

8. CORE BANKING SYSTEMS

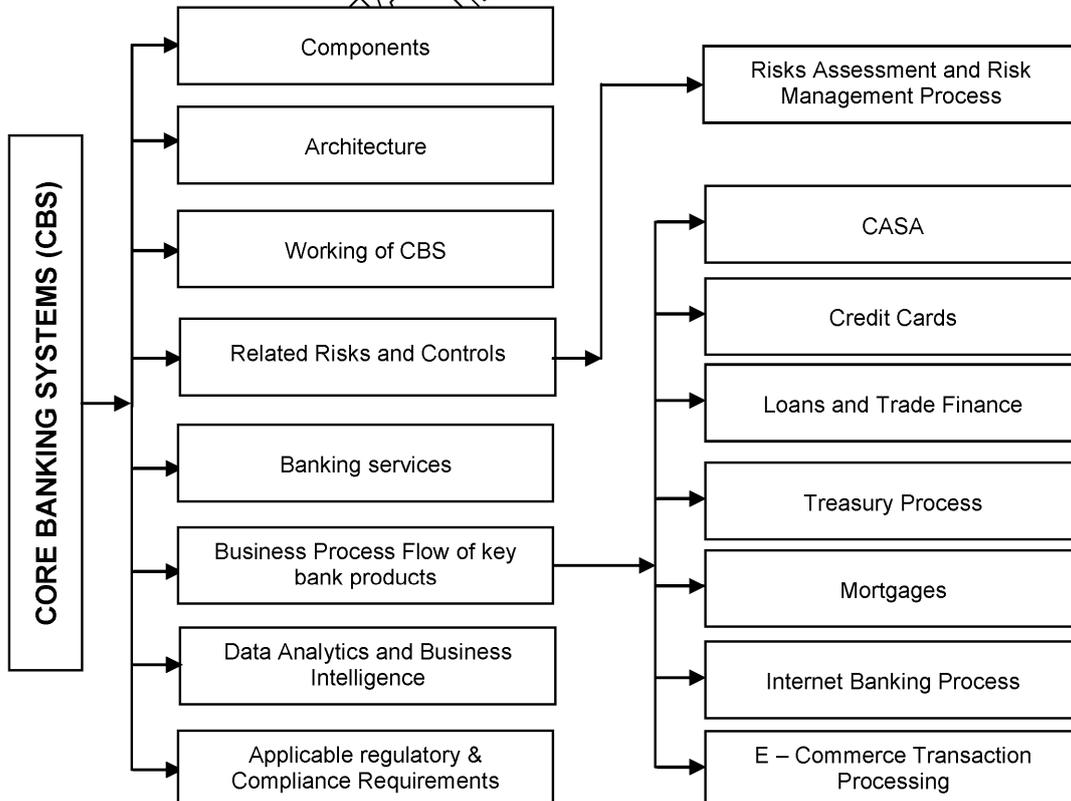
QUESTION WISE ANALYSIS OF PREVIOUS EXAMINATIONS

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CHAPTER OVERVIEW

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SECTION 1: THEORY FOR CLASSROOM DISCUSSION



PART 1: INTRODUCTION

Q.No.1. Discuss major products and services provided and rendered by Commercial Banks? (C)

1) ACCEPTANCE OF DEPOSITS:

- a) **Deposits** are made by customers in various schemes for pre-defined periods.
- b) **Commercial banks accept deposits** such as term deposits, savings bank deposits, current account deposits, and various others innovative products.

2) GRANTING OF ADVANCES:

- a) **Advances** contain a major source of lending by commercial banks.
- b) Commercial banks provide various types of advances such as cash credit, overdrafts, etc.

3) REMITTANCES:

- a) **Remittances** involve transfer of funds from one place to another.
- b) *Commercial Banks Transfer Funds through various modes such as Demand Drafts, Telegraphic or Mail Transfers (TT/MT), Electronic Funds Transfer (EFT).*

4) COLLECTIONS:

- a) **Collections** involve collecting proceeds on behalf of the customer.
- b) Customers can deposit various instruments such as Cheques, Drafts etc. for the purpose of collection.

5) CLEARING:

- a) **Clearing** involves collecting instruments on behalf of customers of bank.
- b) The instruments may be payable locally or at an outside center.
- c) Electronic Clearing Services (ECS) is now used extensively for clearing.

6) LETTERS OF CREDIT AND GUARANTEES: Issuing Letters of Credit (LC) & Guarantees are two important services rendered by banks. LC is an undertaking by a bank to the payee to pay to him, on behalf of the applicant (the buyer), any amount up to the limit specified in the LC, according to agreed terms and conditions.**7) CREDIT CARDS:**

- a) The processing of applications for credit cards is usually assigned to a separate division at the central office of a bank.
- b) Most credit cards issued by banks are linked to one of the international credit card networks like VISA, Master, Amex or RuPay.

8) DEBIT CARDS:

- a) Debit cards are generally issued by the central office of the bank.
- b) Debit cards are networked with an inter-bank network.

9) OTHER BANKING SERVICES:

Services like Back operations, Retail Banking, High Net-worth Individuals (HNI), Risk management and other specialized services are also provided by banks.

SIMILAR QUESTIONS:

1. "The services offered by the banks determine their competitiveness" what may be the core services offered by the banks?
 - A. Refer above Answer
2. List out the core banking services of Commercial banks.
 - A. Refer above Answer.
3. What are the key features of Banking business?
 - A. Refer above Answer.

Q.No.2. What is a Core Banking System Solution (CBS)? what are its characteristics? (A)

CORE BANKING SOLUTION (CBS): Core Banking Solution (CBS) refers to a common IT solution wherein a central shared database supports the entire banking application. It allows the customers to use various banking facilities irrespective of the bank branch location.

THE CHARACTERISTICS OF CBS ARE:

- 1) There is a common database in a central server located at a Data Center, which gives a consolidated view of the bank's operations.
- 2) Branches function as delivery channels providing services to its customers.
- 3) CBS is centralized Banking Application software that has several components which have been designed to meet the demands of the banking industry.
- 4) CBS is supported by advanced technology infrastructure and has high standards of business functionality.
- 5) Core Banking Solution brings significant benefits such as a customer is a customer of the bank and not only of the branch.
- 6) CBS is modular in structure and is capable of being implemented in stages as per requirements of the bank.
- 7) CBS software also enables integration of all third-party applications, including in-house banking software, to facilitate simple and complex business processes.

SIMILAR QUESTION:

1. "CBS offers extended capabilities to banks by showing them a new paradigm in service offerings" comment.
- A. Refer the above answer .

Q.No.3. Write some examples of CBS software? (C)

Some examples of CBS software are.

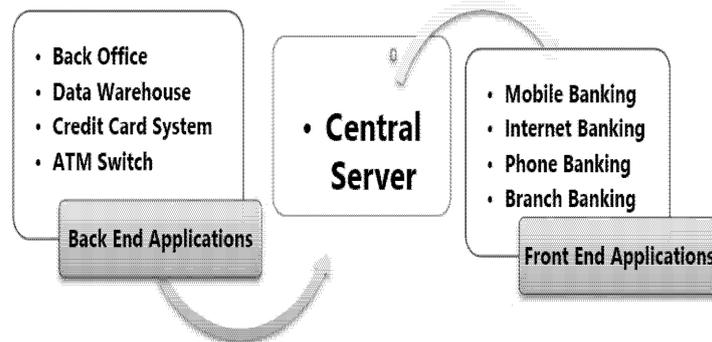
- a) **FINACLE:** CBS by Infosys that provides universal banking functionality covering all modules for banking services.
- b) **FINNONE:** Web-based global banking product designed to support banks and financial solution companies in dealing with assets, liabilities, core financial accounting and customer service.
- c) **FLEXCUBE:** Developed by Oracle Financial services it is a Comprehensive, integrated, interoperable, and modular solution that enables banks to manage evolving customer expectations.
- d) **BANCS:** A customer-centric business model which offers simplified operations comprising loans, deposits, wealth management, digital channels and risk and compliance components.
- e) **BANKMATE:** A full-scale Banking solution which is a scalable, integrated e-banking systems that enables communication through any touch point to provide full access to provide complete range of banking services with anytime, anywhere paradigm.

