Faculty of Information Technology

SYSTEM ANALYSIS AND DESIGN

**Fall 2021**

**Part I. Multiple choice questions**

1. would be classified as software designed to support the payroll function.
   1. System software
   2. Design software
   3. Analysis software
   4. Application software
2. is designed to support organizational functions or processes.
   1. Application software
   2. Design software
   3. Analysis software
   4. Testing software
3. What are computer programs that make it easy to use and benefit from techniques and to faithfully follow the guidelines of the overall development methodology?
4. Tools
5. Techniques
6. Data flow
7. Methodologies
8. Who has the primary responsibility for the design and analysis of information systems?
9. Systems analyst
10. Software engineer
11. Employees
12. Applications developer
13. is/are the process(es) that an analyst will follow to help ensure that his work is complete, well-done, and understood by project team members.
14. Tools
15. Techniques
16. Data flow
17. Methodologies
18. The first procedural, or third-generation, computer programming languages did not become available until the beginning of the .

A) 1950s

B) 1960s

C) 1970s

D) 1980s

1. Because computers were so expensive, computer memory was also at a premium, so system developers conserved as much memory as possible for .
2. System design
3. System analysis
4. Data analysis
5. Data storage
6. are large, complex systems that consist of a series of independent system modules.
7. Supply chain management systems
8. Enterprise-wide systems
9. Customer relationship management systems
10. Transaction processing systems
11. were developed to make systems developers' work easier and more consistent.
12. Data analysis tools
13. Computer-aided software engineering (CASE) tools
14. Software designing tools
15. Modeling tools
16. Most organizations find it beneficial to use a standard set of steps, called , to develop and support their information systems.
17. Systems development methodology
18. Supply chain management systems
19. Analytical processing systems
20. Customer relationship management systems
21. Which of the below is a traditional methodology used to develop, maintain, and replace information systems?
22. Prototyping
23. OOAD
24. RAD
25. SDLC
26. Information systems analysis and design is a process to develop and maintain computer-based information systems. T/F?
27. Ninety-four percent of companies report that they practice agile in their systems development efforts. T/F?
28. To be effective, techniques and tools must both be consistent with an organization's systems development methodology. T/F?
29. Techniques and tools must make it difficult for system developers to conduct the steps called for in the methodology. T/F?(it is easier).
30. An organizational approach to systems analysis and design is not driven by methodologies. T/F?(it is based on methodologies).
31. The analysis and design of computer-based information systems began in the 1950s. T/F?
32. Most organizations never developed their applications from scratch using their in- house development staff. T/F?(they are, e.x: fpt,…)
33. Which of the following is correct with respect to the logical design?
34. All functional features of the system chosen for development in analysis are described independently of any computer platform.
35. Logical design does not concentrate on the business aspects of the system.
36. Logical design is tied to a specific hardware and software platform.
37. Technical specifications are developed.
38. In which phase of the SDLC is an information system systematically repaired and improved?
39. Implementation
40. Analysis
41. Design
42. Maintenance
43. Which of the following are delivered after the completion of analysis phase?
44. Functional, detailed specifications of all system elements
45. Priorities for systems and projects; an architecture for data, networks, and selection hardware, and IS management are the result of associated systems
46. Code, documentation, training procedures, and support capabilities
47. Description of current system and where problems and opportunities are with a general recommendation on how to fix, enhance, or replace current system
48. Systems development methodologies and techniques which are based on objects rather than data or processes are known as .

* Inheritance
* Objects
* Participatory design
* Object-oriented analysis and design

23)Which of the following is NOT a part of the Evolutionary model of the SDLC process?

* 1. Analysis
  2. Design
  3. Planning
  4. Procedure

24)Which of the following activities happens during the SDLC planning phase?

* 1. A presentation of why the system should or should not be developed by the organization is given.
  2. New system requirements are identified.
  3. The high level design is prepared.
  4. User acceptance testing is performed.

25)In which phase of the SDLC are the system requirements studied and structured?

* 1. Implementation
  2. Analysis
  3. Design
  4. Planning

26)Which SDLC phase focuses on the needs of the entire organization?

* 1. Design
  2. Planning
  3. Logical
  4. Analysis

27)In which phase of the SDLC is the description of the recommended solution converted into logical and then physical system specifications?

* 1. Implementation
  2. Analysis
  3. Design
  4. Planning

28)In which phase of the SDLC is the information system coded, tested, installed, and supported in the organization?

* 1. Implementation
  2. Analysis
  3. Design
  4. Planning

29) is/are the final output from the analysis phase.

* 1. Physical system specifications
  2. Work plan for the project
  3. Priorities for systems and projects proposal
  4. A description of the alternative solution

30)Which of the following are delivered after the completion of the implementation phase?

* 1. Code, documentation, training procedures, and support capabilities
  2. Functional, detailed specifications of all system elements
  3. Description of current system and where problems and opportunities are with a general recommendation on how to fix, enhance, or replace current system
  4. Priorities for systems and projects; an architecture for data, networks, and selection hardware, and IS management are the result of associated systems

31) Which of the following are delivered after the completion of analysis phase?

* 1. Functional, detailed specifications of all system elements
  2. Priorities for systems and projects; an architecture for data, networks, and selection hardware, and IS management are the result of associated systems
  3. Code, documentation, training procedures, and support capabilities
  4. Description of current system and where problems and opportunities are with a general recommendation on how to fix, enhance, or replace current system

32) Which of the below is NOT a true statement regarding the SDLC?

* 1. It is a highly linked set of phases whose products feed the activities in subsequent phases.
  2. The different phases are clearly defined.
  3. The relationships between phases are well specified.
  4. It is a rapid method to prototype and develop an application.

1. Which of the following are delivered after the completion of the Maintenance phase of the SDLC?
   1. New versions or releases of software with associated updates to documentation, training, and support
   2. Functional, detailed specifications of all system elements
   3. Priorities for systems and projects; an architecture for data, networks, and selection hardware, and IS management are the result of associated systems
   4. Code, documentation, training procedures, and support capabilities
2. All of these are reasons to begin designing a system replacement except .
   1. when the information system is no longer performing as desired.
   2. when maintenance costs become prohibitive.
   3. when the organization needs have substantially changed.
   4. when the system has reached the time limit of seven years.

35Which of the following is a drawback of the traditional waterfall SDLC approach?

* 1. Users are locked into requirements.
  2. There are no criticisms.
  3. The process is too chaotic.
  4. It is too short of a process.

36Which of the following is NOT a criticism of the traditional waterfall SDLC approach?

* 1. Prototypes do not work properly.
  2. Users are locked into requirements.
  3. The role of customers is narrowly defined.
  4. Intangible processes are given hard and fast dates.

37Which of the following is one of three key principles shared by the Agile Methodologies?

* 1. A focus on self-adaptive processes
  2. A focus on roles
  3. A focus on predictive methodologies
  4. A focus on passive processes

38The third phase in the SDLC is planning and in this phase the analyst thoroughly studies the organization's current procedures and the information systems used to perform organizational tasks?(F/ design).

39The part of the design process that is independent of any specific hardware or software platform is referred to as logical design?(T).

40Which of the following is NOT true regarding iterative development?

* 1. It is a mechanism for dealing with a lack of predictability.
  2. It focuses on the frequent production of working versions of a system.
  3. It provides feedback to customers.
  4. Feedback is not provided to developers and customers.

41Which of the following is NOT valued according to the Agile Manifesto for software development?

