

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA – SEMESTER –IV-EXAMINATION – SUMMER-2022

Subject Code: 4549261**Date: 13-07-2022****Subject Name: Creativity, Innovation and Incubation****Time: 10:30 AM TO 01:30 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q. No.		Marks
Q.1	Explain the following concepts in brief (a) Angel Investors (b) Creative Personality (c) Radical Innovation (d) Technology obsolescence (e) Entrepreneurship (f) Entrepreneurial creativity (g) The Consultant	14
Q.2	(a) List out ten important incubators in India and write a short note on any four business incubators.	07
	(b) Define term innovation and explain the types of innovation.	07
	OR	
	(b) What is Creativity? Explain the types of Creativity.	07
Q.3	(a) What is Business Incubator? How does it work?	07
	(b) Write the characteristics of innovative entrepreneur of your choice, and explain the step involved by him/her to invent the product or service.	07
	OR	
Q.3	(a) Discuss the technological innovation in Indian education sector.	07
	(b) What do you mean by creativity? Which are myths surrounding creativity?	07
Q.4	(a) Explain “technology maturity, obsolesce and discontinuities” with relevant examples.	07
	(b) Review ‘the growth of IT sector after COVID-19 due to Technological development’ in the contest of factors influencing IT sector growth after COVID-19.	07
	OR	
Q.4	(a) What is intellectual property? How someone can protect their intellectual property?	07
	(b) “Growing organizations always support creativity & innovation.” Justify this statement in favor of organizational characteristics that support creativity and innovation.	07

CASE STUDY:

The railway industry in India witnessed tremendous growth, both in terms of operational infrastructure and delivery of passenger services. Being the world's second largest organization under the control of a single management, the Indian Railways served more than 13 million passengers every year. In order to remain profitable, the Railways started investing in cost-cutting technologies that helped the organization to economize on resources and also facilitated streamlining of its varied functional operations. However, the ticketing services of the IR received thrust only after the first passenger reservation system was implemented in 1985. The later two decades saw faster implementation of newer and more advanced technologies by the Indian Railways.

The Indian Railways was among the first organizations in the country to implement computerization on a large-scale. In 1985, IR launched its first passenger reservation system IMPRESS (Integrated Multi-train Passenger Reservation System) as a pilot project in New Delhi.

One noticeable achievement of CRIS was the development and implementation of CONCERT (Countrywide Network of Computerized Enhanced Reservation and Ticketing) based on a distributed computing architecture. CONCERT was first implemented in September 1994. The implementation of CONCERT yielded substantial benefits. The reservation procedure became less labour-intensive and more technology-based, and there was significant increase in the number of transactions handled per day.

The Indian Railways launched the online reservation system in August 2002 under the aegis of IRCTC. With its Web-based interface, passengers could enquire information about trains, find out their reservation status and also book tickets online. By the end of December 2003, IRCTC sold more than 70,000 tickets and extended its services to more than 120 cities all over India. This facility was efficient, convenient and also economical for officially busy users who could not afford to personally go to a PRS centre or who otherwise found the service charges of touts and agents exorbitantly high.

Difficulties in Implementation: The workload on the PRS was enormous. It handled more than 1.3 million queries on roughly 14,300 trains. Amitabh Pandey, Group General Manager, IT Services, IRCTC, once remarked, "The PRS had to handle close to the tune of 600,000 reservations per day. Internet connectivity at that time was poor and the Web pages took a lot of time to load and sometimes the customers used to book a ticket multiple times since they kept clicking repeatedly."

Other Innovations:

The IT strategies of IR did not remain confined to the implementation of the passenger reservation system or the on-line internet system. The organization kept on investing in several state-of-the-art technologies that, apart from being user friendly, also emerged as avenues for higher profits.

In order to carry out the broader social goal of providing affordable transport service to the country, IR made substantial investments in resource saving technologies. The progressive implementation of IT served as a thrust towards better responsiveness to the rising passenger demands. The communication infrastructure that IR built up over the years not only helped it cater effectively to the rising customer needs but also opened new avenues for revenue generation. The Internet reservation system, CONCERT, unreserved ticketing system, railway credit cards, Tele-Booking Services and mobile reservation were only some of the instances where upcoming technologies gave new dimensions to customer satisfaction. They augmented IR's revenues and also helped cut down surplus expenditures through better utilization of resources by way of improved demand analysis, better management of coaches and efficient utilization of railway tracks.

(a) Which are the other innovations taken by IR? **07**

(b) Why Indian Railway going towards technological development in Railway sector? **07**

OR

Q.5 (a) Which are the barriers to Indian Railway in Implementation of technological Innovations? **07**

(b) Which technological innovations will you suggest to IR for the Benefits of organization as well as customers after COVID-19 era? **07**