SIMILAR QUESTIONS:

1. Give any five examples of CBS software.
- A. Refer Examples of CBS software point above.

Q.No.4. What are the key modules of CBS? (RTP-NOV19)(B)

- 1) In the case of a CBS, at the core is Central server.
- 2) All key modules of banking such as back office, branch, data warehouse, ATM Switch, mobile banking, internet banking, phone banking and credit-card system are all connected and related transactions are interfaced with the central server.



THE KEY MODULES OF CBS ARE:

- 1) **BACK OFFICE:** Back-office functions include settlements, clearances, record maintenance, regulatory compliance, accounting, and IT services.
- 2) **DATA WAREHOUSE:** Data warehouses take care of the difficult data management - storing large quantities of data and ensuring accuracy - and make it easier for professionals to analyze data.
- 3) **CREDIT-CARD SYSTEM:** Credit card system provides customer management, credit card management, account management, customer information management and general ledger functions; provides the online transaction authorization.
- 4) **AUTOMATED TELLER MACHINES (ATM):** ATMs are convenient, allowing consumers to perform quick, self-serve transactions from everyday banking like deposits and withdrawals to more complex transactions like bill payments and transfers.
- 5) **CENTRAL SERVER:** Nowadays, most banks use core banking applications to support their operations creating a Centralized Online Real-time Exchange (or Environment) (CORE). This means that the entire bank's branches access applications from centralized data centers/servers.
- 6) **INTERNET BANKING:** It is also known as Online Banking, is an electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website.
- 7) **MOBILE BANKING:** It is a service provided by a bank or other financial that allows its customers to conduct financial transactions remotely using a mobile device such as a Smartphone or tablet with an App.
- 8) **PHONE BANKING:** Registration of Mobile number in account is one of the basic prerequisite to avail Phone Banking
- 9) **BRANCH BANKING:** CBS are the bank's centralized systems that are responsible for ensuring seamless workflow by automating the frontend and backend processes within a bank. CBS enables single-view of customer data across all branches in a bank and thus facilitate information across the delivery channels.

SIMILAR QUESTION:

1. In the case of a CBS, at the core is Central server. All key modules of banking are all connected and related transactions are interfaced with the central server in this context list out the key modules of CBS explaining each one of them briefly.
- A. Refer above answer.

Q.No.5. Write the Core features of CBS?

(A)

In addition to basic banking services that a bank provides through use of CBS, the technology enables banks to add following features to its service delivery.

FOLLOWING ARE THE CORE FEATURES OF CBS:

- 1) On-line, real-time processing.
- 2) Transactions are posted immediately.
- 3) All databases updated simultaneously.
- 4) Centralized Operations (All transactions are stored in one common server).

- 5) Real time seamless merging of data from the back office and self-service operations.
- 6) Significant reduction in the errors which occurred due to duplication of entries.
- 7) Separate hierarchy for business and operations.
- 8) Business & Services are productized.
- 9) Remote interaction with customers.
- 10) Reliance on transaction balancing.
- 11) Highly dependent system-based controls.
- 12) Increased access by staff at various levels based on authorization.
- 13) Daily, half yearly and annual closing,
- 14) Automatic processing of standing instructions
- 15) Centralized interest applications for all accounts and account types
- 16) Anytime, anywhere access to customers and vendors.
- 17) Banking access through multiple channels like mobile, web etc.

SIMILAR QUESTION:

1. What features of CBS helps banks in building their competencies?
- A. Refer above answer.

Q.No.6. Discuss the key components of CBS? (or) Discuss various Technology Components of CBS? (A)

- 1) The CBS facilities providing banking services for branches of a bank which are networked and connected to common data center.
- 2) This facilitates staff to process transactions of customers of any branch.
- 3) Hence, all the customers of all the branches are customers of the bank.
- 4) The CBS deployed by the Banks as a part of the CBS Project includes Data Centre (DC) and the Disaster Recovery Centre (DRC).
- 5) *Core banking solutions (CBS) is provided through a combination of an application software and network devices.*

THE KEY TECHNOLOGY COMPONENTS OF CBS ARE AS FOLLOWS:

- 1) **Database Environment:** This consists of the centrally located database servers that store the data for all the branches of the bank which includes customer master data, interest rates, account types etc.
- 2) **Application Environment:** In general, Application environment consist of the application servers that host the different core banking systems like Flex Cube, Bank Mate etc. and is centrally used by different banks.
- 3) **Connectivity to the Corporate Network and the Internet:** There should be adequate bandwidth to deal with the volume of transactions so as to prevent slowing down and resulting in lower efficiency.
- 4) **Data Centre and Disaster Recovery Centre:** The core banking systems consists of a Data Centre which includes various application servers, database servers, web servers etc. and various other technological components. Arrangements for alternate connectivity in times of disruption should be made.
- 5) **Enterprise Security architecture and Security solution:** To ensure security; proxy servers, firewalls, intrusion detection systems are used to protect the network from any malicious attacks and to detect any unauthorized network entries.
- 6) **Online Transaction monitoring for fraud risk management:** Risk evaluations are carried out and considering the risk profile and other regulatory requirements of the bank, effective monitoring should be done as a part of managing fraud risk management.

SIMILAR QUESTION:

1. A CBS is a conglomeration of different components and technologies. List some of the technology components of CBS.
- A. Refer above answer.

Q.No.7. Explain some key aspects built into Architecture of a CBS.

(A) (N 18)

SOME KEY ASPECTS IN-BUILT INTO ARCHITECTURE OF A CBS ARE:

- 1) **INFORMATION FLOW:** CBS improves the speed and accuracy of decision-making by creating a complete analytical infrastructure.
- 2) **CUSTOMER CENTRIC:** CBS enables banks to target customers with the right offers at the right time with the right channel to increase profitability.
- 3) **REGULATORY COMPLIANCE:** CBS has built-in and regularly updated regulatory platform which will ensure complex and expensive compliance.
- 4) **RESOURCE OPTIMIZATION:** Optimizes utilization of information and resources of banks and lowers costs through improved asset reusability, faster turnaround times.

SIMILAR QUESTIONS:

1. Write any 4 key aspects of CBS.
- A. Refer above answer.
2. "It is how the system is designed and built that determines its efficiency and effectiveness" "in this context make a briefing about key aspects of CBS architecture.
- A. Refer above Answer

Q.No.8. Discuss various types of servers being used in CBS?

