



1. What is information?

Ans.:

First of all, we should be able to distinguish between Data and Information.

Data is a raw fact and can take the form of a number of statements such as a date or a measurement.

Information is nothing but 'Processed data' which meaningful for recipient

2. Explain the term 'System'.

Ans.:

The system can be defined as

"A Group of mutually related, cooperating elements with a defined boundary; working on reaching a common goal by taking inputs and producing outputs in organized transformation process."

3. Explain the term 'Information System'.

Ans.:

IS refers to interface of **PPT (People, Process & Technology)**

Information System is *A Combination* of people, hardware, software, communication devices, network and data resources that processes (can be storing, retrieving, transforming information) data and information for a specific purpose.

4. What are the Components of Information System?

Ans.:

People Resources, Hardware Resources, Software Resources, Data Resources, Network Resources & Information Products

5. Explain - Business Information System

Ans.:

Business Information Systems (BIS) may be defined as Systems integrating information technology, people and business.

BIS bring business functions and information modules together for establishing effective communication channels

6. What is Business Process?

Ans.:

An Activity or set of activities that...

Has a Goal, Has Specific Inputs, Has Specific Outputs, Uses Resources, Has a number of activities that are performed in some order, May affect more than one organizational unit.

Horizontal organizational impact, Creates value of some kind for the customer The customer may be internal or external.

**7. In order to be able to compete (Strive) successfully in the modern business environment, what must be able to do any information systems?**

Ans.:

- ✓ Large Capacity for storage,
- ✓ Provide faster access,
- ✓ support decision making,
- ✓ grant competitive edge,
- ✓ fast and accurate processing of data,
- ✓ faster communication and reduce information redundancy

8. Types of different business levels in organization:

Ans.:

No.	Level	Groups Served / User	Used for...
1	Strategic Level Systems	Senior Managers – Like CEO, CFO, Chief Operational Officers, Chief Information Officers and Chair Person of the Board, President, Vice President and Corporate Head Managers	To track and deal with strategic issues, assisting long-range planning
2	Management Level Systems	Middle Managers – like General Manager, Regional manager etc	For the monitoring, controlling, decision-making, and administrative activities
3	Knowledge Level Systems	Knowledge & Data Workers	Support discovery, processing and storage of knowledge and data workers
4	Operational Level Systems	Operational Managers or Supervisors	Support operational managers tracking elementary activities. These can include tracking customer orders, invoice tracking, etc

9. Explain – TPS: Transaction Processing System

Ans.:

A Transaction Processing System (TPS) may be defined as a type of information system that collects, stores, modifies and retrieves the day-to-day data transactions of an enterprise

**TPS Cycle:**

- | | |
|----------------------|-----------------------------------|
| A. Input Entry, | B. Transaction Processing, |
| C. Data Maintenance, | D. Document and Report Generation |

Attributes of TPS

- | | |
|------------------------------------|--------------------|
| A. Access Control, | B. Equivalence, |
| C. High Volume – Rapid Processing, | D. Trustworthiness |

Transactions Processing Qualifiers – ACID Test:

ACID = **A**tomicity (Undividable), **C**onsistency, **I**solation (Separately), **D**urability

10. Explain – OAS: Office Automation System

Ans.:

Office automation refers to the use of computer and software to digitally generate, collect, store, manipulate, and relay office information needed for accomplishing basic tasks and goals.

Examples:

Word Processing, E-Mail, Voice Mail, Electronic Calendaring, Video Conferencing, Desktop Video Conferencing, FAX, Imaging, Desktop Publishing

11. Explain – KM S

Ans.:

A. Types of knowledge

Explicit knowledge - that which can be formalized easily and as a consequence is easily available across the organization.

Example - Spoken Words, Written Material and Compiled data etc.

Tacit Knowledge - Tacit knowledge is unarticulated and represented as intuition, perspective, beliefs, and values that individuals form based on their experiences

Example - hand-on skills, special know-how, employee experiences

B. Link & Difference between information & knowledge

- ✓ The right information, if it is delivered to the right person, in the right fashion, and at the right time, *can improve and ensure organizational effectiveness and efficiency.*
- ✓ Knowledge is power. Knowledge is derived from information
- ✓ For example: Rs. 3450/- is data, my bank account has a balance of Rs. 3450/- is information and if my balance falls below Rs. 2500/- I shall have to pay minimum balance charge, is knowledge
- ✓ If a knowledge worker answers “Yes” to the question, “does this facilitate me do my occupation better?” then it is knowledge

C. Why knowledge has gained so much momentum in recent times”?

Due to following confident factors;

- | | |
|-----------------------------------|--|
| i. Altering Business Surrounding, | ii. Burgeon Connections, |
| iii. Globalization, | iv. Modification in Organizational Composition |



12. Explain – MIS: Management Information System

Ans.:

MIS = Management + Information + System

MIS is a computer based system that provides flexible and speedy access to accurate data

Steps to develop MIS:

Groundwork Examination, Requirements Psychoanalysis, Systems Blueprint,

Acquirement / Procurement

Developing MIS – Dos & Don'ts:

Layman, Bridging, Contribution in Totality, Tailor made, Interpretation, Synchronization,

Application

13. Explain – DSS

Ans.:

DSS is a type of computerized information system that supports business and organizational decision-making activities

A DSS supports the human decision-making process, rather than a means to replace it.

