School of Business

Master of Business Administration MBA Aviation management
Semester End Examination - Nov 2023

Duration : 180 Minutes
Max Marks : 100

Sem III - MSB23T2005 - Forecasting and Automation in Aviation

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)	List the different types of controlled airspace and their associated restrictions.	K1 (2)
2)	What steps are involved in constructing a regression-based forecasting model to predict air passenger growth for a particular region?	K2 (4)
3)	Illustrate the impact of Wake Turbulence on aircraft following a heavy aircraft during approach and landing.	K2 (6)
4)	Apply the concept of Free Route Airspace (FRA) to allow aircraft to plan and fly more direct routes, reducing flight distances and fuel consumption. Develop a Free Route Airspace design and implement procedures to optimize air traffic movements.	K3 (9)
5)	Develop a comprehensive plan for managing air traffic movements during significant weather events, such as hurricanes or volcanic eruptions. Apply flow control measures, rerouting procedures, and airport closures to ensure the safety of air traffic.	K3 (9)
6)	Build a comprehensive checklist for cargo handling procedures to ensure the safe and efficient transportation of various types of cargo.	K5 (10)
7)	Assume a scenario where a cargo airline is planning to expand its network to new international markets. Analyse the potential challenges the airline may face in terms of regulatory compliance and market demand.	K4 (12)
8)	Evaluate the potential benefits of using AI-powered chatbots for providing passenger assistance and answering common queries at airports.	K5 (15)
9)	Compare traditional manual airport operations with fully automated airports in terms of efficiency, cost-effectiveness, and passenger satisfaction.	K5 (15)
10)	Elaborate on the benefits of using intermodal transportation for cargo delivery, considering the integration of air, road, and rail networks for seamless logistics.	K6 (18)