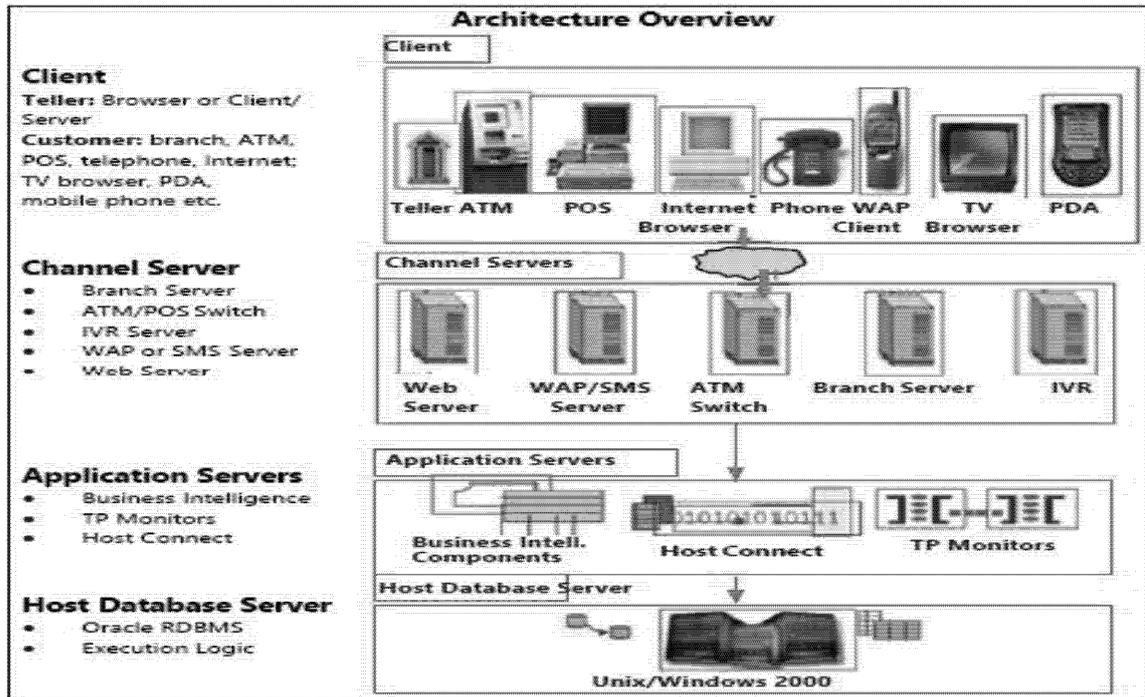
(A)

SERVER: The **Server** is a sophisticated computer that accepts service requests from different machines called clients. There are different types of servers used in deploying CBS.

SOME OF THESE ARE:

- 1) **Application Server:** The **Application Server** performs necessary operations and updates the account of the customer. The validated customer transaction is sent to the application server at the data centre. The results are updated in the database server at the centralized data center.
- 2) **Database Server:** The **Database Server** contains the entire data of the Bank. Application software accesses the database server. The database must be highly secured to prevent unauthorized changes.
- 3) **Automated Teller Machine (ATM) Channel Server:**
 - a) This server contains the details of ATM account holders. When the Central Database is busy the file containing the account balance of the customer is sent to the ATM switch. Such a file is called Positive Balance File (PBF).
 - b) Till the central database becomes accessible, the ATM transactions are passed on the balance available in the ATM server.
- 4) **Internet Banking Channel Server (IBCS):** **IBCS (Internet Banking Channel Server)** software stores the user name and password of the entire internet banking customers. It also contains the details about the branch of the customer.
- 5) **Internet Banking Application Server:** The **Internet Banking Software** which is stored in the IBAS authenticates the customer with the login details stored in the IBCS. Customer is authenticated by comparing the details given by him with the details stored in IBCS.
- 6) **Web Server:** The **Web Server** is used to host all web services and internet related software. All the online requests and websites are hosted and serviced through the web server.
- 7) **Proxy Server:** A **Proxy Server** offers a computer network service to allow clients to make indirect network connections to other network services. The proxy provides the resource either by connecting to the specified server or by serving it from a cache.

- 8) **Anti-Virus Software Server:** The Anti-Virus Server is used to host anti-virus software to ensure all the software used is first scanned to ensure safety and security.



SIMILAR QUESTION:

- Servers are the back bones of any IT implementation and CBS is no exception list out and make a brief note about different servers deployed in CBS .
 A. Refer above answer

Q.No.9. Discuss the process of Internet Banking? (or) Discuss the Processes involved in Online Banking? (C)

- The customer applies to the bank for such a facility. The user is provided with a User ID and Password.
- On access, user is directed to secure web server. The internet banking website is hosted on the web server. Access to the web server is permitted only to authorized users.
- To protect the web server from unauthorized use and abuse, the network traffic goes through a firewall.
- An individual accessing the website of bank will access the web server.
- The web page displays user ID and password.
- The password will be displayed in an encrypted form.
- The web server forwards the customer details to the internet banking applications server which in turn accesses the IBCS.
- The information received from the web server is verified with the data of the customer held in the internet banking (IBAS).
- Based on the authentication check, the Internet Banking Application Server (IBAS) sends an acknowledgement to the web server. The web server displays the message. Once the authentication process is completed correctly, the customer is provided internet banking facility, which would include:
 - Password change
 - Balance inquiry
 - Fund transfer
 - Request for cheque book
 - Stop payment
 - Copy of statement of account; and
 - ATM/ Credit Card related queries
- The service requested is directed by the web server to the IBAS for processing.

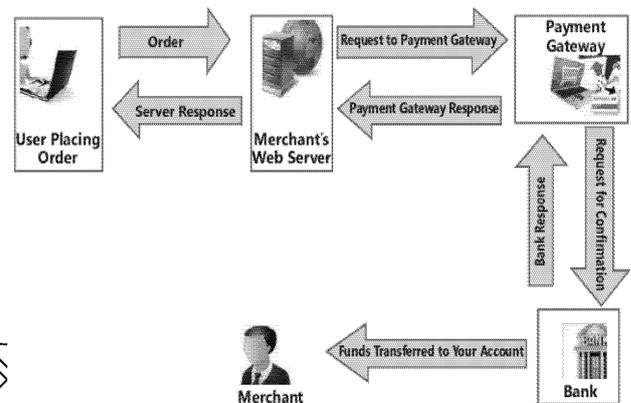
- 11) The Internet Banking Channel Server (IBCS) will retrieve the data from the central database server.
- 12) Internet banking database server then forwards the customer data to the IBAS which processes the transaction. The IBCS then sends the data to the IBAS. The IBAS then sends the same to the web browser.
- 13) The web server generates a dynamic web page for the service requested
- 14) The customer would be able to get the service required. After the services provided, the user may choose to log out.

SIMILAR QUESTION:

1. Internet banking offers flexibility of banking services and at the same time offers challenges and threats .Discuss the process of how internet banking function.
- A. Refer above answer

Q.No.10. Discuss the process flow of e-Commerce Transaction?**(C)**

- 1) Most of the e-Commerce transactions involve advance payment either through a credit or debit card issued by a bank.
- 2) Here, the user logs in on the e-commerce web site, places an order and selects option of payment - Cards, or Internet Banking.
- 3) If it is Internet Banking, the merchant site is directed to bank's Merchant-Internet banking server.
- 4) User must log in and authorize payment. This requires customer enter OTP (Online Transaction Password) received on mobile, to complete the transaction. After this, the customer is redirected to merchant site.

**SIMILAR QUESTION:**

1. E-commerce transactions are zooming up day by day outline the process of e-commerce transaction.
- A. Refer the above answer.

Q.No.11. Discuss the stages of deployment and implementation of CBS? Or How does CBS Work? (B) (RTP-N19,N20)

The deployment and implementation of CBS should be controlled at various stages to ensure that banks automation objectives are achieved:

- 1) **PLANNING:** Planning for implementing the CBS should be done as per strategic and business objectives of bank.
- 2) **APPROVAL:** CBS requires high investment and recurring costs. Hence, the decision must be approved by the board of directors.
- 3) **SELECTION:** Although there are multiple vendors of CBS, each solution has key differences. Hence, bank should select the right solution by considering various parameters to meet their specific requirements and business objectives.
- 4) **DESIGN AND DEVELOP OR PROCURED:** Currently, most of the CBS is procured. There should be appropriate controls covering the design or development or procurement of CBS for the bank.
- 5) **TESTING:** Extensive testing is to be done at different phases to test suitability of data migration to ensure all existing data is correctly migrated.
- 6) **IMPLEMENTATION:** CBS must be implemented as per pre-defined and agreed plan with specific project milestones to ensure successful implementation.

