School of Business

Bachelor of Business Administration
Semester End Examination - May 2024

Duration : 180 Minutes
Max Marks : 100

Sem VI - D1UE601T - Advanced Technology in Banking

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1) Describe the key features and functionalities of UPI (Unified Payments Interface) technology in mobile banking, emphasizing its role in simplifying financial transactions across multiple bank accounts. K3 (6)

2) Scenario:
You are the IT manager of a mid-sized bank tasked with overseeing the implementation and maintenance of INFINET connectivity to streamline payment system operations. However, during the initial phases of integration, you encounter various challenges that hinder the seamless connection between INFINET and the payment systems. To ensure the successful implementation and ongoing maintenance of INFINET connectivity, you need to address these challenges effectively.
Question:
1. As the IT manager facing challenges in implementing and maintaining INFINET connectivity with payment systems, how would you identify and overcome these obstacles to ensure a smooth and reliable integration process? (5 marks)
2. Provide specific examples of potential challenges, such as compatibility issues, network disruptions, and data security concerns, that may arise during the implementation phase.(4 marks) K3 (9)

3) Distinguish between traditional banking and digital banking models, highlighting the key variances, and elucidate how the ascent of technology has impacted the progression of banking services. K4 (4)

4) Imagine you're a strategic planner responsible for developing a roadmap for the digital transformation of a traditional bank into a fully digital banking institution. How would you analyze a comprehensive analysis of the bank's existing infrastructure, processes, and customer preferences to formulate a digital strategy aligned with business objectives? What key milestones and performance metrics would you define to measure the success of the digital transformation initiative? K4 (8)

5) Situation:

You are a senior executive at XYZ Bank, a financial institution operating in a region with significant unbanked populations and limited access to traditional banking services. XYZ Bank is considering implementing Electronic Fund Transfer (EFT) systems to address financial inclusion challenges and promote access to banking services. As part of your strategic planning, you are tasked with analyzing the potential impact of EFT on financial inclusion and outlining how these systems can bridge the gap for unbanked populations, enable digital payments in underserved regions, and promote financial literacy initiatives.

Question:
As a senior executive at XYZ Bank, how would you analyze the impact of Electronic Fund Transfers (EFT) on financial inclusion and access to banking services in our region? Specifically, how do EFT systems bridge the gap for unbanked populations, enable digital payments in underserved regions, and promote financial literacy and inclusion initiatives?

6) Situation: Evergreen Bank, a long-standing financial institution, is in the midst of a technological overhaul to modernize its banking operations. The bank has implemented various cutting-edge technologies such as artificial intelligence (AI), machine learning (ML), and robotic process automation (RPA) to streamline processes, enhance customer experiences, and stay competitive in the digital age.
Question:

1. As Evergreen Bank undergoes its technological transformation, explain the potential impact of these advancements on its banking operations. How might AI, ML, and RPA optimize backend processes such as transaction processing, risk management, and fraud detection?(5 marks)
                        2.Discuss how these technologies could improve front-end services for customers, including personalized banking experiences, real-time support, and seamless omni-channel interactions.(5 marks)

Situation:
You have been hired as a CRM consultant by a large banking institution looking to assess the effectiveness of their current CRM systems. The bank is particularly interested in understanding how these systems contribute to enhancing customer satisfaction, improving retention rates, and personalizing marketing strategies.

7)

Question:
In this scenario, how do Customer Relationship Management (CRM) systems utilized by the banking institution contribute to enhancing customer satisfaction, improving retention rates, and personalizing marketing strategies? Provide specific examples of CRM features employed in the banking context and assess their effectiveness in achieving these objectives.

8) Situation: K5 (15)

ABC Bank is a leading financial institution that is constantly looking for ways to improve its services and stay ahead in the competitive market. With the increasing popularity of mobile banking and the rising concerns about security in digital transactions, ABC Bank has decided to implement tokenization technology in its mobile banking app.