* 1. Responding to change over following a plan
  2. Working software over comprehensive documentation
  3. Prioritizing the plan over the change required
  4. Individuals and interactions over processes and tools

42 is/are often called the third approach to systems development, after the process-oriented and data-oriented approaches.

* 1. Inheritance
  2. Objects
  3. Participatory design
  4. Object-oriented analysis and design

43One of the most popular realizations of the iterative approach for object-oriented development is the .

* 1. JAD
  2. RAD
  3. RUP
  4. eXtreme Programming

44Which of the following is NOT a phase in the Rational Unified Process?

* 1. Inception
  2. Elaboration
  3. Construction
  4. Calculation

45Which of the following is an iterative approach to programming in the object-oriented design process?

* 1. Rational Unified Process (RUP)
  2. Software Development Life Cycle (SDLC)
  3. eXtreme Programming
  4. The Construction Process

**Crossword:**

|  |  |
| --- | --- |
| **Across**  **1.** A primary concern for most organizations when dealing with the cloud is \_\_\_**availability**\_\_\_\_\_.  **4.** \_\_\_**Customization**\_\_\_\_\_ refers to sites that allow a user to customize the content and look of a site based on their personal preferences.  **8.** \_\_**Personalization**\_\_\_\_\_\_ means providing Internet content to a user based upon knowledge of that customer.  **9.** In the \_**SAAS**\_\_\_\_\_\_\_ model, the customer uses only applications provided via a cloud infrastructure. Typically, such applications include Web-based e-mail services and Web-based productivity suites.  **10.** \_\_\_**CSS**\_\_\_\_\_ is a set of style rules that tells a Web browser how to present a document.  **17.** A(n) \_**CMS**\_\_\_\_\_\_\_ is a special type of software application for collecting, organizing, and publishing Web site content.  **18.** According to the **component**\_\_\_\_\_\_\_\_ service principle, a service should be simple and modular.  **21.** To make sure Websites contain the most accurate and up-to-date information, often from multiple sources, many organizations have turned to using a \_\_**content**\_\_\_\_\_\_ management system.  **23.** A(n) \_\_**application server**\_\_\_\_\_\_ is a computing server where data analysis functions primarily reside.  **24.** A \_\_**file server**\_\_\_\_\_\_ is a device that manages file operations and is shared by each client PC attached to a LAN.  **25.** \_\_\_**HTTP**\_\_\_\_\_ is a communication protocol for exchanging information on the Internet.  **27.** In the \_\_\_**SAAS**\_\_\_\_\_ model, the user has control over the applications but has limited or no control over the underlying infrastructure  **29.** The \_\_**data analysis**\_\_\_\_\_\_ functions of an IS transform inputs into outputs, including simple summarization to complex mathematical modeling such as regression analysis.  **30.** \_\_\_\_\_**XSL**\_\_\_ is a specification for separating style from content when generating XML pages. | **Down**  **2.** A thin client is a client device designed so that most processing and data storage occur on the \_\_\_\_**server**\_\_\_\_.  **3.** Services in a(n) \_\_**public**\_\_\_\_\_\_ cloud can be used by any interested party on a pay-per-use basis; hence, they are often used for applications that need rapid scalability  **5.** A \_\_**database engine**\_\_\_\_\_\_ is the (back-end) portion of the client/server database system running on the server that provides database processing and shared access functions  **6.** The \_**data management**\_\_\_\_\_\_\_ functions of an IS manage all interaction between software and files and databases, including data retrieval/querying, updating, security, concurrency control, and recovery.  **7.** Applications under the \_\_\_**SAAS\_**\_\_\_\_ model are typically easiest to deploy, because the customer does not have to worry about maintaining or updating the software, the underlying platform, or the hardware infrastructure  **11.** \_\_**Middleware**\_\_\_\_\_\_ is a combination of hardware, software and communication technology that brings data management, presentation, and analysis together into a three-tiered (or n-tiered) client/server environment.  **12.** File servers transfer files when data are requested from a \_\_\_**client**\_\_\_\_\_.  **13.** Designing distributed and Internet systems is much like designing \_\_**single**\_\_\_\_\_\_ location systems.  **14.** \_\_\_**XML**\_\_\_\_\_ is an Internet authoring language that allows designers to create customized tags, enabling the definition, transmission, validation, and interpretation of data between applications.  **15.** A(n) \_\_**virtual machine**\_\_\_\_\_\_ is a software emulation of a physical computer system, both hardware and operating system, that allows more efficient sharing of physical hardware resources.  **16.** A(n) \_\_**private**\_\_\_\_\_\_ cloud does not free an organization from the issues associated with managing the cloud infrastructure, but it does give the organization a high degree of customizability, flexibility, and control over their data and applications.  **19.** A Web service is a method of communication between two electronic devices over a \_\_**network**\_\_\_\_\_\_.  **20.** A(n) \_\_\_**API**\_\_\_\_\_ refers to the software building blocks that are used to ensure that common system capabilities, such as user interfaces and printing, as well as modules are standardized to facilitate data exchange between clients and servers.  **22.** \_\_\_\_**LAN**\_\_\_\_ is the cabling, hardware, and software used to connect workstations, computers and file servers located in a confined geographical area.  **26.** In a file server configuration, each file server acts as an additional hard disk for each client \_\_\_\_**PC**\_\_\_\_.  **28.** In the \_\_\_\_**PAAS**\_\_\_\_ model, customers can run their own applications, which are typically designed using tools provided by the service provider. |

# Part 2. Short answer

* 1. Who is a systems analyst and what are the duties of a systems analyst?

Systems analysts analyses how well software, hardware and the wider IT system fit the business needs of their employer or of a client. They write requirements for new systems and may also help implement them and monitor their effectiveness.

REF: <https://targetjobs.co.uk/careers-advice/job-descriptions/279127-systems-analyst-job-description> .

* 1. What is an application software and its importance?

“Application software” or “software applications” (or apps) help the end users perform single or multiple tasks. Application software finds its presence in enterprise as well as non-enterprise applications. Enterprise “application software” includes enterprise resource planning (or ERP), supply chain management, embedded software, and customer relationship management.

Non-enterprise application software includes:  
• Entertainment – game applications for media, CD, and DVD—like Solitaire and Rhapsody  
• Graphics – applications for image organizing, editing, and sharing—like HP (HPQ), Photo smart Essentials, Adobe Illustrator (ADB)  
• Security – applications to detect firewalls and antivirus protection—like Norton  
• Mobile apps – application software meant for a mobile device, smartphone, or tablet.

REF: <https://finance.yahoo.com/news/why-application-software-important-software-203927579.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAANkMF8gciuZ9H719b_dBuwb5miI0kxeSVMLi2DDaorGSxRfVjPeqvxZVLca4B8zZ5Fctn4SVbsbUqeuy0Nm6IVHcYoVE82iczWmfwjg814ubbFFTOMX3XGOZPV2MdlR5E6tkDs__IdKWo6SJj0ToP2SOl_3nZ4EyGtTWc1nXNr3k>.

* 1. What is meant by system methodologies, techniques, and tools?
* Methodology: It is comprehensive guideline that is to be followed to successfully complete every SDLC phase. It is collection of models, tool and techniques. Methodologies are used to enhance performance in the system. If you follow the traditional SDLC then, you will find that- designers designed the system like a castle in the air to the programmer (come on! This is a daydream project to be completed!!). So, a simple methodology can be, bring in the programmer from implementation phase to design phase sitting with designer (ah, now tasks are going to be easier). This is because, higher level employees often don’t have that much idea about the labor of the programmers.