- 7) **MAINTENANCE:** CBS must be maintained as required. E.g. program bugs fixed, version changes implemented, etc.
- 8) **SUPPORT:** CBS must be supported to ensure that it is working effectively.
- 9) **UPDATION:** CBS modules must be updated based on requirements of business processes, technology updates and regulatory requirements.;
- 10) **AUDIT:** Audit of CBS must be done internally and externally as required to ensure that controls are working properly.

SIMILAR QUESTION:

1. Development and deployment of CBS involve a systematic process. Explain
- A. Refer above answer
2. Banks are subject to ever higher cost pressures characterized by shrinking margins and increasing investment needs. The implementation of new requirements – especially triggered by regulation and digitalization – is driving costs in an increasingly competitive environment. Thus, the need to review and optimize the existing IT architecture and depth of value creation is growing steadily. In this context how CBS is deployed and implemented in a bank?
- A. Refer above answer
3. Agro development bank is a corporative bank with two branches in Jaipur city. The bank has decided to implement Core Banking System (CBS) in both branches for better inter-connectivity between its branches and to facilitate management of deposit, loan and credit processing. Explain the various stages involved in deployment and implementation of CBS? (RTP-N20)
- A. Refer above answer.

Q.No.12. What are the risks associated with CBS?

(B)

RISKS ASSOCIATED WITH CBS:

- 1) **OPERATIONAL RISK:** It is defined as a risk arising due to inadequate or failed internal process, people and systems. Operational risk necessarily excludes business risk and strategic risk. The components of operational risk include:
 - a) **Transaction processing risk:** Arises because faulty reporting of important market developments to the bank management may also occur due to errors in entry of data for subsequent bank computations.
 - b) **Information security risk:** Data breaches can cost a bank its reputation; customers can lose time and money and above all their confidential information.
 - c) **Legal risk:** Arises because of the treatment of clients, the sale of products, or business practices of a bank.
 - d) **Compliance risk:** It is exposure to legal penalties, financial penalty and material loss that an organization faces when it fails to act in accordance with industry laws and regulations, internal policies or prescribed best practices.
 - e) **People risk:** Arises from lack of trained key personnel, tampering of records, unauthorized access to dealing rooms and nexus ^(links, relationships) between front and back end offices.
- 2) **CREDIT RISK:** It is the risk that an asset or a loan becomes irrecoverable in the case of outright default, or the risk of an unexpected delay in the servicing of a loan.
- 3) **MARKET RISK:** Market risk refers to the risk of losses in the bank's trading book due to changes in equity prices, interest rates, credit spreads, foreign-exchange rates, commodity prices, and other indicators whose values are set in a public market.
- 4) **STRATEGIC RISK:** Strategic risk, sometimes referred to as business risk, can be defined as the risk that earnings decline due to a changing business environment, for example new competitors or changing demand of customers.
- 5) **IT RISK:** Covered in next question.

SIMILAR QUESTION:

1. Like any business, the banking sector faces several risks. However, given the sector's systemic importance, it's important that bank risks are properly understood and addressed. In this context write about the risks faced by banks.
- A. Refer above answer.

Q.No.13. what are some of the IT Risks associated with CBS?**(A)****IT RISKS ASSOCIATED WITH CBS:**

- 1) **Ownership of Data/process:** Data resides at the Data Centre. Establish clear ownership.
- 2) **Authorization process:** What is the authorization process? Because, anybody with access to the CBS, including the customer himself, can enter data directly.
- 3) **Authentication procedures:** These may be inadequate and hence the user entering the transaction may not be traceable.
- 4) **Several software interfaces across diverse networks:** A Data Centre can have as many as 75-100 different interfaces and application software.
- 5) **Maintaining response time:** Maintaining the interfacing software and ensuring optimum response time and up time can be challenging.
- 6) **User Identity Management:** This could be a serious issue. Some Banks may have more than 5000 users interacting with the CBS at once.
- 7) **Access Controls:** Designing and monitoring access control is an extremely challenging task.
- 8) **Incident handling procedures:** These may not be adequate considering the need for real-time risk management.
- 9) **Change Management:** At application level and data level - Master files, transaction files and reporting software.

SIMILAR QUESTION:

1. CBS has its fair share of risks enumerate.
- A. Refer the above answer.
2. Core banking systems (CBS) underpin nearly every major banking process. These systems not only drive the banks' day-to-day operations but also serve as the core IT platform for new capabilities and growth. In this context write about the IT risks associated with CBS.
- A. Refer above answer.

Q.No.14. What type of sub-processes should be applied in banks for Information Security, as per ISO 27001? (or) "RBI has suggested using ISO 27001:2013 to implement information security" Explain the sub-processes to be implemented to mitigate risks? Also make a Sample Listing of Risks and controls w.r.t Information Security

(N18)(A)

- 1) Information security is critical to mitigate the risks of Information technology.
- 2) Security refers to ensure Confidentiality, Integrity and Availability of information.
- 3) RBI has suggested use of ISO 27001:2013 implement information security.
- 4) Information security comprises of the following sub-processes:
 - a) **Information Security Policies, Procedures, and practices:** These cover all key areas of securing information at various layers of information processing and ensure that information is made available safely and securely.
 - b) **User Security Administration:** Refers to security for various users of information systems. It also covers the complete administration of users right from creation to disabling of users is defined as part of security policy.
 - c) **Application Security:** Refers to how security is implemented at various aspects of application right from configuration, setting of parameters and security for transactions through various application controls.

- d) **Database Security:** Refers to various aspects of implementing security for the database software.
- e) **Operating System Security:** Refers to security for operating system software which is installed in the servers and systems which are connected to the servers.
- f) **Network Security:** Refers to how security is provided at various layers of network and connectivity to the servers.
- g) **Physical Security:** Refers to security implemented through physical access controls.

Sample Listing of Risks and Controls w.r.t Information Security

RISKS	KEY IT CONTROLS
Significant information resources may be modified inappropriately, disclosed without authorization, and / or unavailable when needed. (e.g., they may be deleted without authorization).	Super user access or administrator passwords are changed on system installation and are available with administrator only and adequately protected.
Lack of management direction and commitment to protect information assets.	Security policies are established and management monitors compliance with policies.
Potential Loss of confidentiality, availability and integrity of data and system.	Vendor default passwords are appropriately modified, eliminated, or disabled.
User accountability is not established.	All users are required to have a unique user id.

SIMILAR QUESTION:

1. What are the RBI’s guidelines for information security in CBS of banks?
 - A. Refer the above answer.
2. ISO/IEC 27001:2013 (also known as ISO27001) is the international standard that sets out the specification for an information security management system (ISMS). Its best practice approach helps organizations manage their information security by addressing people and processes as well as technology. Elaborate on the Information security and its sub processes.
 - A. Refer above answer (1 to 4 points).
3. In line with the suggestions of RBI, M/s. ABC Bank is planning to obtain ISO 27001:2013 certification for its Information Security Management System. As an IS Auditor you are required to prepare a sample list of Risks w.r.t Information Security for the bank.
 - A. Refer the risks and controls table in the above answer.

Q.No.15 Define Internal Control System and give some examples of Internal Control systems being followed in Bank branches? (C) (RTP-N18, M20)(M 18)

INTERNAL CONTROL SYSTEM: Internal control system ensures orderly and efficient conduct of business, according to management policies, safeguarding assets through prevention and detection of fraud and error.

It ensures completeness and timely preparation of the reliable finance information.