Components of DSS

- A. Planning Languages – General Purpose PL & Special Purpose PL
- B. The User
- C. One or more Database
- D. Model Base – Brain of DSS

Explain phases of Early Framework of DSS.

- A. Intelligence
- B. Design
- C. Choice
- D. Implementation

14. Explain – EIS

Ans.:

An Executive Information System (EIS) is the nature of IS used by executives to access and administer the data they entail to make informed business decisions

Components of EIS

- A. Hardware, B. Software, C. GUI, D. Telecommunication

15. Explain – ERP

Ans.:

Enterprise Resource Planning (ERP) systems integrate internal and external management information across an entire organization—taking on finance/accounting, manufacturing, sales and service, customer relationship management, etc.

**ERP Stages of Implementation**

- A. Inventory Control
- B. ABC Analysis & Pareto Analysis

Items	Annual Consumption Value	of Total Inventory Items
A	Highest 70-80%	Accounts for 10-20%
C	Lowest 5%	Accounts for 50%
B	Medium 15-25%	Accounts for 30%
Pareto Analysis	80%	20%

C. Economic Order Quantity (EOQ)

EOQ is used as part of a uninterrupted review inventory system in which the level of inventory is scrutinize at all times and a fixed magnitude is ordered each time the inventory level reaches a particular reorder point.

- D. Just-In-Time (JIT)
- E. Material Requirement Planning (MRP– I)
- F. Inventory Control
- G. ABC Analysis
- H. Economic Order Quantity (EOQ)
- I. Just-In-Time (JIT)
- J. Material Requirement Planning (MRP– I)

16. Explain – CRM

Customer Relationship Management is a corporate level strategy which focuses on creating and maintaining lasting relationships with its customers.

- ✓ Customer is a '*Human Being*',
- ✓ Relationship is the '*Feeling*' and
- ✓ Management is '*Management Tact*' respectively

Greenberg's definition of CRM

This states that CRM must establish with a business strategy, which drives transformation in the business, and influences work processes. These processes are enabled by information technology (IT) and are illustrated with the help of CRM Pyramid.

3 Ways to CRM – TAD

TAD = Take Action, Analyze, Discover

17. Explain – SCM

SCM is the process of planning, implementing, & controlling the operations of the supply chain with the purpose to satisfy customer requirements as efficiently as possible.



Two central ideas of SCM :

- A. Every product that reaches an end user represents the cumulative effort of multiple organizations
- B. While supply chains have existed for a long time, most organizations have only paid attention to what was happening within their “four walls.”

Core Components / elements of SCM

- A. Procurement / Purchasing
- B. Operation (R/M to F/G)
- C. Distribution
- D. Integration

18. Explain – HRM S

A Human Resources Management System (HRMS) is a software application that coalesce (Merge) many human resources functions, together with benefits administration, payroll, recruiting and training, and performance analysis and assessment into one parcel.

HRM S involves...

- A. Workforce Management
- B. Time and Attendance Management
- C. Payroll Management
- D. Training Management
- E. Compensation Management
- F. Recruitment Management
- G. Personnel Management
- H. Organizational Management
- I. Employee Self Service (ESS)
- J. Analytics

19. Explain – CBS - Centralized Online Real-time Environment

Ans.:

The platform where communication technology and information technology are merged to suit core needs of banking is known as Core Banking Solutions (CBS).

Common Points:

- ✓ Core banking solution is a comprehensive, agile, componentized yet integrated business solution, addressing all the core needs of banks, in easy-to-configure modules.
- ✓ The solution is wholly focused on banking and financial services spanning across solutions in the areas of Retail & Corporate Banking, Cash Management, Relationship Banking, Financial CRM, Credit Risk & Appraisal, EAI (Enterprise Application Integration), Internet Banking, FX (Forex), Basel II, Data warehousing and Analytics.

**Example:****A. Infosys' Finacle:**

With a 360 degree single source view into customer accounts, banks can empower customers with relevant information and delight them with 'The right offerings, Presented at the right time through the right channel'

Key Modules of Finacle:

- | | |
|-------------------------------------|-----------------------|
| A. Enterprise Customer Information, | B. Consumer Banking, |
| C. Corporate Banking, | D. Trade Finance, |
| E. Customer Analytics, | F. Wealth management, |
| G. Islamic Banking, | H. Payments, |
| I. Origination, | J. Dashboards |

B. Nucleus - FinnOne:

The Nucleus FinnOne banking suite, made and marketed by India- based Company Nucleus software, comes with a wide variety of integrated applications that cover different aspects of global web banking.

