

# CBCS SCHEME

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MBA401



## Fourth Semester MBA Degree Examination, June/July 2026 Emerging Technologies for Business

Max. Marks:100

**Note:** 1. Answer any *FOUR* full questions from *Q1* to *Q7*.  
2. Question No.8 is compulsory.  
3. *M* : Marks , *L*: Bloom's level , *C*: Course outcomes.

|     |    |                                                                                                                                     | M  | L  | C   |
|-----|----|-------------------------------------------------------------------------------------------------------------------------------------|----|----|-----|
| Q.1 | a. | Define Fourth Industrial Revolution (IR 4.0) and explain the role of programmable devices in emerging technologies.                 | 3  | L2 | CO2 |
|     | b. | Illustrate the Data Processing Cycle and explain how data acquisition supports emerging technologies in business applications.      | 7  | L3 | CO3 |
|     | c. | Analyze the relationship between Human–Machine Interaction and Artificial Intelligence in transforming modern business operations.  | 10 | L4 | CO4 |
| Q.2 | a. | What is Big Data? Mention any three characteristics of Big Data.                                                                    | 3  | L1 | CO1 |
|     | b. | Explain the architecture of IoT with suitable examples from smart city applications.                                                | 7  | L3 | CO2 |
|     | c. | Evaluate the applications of Artificial Intelligence in healthcare and agriculture sectors with suitable illustrations.             | 10 | L5 | CO4 |
| Q.3 | a. | Differentiate between Data and Information.                                                                                         | 3  | L2 | CO1 |
|     | b. | Discuss the advantages and challenges of IoT in wearable devices and smart farming.                                                 | 7  | L3 | CO2 |
|     | c. | Analyze the importance of Digital Privacy and Accountability in AI-driven business systems.                                         | 10 | L4 | CO4 |
| Q.4 | a. | State the goals of Artificial Intelligence.                                                                                         | 3  | L1 | CO1 |
|     | b. | Explain the role of Data Value Chain in effective business decision-making.                                                         | 7  | L3 | CO3 |
|     | c. | Compare and evaluate Augmented Reality (AR), Virtual Reality (VR), and Mixed Reality (MR) in business and educational applications. | 10 | L5 | CO4 |

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|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----|----|-----|
| Q.5                          | a.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | What is Cloud Computing? Mention its significance in emerging technologies.                                                                    | 3  | L2 | CO1 |
|                              | b.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Describe various AI tools and platforms used in business analytics and automation.                                                             | 7  | L3 | CO2 |
|                              | c.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Analyze the impact of Blockchain Technology and Cyber Security on digital business transformation.                                             | 10 | L4 | CO4 |
| Q.6                          | a.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Define Augmented Reality (AR).                                                                                                                 | 3  | L1 | CO1 |
|                              | b.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Explain the working process of IoT and discuss its applications in Smart Homes and Smart Grids.                                                | 7  | L3 | CO2 |
|                              | c.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Design a business model using Emerging Technologies such as AI, IoT, and Cloud Computing for improving customer experience in retail business. | 10 | L5 | CO3 |
| Q.7                          | a.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | What is Additive Manufacturing (3D Printing)?                                                                                                  | 3  | L1 | CO1 |
|                              | b.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Explain the applications of AR systems in medical and entertainment industries.                                                                | 7  | L3 | CO2 |
|                              | c.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Critically examine ethical issues, threats, and challenges associated with emerging technologies in modern organizations.                      | 10 | L5 | CO4 |
| <b>Compulsory Question :</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                |    |    |     |
| Q.8                          | A retail company named SmartKart plans to transform its traditional business operations into a technology-driven digital enterprise. The company intends to use Artificial Intelligence for customer recommendation systems, IoT-enabled smart shelves for inventory tracking, AR applications for virtual product trials, and Cloud Computing for centralized data management. However, the management is concerned about digital privacy, cyber security risks, employee adaptation, and implementation cost. |                                                                                                                                                |    |    |     |
|                              | <b>Questions:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                | 5  | L3 | CO1 |
|                              | a)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Identify the emerging technologies used by SmartKart and explain their business relevance.                                                     | 5  | L4 | CO2 |
|                              | b)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Analyze how IoT and AI can improve operational efficiency and customer satisfaction in SmartKart.                                              | 5  | L5 | CO4 |
|                              | c)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Evaluate the ethical and cyber security challenges SmartKart may face during digital transformation.                                           | 5  | L5 | CO5 |
|                              | d)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Suggest a suitable technology integration strategy for successful implementation of emerging technologies in SmartKart.                        |    |    |     |

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