SOME EXAMPLES OF INTERNAL CONTROLS BEING FOLLOWED IN BANK BRANCHES ARE:

- 1) Work of one staff member is always supervised/ checked by another staff member, irrespective of the nature of work (Maker-Checker process).
- 2) Job rotation among staff exists.
- 3) Financial and administrative powers of each official/ position is fixed and communicated to all persons concerned.
- 4) Branch managers must send periodic confirmation to their controlling authority on compliance of the laid down systems and procedures.
- 5) All books are to be balanced periodically. Balancing is to be confirmed by an authorized official.
- 6) Details of lost security forms are immediately informed to controlling so that they can exercise caution.

- 7) Fraud prone items like currency, valuables, draft forms, term deposit receipts, traveler's cheques and other such security forms are in the custody of at least two officials of the branch.
- 8) Effective internal audit should be carried out and any control deficiencies noted should be directly communicated to the senior management.

SIMILAR QUESTION:

1. "It is the presence of internal control system that ensures orderly and efficient conduct of business" Comment.
- A. Refer above Answer
2. Internal controls are the systems, policies, procedures and processes implemented by the board and senior management to safeguard bank assets, limit or control risks and achieve the bank's objectives. Effective internal controls may prevent or detect mistakes, potential fraud or noncompliance with bank policies. In this context list out some examples of internal controls being followed in bank branches.
- A. Refer above answer.

Q.No.16. How IT Risks can be mitigated in Banks? Or Discuss the IT Controls in Banks? (M19)(MTP-M18)(A)

IT risks need to be mitigated^(=make less) by controls in the automated environment(=IT environment). This is done by integrating controls into IT.

Sample list of IT related controls are:

- 1) The system maintains a record of all log-ins and log-outs.
- 2) If the transaction is to be posted to a dormant (or inoperative) account, the processing is stopped and can be proceeded only with a supervisory password.
- 3) The system checks whether the amount to be withdrawn is within the drawing power of the customer.
- 4) The system shows a message if the balance in a lien account would fall below the lien amount ^(=the amount which the bank has put a hold on) after the processing of the transaction.
- 5) Access to the system is available only between fixed hours and specified days only.
- 6) A user timeout is prescribed.
- 7) Once the end-of-the-day process is over, the ledgers cannot be opened without a supervisory level password.
- 8) Users should be given access only on a 'need-to-know basis' based on their role in the bank.
- 9) Exception situations such as limit excess, reactivating dormant accounts, etc. can be handled only with a valid supervisory level password.

SIMILAR QUESTIONS:

1. How IT controls works in Banks?
- A. Refer above Answer.
2. "Existence of controls mitigates the risk to a maximum extent in any organization including banks". Make a list of IT related controls in banks.
- A. Refer above Answer.

Q.No.17. Write about Configuration, Masters, Transactions and Reports settings in CBS. (C)

APPLICATION SOFTWARE - CONFIGURATION, MASTERS, TRANSACTIONS AND REPORTS:
Application Software whether it is a high-end CBS software, ERP software or a simple accounting software, have primarily four gateways through which enterprise can control functioning, access and use the various menus and functions of the software.

THESE ARE CONFIGURATION, MASTERS, TRANSACTIONS AND REPORTS.

- 1) **CONFIGURATION:** Some examples of configuration in the context of CBS software are given here:
 - a) Defining access rules from various devices/terminals.
 - b) Creation of User Types

- c) Creation of Customer Type, Deposit Type, year-end process
 - d) User Access & privileges - Configuration & its management
 - e) Password Management
- 2) **MASTERS:** Some examples of masters in context of CBS Software are as follows:
- a) **Customer Master:** Customer type, details, address, PAN details,
 - b) **Employee Master:** Employee Name, Id, designation, level, joining details, salary, leave, etc.
 - c) **Income Tax Master:** Tax rates applicable, Slabs, frequency of TDS, etc.
- 3) **TRANSACTIONS:** Some examples of transactions in the context of CBS software are given here:
- a) **Deposit transactions:** opening of a/c, deposits, withdrawals, interest computation, etc.
 - b) **Advances transactions:** opening of a/c, deposits, withdrawals, transfers, closure, etc.
 - c) **ECS transactions:** Entry uploads, authorize/approve, update, etc.
 - d) **General Ledger:** Expense accounting, interest computation update, charges update, etc.
- 4) **REPORTS:** CBS software has extensive reporting features with standard reports and options to generate adhoc reports as required by user or the bank.
- Some examples of reports are as follows:
- a) Summary of transactions of day
 - b) Daily General Ledger (GL) of day
 - c) Activity Logging and reviewing
 - d) MIS report for each product or service
 - e) Reports covering performance/compliance;
 - f) Reports of exceptions, etc.

SIMILAR QUESTION:

1. Application Software whether it is a high-end CBS software, ERP software or a simple accounting software, have primarily four gateways through which enterprise can control functioning, access and use the various menus and functions of the software. Comment.
- A. Refer above answer

Q.No.18. List out some application software risks and controls in CBS. (C)

Risks	IT Controls
Interest may be incorrectly computed leading to incorrect recording of income/expenditure.	Interest is automatically correctly computed. Digits are rounded off appropriately. Interest is accurately accrued.
Inappropriate assignment of rate codes resulting in violation of business rules and/ or loss of revenue.	The interest rate code is defaulted at the account level and can be modified to a rate code carrying a higher or lower rate of interest only based on adequate approvals.
Absence of appropriate system validations may result in violation of business rules.	System validations have been implemented to restrict set up of duplicate customer master records.
Inappropriate reversal of charges resulting in loss of revenue.	System does not permit reversal of the charges in excess of the original amount charged.
Multiple liens in excess of the deposit value may result in inability to recover the outstanding in the event of a default.	System prevents a single lien from exceeding the deposit value. It prevents marking of multiple liens against the same deposit, thus preventing the total liens exceeding the deposit account.

SIMILAR QUESTION:

- CBS is either procured or designed, Banks have to take care of application software risks and controls in CBS, in this context write about some risks and their associative controls related to CBS application software.
- A. Refer above answer.

Q.No.19. Explain Business process flow of Current & Savings Accounts (CASA)? Write about the Risk & Controls around the CASA Process? (B) (RTP-M18) (STUDENT SELF STUDY)

PROCESS FLOW OF CURRENT & SAVINGS ACCOUNTS (CASA):

- Either the customer approaches the relationship manager to apply for a CASA facility or will apply through internet banking, the charges/ rates are provided by the relationship manager.
- Once the potential customer agrees, the relationship manager request for the relevant documents i.e. KYC and other relevant documents .
- The documents received from the customers are handed over to the Credit team / Risk team for sanctioning of the facilities/limits of the customers.
- Credit team verifies the document's, assess the financial and credit worthiness of the borrowers and updates facilities in the customer account.
- Current / Account savings account along with the facilities requested are provided to the customer for daily functioning.
- Customers can avail facilities such as cheque deposits / withdrawal, Cash deposit / withdrawal, Real Time Gross Settlement (RTGS) etc.,

Risk & Controls around the CASA Process

S. NO.	RISK	KEY CONTROLS
1)	Credit Line setup is unauthorized and not in line with the banks policy.	The credit committee checks customer details are in line with Credit Risk Policy and that the Client can be given the Credit Line.
2)	Credit Line setup in CBS is unauthorized and not in line with the banks policy.	Access rights should be restricted to authorized personnel.
3)	Customer Master defined in CBS is not in accordance with the Pre- Disbursement Certificate.	Access rights to authorize should be restricted to authorized personnel.
4)	Inaccurate interest / charge being calculated in CBS.	Interest on fund based facilities are automatically calculated in the CBS.
5)	Unauthorized personnel approving the CASAS transaction in CBS.	Segregation of Duties has to be maintained
6)	Inaccurate accounting entries generated in CBS.	Accounting entries are generated by CBS basis the facilities requested by the customer and basis defined configurations for those facilities in CBS.

