SYSTEM ANALYSIS AND DESIGN
MCQ Question Bank

1. The primary tool used in structured design is a: a). module **b). Structure chart** c). Data-flow diagram d). program flowchart**.**
2. _____ system consists of programs, data files and documentation a). Conceptual b). Logical **c). Physical** d). None of the above
3. 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
4. The organized process or set of steps that needs to be followed to develop an information system is known as a). Analytical cycle b). Design cycle c). Program specification **d). system development life cycle**
5. Which of the following is not a fact-finding technique? **a). Third party enquiry** b). Interview c). Questionnaire d). Record reviews
6. What are structured analysis tools? a). Data Flow Diagrams b). Data Dictionary c). Decision Trees **d). All of these**
7. A rectangle in a DFD represents a). A process b). A data store **c). An external entity** d). An input unit
8. SDLC stands for **a) System Development Life Cycle** b) Structure Design Life Cycle c) System Design Life Cycle d). None
9. HIPO stand for **a). Hierarchy input process output** b). Hierarchy input plus output c). Hierarchy plus input process output d). Hierarchy input output Process

10. …….. Phase is a time consuming phase and yet a very crucial phase

a). Feasibility Study b). Requirement Phase **c). Analysis Phase** d). Testing Phase

11. …… is a tabular method for describing the logic of the decisions to be taken.

a). Decision tables b). Decision tree c). Decision Method d). Decision Data

12. ..... means coordinated effort, to communicate the information of the system in written form.

a). System Documentation b). System Storage c). System Record d). System Share

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

a). Feasibility Study b). Feasibility report c). System Design d). System analysis

14. In …… system the interaction between various subsystems cannot be defined with certainty

a). Open System b). Closed System c). Deterministic System **d). Probabilistic System**

15. Development costs for a computer based information system include/s .....

a). Salaries of the system analysis b). Cost of converting and preparing data

c). Cost of testing and documenting **d). All A, B, C**

16. Which of the following is/are major step/s of system design?

a). Specification of system output b). Development of system flowchart

c). Development of program specifications **d). All A, B, C**

17. ..... refers to the collection of information pertinent to systems project.

a). Data gathering b). Data Exporting

c). Data Embedding d). Data importing

18. The key considerations involved in the feasibility analysis is include

a). Economical b). Technical

c). Behavioral **d). All**

19. DSS stands for ……

a). Design Support Systems b). Data Digital System c). Data Systems Service d). Digital System Service

20. Which of the following is not a type of system tests?

a). Program Testing b). System Testing

c). System Documentation **d). Evaluation Process**

21. System Study involves

a) Study of an existing system b) documenting the existing system.

c) identifying current deficiencies and establishing new goals **d) All of the above**

22. The step-by-step instructions that solve a problem are called _____.

a) An algorithm b). A list

c). A plan d) A sequential structure

23. A problem's _____ will answer the question, "What information will the computer need to know in order to either print or display the output times?"

a). Input b). Output

c). Processing d). Purpose

24. Documentation is prepared

a). at every stage b). at system design

c). at system analysis d). at system development

25. System Implementation Phase entails

a). System check outs b). Pilot run

c). Parallel runs d). All of the above

26. Data Definition Language (DDL)

a). describes how data are structured in the data base

b). specifies for the DBMS what is required; the techniques used to process data

c). determine how data must be structured to produce the user's view

d). All of the above

27. In phase 1 of the system development life cycle, which of the following aspects are usually analyzed?

a). outputs b). input (transactions)

c). controls **d). All of the above**

28. To run the old system and the new system at the same time for a specified period, the system implementation approach used is

a). pilot b). phased

c). parallel d). direct

29. Decision tree uses

a). pictorial depictation of alternate conditions b). nodes and branches

c). consequences of various depicted alternates **d). All of the above**

30. Problem analysis is done during

a). system design phase **b).systems analysis phase**

c). before system test d). All of the above

31. Top-down programming is

a). a group of related fields

b). a map of the programmer's view of the data

c). an approach in which the top module is first tested then program modules are added from the highest level to the lowest level

d). a series or group of components that perform one or more operations of a more complex system

32. A decision table facilitates conditions to be related to

a). actions b). programs

c). tables d). operation

33. On the feasibility committee, department representatives serve as:

a). direct users of the new system b). liaison to their departments

c). ready sources of information **d). All of the above**

34. A _____ is an outline of a process that keeps develop successful information systems

a). System Development Life Cycle b). CASE tool

c). Phased Conversion d). Success Factors

35. The set of. instructions for how to tie a bow is an example of the _____Structure.

a). Control b). Repetition

c). Selection **d). Sequence**

36. Which of the following appropriately explains the desirable characteristic of good system design?

a). Modular approach b). Proper documentation

c). Conversion d). Long discussions

37. The rule(s) to follow in constructing decision tables is (are):

a). a decision should be given a name

b). 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.

c). standardized language must be used consistently.

d). All of the above

38. Which are the tools not used for System Analysis

a). System - test data b). Decision table

c). Data Flow Diagram d). Flowcharts

39. Acceptance testing is

a). running the system with line data by the actual user

b). making sure that the new programs do in fact process certain transactions according to Specifications

c). is checking the logic of one or more programs in the candidate systems

d). None.

