

Register No.: Name:

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

SECOND SEMESTER MBA DEGREE EXAMINATION (S), SEPT 2022

(2021 Scheme)

Course Code: 21MBA108

Course Name: Operations Management

Max. Marks: 60

Duration: 3 Hours

PART A

(Answer all questions. Each question carries 2 marks)

1. Define operation management
2. What do you mean by productivity?
3. Differentiate work study and method study.
4. What is meant by MPS?
5. Write short note on Service JIT.

PART B

(Answer any 3 questions. Each question carries 10 marks)

6. Identify the key elements of Operation management with pertinent examples.
7. Discuss the forecasting techniques with relevant examples.
8. How does TQM helps to operations management in service sectors? Appraise with suitable examples.
9. Compare the uses and benefits of ERP and MRP in the production planning.
10. Discuss in detail about the World class manufacturing system.

PART C

(Compulsory question, the question carries 20 marks)

11. According to the Directorate General of Civil Aviation(DGCA), India's air passenger traffic has grown by at least 16% annually over the past decade. In 2000-01, it stood at 14 million passengers. In 2017, Indian airlines flew nearly 140 million passengers, most of them domestic. Yet, that growth has been largely profitless. The Centre for Asia Pacific Aviation predicts consolidated industry losses of between \$430-460 million in FY19. High aviation fuel prices, rupee depreciation against the dollar, excessive parking and landing charges, loads of debt and fare wars, even some inefficient operations, have been the millstones around the airline industry. Airlines such as Jet Airways, IndiGo, SpiceJet, GoAir and Air India continue to struggle when it comes to financial and operational performance. Jet, which cancelled all flights, has at least Rs 15,000 crore in dues and leaves more than 15,000 unpaid staff in the lurch. Air India has debt repayments worth Rs 9,000 crore lined up this financial year and limited means to service them. GoAir has grounded at least 10 of its 48 planes for want of a network to fly them. More than 15 top executives have quit the airline in the last few months. IndiGo's Airbus planes have developed constant issues since they were pressed into services, leading to several groundings since 2018. The country's aviation regulator, DGCA recently served notices to the airline on the engine issues and will be conducting a safety

audit on its fleet soon.

Problems of Air India

Saddled with debt of some 550 billion rupees, Air India has been outmanoeuvred by private carriers in India's intensely competitive aviation market. Air India's revenue from passengers topped 55 billion rupees October-December(2018), an increase of 20% on the year. In December,2018, parliamentary approval was sought for a capital infusion of 23 billion rupees into Air India, on condition that the airline meet such goals as higher levels of operational efficiency, creating distinct business strategies for each of its core businesses and improving the quality of its workforce. According to sources, the airline has satisfied enough of those requirements for the injection to go ahead. As of August,2018, the airline had received over 270 billion rupees in support under a 10-year turnaround plan approved by the previous government in 2012. The plan provides for a total equity infusion of 302 billion rupees into the airline through 2021. But keeping Air India afloat is only the first step for the government. It must also make the airline appealing to buyers. When the government attempted to sell the airline along with two-thirds of its debt in 2018, the offer found no takers. Potential buyers were apparently put off not only by the airline's massive debt, but also because the state sought to retain a 24% stake, which would give it a presence on Air India's board and require its consent on important resolutions. Budget documents released on Feb. 1, 2019 show the government will also provide 39 billion rupees for servicing debt transferred to Air India Asset Holding.

Problems of aviation sector

The **rupee depreciation** is hitting carriers hard. About 25-30% of their costs, excluding fuel, are dollar denominated—from aircraft lease rents and maintenance costs to ground handling and parking charges abroad. **Aviation turbine fuel(ATF)** prices constitute about 40% of costs for an Indian carrier and are taxed higher here than anywhere else in the world. The Centre charges 14% excise duty on ATF. The states pile on their own sales tax that can go as high as 29%. The **intense competition among domestic carriers**, the need to capture a slice of the ever expanding market and passenger price sensitivity makes the airlines difficult to raise ticket prices. The new civil aviation policy (NCAP) 2016's regional connectivity scheme doesn't help. The ticket price caps it imposes under the scheme, the fact that the viability gap funding will last only for three years and various operational issues such as the lack of slots for connecting flights at major airports are a hindrance. Rules such as **route dispersal guidelines (RDG)** that mandate airlines to fly a certain percentage of flights in smaller, unprofitable air routes is archaic in nature. The projected growth in capacity, because of plane orders, will lead to a 14% shortfall in commander pilots, a part of which will have to be fulfilled by more expensive expatriates, leading to a rise in the wage bill, the second biggest cost chunk after fuel. IndiGo in February announced it would cut 30 daily flights from its schedule due to a shortage of crew to man its planes. It is hiring at least 100 expatriate commanders.

- a) Discuss the problems in routing and scheduling that might be faced by an Indian Airline. (10 Marks)
- b) How do you help with MPS to Indian Airlines as an Operation manager? (10 Marks)
