

Question Paper

Information Technology and Systems – I (MB1C3): January 2009

- Answer all 100 questions.
- Each question carries one mark.

1. Which of the following type of registers is used for storing the data that is on its way to and from memory? [<Answer>](#)
- (a) Accumulator (AC)
 - (b) Memory Buffer Register (MBR)
 - (c) Program Counter (PC)
 - (d) Instruction Register (IR)
 - (e) Memory Address Register (MAR).

2. Which of the following statements is/are **true** about Reduced Instruction Set Computer (RISC) processor? [<Answer>](#)
- I. RISC microprocessors execute the instructions very fast when compared to Complex Instruction Set Computer (CISC) microprocessors.
 - II. RISC chips are cheaper to design and produce compared to CISC chips.
 - III. RISC uses more complex set of instructions when compared to CISC architecture.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (I) and (II) above
 - (e) Both (II) and (III) above.

3. Which of the following statements is/are **false** about secondary storage media? [<Answer>](#)
- I. Secondary storage media is known as external memory.
 - II. Secondary storage media is non-volatile in nature and is slower than the primary storage media.
 - III. Secondary storage media is directly accessible to CPU of a computer system.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (I) and (II) above
 - (e) Both (II) and (III) above.

4. Match the following: [<Answer>](#)

1. IBM4300	a. Mainframe computer
2. PDP-1	b. Supercomputer
3. CRAYXMP	c. Minicomputer

- (a) 1-a, 2-b, 3-c
 - (b) 1-b, 2-a, 3-c
 - (c) 1-a, 2-c, 3-b
 - (d) 1-c, 2-a, 3-b
 - (e) 1-c, 2-b, 3-a.
5. The instructions to start the computer are placed on a special chip known as Read Only Memory Basic Input-Output System (ROM BIOS) chip. To allow Read Only Memory (ROM) upgrades, most computers use [<Answer>](#)
- (a) Dynamic Random Access Memory
 - (b) Video Random Access Memory
 - (c) Cache Memory
 - (d) Flash Memory
 - (e) Virtual Memory.

6. In digitizer, which of the following is connected to a pen-like stylus that is used to trace the image, store it in the random access memory and display it on monitor? [<Answer>](#)
- (a) Charge coupled device
 - (b) Switch
 - (c) Joystick
 - (d) Digitizer tablet
 - (e) Keyboard encoder.
7. Which of the following statements is/are **false** about Arithmetic Logic Unit (ALU)? [<Answer>](#)
- I. ALU performs arithmetic and logical operations on the data.
 - II. ALU obtains the program instructions stored in the primary memory of the computer, interprets them and issues signals that result in their execution.
 - III. ALU is designed to store the data generated at various stages of processing.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (I) and (III) above
 - (e) Both (II) and (III) above.
8. Computers can be broadly classified on the basis of their utility, technology, size and capacity. Based on utility, computers are classified into [<Answer>](#)
- (a) General purpose computers and special purpose computers
 - (b) Analog computers and digital computers
 - (c) Hybrid computers and digital computers
 - (d) Microcomputers and minicomputers
 - (e) Minicomputers and supercomputers.
9. Which of the following statements is/are **false** about cache memory? [<Answer>](#)
- I. Cache memory can be accessed more easily and quickly by a microprocessor than the random access memory.
 - II. Cache memory increases the speed of processing by making current programs and data available to CPU at a rapid rate.
 - III. Cache memory is less expensive compared to random access memory.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (I) and (III) above
 - (e) Both (II) and (III) above.
10. Which of the following is the first business organization to purchase Universal Automatic Computer (UNIVAC)? [<Answer>](#)
- (a) Prudential insurance company
 - (b) Life insurance corporation
 - (c) World bank
 - (d) Housing and financial development bank
 - (e) US stock exchange.
11. Which of the following statements is/are **false** about flatbed scanners? [<Answer>](#)
- I. Flatbed scanners draw in the sheets by means of a roller mechanism.
 - II. Flatbed scanners work on a single sheet of paper at a time and are the most commonly used scanners in offices.
 - III. Flatbed scanners are used to copy smaller originals such as photographs and the image quality is not good as compared to the handheld scanners.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (I) and (III) above
 - (e) Both (II) and (III) above.

