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Subject Code:- CMBMF0206
Roll. No:

NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA
(An Autonomous Institute Affiliated to AKTU, Lucknow)
MBA MF
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.*

<u>SECTION-A</u> 20

1. Attempt all parts:-

(1.1) Radical innovation creates: (CO1,K2) 1

(a) Minor improvement
(b) No change
(c) Major market change
(d) Administrative task

(1.2) Process innovation improves: (CO1,K2) 1

(a) Product pricing
(b) Operational efficiency
(c) Sales commission
(d) Office layout

(1.3) A framework for innovation provides: (CO2,K1) 1

(a) Legal compliance
(b) Structured guidance
(c) Office design
(d) Employee transfer

(1.4) Early adopters _____________ : (CO2,K1) 1

(a) Reject innovations
(b) Accept innovation early
(c) Avoid technology
(d) Delay decisions

(1.5) Innovation management requires: (CO3,K2) 1

(a) Office transfer
(b) Market decline
(c) Strategic planning
(d) Random purchase

(1.6) Strategic aspects of technology support: (CO3,K2) 1

(a) Random planning
(b) Inventory counting
(c) Temporary goals
(d) Long-term planning

(1.7) Technology adaptation: (CO4,K2) 1

(a) Inventory reduction
(b) Office expansion
(c) Modification for local needs
(d) Random hiring

(1.8) Lean systems focus on: (CO4,K2) 1

(a) Random hiring
(b) Office expansion
(c) Efficient resource utilization
(d) Inventory loss

(1.9) National Technology Policy guides: (CO5,K1) 1

(a) Technological development
(b) Random conflict
(c) Office repairs
(d) Payroll delays

(1.10) R&D investments improve: (CO5,K2) 1

(a) Innovation capability
(b) Random delay
(c) Office conflict
(d) Manual operations

2. Attempt all parts:-

(2.1) State the meaning of creativity. (CO1,K1) 2
(2.2) List features of innovation management. (CO2,K1) 2
(2.3) Define technology forecasting. (CO3,K1) 2
(2.4) Define technology adoption. (CO4,K1) 2
(2.5) Define IPR. (CO5,K1) 2

SECTION-B 30

Answer any one of the following:-

(3.1) Explain the concept and types of innovation (CO1,K2) 6
(3.2) Explain creativity as a building block of innovation. (CO1,K2) 6

Answer any one of the following:-

(3.3) A technology company is facing intense competition and declining market share because its products are becoming outdated quickly. To remain competitive, the management decides to adopt a structured innovation management framework that encourages idea generation, research and development, employee collaboration, and continuous improvement. 6

Question:

Analyze how an effective innovation management framework can help the company improve its competitiveness and achieve long-term growth. Discuss the key elements involved in the framework. (CO2,K4)

(3.4) Explain the structural elements necessary for successful innovation management. (CO2,K2) 6

Answer any one of the following:-

(3.5) Discuss technology choice and process selection. (CO3,K2) 6

(3.6) Explain technology forecasting methods. (CO3,K2) 6

Answer any one of the following:-

(3.7) Explain technology adoption process. (CO4,K2) 6

(3.8) Explain operational flexibility through technology adaptation. (CO4,K2) 6

Answer any one of the following:-

(3.9) Explain role of WTO in new age technology. (CO5,K2) 6

(3.10) Explain technology transfer and IPR protection. (CO5,K2) 6

<u>SECTION-C</u> 50

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

(4.1) A manufacturing company has noticed a decline in customer demand due to changing market trends and increasing competition from technologically advanced firms. To respond effectively, the company plans to strengthen its innovation capabilities by focusing on factors such as leadership support, employee creativity, technological advancement, customer feedback, and market research. 10

Question:

Analyze the key drivers influencing innovation in the company. Explain how these drivers can help the organization improve performance and maintain a competitive advantage. (CO1,K4)

(4.2) Discuss open innovation and closed innovation models. (CO1,K2) 10

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

(5.1) A healthcare company introduced a new digital health monitoring system designed to improve patient care and operational efficiency. Although the technology offers significant benefits, many hospitals and medical staff are reluctant to adopt it due to high implementation costs, lack of technical skills, resistance to change, poor infrastructure, and concerns about data security. 10

Question:

Analyze the major barriers affecting the diffusion of innovation in this case. Suggest suitable measures the company can take to overcome these barriers and encourage wider adoption of the technology. (CO2,K4)

(5.2) Explain importance of innovation culture for competitiveness. (CO2,K2) 10

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

(6.1) Explain technology portfolio evaluation techniques. (CO3,K2) 10

(6.2) A multinational electronics company is managing a portfolio of technology projects that includes artificial intelligence, renewable energy devices, and smart wearable products. Some projects offer high potential returns but involve significant uncertainty and financial risk, while others provide stable returns with lower risk. The management must decide how to allocate resources effectively among these projects. 10

Question:

Explain the concepts of risk and return in technology portfolio management. Analyze how balancing risk and return can help the company achieve innovation, profitability, and long-term growth. (CO3,K2)

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

(7.1) Discuss licensing and franchising as technology transfer modes. (CO4,K2) 10

(7.2) Discuss operational efficiency through lean technology. (CO4,K2) 10

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

(8.1) A software startup has developed a unique mobile application with advanced features and original digital content. Soon after its launch, competing companies begin copying its technology and design elements. To protect its innovations and maintain a competitive advantage, the company decides to use intellectual property rights such as patents and copyrights. 10

Question:

Explain the role of patents and copyrights in promoting and protecting innovation. Analyze how these intellectual property rights can help the company secure its creations, encourage investment in research and development, and support business growth. (CO5,K4)

(8.2) Discuss strategic challenges in managing R&D investments. (CO5,K2) 10