40. The _____ symbol is used in a flowchart to represent a step that gets information from the user.

a). Input/Output b). Process

c). Selection/repetition d). Start/Stop

41. The _____ symbol is used in a flowchart to represent a calculation task.

a). Input b). Output

c). Process d). Start

42. A feasibility document should contain all of the following except:

a). project name **b). problem descriptions**

c). feasible alternative d). data-flow diagrams

43. Which of the following is not a characteristic of a system

a). operates for some purpose **b). has homogeneous components**

c). has interacting components d). operates within a boundary

44. A group of related fields, is known as

a). tuple b). schema

c). records d). file

45. A Decision table

a). represents the information flow

b). documents rules, that select one or more actions, based on one or more conditions, from a set of possible conditions.

c). gets an accurate picture of the system

d). shows the decision paths

46. Top Management is more interested in

a). day-to-day operations b). strategic decisions

c). tactical decision **d). both b and c**

47. Unit testing is

a). running the system with line data by the actual user

b). making sure that the new programs do in fact process certain transactions according to Specifications

c). is checking the logic of one or more programs in the candidate system

d). testing changes made in an existing or a new program

48. The records in a file on magnetic tape

a). can only be accessed serially b). are meant for backup c). cannot be transformed to a disk file d). None
49. A system analyst designs a new system by a). **identifying sub systems and the interfaces between sub systems** b). adopting a developed system to the present environment c). developing the system as a large, single unit d). None.
50. Cost-Benefit analysis a). evaluates the tangible and non-tangible factors b). compares the cost, with the benefits, of introducing a computer-based system c). estimates the hardware and software costs **d). All of the above**
51. Which of the following is (are) the characteristic(s) of a system? a). organization b). Interaction c). Interdependence **d). All of the above**
52. A graphic representation of an information system is called a). flow chart b). pictogram **c). data flow diagram** d). histogram
53. The Data flow diagram (DFD) shows; a). the flow of data b). the processes c). the areas where they are stored. **d). All of the above**
54. 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
55. Data dictionary contains detail of a). data structures b). data flows c). data stores **d). All of the above**

56. A square symbols

a). defines a source or destination of system data

b). identifies data flow

c). represents a process that transforms incoming data flow(s) into outgoing data flows

d). is a data store-data at rest, or a temporary repository of data

57. During system study, data can be collected through

a). questionnaires b). interviews c). on-site observations **d). All of the above**

58. The person communicating with the manager to identify information needs is the

a). executive vice-president b). vice- president of information system

c). programmer **d). system analyst**

59. The systems have been classified in different ways

a). physical or abstract b). open or closed

c). man-made information system **d). All of the above**

60. System Specifications are used to

a). describe system flows b). get an accurate picture of the system

c). avoids ambiguity **d). All of the above**

61. Which of the following symbols is (are) not the Data Flow Diagram (DFD):

a). a square b). an open rectangle

c). a circle **d). a triangle**

62. The first step in the problem-solving process is to _____.

a). Plan the algorithm **b). Analyze the problem**

c). Desk-check the algorithm d). Evaluate and modify (if necessary) the program

63. HIPO

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

64. 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). None.

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

a). system design phase b). system development phase

c). system analysis phase d). system investigation phase

66. 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). None.

67. 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

68. The first step in systems Development Life Cycle is

a). database design b). system design

c). preliminary investigation and analysis d). graphical user interface

69. A system investigation may result from

a). an analysis investigation b). a scheduled systems reviewed

c). a manager's formal request **d). All of the above**

70. The feasibilities studied in preliminary investigation is (are):

a). technical feasibility b). economic feasibility

c). operational feasibility **d). All of the above**

71)…… is an important factor of management information system.

A) System B) Data C) Process D) All

72)…….. level supply information to strategic tier for the use of top management. A) Operational B) Environmental C) Competitive **D) Tactical**

73). In a DFD external entities are represented by a

A) Rectangle B) Ellipse C) Diamond shaped box D) Circle

74).After the design phase the document prepared is known as……

A) system specification B) performance specification **C) design specification** D) None of these

75).A data flow can

A) Only emanate from an external entity

B) Only terminate in an external entity

C) May emanate and terminate in an external entity

D) May either emanate or terminate in an external entity but not both

76)…… can be defined as most recent and perhaps the most comprehensive technique for solving computer problems. **A) System Analysis** B) System Data C) System Procedure D) System Record