* Techniques: There are several techniques in several phases of SDLC. You can name them very easily- how to code, how to keep track of the progress, how to manage things, how to co-operate among phases, how to test the system, what about post implementation- techniques are guidelines here. There is no standard guideline for the lifecycle. It is recommended to use your own idea about the systems to propose your technique to solve problems. The steps in each phrase, live what is the function, what is the requirement, what is the detail, the description…

We will also take a little look into the 2 approaches of SDLC

1. Traditional Approach: This approach is also called structured approach. Within the scope of this approach, we will try to cover structured programming, top down programming, Structured design approach and structured analysis
2. Object Oriented Approach

* Tools: The world has advanced a lot that now the systems are designed with the help of computer tools. This is for accuracy, flexibility and standardization. The trend is augmenting day by day. We will dig into Computer Aided System Engineering (CASE) tools during the course run. CASE is an automated tool that helps to speed up the system development.
* REF: <https://www.scribd.com/doc/6849398/Lecture-SDLC-Model-tool-technique-methodology> .
  1. What is a system development methodology?

It is a methodology for systematically organizing the best ways to develop systems efficiently. It includes, for example, descriptions of work to be performed at each stage of the development process and drafted documents. Multiple methodologies—which differ according to viewpoint—are available. In terms of the development process, some example methodologies are "water-fall development," "spiral development," and "agile-software development." And in terms of the design approach, some example methodologies are the process-oriented approach (POA), the data-oriented approach (DOA), the object-oriented approach (OOA), and the service-oriented approach (SOA).

REF: <https://www.slideshare.net/KashifKhan76/system-development-methodologies-64648700> .

* 1. What are the five major phases of the SDLC?

1. **Planning**
   1. Need for a new or enhanced system is identified
   2. Needs are identified, analyzed, prioritized, and arranged
   3. Determine the scope of the proposed system
   4. Baseline project plan is developed
2. **Analysis**
   1. System requirements are studied from user input and structured
   2. Requires careful study of current systems, manual and computerized, that might be replaced or be enhanced
   3. Output is description of the alternate solution recommend by the analysis team
3. **Design**
   1. Analyst converts the alternate solution into logical and physical specifications
   2. **Logical Design**
      1. The design process part that is independent of any specific hardware or software platform
   3. **Physical Design**
      1. The logical specifications of the system from logical design are transformed into technology-specific details from which all programing/system construction can be accomplished
   4. Choices of language, database, and platform are many times already decided by the organization or client
4. **Implementation**
   1. Occurs when the information system is coded, tested, installed, and supported in the organization
   2. New systems become part of the daily activities of the organization
5. **Maintenance**
   1. The phase in which an information system is systematically repaired and improved
   2. Organization’s needs may change over time requiring changes to the system based on user’s needs
   3. List the outputs delivered from each of the SDLC phases.

Planning: a clearer picture of the scope of the entire project and the anticipated issues, opportunities, and directives which triggered the project.

Analysis: description of the alternative solution.

Design:

* Functional, detailed specifications of system elements (data, processes, inputs, and outputs)
* Technical, detailed specifications of all system elements (programs, files, network, system software, etc.)
* Acquisition plan for new technology

Implementation: Code, documentation, training procedures, and support capabilities

Maintenance: New versions or releases of software with associated updates to documentation, training, and support

* 1. What happens during testing and installation of the new systems during the implementation phase of the software development life cycle?

This phase is initiated after the system has been tested and accepted by the user. In this phase, the system is installed to support the intended business functions. System performance is compared to performance objectives established during the planning phase. Implementation includes user notification, user training, installation of hardware, installation of software onto production computers, and integration of the system into daily work processes. This phase continues until the system is operating in production in accordance with the defined user requirements.

* 1. Describe the criticism of traditional waterfall SDLC process.
* Once one phase ends another begins, going downhill until complete
* Makes it difficult to go back
* Results in great expense to make changes
* Role of system users or customers narrowly defined
* Focused on deadlines
  1. Explain object-oriented analysis and design.
* Object-oriented analysis and design (OOAD) is a software engineering approach that models a system as a group of interacting objects. Each object represents some entity of interest in the system being modeled, and is characterised by its class, its state (data elements), and its behavior. Various models can be created to show the static structure, dynamic behavior, and run-time deployment of these collaborating objects.
* Based on objects rather than data or processes
* Combines data and processes (called **methods**) into single entities call objects
* **Object**: A structure that encapsulates attributes and methods that operate on those attributes
* **Inheritance**: Hierarchical arrangement of classes enabling subclasses to inherit properties of superclasses
* **Object Class**: Logical grouping of objects that have the same attributes and behaviors.
  1. Describe the Rational Unified Process (RUP) and its phases.
* **Rational Unified Process (R U P)** is an object-oriented systems development methodology
* Based on an iterative, incremental approach to systems development
* R U Ps four phases:
  + - Inception: The main goal is to define the full system scope as a basis for validating the initial cost and budget.
    - Elaboration: The main objective is to minimize the risk points that are defined by analysis until the end of this stage.
    - Construction: T main goal is to build a software system.
    - Transition: The main goal is to "transit" the system from development to production, making it available and understood by the end users.
  1. List some advantages and disadvantages of Layered architecture and Client–server architecture
* Layered architecture:
* Advantages:
* **Layered architecture increases flexibility, maintainability, and scalability.** In a Layered architecture we separate the user interface from the business logic, and the business logic from the data access logic. Separation of concerns among these logical layers and components is easily achieved with the help of layered architecture.
* **Multiple applications can reuse the components.** For example if we want a windows user interface rather than a web browser interface, this can be done in an easy and fast way by just replacing the UI component. All the other components like business logic, data access and the database remains the same. Layered architecture allows to swap and reuse components at will.
* **Layered architecture** enables teams to work on different parts of the application parallely with minimal dependencies on other teams.
* **Layered architecture**enables develop loosely coupled systems.
* **Different components** of the application can be independently deployed, maintained, and updated, on different time schedules.
* **Layered architecture**also makes it possible to configure different levels of security to different components deployed on different boxes. sO Layered architecture, enables you to secure portions of the application behind the firewall and make other components accessible from the Internet.
* **Layered architecture**also helps you to test the components independently of each other.
* Disadvantages:
* **There might be a negative impact**on the performance as we have the extra overhead of passing through layers instead of calling a component directly.
* **Development of user-intensive** applications can sometime take longer if the layering prevents the use of user interface components that directly interact with the database.
* **The use of layers helps** to control and encapsulate the complexity of large applications, but adds complexity to simple applications.
* **Changes to lower level interfaces**tend to percolate to higher levels, especially if the relaxed layered approach is used.

### Client Server Architecture:

### Advantages:

* The data is centralized within the system that is maintained in a single place.
* The model is efficient in delivering resources to the client and also requires low-cost maintenance.
* It is easy to manage, and the data can be easily delivered to the client.
* As the data is centralized, this system is more secure and serves added security to the data.
* Within this type of model, more clients and servers can be embedded into the server, which makes the performance outstanding and increases the model’s overall flexibility.
* Disadvantages:
* Clients’ systems can get a virus or any malicious scripts if any are running on the server.
* Extra security must be added so that the data does not get spoofed in between the transmission.
* The main problem can be server down. When the server is down, the client loses its connection and will not access the data.
  1. List some factors to choose software architecture based on non-functional requirements

REF: <https://dev.to/arquitectosoft1/non-functional-requirements-the-pillars-of-a-solid-software-architecture-2mbg> .