SIMILAR QUESTION:

- The core services offered by banks are current accounts and savings accounts, Describe the procedure and risks involved in operating CASA in banks.
- A. Refer above answer.

Q.No.20. What are the steps involved in credit card transaction? Discuss several Risks and Controls around the Credit Card Process? (MAY 18)(A)

STEP 1: AUTHORIZATION: This is the first step in processing a credit card. After a merchant swipes the card, the data is submitted to merchant's bank, called an acquirer. The acquirer then sends the request to the card issuing bank, where it is authorized or denied, and the merchant is allowed to process the sale.

STEP 2: BATCHING: This is the second step in processing a credit card. At the end of the day, the merchant reviews all the day’s sales to ensure that all of them were authorized and signed by the cardholder. It then transmits all the sales at once, called a batch, to the acquirer to receive payment.

STEP 3: CLEARING: This is the third step in processing a credit card. After the acquirer receives the batch, it sends it through the card network where each sale is routed to the appropriate issuing bank. The issuing bank then subtracts its interchange fees and transfers the remaining amount through the network, back to the acquirer.

STEP 4: FUNDING: This is the fourth and final step in processing a credit card. After receiving payment from the issuer, minus interchange fees, the acquirer subtracts its discount fee and sends the remainder to the merchant. The merchant is now paid for the transaction, and the cardholder is billed.

Risks and Controls around the Credit Card Process

S. NO.	RISKS	KEY CONTROLS
1)	Credit Line setup is unauthorized and not in line with the banks policy.	Access rights to authorize should be restricted to authorized personnel.
2)	Credit Line setup can be breached.	Transaction cannot be made if the aggregate limit of outstanding amount exceeds the credit limit assigned to customer.
3)	Inaccurate interest / charge being calculated in the Credit Card system.	Interest on fund based credit cards and charges are automatically calculated in the credit card system as per the de-fined masters
4)	Inaccurate reconciliations performed.	Daily reconciliation for the balances received from credit card network with the transactions updated in the credit card system on card network level.

SIMILAR QUESTION:

- Credit card is a major innovation in banking sector, Then how a credit card is processed and what are the risks involved in credit cards?
A. Refer above answer
- Mr.G has started his new business of homemade biscuits and cookies through online mode. He has a website having detail of all its product and payment gateway. Identify the different ways that should be followed by him to protect his e-business from intrusion? (RTP-N20)
A. Refer above answer

Q.No.21. Define Mortgage loan .Explain different types of Mortgage loans. (C) (MTP2 N18)

A Mortgage loan is a secured loan which is secured on the borrower’s property by marking a lien on the property as collateral for the loan.

Mortgages are used by individuals and businesses to make large real estate purchases without paying the entire value of the purchase up front.

TYPES OF MORTGAGE LOAN

- Home Loan:** This is a traditional mortgage where customer has an option of selecting fixed or variable rate of interest and is provided for the purchase of property.
- Top Up Loan:** Here the customer already has an existing loan and is applying for additional amount either for refurbishment or renovation of the house
- Loans for Under Construction Property:** In case of under construction properties the loan is disbursed in tranches / parts as per construction plan.

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Q.No.22. What are the core areas of treasury operations? Write the risks and controls around the treasury process? (C)

CORE AREAS OF TREASURY OPERATIONS: The core areas of treasury operations in a bank can be functionally divided into the following broad compartments as mentioned below:

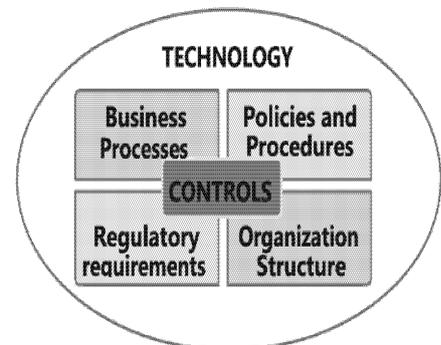
- 1) Dealing Room Operations (Front office operations);
- 2) Middle Office (Market Risk department / Product Control Group); and
- 3) Back office.
 - a) **FRONT OFFICE:** Here, operations consist of dealing room operations wherein the dealers enter into deal with the various corporate and interbank Counter-parties. Dealers must ensure that all risk/credit limits are available before entering into a deal. Also, the deal must not contravene ^(=To break a law or a rule) the current regulations regarding dealing in INR with overseas banks/counter-parties.
 - b) **MIDDLE OFFICE:** It includes risk management, responsibility for treasury accounting, and documentation of various types, producing the financial results, analysis and budget forecasts for the treasury business unit, input into regulatory reporting.
 - c) **BACK OFFICE OPERATIONS:** The mainstream role of the Back Office is in direct support of the trading room or front office.

S.NO.	RISK	KEY CONTROLS
1)	Unauthorized securities setup in systems such as Front office/Back office.	Appropriate Segregation of duties & review controls around securities master setup/ amendments.
2)	Inaccurate trade is processed.	Appropriate Segregation of duties & review controls to ensure the accuracy and authorization of trades.
3)	Unauthorized confirmations are processed.	Complete and accurate confirmations to be obtained from counter party.
4)	Insufficient Securities available for Settlement	Effective controls on securities and margins.
5)	Incomplete and inaccurate data flow between systems.	Inter-system reconciliations, Interfaces and batch processing controls.
6)	Insufficient funds are available for settlements	Controls at CCIL/NEFT/RTGS settlements to ensure the margin funds availability and the timely funds settlements.
7)	Incorrect Nostro payments processed.	Controls at Nostro reconciliation and payments.

Q.No.23. Write about Impact of Technology in Banking. (B)

IMPACT OF TECHNOLOGY IN BANKING:

- 1) In the CBS environment, technology encompasses all the four critical components which are Business processes, Policies and Procedures, Regulatory requirements and Organization structure.
- 2) Controls should pervade all the four areas
- 3) If IT fails, then none of the business processes can be performed. Hence, it is important to understand how the four components of banking business are configured, maintained and updated using technology.
- 4) With CBS, Technology has become all-pervasive and has become integral for doing banking.
- 5) Further, all the business and control aspects of the bank as a whole are in-built into the technology through configuration, setting of parameters and controls at different layers of technology.



SIMILAR QUESTION:

1. Technology is impacting all the sectors in the economy and Banking is no exception. In the CBS environment, technology encompasses all the four critical components of the bank .In this context Comment on the Impact of Technology in Banking.
- A. Refer above answer.

Q.No.24. What is Money Laundering? What are the key provisions of Prevention of Money Laundering Act (PMLA)? (A)(N 19)(RTP M18)

- 1) **MONEY LAUNDERING:** Money Laundering is the process by which the proceeds of the crime and the true ownership of those proceeds are concealed or made opaque (not transparent) so that the proceeds appear to come from a legitimate source.
- 2) The objective in money laundering is to conceal the existence, illegal source, or illegal application of income to make it appear legitimate.
- 3) Money laundering is commonly used by criminals to make "dirty" money appear "clean" or the profits of criminal activities are made to appear legitimate.

PREVENTION OF MONEY LAUNDERING ACT (PMLA):

- a) Under Section 12 of PMLA, every banking company, financial institution and intermediary, (hereinafter referred to as such entities) is required to maintain a record of transactions as may be prescribed by rules and furnish information to the Director within such time as may be prescribed.
- b) Under rule 6 of PMLR, such records are to be maintained for a period of ten years from the date of transaction.
- c) The key aspects of PMLA are as follows:
 - i) Maintenance of record of all cash transactions above 10 lakhs
 - ii) All series of cash transactions of value less than 10 lakhs integrally connected if they have taken place within a month (aggregate value above 10 lakhs)
 - iii) All cash transactions here forged or counterfeit notes have been used.
 - iv) All suspicious transactions made in cash or otherwise.