C. Oracle's FLEXCUBE:

Oracle FLEXCUBE helps banks transform their business model from disparate operations towards centralization of key functions, such as accounting, customer information, and management information

20. Explain – AIS: Accounting Information System

Ans.:

The theme of Accounting Information System (AIS) combines a general business background with a spotlight on Business information systems and accounting to prepare learners for specialized careers in accounting, auditing, consulting, business analysis and management.

Key Components of AIS

- | | |
|---|------------------------------|
| A. People, | B. Procedure & Instructions, |
| C. Data, | D. Software, |
| E. Information Technology Infrastructure, | F. Internal Controls |

21. Explain – AI: Artificial Intelligence

Ans.:

- ✓ Artificial Intelligence (AI) is the vicinity (Area) of computer science focusing on creating machines *that can fit into place on behaviors that humans regard as intelligent*
- ✓ Artificial Intelligence (AI) is a research field that studies...
'how to comprehend the intelligent human behaviors on a computer'.
- ✓ Although AI has been studied for more than half a century, we still cannot make a computer that is as intelligent as a human in all aspects
- ✓ **Some of the commercial applications of AI**
 - A. Decision Support, B. Information Retrieval, C. Virtual Reality, D. Robotics

**22. Explain – ES: Expert System**

An Expert System is highly developed DSS that utilizes knowledge generally possessed by an expert to share a problem. (Developed by Expert and used by non-Expert)

Need of Expert Systems:

- A. Expert labor is expensive and scarce.
- B. Moreover, no matter how bright or knowledgeable certain people are, they often can handle only a few factors at a time.

Types of Expert System problem domains:

- A. Expert systems are designed to deal with imprecise data or problems that have more than one solution.
- B. Using a technique called fuzzy (Uncertain) logic; an expert system can deal with imprecise data by asking for a level of confidence.
- C. A neural network uses computer circuitry to simulate the way in which a brain might process information.

Components of ES:

- A. Knowledge Base,
- B. Inference Engine,
- C. User Interface,
- D. Explanation Facility,
- E. Database of Facts

Types of ES:

- A. Examples Based System,
- B. Rules Based Systems,
- C. Frame Based Systems

23. Explain – BI

BI is essentially timely, accurate, high-value, and actionable business insights (intuition), and the work processes and technologies used to obtain them.

BI – Tools:

- A. Simple Reporting & Querying –
Tell me what happened
- B. Business Analysis –
Tell me what happened and why
- C. Dashboards –
Tell me a lot of things, but without too much effort
- D. Scorecards –
This involves providing a visual representation of the enterprise strategy by taking critical metrics and mapping them to strategic goals throughout the enterprise



E. Data Mining or Statistical Analysis –

This involves using statistical, artificial intelligence, and related techniques to mine through large volumes of data and providing knowledge without users even having to ask specific questions

24. What are the benefits to micro and small to medium enterprise of Business Reporting through MIS and IT?

Ans.:

- | | |
|----------------------------------|-------------------------------|
| A. Paperless Lodgment, | B. Electronic Record Keeping, |
| C. Pre-filled Forms, | D. Ease of Sharing, |
| E. Secure AUSKey Authentication, | F. Same Time Validation |

25. What are the benefits to large business of Business Reporting through MIS and IT?

Ans.:

A single Reporting language to report to government, Reduce Costs, Streamline the process of aggregating data, increased access to comparable performance information, Secure AUSKey Authentication, Same time Validation

26. Explain – ACM : Access Control Mechanism

Ans.:

IAA – Identification, Authentication and Authorization

These controls *restrict use of computer system resources to authorized users*, limit the actions authorized users can take with these resources, and ensure that users obtain only authentic computer system resources.

Auditors should have two concerns:

- A. They need to determine 'how well any access control mechanism uses safeguards assets and preserves data integrity'
- B. whether the access controls chosen for that system suffice

Access control Functions:

- A. Identity Management
- B. Authentication
- C. Authorization
- D. Accountability

Approaches to Access Control:

- A. Role Based Access Control (RBAC)
- B. Rules Based Access Control (RAC)

Principle of Least Privilege:

- ✓ This is a fundamental principle of information security, which refers to give only those privileges to a user account, which are essential to that user's work.
- ✓ For example, a backup user does not need to install software; hence, the backup user has rights only to run backup and backup-related applications



27. Explain – Payment Mechanism

Ans.:

With the increase in online shopping and e-commerce industry, it has now become a requirement that *the web stores are integrated with a payment gateway*

A. Credit Cards / Debit Card

Process - Authorization, Batching, Clearing, Funding

B. Electronic Cheques

By FSTC & By Cyber Cash

C. Smart Cards :

Smart cards have an embedded microchip instead of magnetic strip

Types - Contact Cards, Contactless Cards & Combi Cards

D. Electronic Purses

28. What are the steps of any typical on line transaction?

Ans.: 1. Advertising, 2. Offering, 3. Selling, 4. Billing,
5. Paying, 6. Matching, 7. Delivering, 8. Resolving

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