### Security

Security is a process of risk management that balances likely **security risks** against the **cost** of guarding against them.

This requirement allows the owners of resources in the system to **reliably control** who can perform what actions on particular resources. It implies many actions, some of them:

* Sensitive **resources** identification and protection: permission evaluation over every action over every resource.
* Identification and **authorization**.
* **Availability** protection.
* Secure **libraries**.
* Security **administration**.
* Information **integrity**.
* Continuous **monitorization** of vulnerabilities and threats.

### Cost

Cost can be the **achilles heel** of a software project. There are a lot of elements to consider in the overall cost of a software architecture. The most outstanding examples are:

* **Implementation** cost: a more complexity architecture requires more qualified engineers.
* Costs associated to **failure management** and recovery.
* **Data Backup** strategy costs.
* **Resources** needed to run the system: hardware, electricity, etc.
* Costs associated to system **maintenance** and support.

Reliability

Also known as Mean Time Between/To Failures or MTBF/MTTF. This requirement refers to the consistency in the anticipation of software operations. Therefore unreliability is the result of unanticipated results of software operations.

A common metric to measure reliability is the number of software faults (known as bugs), expressed as faults per thousand lines of code.

The best way to mitigate bugs in software is to do good testing strategy, therefore a software architecture easy to test could be more reliable than other architecture harder to test.

* System is an important factor of management information system.

## Tactical **level supply information to strategic tier for the use of top management.**

## **In a DFD external entities are represented by a** Rectangle

## Information **can be defined as data that has been processed into a form that is meaningful to the recipient and is of real or perceive value in current or prospective decisions.**

## Parallel Operation **Use the new system as the same time as the old system to compare the results. This is known as**

## **After the design phase the document prepared is known as** design specification

## **A data flow can** May emanate and terminate in an external entity

## System Analysis **can be defined as most recent and perhaps the most comprehensive technique for solving computer problems.**

## **Which of the following is / are the Characteristics of information?:** Accuracy and Relevance, Form of information and Timeliness, Completeness and Purpose

## **The data Flow Diagram is the basic component of** Logical **system**

## **Data cannot flow between two data stores because** they will get merged

## **The characteristics of well designed system are a) Practical b) Effective c) Secure d) Reliable e) Flexible f) Economical:** a, b, c, d, e and f

## System flowchart **gives defining the flow of the data through and organization or a company or series of tasks that may or may not represent computerized processing.**

## **In the Analysis phase, the development of the** program specification **occurs, which is a clear statement of the goals and objectives of the project.**

## **Actual programming of software code is done during the** Development and Documentation **step in the SDLC.**

## **Enhancements, upgrades, and bug fixes are done during the** Maintenance and Evaluation **step in the SDLC.**

## **HIPO stand for**  Hierarchy input process output

## **Advantages of system flowcharts:** Effective communication, Effective analysis, Queasier group or relationships

## Decision tables **is a tabular method for describing the logic of the decisions to be taken.**

## **The approach used in top‐down analysis and design is** to identify a top level function an d then create a hierarchy of lower‐level modules and components.

## **Documentation is prepared** at every stage

## **Decision tree uses** pictorial depictation of alternate conditions, nodes and branches, consequences of various depicted alternates

## **Problem analysis is done during:** systems analysis phase

## **A decision table facilitates conditions to be related to** Actions

## **A** System Development Life Cycle **is an outline of a process that keeps develop successful information systems**

## **An appraisal, of a system's performance after it has been installed, is called system** review

## **An example of a hierarchical data structure is** Tree

## **Which of the following is not a characteristic of good test data** users do not participate at this preliminary stage

## **In the system concepts, term Integration** refers to the holism of system

## **The rule(s) to follow in constructing decision tables is (are):** a decision should be given a name, the logic of the table is independent of the sequence in which conditions rules are written, but the action takes place in the order is which the events occur., standardized language must be used consistently.

## System **is a group of interested components working together towards a common goal by accepting inputs and producing outputs in an organized transformation process.**

## **A rectangle in a DFD represents** an external entity

## **External Entities may be a** Source of input data or destination of results

## **The major goal of requirement determination phase of information system development is** determine what information is needed by an organization

## **It is necessary to prioritize information requirements of an organization at the requirements determination phase as** there are constraints on budgets, available time, human resource and requirement

## **Requirement specification is carried out** after requirements are determined

## **The role of a system analyst drawing up a requirements specification is similar to** architect designing a building

## **It is necessary to consult the following while drawing up requirement specification** top, middle and operational managers and also all who will use the system

## In order to understand the working of an organization for which a computer based system is being designed, an analyst mustinterview top, middle, line managers and also clerks who will enter data and use the system

## **A feasibility study is carried out** before the final requirements specifications are drawn up

## **The main objective of feasibility study is** to assess if it is possible to meet the requirements specified subject to constraints of budget, human resource and hardware

## **It is necessary to carry out a feasibility study as** even though top management is in favour of the system, technology may not be mature for implementation

## **Feasibility study is carried out by** system analyst in consultation with managers of the organization

## **Initial requirements specification is** only a rough indication of the requirement

## **Final specifications are drawn up by** system analyst in consultation with the management of the organization

## **The main goal of arriving at a final specification is t**o tell the organization’s managers what the proposed system will achieve in a language understood by them

## **The final specifications are arrived at** after feasibility study

## **System approval criteria are specified** when the final specifications are drawn up

## **Hardware study is required** to determine the type of computer system and software tools needed to meet the final system specification

## **Hardware study is carried out** after the final system is specified

## **System design is carried out** after final system specifications are approved by the organization

## **The primary objective of system design is to** design the programs, databases and test plan

## **System evaluation is carried out** after the system has been operational for a reasonable time

## **The main objective of system evaluation is** to improve the system based on operational experience for a period

## **Systems are modified whenever** user’s requirements change

## **The main objective of system modification is** to meet the user’s new/changed needs

## **To easily modify the existing system it is necessary to** design the system which can be changed at low cost

## **It is necessary to design an information system to easily accommodate change, because** organizations’ requirements change over a period of time

## **Changing an operational information system is** expensive and done selectively

## **System analysts have to interact with i) managers of organizations ii) users in the organization iii) programming team iv) data entry operator:** i, ii and iii

## **The primary responsibility of a systems analyst is to** specify an information system which meets the requirements of an organization

## **The most important attribute of a systems analyst is** very good technical management skills

## **Managers in organizations should not design their own systems as** they do not have the special skills necessary to design systems

## **Systems analyst should use software tools in their work as** they assist in systematic design of systems

## **Which of the following does not occur in phase - 4 of the system development life cycle (SDLC)** conduct interviews

## **The structure chart is** a hierarchical partitioning of the program

## **Programmers use** HIPO **to organize and summarize the results of their problem analysis.**

## **Changes made periodically to a system, after its implementation, is known as system** maintenance

## **The first step in systems Development Life Cycle is** preliminary investigation and analysis

## **Graphic representation of the control logic of processing functions or modules representing a system, is known as:** Structured chart

## **An open rectangle** is a data store-data at rest, or a temporary repository of data

## **Difference between Decision - Tables and Decision Trees is (are)** form of representation

## **Coding and testing are done In a** top-down manner

## **The first step in the problem-solving process is to** Analyze the problem

## **All of the following tools are used for process descriptions except:** data dictionaries

76. System design aid should primarily

A. help analyse both data and activities

B. help in documentation

C. help in programming

D. generate code

[Discussion](https://mcqmate.com/discussion/145805/system-design-aid-should-primarily)

