Printed Page:-4 **Subject Code:- CMBA0203**
Roll. No:

NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA
(An Autonomous Institute Affiliated to AKTU, Lucknow)
MBA
SEM: II - THEORY EXAMINATION (2025 - 2026)
Subject: Management of Technology, Innovation and Change

Time: 3 Hours **Max. Marks: 100**

General Instructions:

IMP: *Verify that you have received the question paper with the correct course, code, branch etc.*
1. *This Question paper comprises of* ***three Sections -A, B, & C.*** *It consists of Multiple Choice Questions (MCQ's) & Subjective type questions.*
2. *Maximum marks for each question are indicated on right -hand side of each question.*
3. *Illustrate your answers with neat sketches wherever necessary.*
4. *Assume suitable data if necessary.*
5. *Preferably, write the answers in sequential order.*
6. *No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.*

SECTION-A 20

1. Attempt all parts:-

(1.1) Incremental innovation refers to: (CO1 - K2) 1
- (a) Small improvements to existing products or processes
- (b) Breakthrough completely new product
- (c) Radical technology change
- (d) Disruptive market change

(1.2) An example of incremental innovation is: (CO1 - K2) 1
- (a) First smartphone
- (b) First automobile
- (c) First airplane
- (d) New iPhone model with better camera

(1.3) The third stage of an innovation management framework is: (CO2 - K4) 1
- (a) Idea generation
- (b) Concept development and testing
- (c) Manufacturing
- (d) Marketing

(1.4) An innovation portfolio is defined as: (CO2 - K4) 1
- (a) Single innovation project
- (b) Collection of innovation projects at different stages and risk levels
- (c) List of failed projects
- (d) Annual budget document

(1.5) First mover advantage in technology strategy is: (CO3 - K5) 1

(a) Benefits gained by being first to market with new technology
(b) Benefits of entering last
(c) Benefits of copying others
(d) Benefits of avoiding technology

(1.6) Early follower strategy in technology is: (CO3 - K5) 1

(a) Being first to market
(b) Entering after first mover but before majority; learning from first mover's mistakes
(c) Entering last
(d) Never entering

(1.7) Outbound open innovation refers to: (CO4 - K4) 1

(a) Bringing ideas into the firm
(b) Taking internal ideas and technologies to external market (licensing spin-offs)
(c) Keeping all ideas secret
(d) Destroying unused ideas

(1.8) Technology adaptation is important for India because: (CO4 - K4) 1

(a) Technology is always perfect as is
(b) No adaptation needed
(c) Adaptation increases cost
(d) Local conditions (climate infrastructure skills) differ from source country

(1.9) A trade secret is defined as: (CO5 - K5) 1

(a) Registered public information
(b) Patent-published information
(c) Confidential business information giving competitive advantage (e.g., Coca-Cola formula)
(d) Copyrighted material

(1.10) Technology licensing in the IPR context is: (CO5 - K5) 1

(a) Granting permission to another party to use IP rights in exchange for royalty
(b) Selling IP outright
(c) Destroying IP
(d) Ignoring IP

2. Attempt all parts:-

(2.1) Identify and explain two external sources of innovation. (CO1 - K2) 2

(2.2) Describe the characteristics of innovators in diffusion of innovation. (CO2 - K2) 2

(2.3) Explain technology portfolio. (CO3 - K2) 2

(2.4) Describe the technology adoption. (CO4 - K2) 2

(2.5) Explain technology portfolio evaluation. (CO5 - K2) 2

<u>SECTION-B</u> 30

Answer any <u>one</u> of the following:-

(3.1) Explain the difference between divergent thinking and convergent thinking in creative problem solving. (CO1 - K4) 6

(3.2)	Describe the barriers to organizational creativity and how to overcome them. (CO1 - K3)	6

Answer any one of the following:-

(3.3)	Describe the factors that influence rate of adoption of innovation. (CO2 - K2)	6
(3.4)	Describe the components of an innovation management system including processes, tools and governance. (CO2 - K2)	6

Answer any one of the following:-

(3.5)	Describe the critical issues and factors in choice of technology for organizations. (CO3 - K2)	6
(3.6)	Evaluate the role of technology in creating and sustaining competitive advantage. (CO3 - K5)	6

Answer any one of the following:-

(3.7)	Explain the steps in technology transfer process from identification to implementation. (CO4 - K2)	6
(3.8)	Describe the technology transfer concerns specific to Indian manufacturing sector. (CO4 - K2)	6

Answer any one of the following:-

(3.9)	Describe the methods for strategic evaluation of technology investments including financial and strategic criteria. (CO5 - K5)	6
(3.10)	Elaborate on different types of Intellectual Property Rights with examples of each. (CO5 - K2)	6

SECTION-C 50

4. Answer any one of the following:-

(4.1)	Discuss how companies can balance exploration (radical innovation) and exploitation (incremental innovation) effectively. (CO1 - K2)	10
(4.2)	Explain how digital technologies (AI IoT Cloud) are enabling new forms of innovation across industries. (CO1 - K2)	10

5. Answer any one of the following:-

(5.1)	Apply the five factors of innovation adoption (Roger's) to explain why UPI adoption succeeded in India. (CO2 - K3)	10
(5.2)	Explain the concept of organizational innovative effectiveness. What are the key drivers and how can they be measured? (CO2 - K3)	10

6. Answer any one of the following:-

(6.1)	Design a technology adoption framework for an Indian bank transitioning from legacy systems to cloud and AI. (CO3 - K6)	10
(6.2)	Create a technology roadmap for a hospital chain adopting telemedicine and AI diagnostics. Show market product and technology layers for 5 years. (CO3 - K6)	10

7. Answer any one of the following:-

(7.1)	Describe the legal and intellectual property concerns in cross-border technology transfer. Suggest how should Indian companies protect their interests? (CO4 - K5)	10
(7.2)	An Indian automotive parts manufacturer is licensing electric motor technology from a German company. Create a technology transfer plan including	10

documentation, training, pilot production and performance targets. (CO4 - K6)

8. Answer any <u>one</u> of the following:-

(8.1)	Describe the intellectual property licensing issues in university-industry technology transfer. Design a model agreement template. (CO5 - K6)	10
(8.2)	Evaluate the R&D strategy of a successful Indian company of your choice . Analyze their R&D intensity, focus areas, and key innovations. (CO5 - K5)	10