77).The data Flow Diagram is the basic component of …… system

A) Conceptual **B) Logical** C) Physical D) None of the above

78).. Data cannot flow between two data stores because

A) it is not allowed in DFD B) a data store is a passive repository of data C) data can get corrupted

D) they will get merged

79).. ……. 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. A) System process **B) System flowchart** C) System design D) Structured System

80). 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**

81).Advantages of system flowcharts …… A) Effective communication B) Effective analysis C) Queasier group or relationships **D) All A, B, C**

82)…… is a tabular method for describing the logic of the decisions to be taken. **A) Decision tables** B) Decision tree C) Decision Method D) Decision Data
83).Decision tree uses A. pictorial depictation of alternate conditions B. nodes and branches C. consequences of various depicted alternates **D. All of the above**
84).Problem analysis is done during A. system design phase **B. systems analysis phase** C. before system test D. All of the above
85). A _____ is an outline of a process that keeps develop successful information systems **A. System Development Life Cycle** B. CASE tool C. Phased Conversion D. Success Factors
86).An appraisal, of a system's performance after it has been installed, is called system A. planning **B. review** C. maintenance D. batch Processing
87).An example of a hierarchical data structure is A. Array B. Linked list **C. Tree** D. All of the above
88).Which of the following is not a characteristic of good test data **A. users do not participate at this preliminary stage** B. should be comprehensive C. every statement should be executed D. All of the above
89.)In the system concepts, term Integration A. implies structure and order B. refers to the manner in which each component functions with other components of the system. C. means that parts of the computer system depend on one another. **D. refers to the holism of system**
90).The rule(s) to follow in constructing decision tables is (are): A. a decision should be given a name B. 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. C. standardized language must be used consistently. **D. All of the above**
91)…… is a group of interested components working together towards a common goal by accepting inputs and producing outputs in an organized transformation process. **A) System** B) Network C) Team D) System Unit
92).Requirement specification is carried out

a) after requirements are determined b) before requirements are determined c) simultaneously with requirements determination d) independent of requirements determination

93). The role of a system analyst drawing up a requirements specification is similar to

a) architect designing a building b) a structural engineer designing a building c) a contractor constructing a building d) the workers who construct a building

94).A feasibility study is carried out a) after final requirements specifications are drawn up b) during the period when requirements specifications are drawn up **c) before the final requirements specifications are drawn up** d) at any time

95).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

96).It is necessary to carry out a feasibility study as

a) top management cannot 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 favour of the system, technology may not be mature for implementation

d) all organizations do it

97).Feasibility study is carried out by

a) managers of the organization

b) system analyst in consultation with managers of the organization

c) users of the proposed system

d) systems designers in consultation with the prospective users of the system

98).Initial requirements specification is

a) not changed till the end of the project

b)continuously changed during project implementation

c) only a rough indication of the requirement

d) changed and finalized after feasibility study

99).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

100).The final specifications are arrived at

a) after feasibility study b) during feasibility study

c) just before implementation phase d) when the system is being designed

101).. Hardware study is carried out

a) after the final system is specified b) at the requirements specification stage

c) before the requirements are specified d) whenever management decides it is necessary

102).The primary objective of system design is to

a) design the programs, databases and test plan b) design only user interfaces

c) implement the system d) find out how the system will perform

103).System evaluation is carried out

a) after the system has been operational for a reasonable time b) during system implementation

c) whenever managers of user organization want it d) whenever operational staff want it

104).The main objective of system evaluation is

a) to see whether the system met specification **b) to improve the system based on operational experience for a period**

c) to remove bugs in the programs d) to asses the efficiency of the system

105).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
106).Programmers use _____ to organize and summarize the results of their problem analysis. A. Flowcharts B. Input charts **C. HIPO** D. Output charts
107).Changes made periodically to a system, after its implementation, is known as system A. Analysis B. design C. development **D. maintenance**
108).The first step in systems Development Life Cycle is A. database design B. system design **C. preliminary investigation and analysis** D. graphical user interface
109). Graphic representation of the control logic of processing functions or modules representing a system, is known as: A. Structured analysis **B. Structured chart** C. Structured English D. System Flow chart
110).Difference between Decision - Tables and Decision Trees is (are) A. value to end user **B. form of representation** C. one shows the logic while other shows the process D. All of the above
111).Coding and testing are done In a **A. top-down manner** B. bottom-up manner C. ad hoc manner D. cross sectional manner
112).The first step in the problem-solving process is to _____. A. Plan the algorithm **B. Analyze the problem** C. Desk-check the algorithm D. Evaluate and modify (if necessary) the program
113).All of the following tools are used for process descriptions except: A. structured english B. decision tables C. pseudocode **D. data dictionaries**
114).System design aid should primarily **A. help analyse both data and activities** B. help in documentation C. help in programming D. generate code
115).Mistakes made in the system analysis stage show up in :

A. implementation B. system design C. system developments D. All of the above