A. help analyse both data and activities

77. Mistakes made in the system analysis stage show up in :

A. implementation

B. system design

C. system developments

D. All of the above

[Discussion](https://mcqmate.com/discussion/145806/mistakes-made-in-the-system-analysis-stage-show-up-in)

A. implementation

78. HIPO means

A. is a forms-driven technique in which standard forms are used to document the information

B. consists of a hierarchy chart and an associated set of input/process/ output charts

C. captures the essence of top down decomposition.

D. All of the above

[Discussion](https://mcqmate.com/discussion/145807/hipo-means)

D. All of the above

79. Which of the following activities, does not belong to the Implementation phase of the SDLC?

A. File conversion

B. Program testing

C. User training

D. All of the above

[Discussion](https://mcqmate.com/discussion/145808/which-of-the-following-activities-does-not-belong-to-the-implementation-phase-of-the-sdlc)

B. Program testing

80. During what phase, the requirement analysis is performed?

A. system design phase

B. system development phase

C. system analysis phase

D. system investigation phase

[Discussion](https://mcqmate.com/discussion/145809/during-what-phase-the-requirement-analysis-is-performed)

C. system analysis phase

81. The requirements report includes

A. a hierarchy chart showing the top-level modules

B. a list of alternative solutions considered

C. a data flow diagram describing the proposed new system.

D. All of the above

[Discussion](https://mcqmate.com/discussion/145810/the-requirements-report-includes)

C. a data flow diagram describing the proposed new system.

82. During the system study, analysts determine manager's information needs by

A. conducting tours of a nearby computer center

B. asking questions

C. showing samples of computer reports

D. teaching short courses in programming languages

[Discussion](https://mcqmate.com/discussion/145811/during-the-system-study-analysts-determine-managers-information-needs-by)

B. asking questions

83. A feasibility study

A. includes a statement of the problems

B. considers a single solutions

C. both (a) and (b)

D. a list of alternative solution considered

[Discussion](https://mcqmate.com/discussion/145812/a-feasibility-study)

A. includes a statement of the problems

84. Which of the following is (are) the characteristic(s) of a system?

A. organization

B. Interaction

C. Interdependence

D. All of the above

[Discussion](https://mcqmate.com/discussion/145813/which-of-the-following-is-are-the-characteristics-of-a-system)

D. All of the above

85. A graphic representation of an information system is called

A. flow chart

B. pictogram

C. data flow diagram

D. histogram

[Discussion](https://mcqmate.com/discussion/145814/a-graphic-representation-of-an-information-system-is-called)

C. data flow diagram

86. In data-flow diagrams, an originator or receiver of the data is usually designated by

A. a circle

B. an arrow

C. a square box

D. a rectangle

[Discussion](https://mcqmate.com/discussion/145815/in-data-flow-diagrams-an-originator-or-receiver-of-the-data-is-usually-designated-by)

C. a square box

87. To which phase of SDLC, is file conversion related?

A. System Implementation

B. System analysis

C. System development

D. System design

[Discussion](https://mcqmate.com/discussion/145816/to-which-phase-of-sdlc-is-file-conversion-related)

A. System Implementation

88. Which of the following is not considered as a tool at the system design phase?

A. piechart

B. data-flow diagram

C. decision table

D. systems flowchart

[Discussion](https://mcqmate.com/discussion/145817/which-of-the-following-is-not-considered-as-a-tool-at-the-system-design-phase)

A. piechart

89. Which are the tools not used for System Analysis

A. System - test data

B. Decision table

C. Data Flow Diagram

D. Flowcharts

[Discussion](https://mcqmate.com/discussion/145818/which-are-the-tools-not-used-for-system-analysis)

A. System - test data

90. The code used for the validation purpose is known

A. Self checking code

B. Sequence code

C. Alpha numeric code

D. Group classification code

[Discussion](https://mcqmate.com/discussion/145819/the-code-used-for-the-validation-purpose-is-known)

A. Self checking code

91. A data dictionary is useful as  
(i) it is a documentation aid (ii) it assists in designing input form (iii) it contains al data in an application including temporary data used in processes (iv) it is a good idea in system design

A. (i) and (ii)

B. (i) and (iv)

C. (i),(ii) and (iii)

D. (i) and (iv)

[Discussion](https://mcqmate.com/discussion/145820/a-data-dictionary-is-useful-as-i-it-is-a-documentation-aid-ii-it-assists-in-designing-input-form-iii-it-contains-al-data-in-an-application-including-temporary-data-used-in-processes-iv-it-is-a-good-idea-in-system-design)

C. (i),(ii) and (iii)

92. By metadata we mean

A. very large data

B. data about data

C. data dictionary

D. meaningful data

[Discussion](https://mcqmate.com/discussion/145821/by-metadata-we-mean)

B. data about data

93. A data dictionary is usually developed

A. At requirements specification phase

B. During feasibility analysis

C. When DFD is developed

D. When a datadase is designed

[Discussion](https://mcqmate.com/discussion/145822/a-data-dictionary-is-usually-developed)

C. When DFD is developed

94. A data dictionary has information about

A. every data element in a data flow

B. only key data element in a data flow

C. only important data elements in a data flow

D. only numeric data elements in a data flow

[Discussion](https://mcqmate.com/discussion/145823/a-data-dictionary-has-information-about)

A. every data element in a data flow

95. A data element in a data dictionary may have

A. only integer value

B. no value

C. only real value

D. only decimal value

[Discussion](https://mcqmate.com/discussion/145824/a-data-element-in-a-data-dictionary-may-have)

B. no value

96. A concise code is necessarily

A. Precise

B. Meaningful

C. Comprehensive

D. Difficult

[Discussion](https://mcqmate.com/discussion/145825/a-concise-code-is-necessarily)

A. Precise

97. Serial numbers used as codes are  
(i) concise (ii ) meaningful (iii) expandable (iv) comprehensive

A. i and ii

B. ii and iii

C. ii and iv

D. i and iii

[Discussion](https://mcqmate.com/discussion/145826/serial-numbers-used-as-codes-are-i-concise-ii-meaningful-iii-expandable-iv-comprehensive)

D. i and iii

98. Block codes are (i)concise (ii )meaningful (iii)expandable (iv)comprehensive

A. i and ii

B. ii and iii

C. iii and iv

D. i and iii

[Discussion](https://mcqmate.com/discussion/145827/block-codes-are-iconcise-ii-meaningful-iiiexpandable-ivcomprehensive)

B. ii and iii

99. Group classification codes are  
(i)concise (ii)meaningful (iii) expandable (iv)comprehensive

A. i and ii

B. i, ii and iii

C. ii, iii and iv

D. i, ii and iv

[Discussion](https://mcqmate.com/discussion/145828/group-classification-codes-are-iconcise-iimeaningful-iii-expandable-ivcomprehensive)

C. ii, iii and iv

100. Significant codes are  
(i)concise (ii)meaningful (iii)expandable (iv)comprehensive

A. i and ii

B. i, ii and iii

C. ii, iii and iv

D. i, ii and iv

[Discussion](https://mcqmate.com/discussion/145829/significant-codes-are-iconcise-iimeaningful-iiiexpandable-ivcomprehensive)