12. RAID is an acronym for [<Answer>](#)
- (a) Relative Array of Independent Disks
 - (b) Redundant Array of Inexpensive Disks
 - (c) Record Array of Integrated Disks
 - (d) Reduced Array of Independent Disks
 - (e) Random Array of Integrated Disks.
13. Which of the following statements is/are **true** about single-tasking and multi-tasking operating systems? [<Answer>](#)
- I. In multi-tasking operating system, one program called the foreground program is active while the other called the background program is inactive.
 - II. Users who need to work with more than one application during a single session would find single-tasking operating system as very convenient.
 - III. Linux is an example of single-tasking operating system.
- (a) Only (I) above
 - (b) Both (I) and (II) above
 - (c) Both (I) and (III) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.
14. Which of the following statements is/are **true** about the preemptive multi-tasking? [<Answer>](#)
- I. Preemptive multi-tasking is a type of multi-tasking which enables the operating system to regain control of the CPU if an application stops running and crashes.
 - II. In preemptive multi-tasking, the operating system allocates CPU time to all running processes.
 - III. In preemptive multi-tasking the failure of one application brings down the entire system.
- (a) Only (I) above
 - (b) Both (I) and (II) above
 - (c) Both (I) and (III) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.
15. Which of the following statements is/are **false** about cooperative multi-tasking? [<Answer>](#)
- I. Cooperative multi-tasking is simple form of multi-tasking, where users could run two or more programs.
 - II. In cooperative multi-tasking, different programs control the CPU at different points of time.
 - III. In cooperative multi-tasking even if the foreground program crashes, the computer will not hang, and no need to restart the computer.
- (a) Only (II) above
 - (b) Only (III) above
 - (c) Both (I) and (II) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.
16. Which of the following statements is/are **true** about multi-threading? [<Answer>](#)
- I. Multi-threading extends the concept of multi-tasking by allowing individual programs to carry out several tasks simultaneously.
 - II. With multi-threading, the computer can execute more than one task in a single program.
 - III. Using multi-threading users can work on one task in an application while other tasks keep running in the background.
- (a) Only (I) above
 - (b) Both (I) and (II) above
 - (c) Both (I) and (III) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.

17. Which of the following statements is/are **true** about various types of user interfaces? [<Answer>](#)
- I. Command-line user interface is a character-based user interface.
 - II. Command-line user interface is popular as it does not involve a lot of memorization of commands and syntaxes.
 - III. Menu-driven user interface provide the users with a list that contains a range of options from which they have to select the commands.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (I) and (III) above
 - (e) Both (II) and (III) above.
18. The NetWare 4.x series of operating systems include the versions 4.0, 4.10, 4.11, IntraNetWare and 4.2. Which of the following statements is/are **false** regarding NetWare 4.x series of operating systems? [<Answer>](#)
- I. NetWare 4.0 was an upgrade of the NetWare 3.12 version and was available for a wide range of platforms like DOS, MAC OS/2 and some versions of UNIX.
 - II. NetWare 4.x series of operating systems are compatible with Windows-based servers such as SQL server 2000, Windows Exchange server etc.
 - III. NetWare 4.x series of operating systems also provides browser-based interface, making the synchronization of various business processes easier.
- (a) Only (I) above
 - (b) Only (III) above
 - (c) Both (I) and (II) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.
19. Which of the following statements is/are **true** about UNIX operating system? [<Answer>](#)
- I. It is compatible with different versions.
 - II. It provides cryptic commands that are difficult to learn.
 - III. It provides user-friendliness.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (I) and (III) above
 - (e) Both (II) and (III) above.
20. Which of the following statements is/are **true** about various files in MS-DOS? [<Answer>](#)
- I. COMMAND.COM is the interactive portion of the operating system which accepts user input at the command prompt and contains a set of internal commands to perform the basic functions.
 - II. IO.SYS is loaded after loading MS-DOS.SYS.
 - III. MSDOS.SYS handles application management tasks such as file and record management, memory management, access to real time clock.
- (a) Only (III) above
 - (b) Both (I) and (II) above
 - (c) Both (I) and (III) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.
21. Which of the following MS-DOS commands is used to set or display directories that will be searched for programs not in the current directory? [<Answer>](#)
- (a) DIR
 - (b) MKDIR
 - (c) PATH
 - (d) REM
 - (e) APPEND.
22. Which of the following UNIX commands is used to login securely to remote node? [<Answer>](#)
- (a) alias name1 name2
 - (b) alias name1= "name2"
 - (c) Unalias name1 [na2...]
 - (d) ssh nd
 - (e) mv f1[f2..] d.