SIMILAR QUESTION:

1. Money laundering damages financial sector institutions that are critical for economic growth, promoting crime and corruption that slow economic growth, reducing efficiency in the real sector of the economy. Then what exactly is money laundering and what are the provisions of PMLA?
- A. Refer above answer.

Q.No.25. How technology helps in Anti Money Laundering?

(C)

ANTI-MONEY LAUNDERING (AML) USING TECHNOLOGY:

- 1) Negative publicity, damage to reputation and loss of goodwill, legal and regulatory sanctions and adverse effect on the bottom line are all possible consequences of a bank's failure to manage the risk of money laundering.
- 2) Banks face the challenge of addressing the threat of money laundering in several ways as banks can be used as primary means for transfer of money across countries.
- 3) The challenge is even greater for banks using CBS as all transactions are integrated.
- 4) Banks are using special fraud and risk management software to prevent and detect fraud and integrate this as part of their internal process and daily processing and reporting.

Q.No.26. How money laundering helps to finance terrorism?

(C)

FINANCING OF TERRORISM:

- 1) Money to fund terrorist activities moves through the global financial system via wire transfers and in and out of personal and business accounts.
- 2) It can sit in the accounts of illegitimate charities and be laundered through buying and selling securities and other commodities, or purchasing and cashing out insurance policies.

- 3) Although terrorist financing is a form of money laundering, the money frequently starts out clean i.e. as a 'charitable donation' before moving to terrorist accounts. It is highly time sensitive requiring quick response.
- 4) As per compliance requirements of PMLA, CBS software should include various types of reports which are to be generated periodically for filing with regulatory agencies.

Q.No.27. Briefly explain all the stages of Money Laundering and how banks are used in laundering money? (RTP-MAY 20)(A)

THREE STAGES OF MONEY LAUNDERING:

- 1) **PLACEMENT:** The first stage involves the **Placement** of proceeds derived from illegal activities - the movement of proceeds, frequently currency, from the scene of the crime to a place, or into a form, less suspicious and more convenient for the criminal.
- 2) **LAYERING:** Layering involves the separation of proceeds from illegal source using complex transactions designed to obscure the audit trail and hide the proceeds. Layering involves sending the money through various financial transactions to change its form and make it difficult to follow.
- 3) **INTEGRATION:** Integration involves conversion of illegal proceeds into apparently legitimate business earnings through normal financial or commercial operations.

Q.No.28. Discuss the key functions of RBI? (N19)(C)

- 1) The **Reserve Bank of India (RBI)** was established on April 1, 1935 in accordance with the provisions of the Reserve Bank of India Act, 1934.
- 2) The basic functions of the Reserve Bank are: "to regulate the issue of Bank Notes and keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage."
- 3) Some of the key functions of RBI are given here
 - a) **Monetary Authority:** Formulates implements and monitors the monetary policy with the objective of maintaining price stability and ensuring adequate flow of credit to productive sectors.
 - b) **Regulator and supervisor of the financial system:** Prescribes broad parameters of banking operations within which the country's banking and financial system functions with the objective of maintaining public confidence in the system.
 - c) **Issuer of currency:** Issues and exchanges or destroys currency and coins not fit for circulation.

Q.No.29. Define Cybercrime. List out the categories classified by The United Nations "Manual on the Prevention and Control of Computer Related Crime" (B)

- 1) Cybercrime also known as computer crime is a crime that involves use of a computer and a network.
- 2) Cybercrimes are defined as: "Offences that are committed against individuals or groups of individuals with a criminal motive to intentionally harm the reputation of the victim or cause physical or mental harm, or loss, to the victim directly or indirectly, using modern telecommunication networks such as Inter network (Chat rooms, emails, notice boards and groups) and mobile phones.
- 3) The United Nations Manual on the Prevention and Control of Computer Related Crime classifies such crimes into following categories:
 - a) Committing of a fraud by manipulation of the input, output, or maximum output of a computer based system.
 - b) Computer forgery, which involves changing images or data stored in computers,
 - c) Deliberate damage caused to computer data or programs through virus programs or logic bombs,
 - d) Unauthorized access to computers by 'hacking' into systems or stealing passwords, and,
 - e) *Unauthorized reproduction of computer programs or software piracy.*
 - f) *Cybercrimes have grown big with some countries promoting it to attack another country's security and financial health.*

Banking sector is prone to high risks by cyber criminals as banks deal with money and using technology, frauds can be committed across geographical boundaries without leaving a trace. Hence, CBS and banking software is expected to have high level of controls covering all aspects of cyber security.

Q.No.30. Write about Sensitive Personal Data Information (SPDI) with respect to banks. (B)

SENSITIVE PERSONAL DATA INFORMATION (SPDI)

- 1) Section 43A of the IT Amendment Act imposes responsibility for protection of stakeholder information by body corporate.
- 2) The IT Act has a specific category, 'sensitive personal data or information,' which consists of password, financial information (including bank account, credit card, debit card or other payment details), physical, physiological and mental health conditions, sexual orientation, medical records, and biometric information
- 3) This legally obligates all stakeholders to adhere to its requirements.
- 4) One of the largest stakeholders of SPDI are banks apart from insurance companies, financial institutions, hospitals, educational institutions, service providers, travel agents, payment gateway providers and social media platforms, etc.
- 5) Hence, at a corporate level, every bank should develop, communicate and host the privacy policy of the bank.
- 6) The policy should include all key aspects of how they deal with the personal information collected by the bank.

Q.No.31. Write about the Privacy Policy to be adopted by the banks (C)

PRIVACY POLICY:

- 1) Every bank captures Personal Information of customers as per definition of IT Act. Hence, it is mandatory to ensure security of personal information.
- 2) This information must be protected by maintaining physical, electronic, and procedural safeguards by using appropriate security standards such as ISO 27001 to ensure compliance with regulatory requirements.
- 3) Further, the employees of banks should be trained in the proper handling of personal information. Even when such services are outsourced, the vendor companies are required to protect the confidentiality of personal information they receive and process.
- 4) The specific information collected is to be confirmed with the customers. The type of information collected could be Non-Personal and Personal Information
- 5) The Personal Information provided by customer such as name, address, phone number, and email is collected and used by bank to offer new online experiences.
- 6) The customer must be provided access to change information for their account or application by logging on to their account online or telephoning customer service.
- 7) The customer should be able to control how their non-personal information is collected and used online.

SECTION 2: QUESTIONS FOR ACADEMIC INTEREST FOR STUDENTS SELF STUDY

Q.No.1. In recent times, new modes of money transfer have replaced the traditional methods of funds transfer what are they?OR Electronic Funds Transfer (EFT) is another mode of remittance which facilitates almost instantaneous transfer of funds between two centers electronically in this context what are the new method of remittance using EFT? (C)

In recent times, new modes of money transfer have replaced the traditional methods of funds transfer. These include:

- 1) **REAL TIME GROSS SETTLEMENT (RTGS)** is an electronic form of funds transfer where the transmission takes place on a real-time basis. In India, transfer of funds with RTGS is done for high value transactions.
- 2) **NATIONAL ELECTRONIC FUNDS TRANSFER (NEFT)** is a nation-wide payment system facilitating one-to-one funds transfer. Under this Scheme, individuals can electronically transfer funds from any bank branch to any individual having an account with any other bank branch in the country participating in the Scheme.
- 3) **IMMEDIATE PAYMENT SERVICE (IMPS)** is an instant payment inter-bank electronic funds transfer system in India. IMPS offer an inter-bank electronic fund transfer service through mobile phones. Unlike NEFT and RTGS, the service is available 24/7 throughout the year including bank holidays.