C. ii, iii and iv

101. In significant codes some or all parts of the code

A. .are meaningful

B. are usable

C. are significant

D. represent values

[Discussion](https://mcqmate.com/discussion/145830/in-significant-codes-some-or-all-parts-of-the-code)

D. represent values

102. Sequence numbering of records is used to  
(i)Identify each record uniquely (ii)Track a missing record in a batch of records (iii)Count number of records (iv) Sort the records

A. i, ii

B. i, ii, iii

C. i, ii, iii, iv

D. i and iv

[Discussion](https://mcqmate.com/discussion/145831/sequence-numbering-of-records-is-used-to-iidentify-each-record-uniquely-iitrack-a-missing-record-in-a-batch-of-records-iiicount-number-of-records-iv-sort-the-records)

C. i, ii, iii, iv

103. Study involves

A. study of an existing system

B. System documenting the existing system.

C. identifying current deficiencies and establishing new goals

D. All of the above

[Discussion](https://mcqmate.com/discussion/145832/study-involves)

D. All of the above

104. The primary tool used in structured design is a:

A. structure chart

B. structure chart

C. program flowchart

D. module

[Discussion](https://mcqmate.com/discussion/145833/the-primary-tool-used-in-structured-design-is-a)

A. structure chart

105. How many steps are in the systems development life cycle (SDLC)?

A. 4

B. 5

C. 6

D. 10

[Discussion](https://mcqmate.com/discussion/145834/how-many-steps-are-in-the-systems-development-life-cycle-sdlc)

A. 4

106. The first step in the systems development life cycle (SDLC) is:

A. Analysis.

B. Design.

C. Problem/Opportunity Identification.

D. Development and Documentation.

[Discussion](https://mcqmate.com/discussion/145835/the-first-step-in-the-systems-development-life-cycle-sdlc-is)

C. Problem/Opportunity Identification.

107. Most modern software applications enable you to customize and automate various features using small custom-built “miniprograms” called:

A. macros.

B. code.

C. routines.

D. subroutines.

[Discussion](https://mcqmate.com/discussion/145836/most-modern-software-applications-enable-you-to-customize-and-automate-various-features-using-small-custom-built-%E2%80%9Cminiprograms%E2%80%9D-called)

A. macros.

108. The organized process or set of steps that needs to be followed to  
develop an information system is known as the:

A. analytical cycle.

B. design cycle.

C. program specification.

D. system development life cycle.

[Discussion](https://mcqmate.com/discussion/145837/the-organized-process-or-set-of-steps-that-needs-to-be-followed-to-develop-an-information-system-is-known-as-the)

D. system development life cycle.

109. The final step in the Sytem development life cycle (SDLC)?

A. Analysis

B. Operational

C. Development

D. Design

[Discussion](https://mcqmate.com/discussion/145838/the-final-step-in-the-sytem-development-life-cycle-sdlc)

B. Operational

110. The make-or-buy decision is associated with the \_\_\_\_\_\_\_\_\_\_\_\_ step in  
the SDLC.

A. Problem/Opportunity Identification

B. Design

C. Analysis

D. Development and Documentation

[Discussion](https://mcqmate.com/discussion/145839/the-make-or-buy-decision-is-associated-with-the-step-in-the-sdlc)

B. Design

111. In the Analysis phase, the development of the \_\_\_\_\_\_\_\_\_\_\_\_ occurs,  
which is a clear statement of the goals and objectives of the project.

A. documentation

B. flowchart

C. program specification

D. design

[Discussion](https://mcqmate.com/discussion/145840/in-the-analysis-phase-the-development-of-the-occurs-which-is-a-clear-statement-of-the-goals-and-objectives-of-the-project)

C. program specification

112. Actual programming of software code is done during the \_\_\_\_\_\_\_\_\_\_\_\_  
step in the SDLC.

A. Maintenance and Evaluation

B. Design

C. Analysis

D. Development and Documentation

[Discussion](https://mcqmate.com/discussion/145841/actual-programming-of-software-code-is-done-during-the-step-in-the-sdlc)

D. Development and Documentation

113. Enhancements, upgrades, and bug fixes are done during the \_\_\_\_\_\_\_\_\_\_\_\_ step in the SDLC.

A. Maintenance and Evaluation

B. Problem/Opportunity Identification

C. Design

D. Development and Documentation

[Discussion](https://mcqmate.com/discussion/145842/enhancements-upgrades-and-bug-fixes-are-done-during-the-step-in-the-sdlc)

A. Maintenance and Evaluation

114. The \_\_\_\_\_\_\_\_\_\_\_\_ determines whether the project should go forward.

A. feasibility assessment

B. opportunity identification

C. system evaluation

D. program specification

[Discussion](https://mcqmate.com/discussion/145843/the-determines-whether-the-project-should-go-forward)

A. feasibility assessment

115. Technical writers generally provide the \_\_\_\_\_\_\_\_\_\_\_\_ for the new  
system.

A. programs

B. network

C. analysis

D. documentation

[Discussion](https://mcqmate.com/discussion/145844/technical-writers-generally-provide-the-for-the-new-system)

D. documentation

116. \_\_\_\_\_\_\_\_\_\_\_ design and implement database structures.

A. Programmers

B. Project managers

C. Technical writers

D. Database administrators

[Discussion](https://mcqmate.com/discussion/145845/design-and-implement-database-structures)

D. Database administrators

117. \_\_\_\_\_\_\_\_\_\_\_\_ spend most of their time in the beginning stages of the SDLC, talking with end-users, gathering information, documenting systems, and proposing solutions.

A. Systems analysts

B. Project managers

C. Network engineers

D. Database administrators

[Discussion](https://mcqmate.com/discussion/145846/spend-most-of-their-time-in-the-beginning-stages-of-the-sdlc-talking-with-end-users-gathering-information-documenting-systems-and-proposing-solutions)

A. Systems analysts

118. \_\_\_\_\_\_\_\_\_\_\_\_ manage the system development, assign staff, manage the budget and reporting, and ensure that deadlines are met.

A. Project managers

B. Network engineers

C. Graphic designers

D. Systems analysts

[Discussion](https://mcqmate.com/discussion/145847/manage-the-system-development-assign-staff-manage-the-budget-and-reporting-and-ensure-that-deadlines-are-met)

A. Project managers

119. \_\_\_\_\_\_\_\_\_\_\_\_ is the process of translating a task into a series of  
commands that a computer will use to perform that task.

A. Project design

B. Installation

C. Systems analysis

D. Programming

[Discussion](https://mcqmate.com/discussion/145848/is-the-process-of-translating-a-task-into-a-series-of-commands-that-a-computer-will-use-to-perform-that-task)

D. Programming

120. Debugging is:

A. creating program code.

B. finding and correcting errors in the program code.

C. identifying the task to be computerized.

D. creating the algorithm.

[Discussion](https://mcqmate.com/discussion/145849/debugging-is)

B. finding and correcting errors in the program code.

121. Translating the problem statement into a series of sequential steps  
describing what the program must do is known as:

A. coding.

B. debugging.

C. creating the algorithm.

D. writing documentation.

[Discussion](https://mcqmate.com/discussion/145850/translating-the-problem-statement-into-a-series-of-sequential-steps-describing-what-the-program-must-do-is-known-as)

C. creating the algorithm.

122. Translating the algorithm into a programming language occurs at the  
\_\_\_\_\_\_\_\_\_\_\_\_ step of the PDLC.

A. Debugging

B. Coding

C. Testing and Documentation

D. Algorithm Development

[Discussion](https://mcqmate.com/discussion/145851/translating-the-algorithm-into-a-programming-language-occurs-at-the-step-of-the-pdlc)

B. Coding

123. The problem statement should include all of the following EXCEPT:

A. input.

B. output.

C. processing.

D. storage.

[Discussion](https://mcqmate.com/discussion/145852/the-problem-statement-should-include-all-of-the-following-except)

D. storage.

124. The problem statement includes the \_\_\_\_\_\_\_\_\_\_\_\_, which lists specific input numbers a program would typically expect the user to enter and precise output values that a perfect program would return for those input values.

