



Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD (now MoE)

Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC

Coimbatore - 641 043, Tamil Nadu, India

Master's Degree Examination - May 2025

IV Semester

Class : II PG

Major : MBA/MBA-Information Technology

Time: 3 Hours

Max. Marks: 100

23MBAC290/23MBMC290 Specialisation-I.P.IV - Innovation and Technology Management
/23MBAC300 - Specialisation-II.P.IV - Innovation and Technology Management

Course Outcome:

CO1: Update knowledge on technological changes and innovative business solutions for firm's sustainable development

CO2: Analyse the technology management challenges and provide solutions to manage technology in turbulent environment.

CO3: Apply critical thinking and employ problem solving approach to mitigate the hindrances in innovation and technology management.

CO4: Examine the role of innovation in organizational process and ensure innovation works as a core competency in technology management.

CO5: Display the breadth of skills changing the landscape of organizational success with highly recognized innovative practices to manage technology adoption

Part A

10 x 1 = 10

Choose the Correct Answer

1. Innovation is defined as: CO1K1
 - a. The commercialization of a new product or process.
 - b. The invention of a new product or process.
 - c. A new product or process idea.
 - d. The implementation of a new production method.
2. Process innovation refers to: CO1K1
 - a. The development of a new service.
 - b. The development of a new product.
 - c. The implementation of a new or improved production method.
 - d. The development of new products or services.
3. Established firms relative to new firms are better at: CO2K1
 - a. All types of innovation.
 - b. Innovation which is competence-enhancing.
 - c. Innovation which is competence-destroying.
 - d. Innovation which is disruptive.
4. Which of the following are valuable in a standards war? CO2K1
 - a. Competitive advantage
 - b. Late mover advantage
 - c. Early mover advantage
 - d. Technological advantage
5. Outsourcing of innovation globally is more likely where: CO3K1
 - a. Innovations are autonomous
 - b. Innovations are systemic
 - c. Innovations are systemic or autonomous
 - d. Innovations are made by service sector firms

6. The fundamental challenge of knowledge transfer in multinational firms is: CO3K2
- Transferring explicit knowledge across borders.
 - Transferring tacit knowledge across borders.
 - Creating tacit knowledge in overseas subsidiaries.
 - Transferring tacit and explicit knowledge across borders.
7. What potential advantages can be gained from involving overseas subsidiaries in R&D activities? CO4K2
- Local subsidiaries offer financial advantages such as lower land and labour costs.
 - Local subsidiaries offer access to local companies.
 - Local subsidiaries offer access to technical knowledge and skills.
 - Local subsidiaries offer financial advantages as well as access to local markets, technical knowledge and skills.
8. Following establishment of a dominant design in the product life cycle, what would you expect to happen? CO4K2
- Emphasis on product innovation rather than process innovation.
 - Emphasis on process innovation rather than product innovation.
 - Competition to increase as new firms enter the industry.
 - Competition to decrease as more firms exit than enter the industry.
9. Innovation can help to provide a temporary competitive advantage when: CO5K2
- Barriers to entry are high.
 - Barriers to imitation are low and intellectual property rights are difficult to enforce.
 - There are few other competitors.
 - Barriers to entry are low.
10. In which markets network effects are likely? CO5K1
- Markets subject to increasing returns
 - 'Tippy' markets
 - Hi-tech product markets
 - All of the above

Part B

5 x 6 = 30

Answer ALL questions

Each answer should not exceed 400 words or two pages

- 11.a. Briefly discuss on evolution of Technology CO1K2
(or)
- 11.b. What are the technological opportunities for freshers? CO1K1
- 12.a. Define the concept of technological innovation. CO2K2
(or)
- 12.b. List the core competencies in Technology. CO2K2
- 13.a. Write a short note on Building Blocks of Innovation Eco Systems. CO3K2
(or)
- 13.b. Illustrate the term Gamification. CO3K3
- 14.a. Sketch out the organic system of management. CO4K2
(or)
- 14.b. Define Green Technologies. CO4K2
- 15.a. List out the choices of technology development. CO5K2
(or)
- 15.b. Describe IT enabled strategic innovation. CO5K2

Part C

5 x 12 = 60

Answer ALL questions

Question No 20. Case is Compulsory

Each answer should not exceed 800 words or four pages

- 16.a. Define the Axes and Atlas of technology. CO1K3
(or)
- 16.b. Summarise the technological changes in economic thoughts CO1K3
- 17.a. Criticise the issues in flexible technology. CO2K2
(or)
- 17.b. Enumerate the concept of technology transfer. CO2K2
- 18.a. Describe the changes in Innovation 4.0. CO3K4
(or)
- 18.b. Discuss the role of innovation. CO3K4
- 19.a. List the Structural imperatives of technology management. CO4K3
(or)
- 19.b. Write a short note on IoT & 3D Printing. CO4K3
- 20. Case Study (Compulsory Question):** CO5K5

Ola Cabs, founded in 2010 by Bhavish Aggarwal and Ankit

Bhati, revolutionized the Indian transportation sector. What started as a small startup aiming to offer convenient taxi services quickly transformed into one of India's largest ride-hailing companies. Ola's success lies in its innovation, both in technology and business model, which disrupted the traditional transportation industry in India.

The Indian transportation sector was highly fragmented, with traditional taxis being difficult to book, expensive, and often unreliable. Ola faced the challenge of providing an efficient, cost-effective, and tech-driven solution to this market. At the same time, it had to navigate regulatory issues and stiff competition from international players like Uber.

Innovation and Technology Management:

Ola's success can be attributed to several innovative strategies and the effective management of technology:

- **Mobile App Platform (Technology-Driven Innovation):** Ola introduced a simple, user-friendly mobile application that allowed passengers to book rides with just a few taps. The app used GPS to track the nearest available driver, improving the efficiency of the entire process. This technological innovation made taxi services more accessible and convenient for urban populations.
- **Dynamic Pricing Model (Business Model Innovation):** Ola implemented a dynamic pricing system based on demand, which was a significant innovation in the Indian context. This allowed the company to manage supply and demand in real-time, ensuring that both riders and drivers could benefit from fluctuating fares. Although initially controversial, it helped Ola to maximize its resources and improve service availability.

- **Diverse Fleet (Product Innovation):** Unlike traditional taxi services, which offered only a single type of vehicle, Ola introduced multiple ride options, including Ola Mini, Ola Sedan, and Ola Prime, catering to different customer segments and needs. Additionally, Ola introduced innovative services like Ola Auto and Ola Share, expanding its service range to include auto-rickshaws and carpooling.
- **Data Analytics and Artificial Intelligence (Technology Management):** Ola leveraged big data and artificial intelligence to optimize driver routes, predict demand patterns, and enhance user experience. The company continuously refined its app and backend systems to ensure efficient operations, improving both customer and driver satisfaction.

Questions:

1. How did Ola's use of mobile app technology and dynamic pricing contribute to its competitive advantage in the Indian market?
2. In what ways did Ola's innovation in product offerings (e.g., Ola Auto, Ola Share) help differentiate it from traditional taxi services?
