

Time Allowed: 3 hrs

Max. Marks: 100

Instructions: Answer the questions according to the marks. Attempt all questions.

Q # 01. MCQ's. Select the *BEST* answer for each question.

(Marks 15)

- 1-1. Which is the most accurate job title for an individual who studies the problems and needs of a business to determine how people, processes, data, communications, and technology can best accomplish improvements for the business?
- programmer
 - programmer/analyst
 - systems analyst
 - information analyst
 - database administrator
- 1-2. The act of contracting a service or function to an external third part is called:
- outsourcing
 - contracting
 - consulting
 - recruiting
 - none of the above
- 1-3. Which of the following skills does a successful systems analyst need to have:
- interpersonal relations skills
 - systems analysis and design skills
 - interpersonal communications skills
 - problem-solving skills
 - all of the above
- 1-4. A technique for quickly building a functioning model of the information system using rapid application development tools is called:
- modeling
 - information system activities
 - querying
 - transactions processing
 - prototyping
- 1-5. A model that represents the proposed system as a single process:
- data flow model
 - systems model
 - process model
 - context model
 - input model
- 1-6. System users define:
- the problems to be solved
 - the opportunities to be exploited
 - the requirements to be fulfilled
 - the business constraints to be imposed by the information system
 - all of the above
- 1-7. The definition for feasibility is:
- An ongoing activity by which an analyst plans an acceptable system
 - Measure of how beneficial the development of an information system would be to an organization
 - An activity of measuring and analyzing developer productivity
 - An activity of approximating the time, effort, costs, and benefits of developing systems.

- None of the above
- 1-8. DFD stands for which one of the following:
- Data Function Direct
 - Data Function Drive
 - Data Flow Drive
 - Data Flow Diagram
 - Data Flow Design
- 1-9. The open-ended boxes on a process model represent:
- data flows
 - process names
 - inputs
 - data stores
 - boundaries
- 1-10. The rounded rectangles on a process model represent:
- processes
 - boundaries
 - inputs
 - data flows
 - data stores
- 1-11. Which of the following fact-finding techniques provides the systems analyst with the greatest opportunity to probe for more feedback from an individual?
- sampling
 - observation
 - questionnaires
 - interviews
 - research and site visits
- 1-12. The on-going maintenance of a system(s) after it has been placed into operation, including program maintenance and system improvements is called:
- systems planning
 - systems analysis
 - systems support
 - systems design
 - systems implementation
- 1-13. All data processing involves
- processing
 - input and output
 - input and processing
 - input, processing and output
- 1-14. A discrete wave form that transmits data coded into two discrete states as 1-bits and 0-bits, which are represented as on-off electrical pulses; used for data communications called _____.
- Analog Signals
 - Digital Signals
 - Sound Waves
- 1-15. Formal rules for accomplishing tasks that have been developed to cope with expected situation in an organization, called
- Operations Policy
 - Standard Operating Procedures

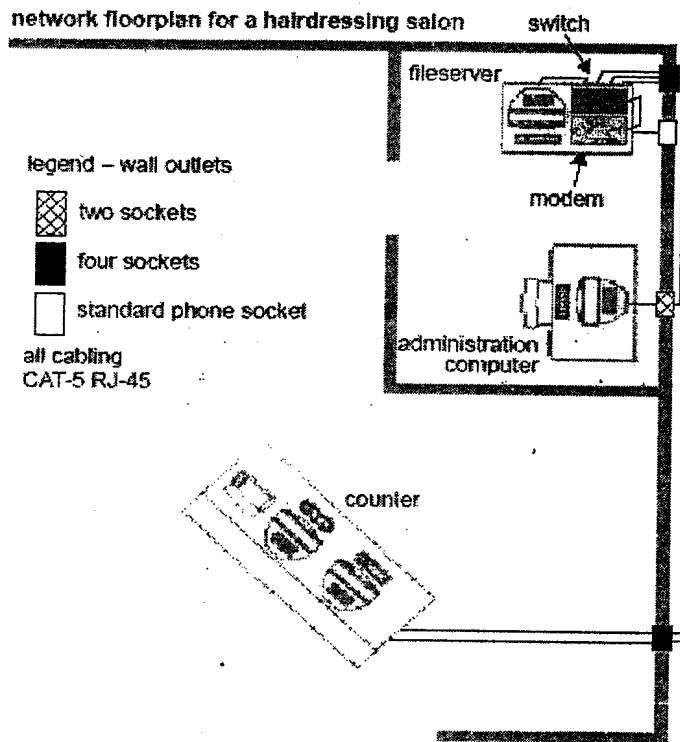
- Procedures to follow

- Q # 02.** (i) Name two (2) components of an Information System. (Marks 02)
(ii) Explain the role of the "System Analyst" in an Information System. (Marks 02)
(iii) The web server will be connected to the existing network and Deon must choose the most appropriate network protocol for the new system.
a. What is the most appropriate protocol for the new system. (Marks 02)
- IPX/SPX
 - TCP/IP
 - MUSIC/CD
 - NETBEUI
 - HTTP
- b. Explain why this (whatever you choose) is the most appropriate protocol. (Marks 02)
- Q # 03.** (i) Draw a diagram of a **star** network topology suitable for a small business using four workstations, a printer, a scanner and a file server. Clearly label each item of hardware. (Marks 02)
(ii) State the difference between a local area network and a wide area network. (Marks 02)
(iii) To successfully network computers a protocol must be used. What is meant by the term protocol? (Marks 02)
- Q # 04.** (i) Define the following systems
- a. Transaction Processing System (TPS) (Marks 04)
 - b. Decision Support System (DDS) (Marks 04)
 - c. Executive Support System (ESS) (Marks 04)
 - d. Expert System (ES) (Marks 04)
- Q # 05.** Write a short note on the following, (Marks 30)
- a. Centralize Database
 - b. Batch Processing
 - c. Online Processing
 - d. Data
 - e. Information
 - f. Process
 - g. Direct Method
 - h. Phased Method
 - i. Parallel Method
 - j. Operating System
- Q # 06. Mark True or False.** (Marks 15)
- A. Magnetic tape is storage device.
 - B. The purpose of storage device is to process data.
 - C. Processing speed can also be measured in Analog.
 - D. One of the most important factors effecting the speed and power of a computer is TCP / IP.
 - E. ALU is a part of microprocessor.
 - F. Data registers are the part of Micro Processor.
 - G. Computer is a group of electronic devices, used to process data.
 - H. MS- Windows 2000 is a kind of system software.
 - I. Data that have been shaped into a form that is meaningful and useful to human beings called system analyst.
 - J. Relative Data Base Management Support is also known as RDBMS.
 - K. Software that controls the overall activity of a computer known as system software or operating software.
 - L. Hard Disk also known as secondary storage.
 - M. Low Level Language is more like human language.
 - N. Assembly is a good example of low level language.
 - O. Capture or collection of raw data into computer-based system known as input.

Q # 07 (a).

(Marks 05)

The diagram below shows the layout for a computer network used in a hairdressing salon.



- a. State the topology of the network above.
- b. State the type of network used above.

Q # 07 (b). Name the following network topology.

(Marks 05)