A. testing plan

B. error handler

C. IPO cycle

D. input-output specification

[Discussion](https://mcqmate.com/discussion/145853/the-problem-statement-includes-the-which-lists-specific-input-numbers-a-program-would-typically-expect-the-user-to-enter-and-precise-output-values-that-a-perfect-program-would-return-for-those-input-values)

A. testing plan

125. The major goal of requirement determination phase of information system development is

A. determine whether information is needed by an organization

B. determine what information is needed by an organization

C. determine how information needed by an organization can be provided

D. determine when information is to be given

[Discussion](https://mcqmate.com/discussion/145854/the-major-goal-of-requirement-determination-phase-of-information-system-development-is)

B. determine what information is needed by an organization

126. Information requirements of an organization can be determined by

A. interviewing managers and users and arriving at the requirements based on consensus

B. finding out what similar organizations do

C. telling organization what they need based on your experience

D. sending a questionnaire to all employees of the organization

[Discussion](https://mcqmate.com/discussion/145855/information-requirements-of-an-organization-can-be-determined-by)

A. interviewing managers and users and arriving at the requirements based on consensus

127. It is necessary to prioritize information requirements of an organization at the  
requirements determination phase as

A. it is always good to prioritize

B. there are conflicting demands from users

C. there are constraints on budgets, available time, human resource and requirement

D. all good organization do it

[Discussion](https://mcqmate.com/discussion/145856/it-is-necessary-to-prioritize-information-requirements-of-an-organization-at-the-requirements-determination-phase-as)

C. there are constraints on budgets, available time, human resource and requirement

128. The code is developed with the measurable properties of an item is known

A. Group classification code

B. Self checking code

C. Significant digit code

D. Numeric code

[Discussion](https://mcqmate.com/discussion/145857/the-code-is-developed-with-the-measurable-properties-of-an-item-is-known)

C. Significant digit code

129. It is necessary to consult the following while drawing up requirement specification

A. only top managers

B. only top and middle management

C. only top, middle and operational managers

D. top, middle and operational managers and also all who will use the system

[Discussion](https://mcqmate.com/discussion/145858/it-is-necessary-to-consult-the-following-while-drawing-up-requirement-specification)

D. top, middle and operational managers and also all who will use the system

130. In order to understand the working of an organization for which a computer based system is being designed, an analyst must

A. look at only current work and document flow in the organization

B. discuss with top level and middle level management only

C. interview top, middle, line managers and also clerks who will enter data and use the system

D. only clerical and middle level staff who have long experience in the organization and will be users of the system

[Discussion](https://mcqmate.com/discussion/145859/in-order-to-understand-the-working-of-an-organization-for-which-a-computer-based-system-is-being-designed-an-analyst-must)

C. interview top, middle, line managers and also clerks who will enter data and use the system

131. The main objective of feasibility study is

A. to assess whether it is possible to meet the requirements specifications

B. to assess if it is possible to meet the requirements specified subject to constraints of budget, human resource and hardware

C. to assist the management in implementing the desired system

D. to remove bottlenecks in implementing the desired system

[Discussion](https://mcqmate.com/discussion/145860/the-main-objective-of-feasibility-study-is)

B. to assess if it is possible to meet the requirements specified subject to constraints of budget, human resource and hardware

132. It is necessary to carry out a feasibility study as

A. top management can not ensure that a project is feasible before calling a system analyst

B. top management is not sure what they want from the system

C. even though top management is in favor of the system, technology may not be mature for implementation

D. all organizations do it

[Discussion](https://mcqmate.com/discussion/145861/it-is-necessary-to-carry-out-a-feasibility-study-as)

C. even though top management is in favor of the system, technology may not be mature for implementation

133. Final specifications are drawn up by

A. system analyst in consultation with the management of the organization

B. the managers of user organization

C. system analyst in consultation with programmers

D. system designers along with users

[Discussion](https://mcqmate.com/discussion/145862/final-specifications-are-drawn-up-by)

A. system analyst in consultation with the management of the organization

134. System test plan is specified

A. when the final specifications are drawn up

B. during feasibility study

C. during the requirements specifications stage

D. during system study stage

[Discussion](https://mcqmate.com/discussion/145863/system-test-plan-is-specified)

A. when the final specifications are drawn up

135. Systems are modified whenever

A. user’s requirements change

B. new computers are introduced in the market

C. new software tools become available in the market

D. other similar organization modify these system

[Discussion](https://mcqmate.com/discussion/145864/systems-are-modified-whenever)

A. user’s requirements change

136. The main objective of system modification is

A. to use the latest software tools

B. to meet the user’s new/changed needs

C. to use the latest hardware

D. to have the most modern system

[Discussion](https://mcqmate.com/discussion/145865/the-main-objective-of-system-modification-is)

B. to meet the user’s new/changed needs

137. .It is necessary to design an information system to easily accommodate change, because

A. new computers are introduced every year

B. new computer languages become popular every year

C. organizations’ requirements change over a period of time

D. systems need continuous debugging

[Discussion](https://mcqmate.com/discussion/145866/it-is-necessary-to-design-an-information-system-to-easily-accommodate-change-because)

C. organizations’ requirements change over a period of time

138. The primary responsibility of a systems analyst is to

A. specify an information system which meets the requirements of an organization

B. write programs to meet specifications

C. maintain the system

D. meet managers of the organization regularly

[Discussion](https://mcqmate.com/discussion/145867/the-primary-responsibility-of-a-systems-analyst-is-to)

A. specify an information system which meets the requirements of an organization

139. The responsibilities of a system analyst include  
i) defining and prioritizing information requirement of an organization ii) gathering data, facts and opinions of users in an organization iii) drawing up specifications of the system for an organization iv) designing and evaluating the system

A. i and ii

B. i, ii and iv

C. i, ii, iii and iv

D. i, ii and iii

[Discussion](https://mcqmate.com/discussion/145868/the-responsibilities-of-a-system-analyst-include-i-defining-and-prioritizing-information-requirement-of-an-organization-ii-gathering-data-facts-and-opinions-of-users-in-an-organization-iii-drawing-up-specifications-of-the-system-for-an-organization-iv-designing-and-evaluating-the-system)

D. i, ii and iii

140. Among the attributes of a good systems analyst the following are essential  
i) knowledge of organization ii) analytical mind iii) ability to communicate orally iv) excellent mathematical abilities

A. i and ii

B. i, ii and iii

C. i, ii and iv

D. i, iii and iv

[Discussion](https://mcqmate.com/discussion/145869/among-the-attributes-of-a-good-systems-analyst-the-following-are-essential-i-knowledge-of-organization-ii-analytical-mind-iii-ability-to-communicate-orally-iv-excellent-mathematical-abilities)

B. i, ii and iii

141. Managers in organizations should not design their own systems as

A. systems have to interact with other systems

B. they do not have the special skills necessary to design systems

C. it is not their job

D. they are always very busy

[Discussion](https://mcqmate.com/discussion/145870/managers-in-organizations-should-not-design-their-own-systems-as)

B. they do not have the special skills necessary to design systems

142. ……………….. includes review of the existing procedures and information flow.