Tokenization involves replacing sensitive data, such as credit card numbers or account details, with unique identifiers called tokens. These tokens are meaningless to anyone who intercepts them, thus enhancing security during digital asset transfers. Additionally, tokenization streamlines transaction processes, reduces the risk of fraud, and provides a seamless user experience.

As part of the implementation plan, ABC Bank is organizing a series of training sessions for its employees to educate them about tokenization and its benefits. You have been appointed as the lead trainer for these sessions.

Question:
1.During the training session, you are required to explain the concept of tokenization in mobile banking to the employees thoroughly. Additionally, you must discuss the key advantages of tokenization compared to traditional methods of handling sensitive data in mobile banking transactions.(8 marks)
2.Provide examples to illustrate how tokenization works and its role in enhancing the security and efficiency of digital asset transfers within ABC Bank's mobile banking app. Emphasize the importance of tokenization in protecting customer data and building trust in digital banking services.(7 marks)

9) ABC Bank is a leading financial institution aiming to enhance its digital K6 (12) banking services to meet the evolving needs of its customers. As part of its digital transformation strategy, the bank is considering implementing a robust payment gateway system to facilitate secure and seamless transactions for both online and offline purchases. The bank seeks to understand the role of payment gateways in the banking sector and how they can benefit its operations and customers.

Question:
1.What is a payment gateway, and how does it differ from traditional banking systems? (4 marks)
2. Analyze the significance of payment gateways in enabling online transactions in the modern banking landscape. (4 marks)
3. What are the key features and functionalities that a payment gateway should possess to meet the requirements of a bank like ABC Bank? (4 marks)

10) In Mumbai, there lived Rohan, a young entrepreneur with a vision for revolutionizing the country's financial landscape. Inspired by the rapid adoption of technology and the entrepreneurial spirit sweeping across the nation, Rohan set out on a mission to leverage blockchain technology to democratize access to financial services for millions of Indians.

Growing up in a middle-class family, Rohan had witnessed firsthand the challenges faced by ordinary Indians in accessing traditional banking services. With a deep-rooted desire to drive positive change, he founded a fintech startup dedicated to harnessing the power of blockchain to empower the unbanked and underserved communities of India.

With unwavering determination and a relentless pursuit of innovation, Rohan and his team embarked on a journey to develop a decentralized financial platform that would offer a wide range of financial services, including savings accounts, lending, and investment opportunities, all powered by blockchain technology.

Despite facing numerous challenges along the way, from regulatory hurdles to technological complexities, Rohan remained undeterred in his mission. With each obstacle they encountered, he and his team worked tirelessly to find creative solutions and forge ahead in their quest to bring financial inclusion to every corner of India.

As word spread of Rohan's groundbreaking initiative, excitement and anticipation grew throughout the country. People from all walks of life eagerly awaited the launch of the platform, hopeful that it would provide them with access to the financial tools and resources they needed to build a brighter future for themselves and their families.

Finally, after months of tireless effort and dedication, Rohan unveiled the platform to the world. The response was nothing short of extraordinary, with millions of Indians signing up to take advantage of the innovative financial services it offered.

With his decentralized financial platform, Rohan had not only transformed the lives of millions of Indians but had also ignited a spark of hope and optimism for the future of financial inclusion in India. As he looked out over the bustling streets of Mumbai, Rohan knew that his journey was just beginning, and that the possibilities for positive change were limitless.

Q1. How did Rohan navigate the regulatory environment in India while launching his fintech startup, and what strategies did he employ to

ensure compliance with local laws and regulations? (6 marks)

Q2. How did Rohan navigate the regulatory environment in India while launching his fintech startup, and what strategies did he employ to ensure compliance with local laws and regulations? (6 marks)

Q3. Rohan's team encounters a technical challenge in ensuring the scalability and security of their decentralized financial platform to accommodate millions of users across India. Propose a solution that addresses these scalability issues while maintaining the platform's integrity, security, and efficiency, considering factors such as network congestion, transaction throughput, and consensus mechanisms.(6 marks)