SIMILAR QUESTIONS:

1. There are numerous ways of transferring money from one bank account to account. With the increasing technology, online money transfer has become the easiest way of transferring money from one bank to another without any difficulty. What are the three major means of transferring money?
- A. Refer above answer.

Q.No.2. Write about the Process Flow of Issuance of Credit Card Facility. (C)

- 1) Either the customer approaches the relationship manager to apply for a credit card facility or customer will apply the same through internet banking, the charges/rates for the facility are provided by the relationship manager basis the credit application made by the customer.
- 2) Once the potential customer agrees for availing the facilities/products of the bank, the relationship manager request for the relevant documents i.e. KYC and other relevant documents of the customer depending upon the facility/product.
- 3) The documents received from the customers are handed over to the Credit team for sanctioning of the facilities/limits of the customers.
- 4) Credit team verifies the document's, assesses the financial and credit worthiness of the borrowers and issues a credit limit to the customer in CBS and allots a credit card.
- 5) Credit Card is physically transferred to the customer's address.

Q.No.3. Write about the Process Flow of Sale - Authorization process of Credit Card Facility. (C)

- 1) Customer will swipe the credit card for the purchase made by him/her on the POS machine (Point of Sale) at merchant's shop/establishment.
- 2) POS (Point of Sale) will process the transaction only once the same is authenticated.
- 3) The POS (Point of Sale) will send the authentication request to the merchant's bank (also referred as 'acquiring bank') which will then send the transaction authentication verification details to the credit card network (such as VISA, MASTER CARD, AMEX, RUPAY) from which the data will be validated by the credit card issuing bank within a fraction of seconds.
- 4) Once the transaction is validated, the approval message is received from credit card issuing bank to the credit card network which then flows to the merchant's bank and approves the transaction in the POS (Point of Sale) machine.
- 5) The receipt of the transaction is generated and the sale is completed. The transaction made is charged during the billing cycle of that month.

Q.No.4. Write about the Process Flow of Clearing & Settlement process of Credit Card Facility. (C)

PROCESS FLOW OF CLEARING & SETTLEMENT PROCESS OF CREDIT CARD FACILITY:

- 1) The transaction data from the merchant is transferred to the merchant's bank. Merchant's bank clears settlement amount to Merchant after deducting Merchant fees. Merchant's bank, in turn now provides the list of settlement transactions to the credit card network which then provides the list of transactions made by the customer to the credit card issuing bank.

- 2) The credit card issuing bank basis the transactions made, clears the amount to Merchant’s bank but after deducting interchange transaction fees.
- 3) At the end of billing cycle, card issuing company charges the customer’s credit card account with those transactions in CBS.

Q.No.5. Write about various Risks and Controls around the Mortgage Process. (C)

S. NO.	RISK	KEY CONTROLS
1)	Incorrect customer and loan details are captured which will affect the over- all downstream process.	There is secondary review performed by an independent team member who will verify loan details captured in core banking application with offer letter.
2)	Incorrect loan amount disbursed.	There is secondary review performed by an independent team member who will verify loan amount to be disbursed with the core banking application to the signed offer letter.
3)	Interest amount is in- correctly calculated and charged.	Interest amount is auto calculated by the core banking application basis loan amount, ROI and tenure.
4)	Unauthorized changes made to loan master data or customer data.	System enforced segregation of duties exist in the core banking application where the person putting in of the transaction cannot approve its own transaction and reviewer cannot edit any details submitted by person putting data.

Q.No.6. Describe the Process involved in Mortgage loans (C)

PROCESS DESCRIPTION: Loans are provided by the lender which is a financial institution such as a bank or a mortgage company.

There are two types of loan widely offered to customer. They are:

- 1) First is fixed rate mortgage where rate of interest remains constant for the life of the loan.
- 2) Second is variable/floating rate mortgage where rate of interest is fixed for a period but then it fluctuates with the market interest rates.

BUSINESS PROCESS OF MORTGAGES:

- 1) Borrower / Customer approach the bank for a mortgage and relationship manager/ loan officer explains the customer about home loan and its various feature. Asks Customer to fill loan application and provide requisite KYC documents to the loan officer.
- 2) Loan officer reviews the loan application and sends it to Credit risk team who will calculate the financial obligation. This is done basis the credit score as CIBIL rating, income and expense details and Rate of Interest at which loan is offered. Once financial eligibility is determined, then along with customer documents the details are sent to the underwriting team for approval.
- 3) Underwriting team will verify the financial (applicant’s credit history) and employment information of the customer.
- 4) As per the property selected by the customer, loan officer will provide the property details along with requisite documents (property papers etc.) to the legal and valuation team.
- 5) Further verification of property to determine whether property is built as per the approved plan, whether builder has received requisite certificates, age of building to determine whether it will withstand the loan tenure, construction quality.
- 6) Legal and valuation team will send their report to the operations team which will generate letter of offer / Offer letter to customer which entails all details of loan such as loan amount, rate of interest, tenor, monthly installment, security address, fee/charges details and term and conditions.

- 7) Customer will agree to loan agreement which is offered by signing the offer letter. Loan officer will notarize all the loan documents and are send back to lender operations team.
- 8) Once signed offer letter is received the operations team will release or disburse fund and prepare a cashier order. Cashier order is provided to customer in exchange of mandatory original property documents. Once exchange is carried out successfully, banks place a charge or lien on the property so that incase of default the first charge is with the bank to recover the money.
- 9) Post disbursement of loan customer can carry out various loans servicing activity by visiting the branch or via online mode amendments such as interest rate change, change in monthly installment, prepayment of loan amount and foreclosure of loan etc.

Q.No.7. Write about Negotiable Instruments Act-1881 (NI Act)

(C)

NEGOTIABLE INSTRUMENTS ACT-1881 (NI ACT)

- 1) Under NI Act, Cheque includes electronic image of truncated cheque and a cheque in the electronic form.
- 2) A cheque in the electronic form has been defined as 'a mirror image' of a paper cheque. The expression, 'mirror image of' may be substituted by the expression, 'electronic graphic which looks like' or any other expression that captures the intention adequately.
- 3) The definition of a cheque in electronic form contemplates digital signature with or without biometric signature and asymmetric crypto system.
- 4) Since the definition was inserted in the year 2000, it is understandable that it has captured only digital signature and asymmetric crypto system dealt with under Section 3 of IT Act, 2000.
- 5) Since IT Act, 2000 has been amended in the year 2008 to make provision for electronic signature also, suitable amendment in this regard may be required in NI Act so that electronic signature may be used on cheques in electronic form.

SECTION 3: TTEST YOUR KNOWLEDGE

- 1) Briefly explain four steps of risk management strategy?
- 2) Provide atleast three examples each for Risk to data and other IT risks in a Bank?
- 3) Provide four examples of indicators of higher IT risks in a Bank.
- 4) Please explain and distinguish Internal Controls and IT controls in banks.
- 5) Explain key aspects of architecture of Core Banking Software (CBS).
- 6) Briefly explain core features of core Banking software.
- 7) Briefly explain major components of a CBS solution.
- 8) Explain the CBS IT environment.
- 9) What are the Risks associated with CBS software.
- 10) Please explain the four gateways for controlling Core banking software.
- 11) Please explain briefly the Impact of technology in Banking?
- 12) What are the key provisions of Prevention of Money Laundering Act (PMLA)?
- 13) Briefly explain all stages of Money Laundering and How Banks are used in Laundering money?
- 14) What are Computer-related offences as per IT Act which impact banking?

THE END

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