A. Feasibility Study

B. Feasibility report

C. System Design

D. System analysis

[Discussion](https://mcqmate.com/discussion/145871/%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6-includes-review-of-the-existing-procedures-and-information-flow)

A. Feasibility Study

143. Organization chart is a type of

A. basic chart

B. IPO chart

C. Hierarchical chart

D. step chart

[Discussion](https://mcqmate.com/discussion/145872/organization-chart-is-a-type-of)

C. Hierarchical chart

144. …………….. refers to the collection of information pertinent to systems Project.

A. Data transfer

B. Data gathering

C. Data Embedding

D. Data Request

[Discussion](https://mcqmate.com/discussion/145873/%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6-refers-to-the-collection-of-information-pertinent-to-systems-project)

B. Data gathering

145. ………………….. means coordinated effort, to communicate the information of the  
system written form.

A. System documentation

B. Resource required

C. Development schedule

D. User Document

[Discussion](https://mcqmate.com/discussion/145874/%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6-means-coordinated-effort-to-communicate-the-information-of-the-system-written-form)

A. System documentation

146. It specifies the structure of an organization

A. Organization chart

B. DFD

C. Flowchart

D. IPO chart

[Discussion](https://mcqmate.com/discussion/145875/it-specifies-the-structure-of-an-organization)

A. Organization chart

147. To create vehicle of information to provide evidence in the development process and to  
monitor the process. This is one of the objectives of

A. Analysis

B. Design

C. Development

D. Documentation

[Discussion](https://mcqmate.com/discussion/145876/to-create-vehicle-of-information-to-provide-evidence-in-the-development-process-and-to-monitor-the-process-this-is-one-of-the-objectives-of)

D. Documentation

148. A …………. System is no more than idea

A. Conceptual

B. Logical

C. Physical

D. All of the above

[Discussion](https://mcqmate.com/discussion/145877/a-%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6-system-is-no-more-than-idea)

A. Conceptual

149. By an external entity we mean a

A. Unit outside the system being designed which can be controlled by an analyst.

B. Unit outside the system whose behavior is independent of the system being designed

C. A unit external to the system being designed

D. A unit which is not part of a DFD

[Discussion](https://mcqmate.com/discussion/145878/by-an-external-entity-we-mean-a)

C. A unit external to the system being designed

150. Errror report is an example of

A. Ouput process

B. Input process

C. Process

D. None of these

[Discussion](https://mcqmate.com/discussion/145879/errror-report-is-an-example-of)

A. Ouput process

151. Data store in a DFD represents.

A. a sequential file

B. a disk store

C. a repository of data

D. a random access memory

[Discussion](https://mcqmate.com/discussion/145880/data-store-in-a-dfd-represents)

C. a repository of data

152. …………… system consists of programs, data files and documentation

A. Conceptual

B. Logical

C. Physical

D. None of the above

[Discussion](https://mcqmate.com/discussion/145881/%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6-system-consists-of-programs-data-files-and-documentation)

C. Physical

153. …………… is a good example of deterministic system.

A. Life cycle

B. Computer Program

C. Software Program

D. None of the above

[Discussion](https://mcqmate.com/discussion/145882/%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6-is-a-good-example-of-deterministic-system)

B. Computer Program

154. The main ingredient of the report documenting the ……………… is the cost benefit  
analysis.

A. System Analysis

B. Feasibility Study

C. System Analyst

D. System Design

[Discussion](https://mcqmate.com/discussion/145883/the-main-ingredient-of-the-report-documenting-the-%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6-is-the-cost-benefit-analysis)

B. Feasibility Study

155. A data flow can

A. Only a data store

B. Only leave a data store

C. Enter or leave a data Store

D. Either enter or leave a data store but not both

[Discussion](https://mcqmate.com/discussion/145884/a-data-flow-can)

C. Enter or leave a data Store

156. Changing the relationship with and services provided to customers in such a way that  
they will not think of changing suppliers is called ………….

A. Lock in customers

B. Lock out customers

C. Lock in competitors

D. Lock out competitors

[Discussion](https://mcqmate.com/discussion/145885/changing-the-relationship-with-and-services-provided-to-customers-in-such-a-way-that-they-will-not-think-of-changing-suppliers-is-called-%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6)

A. Lock in customers

157. …………… can be defined as data that has been processed into a form that is meaningful to the recipient and is of real or perceived value in current or prospective decisions.

A. Information

B. Data collection

C. Internal data

D. Sample data

[Discussion](https://mcqmate.com/discussion/145886/%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6-can-be-defined-as-data-that-has-been-processed-into-a-form-that-is-meaningful-to-the-recipient-and-is-of-real-or-perceived-value-in-current-or-prospective-decisions)

A. Information

158. Increased volume of sales is an example of ………….…. Benefit. Reduction of bad  
debts is an example of ………..

A. Tangible, Intangible

B. Tangible, Tangible

C. Intangible, Tangible

D. Intangible, Intangible

[Discussion](https://mcqmate.com/discussion/145887/increased-volume-of-sales-is-an-example-of-%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6%E2%80%A6-benefit-reduction-of-bad-debts-is-an-example-of-%E2%80%A6%E2%80%A6%E2%80%A6)

D. Intangible, Intangible

159. A data cannot flow between a store and  
i) a store ii) a process iii) an external entity

A. i and iii

B. i and ii

C. ii and iii

D. ii

[Discussion](https://mcqmate.com/discussion/145888/a-data-cannot-flow-between-a-store-and-i-a-store-ii-a-process-iii-an-external-entity)

A. i and iii

160. In ISR which field indicates the purpose of job

A. Objective

B. Anticipated benefits

C. Output description

D. None of these

[Discussion](https://mcqmate.com/discussion/145889/in-isr-which-field-indicates-the-purpose-of-job)

A. Objective

161. After Development phase, a document is prepared

A. Program specification

B. Design specification

C. System specification

D. None of these

[Discussion](https://mcqmate.com/discussion/145890/after-development-phase-a-document-is-prepared)

C. System specification

162. In DFD which symbol represents the process

A. Circle

B. Rectangle

C. Square

D. Open ended rectangle

[Discussion](https://mcqmate.com/discussion/145891/in-dfd-which-symbol-represents-the-process)

A. Circle

163. The document prepared after study phase is known as

A. Performance specification

B. Design specification

C. System specification

D. None of these

[Discussion](https://mcqmate.com/discussion/145892/the-document-prepared-after-study-phase-is-known-as)

A. Performance specification

164. In which activity the management approve the requirements of the customer

A. Study phase report

B. Study phase review

C. Feasibility study

D. None of these

[Discussion](https://mcqmate.com/discussion/145893/in-which-activity-the-management-approve-the-requirements-of-the-customer)

B. Study phase review

165. In study phase activities, which activity filled the ISR by user

A. User review

B. User need

C. Initial investigation

D. System review

[Discussion](https://mcqmate.com/discussion/145894/in-study-phase-activities-which-activity-filled-the-isr-by-user)

B. User need

* 1. Which of the below is a true statement regarding the systems development life cycle?

The life cycle can be thought of as a circular process in which the end of the useful life of one system leads to the beginning of another project to develop a new version of or replace an existing system.