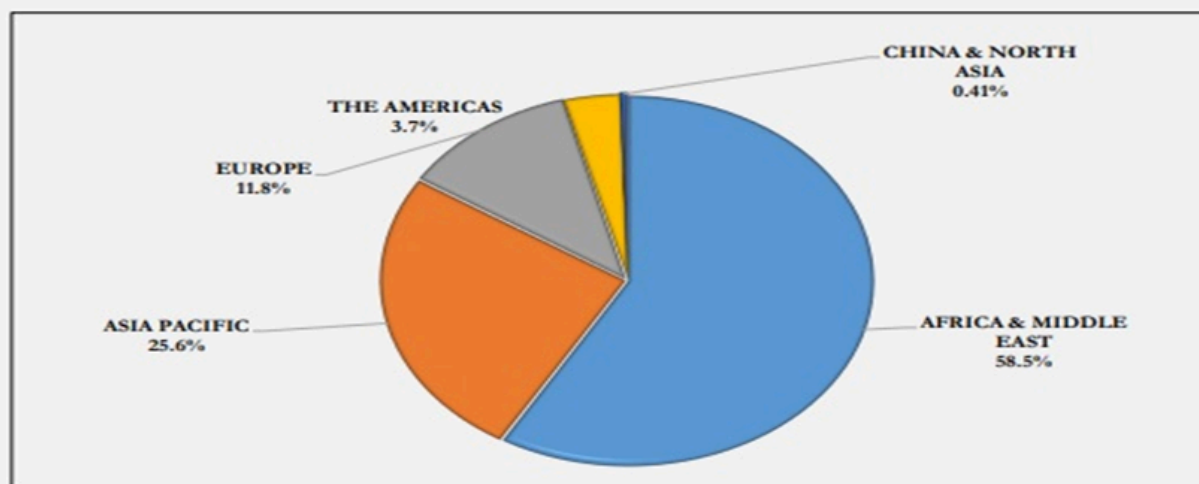


Chart 8: Distribution of India's outbound international passenger traffic, 2022-23



Aircraft Type	Current			Future ²	Historic	Avg. Age	Total
	In Service	Parked	Total				
+ ATR 42/72	45		45			4.0 Years	45
+ Airbus A320	176	42	218	5	139	4.9 Years	362
+ Airbus A321	82	15	97			2.9 Years	97
+ Boeing 777	2		2			15.9 Years	2
Total	305	57	362	5	139	4.3 Years	506