23. Which of the following statements are **true** about Linux operating system and Windows operating system? [<Answer>](#)
- I. Linux is cheap or free for desktop or home use.
 - II. Windows is expensive for desktop or home use as well as for use as a server.
 - III. Linux can make enormous clusters of computers.
 - IV. Windows can support large clusters.
- (a) Both (I) and (II) above
 - (b) Both (II) and (III) above
 - (c) (I), (II) and (III) above
 - (d) (II), (III) and (IV) above
 - (e) All (I), (II), (III) and (IV) above.
24. Based on structure, information can be divided into detailed information, summarized information, sampled [<Answer>](#) information and aggregated information. Which of the following statements is/are **false**?
- I. Sampled information provides the details about all the entities in a group.
 - II. Summarized information comprises an outline of the total information.
 - III. Aggregated information provides details of only a particular entity in a group.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (I) and (III) above
 - (e) All (I), (II) and (III) above.
25. Based on application, information can be divided into planning information, control information and knowledge [<Answer>](#) information. Which of the following statements is/are **false** about planning information?
- I. Planning information is used to compare the actual with the predetermined standards and to take corrective action wherever there are deviations.
 - II. The documents containing the details of operational standards and quality standards form planning information.
 - III. Information collected through library reports and research studies comes under the planning information.
- (a) Only (III) above
 - (b) Both (I) and (II) above
 - (c) Both (I) and (III) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.
26. Professor John Dearden of Harvard University classified information into various categories. Which of the [<Answer>](#) following is **not** among them?
- (a) Internal information
 - (b) Non-Recurring information
 - (c) Control information
 - (d) Recurring information
 - (e) Action information.
27. Data can be collected in a variety of ways and from a variety of sources. Proper care should be taken while [<Answer>](#) collecting data, as the quality of information depends on the method employed for collecting the data. Psychologists use the method of _____ to gather information about their patients.
- (a) Experiment
 - (b) Subjective estimation
 - (c) Observation
 - (d) Survey
 - (e) Transaction processing.

28. Various parameters of quality are validity, consistency, reliability, impartiality and age. Match the following:

[<Answer>](#)

I. Validity	A. refers to the suitability or usefulness of the data for current times.
II. Consistency	B. refers to information which is free from errors and bias.
III. Reliability	C. refers to the use of information and its suitability.
IV. Impartiality	D. refers to uniformity or continuity in data collection.
V. Age	E. refers to the credibility and accuracy of the sources of data collection and the methods of presenting the data.

- (a) I-A, II-C, III-B, IV-D, V-E
- (b) I-B, II-E, III-C, IV-A, V-D
- (c) I-C, II-D, III-E, IV-B, V-A
- (d) I-A, II-D, III-B, IV-C, V-E
- (e) I-D, II-A, III-B, IV-C, V-E.

29. Which of the following statements is/are **true** about hardware resources?

[<Answer>](#)

- I. Hardware resources include all the physical devices and materials that are used in recording and processing the information.
- II. Hardware resources include all tangible objects or machines on which the data is recorded and is processed like computers and data media.
- III. Hardware resources of an information system constitute all the sets of instructions that are required for the processing data into information.

- (a) Only (II) above
- (b) Both (I) and (II) above
- (c) Both (I) and (III) above
- (d) Both (II) and (III) above
- (e) All (I), (II) and (III) above.

30. Which of the following statements is/are **true** about the importance of Information Systems (IS) in business?

[<Answer>](#)

- I. IS in business helps in simplifying complex tasks.
- II. IS in business are used for speeding up the process of conducting tasks.
- III. Use of IS in business reduces the chances of errors to a large extent.

- (a) Only (I) above
- (b) Both (I) and (II) above
- (c) Both (I) and (III) above
- (d) Both (II) and (III) above
- (e) All (I), (II) and (III) above.

31. In order to avoid resistance from the employees in the organization, it is important to

[<Answer>](#)

- I. Set the goals of the organization.
- II. Conduct training sessions for the employees.
- III. Involve employees in building the system, and to council them from time to time.

- (a) Only (III) above
- (b) Both (I) and (II) above
- (c) Both (I) and (III) above
- (d) Both (II) and (III) above
- (e) All (I), (II) and (III) above.

32. Which of the following statements is/are **true** about the design of an effective Information Systems (IS)?

[<Answer>](#)

- I. An effective IS should have the ability to provide information that will reduce ambiguity and uncertainty.
- II. An effective IS should build a knowledge base.
- III. An effective IS should have a design that does not encourage any misuse of information.

- (a) Only (II) above
- (b) Only (III) above
- (c) Both (I) and (II) above
- (d) Both (II) and (III) above
- (e) All (I), (II) and (III) above.

33. Applications are classified into vertical and horizontal applications. Which of the following statements is/are **false** about horizontal applications? [<Answer>](#)
- I. Horizontal applications are general purpose programs that can be used for writing, carrying out numerical calculations, and data storage.
 - II. Horizontal applications are common across different functional divisions of business and can be used by anybody in the organization.
 - III. Personal productivity software is a popular horizontal application that includes word processing, spreadsheets and special programs for storing address, preparing schedules etc.
 - IV. Horizontal applications are expensive when compared to vertical applications.
- (a) Only (I) above
 - (b) Only (IV) above
 - (c) Both (I) and (IV) above
 - (d) (I), (II) and (III) above
 - (e) All (I), (II), (III) and (IV) above.
34. Which of the following statements is/are **false** about application software? [<Answer>](#)
- I. Application software comprises programs that enable users to perform certain tasks like creating documents, conducting analysis, making presentations etc. without writing any code.
 - II. Some examples of application software are word processors, database programs, communication programs and spreadsheet.
 - III. The use of application software will not enable efficiency in operations.
- (a) Only (I) above
 - (b) Only (III) above
 - (c) Both (I) and (II) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.
35. Which of the following statements is/are **true** about paragraph formatting in word processing? [<Answer>](#)
- I. Paragraph formatting includes justification, that is the position of the text in the document and line spacing that is the space between the lines and indentation.
 - II. Paragraph formatting also includes footnotes and endnotes, automatic hyphenation, tables, table of contents and index, style sheets, graphics and web integration.
 - III. Paragraph formatting refers to formatting or changing the sections in a document.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (I) and (II) above
 - (e) All (I), (II) and (III) above.
36. In Microsoft-Excel, which of the following statements is/are **false** about spreadsheet data type 'numbers'? [<Answer>](#)
- I. The default alignment of numbers in the cell is to the left.
 - II. To consider a number as text, an apostrophe (') should be typed before the number.
 - III. A formatted number will be displayed as ##### if it does not fit in a cell.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (I) and (III) above
 - (e) Both (II) and (III) above.
37. In MS-Excel, the formula = 3*2^2*3/2&2^2 would give the result as [<Answer>](#)
- (a) 76
 - (b) 72
 - (c) 184
 - (d) 13.5
 - (e) Displays an error message.

38. AutoFilter is a type of filtering data in Excel that helps in selecting and displaying only the data that is required. If [<Answer>](#) we select AutoFilter option from Data menu, arrow buttons will be displayed in all the cells with field names. If we click on an arrow button in the column, a list of values gets displayed for specifying the condition. If we click on Custom, a dialog box called as the Custom AutoFilter gets displayed, which takes a maximum of
- Four conditions on the selected column
 - Three conditions on the selected column
 - Five conditions on the selected column
 - Two conditions on the selected column
 - One condition on the selected column.
39. Which of the following statements is/are **true** about Lookup & Reference functions in MS-Excel? [<Answer>](#)
- Lookup & Reference functions in excel enable the user to look up for a particular row or column or find a specific reference in the worksheet.
 - Lookup & Reference functions are used for a range of values that extend more than one row or one column.
 - Using Lookup & Reference functions, a database can be referred by using the range or cell references.
 - Lookup & Reference functions in excel help in summarizing, comparing and grouping data and finding out the relationships between two sets of data.
- Only (I) above
 - Only (II) above
 - Only (III) above
 - Both (III) and (IV) above
 - (II), (III) and (IV) above.
40. Which of the following statements is/are **false** about pie charts in the spreadsheet chart category? [<Answer>](#)
- Pie charts are used to express the relative percentage of each portion as a part of the whole.
 - In pie charts, values are expressed in percentage terms.
 - Pie charts are used in time series analysis to show trends or changes over different time periods.
 - Pie charts can be used to show changes over time.
- Only (I) above
 - Only (II) above
 - Only (IV) above
 - Both (III) and (IV) above
 - (II), (III) and (IV) above.
41. Which of the following statements is/are **false** about macros in Microsoft-Excel? [<Answer>](#)
- Macros help in automating a frequently performed task in excel.
 - Macros are not stored in a separate location in the spreadsheet.
 - A macro is a symbol, name, or key that represents a list of commands.
- Only (I) above
 - Only (II) above
 - Only (III) above
 - Both (II) and (III) above
 - All (I), (II) and (III) above.
42. Most presentation graphics allow the users to view the presentation in different ways. In which of the following view options, the slides can be viewed one by one? [<Answer>](#)
- Slide view
 - Outline view
 - Slide sorter view
 - Notes view
 - Master view.
43. In Microsoft-Excel, which of the following is the **correct** syntax for a statistical function PERMUT? [<Answer>](#)
- PERMUT(array)
 - PERMUT(array1, array2)
 - PERMUT(array, number)
 - PERMUT(number)
 - PERMUT(number, number chosen).

44. In Microsoft-Excel, which of the following is the **correct** syntax for a financial function IRR? [<Answer>](#)
- (a) IRR(rate, value1, value2,...)
 - (b) IRR(values, guess)
 - (c) IRR(nper, pmt)
 - (d) IRR(nper, pmt, pv, fv, type, guess)
 - (e) IRR(cost, salvage, life, period, month).
45. In Microsoft-Excel sheet, the cells A1, A2, A3, A4, A5, A6, A7, A8, A9 contains data 1, 2, 3, 9, 5, 6, 7, 7, 7 cells B1, B2, B3, B4, B5, B6, B7, B8, B9 contains data 1, 2, 5, 9, 5, 4, 5, 6, 6 and C1, C2, C3, C4, C5, C6, C7, C8, C9 contains data 2, 3, 4, 5, 6, 7, 4, 3, 2 respectively. When we apply the formula '=SUM(A1 : B9 & B1 : C9)' in the C10, the result will be [<Answer>](#)
- (a) 10
 - (b) 21
 - (c) 126
 - (d) 169
 - (e) #VALUE!.
46. Which of the following statements is/are **true** about the text function SUBSTITUTE in Microsoft-Excel? [<Answer>](#)
- I. SUBSTITUTE replaces the existing string of text with new text.
 - II. SUBSTITUTE deletes all the non-printable characters from the text.
 - III. SUBSTITUTE gives the character that refers to the specified code number from the set of character in the computer.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (I) and (II) above
 - (e) All (I), (II) and (III) above.
47. In Excel sheet, the cells A1, A2, A3, A4, A5, A6, A7, A8, A9 contains data 1, 2, 3, 9, 5, 6, 7, 7, 7 cells B1, B2, B3, B4, B5, B6, B7, B8, B9 contains data 1, 2, 5, 9, 5, 4, 5, 6, 6 and C1, C2, C3, C4, C5, C6, C7, C8, C9 contains data 2, 3, 4, 5, 6, 7, 4, 3, 2 respectively. When we apply the formula '=SUM(A1:B9 C1:C9)' in the C10, the result will be [<Answer>](#)
- (a) 10
 - (b) 7
 - (c) 3
 - (d) 21
 - (e) #NULL!.
48. Which of the following statements is/are **false** about the groupware? [<Answer>](#)
- I. Groupware establishes a platform for collaboration and communication within the organization.
 - II. The use of groupware helps to reduce the time and increases the effort required to transfer ideas, views and documents across workgroups.
 - III. The basic objective behind creating groupware is to enable group of workers working at different geographical locations to communicate with each other.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.
49. Which of the following is **not** an enterprise communication tool? [<Answer>](#)
- (a) Electronic mail
 - (b) Teleconferencing
 - (c) Voice mail
 - (d) Usenet
 - (e) Internet phone and paging.

50. Which of the following statements is/are **false** about task and project management of collaborative work management tool? [<Answer>](#)
- I. Project management groupware helps project teams to work together and keep track of the deadlines.
 - II. Tasks and project management software help in drawing graphs and charts.
 - III. Task and project management tools are generally based on rules that govern the flow of tasks.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.
51. Which of the following intranet groupware helps the user to create a document management library at an intranet website? [<Answer>](#)
- (a) Novell Groupwise
 - (b) Netscape Collabra
 - (c) