

Enrollment No./Seat No.:

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MBA - SEMESTER - III EXAMINATION - WINTER 2025**

**Subject Code: MB03095021**

**Date: 19-12-2025**

**Subject Name: Introduction to FINTECH and Financial Analytics**

**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.**
- 4. USE of SIMPLE calculators AND non-programmable scientific calculators are permitted.**

	<b>Marks</b>
<b>Q.1</b> ALL 7 Questions must be Compulsory.	<b>14</b>
<b>(a)</b> Neobanks	
<b>(b)</b> P2P Lending	
<b>(c)</b> Digital Identity	
<b>(d)</b> Application Programming Interface	
<b>(e)</b> InsurTech	
<b>(f)</b> Robo-Advisory	
<b>(g)</b> Cryptocurrencies	
<b>Q.2 (a)</b> Explain the concept of IT-enabled financial innovations. Discuss the current trends and the future of financial services in the context of FinTech developments.	<b>07</b>
<b>(b)</b> Elaborate on the need and importance of FinTech regulation in India. Discuss the role of RBI, SEBI, and IRDAI in promoting responsible FinTech growth.	<b>07</b>
<b>OR</b>	
<b>(b)</b> Explain the concept of Crowdfunding in the context of FinTech innovation. Discuss how digital platforms have transformed the process of raising funds through collective participation.	<b>07</b>
<b>Q.3 (a)</b> Write short note on Blockchain and its relevance in financial transactions.	<b>07</b>
<b>(b)</b> “FinTech has redefined the relationship between customers and banks.” Justify this statement with examples of innovative practices adopted by banks.	<b>07</b>
<b>OR</b>	
<b>(a)</b> Define Financial Analytics. Discuss its importance in modern financial decision-making with examples from business or investment contexts.	<b>07</b>
<b>(b)</b> Explain the challenges of implementing Financial Analytics in organizations. Discuss issues related to fraud, risk, data quality, and ethical use of information.	<b>07</b>
<b>Q.4 (a)</b> Discuss the various types and components of Financial Analytics. How do these components work together to generate meaningful insights for organizations?	<b>07</b>

- (b) What is Corporate Financial Analytics? Explain its application in performance measurement, budgeting, and cost optimization. 07

OR

- (a) Discuss the importance of Investment Financial Analytics. How does it assist in risk management, profitability analysis, and portfolio management? 07
- (b) Explain the relevance of Python in financial data analytics. Describe the process of data cleaning and the importance of reliable data sources in financial analysis. 07

**Q.5**

India's financial services landscape has undergone a remarkable transformation due to the deep integration of technology into finance — known as FinTech. The growth of mobile banking, UPI, digital lending, AI-based credit scoring, and blockchain-backed record systems has completely changed the way financial services are delivered.

The Unified Payments Interface (UPI), launched in 2016, revolutionized real-time transactions. With UPI, users can transfer money instantly between bank accounts using smartphones without the need for cards or wallets. By 2024, India recorded over 12 billion monthly UPI transactions, leading the world in digital payments. The system's low cost, speed, and interoperability drove rapid adoption across rural and urban India.

FinTech startups have further expanded financial inclusion. Platforms such as Paytm, KreditBee, and LendingKart use Artificial Intelligence and Machine Learning models to assess creditworthiness using alternative data like mobile recharge patterns, online purchases, and social media behavior. This innovation democratized credit but also raised ethical and regulatory concerns regarding data privacy and algorithmic bias.

InsurTech has equally transformed insurance operations. Predictive analytics and Internet of Things (IoT) technologies are used to assess risk in real-time, personalize premiums, and enable instant claim settlements. For example, telematics in vehicle insurance monitors driver behavior, adjusting premiums dynamically. Blockchain technology is also being introduced in trade finance and claim verification to prevent fraud and enhance transparency.

However, challenges persist. Rural areas lag in FinTech adoption due to low digital literacy, limited connectivity, and lack of trust in digital platforms. Cybersecurity risks and data breaches have become more frequent, prompting stricter norms from regulators. The Reserve Bank of India (RBI) and the Insurance Regulatory and Development Authority of India (IRDAI) are working toward a secure and transparent ecosystem, introducing frameworks for data protection, fair lending practices, and responsible AI.

As India continues to digitize financial systems, public infrastructure initiatives like the India Stack, Account Aggregator framework, and Digital India Mission are expected to deepen trust and inclusion. The future of FinTech lies in collaborative innovation between traditional banks, startups, and policymakers — ensuring accessibility, security, and sustainability in the financial sector.

- (a) Identify and discuss the key drivers that have enabled FinTech-led transformation in the Indian banking system. 07
- (b) Explain how AI and machine learning are reshaping the credit assessment and lending process. What risks are associated with their use? 07

OR

- (a)** Evaluate the regulatory measures taken by RBI and IRDAI to ensure secure and ethical FinTech practices. **07**
- (b)** Suggest suitable strategies to enhance FinTech adoption in rural and semi-urban India. **07**

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