Information and Communication Technology in Financial Institutions (ICTFI)

Full Marks: 100

Module-A: Introduction to ICT and Computer Systems
- Information and Communication Technology, Electronic Banking and Online Banking, Mobile Financial Services, Agent Banking, e-commerce and m-Commerce, Computer Hardware, Computer Software, Internet.

Module-B: Different Approaches to Automation of Financial Institutions (FIs)
- Data Center (DC), Near DC, Disaster Recovery Site (DRS), Data Center Standards and certifications, Computer Networking, IT Systems, Storage, Database and backup systems for ICT in FIs, Computerization approaches, Various Software Systems Like Core Banking, Switching, Credit Card, Payment Gateway, Mobile Financial System and Agent Banking Software.

Module-C: Alternative Delivery Channels & Fund Transfer Systems
- Automatic Transaction Machine (ATM), Cash Deposit Machine (CDM), Cash Recycling Machine (CRM), POS terminals, Debit Card, Credit Card, Card technology Internet Banking, SMS and Alert Banking, E-commerce & Internet Payment Gateway, M-Commerce, Mobile Financial Services (MFS), Agent Banking (Biometric Banking), Call Center, Systems for sending fund transfer instruction like Telex, Swift, CHIPS, FEDWIRE.

Module-D: ICT Security, Cyber Security, ICT Risk Management, Standards, Regulations and Legal Framework
- ICT Security, Cyber Security, ICT Risk Management, Security Standards and Regulations, Guideline on ICT Security for Scheduled Banks and Financial Institutions published by the Central Bank of Bangladesh, PCI-DSS, BS 7799 and ISO 27000, Legal framework in Bangladesh (Cyber Law, ICT Act etc).

Module-E: Document Handling Systems, Additional Banking Applications & Other Aspects
- Cheque Processing Systems such as Clearing and Settlement Systems, MICR, RTGS, BACH (BACPS & BEFTN) and additional Banking Applications like ERP Software, CRM Software, E-mail software, Anti-Virus and anti-malware software.

Module F: FinTech, Artificial Intelligence and future Technology Based Banking
- Fintech, RegTech and TechFin, Virtual Banking, Basic Crypto Currency, Block Chain Technology, Cloud computing, Internet of Things (IOT), Machine Learning, Data Mining, Data Warehouse, Neural Network, Data Warehouse, Current Trends, Artificial Intelligence.

References:
1. Abul Kashem Md Shirin and Nusrat Tamanna Prianka (2020): "Information Technology in Financial Services" 2nd ed., The Institute of Bankers, Bangladesh (IBB)
2. C.S. French, 1990: Computer Studies, 3rd ed., Arnold Publishers, New Delhi, India
3. Graham Taylor, 2001: GCSE Computer Studies, 4th ed., Macmillan Press Ltd., London
4. Grau, J. J. (ed.), 1992: Criminal and Civil Investigation Handbook, 2nd ed., McGraw-Hill Inc., New York.
5. James A. O'Brien, 1999: Management Information Systems, 4th ed., Tata McGraw-Hill Publishing Company Limited, New Delhi, India
6. Kenneth C. Laudon & Jane P. Laudon, 1999: Management Information Systems – Organization and Technology, 4th ed., Prentice Hall of India, New Delhi – 110 001.
7. Pete Loshin & Paul A. Murphy, 1999: Electronic Commerce, 2nd ed., Jaico Publishing House, Mumbai, India.
8. Yekini Nureni, INFORMATION COMMUNICATION TECHNOLOGY (ICT).
9. Harry Bouwman,Bart van den Hooff,,Lidwien van de Wijngaert ,Jan van Dijk, Information and Communication Technology in Organizations.
10. Carol V. Brown, Daniel W DeHayes ,Jeffrey Slater, Wainright E. , Martin Managing Information Technology .
11. IIB, Electronic Banking and Information Technology .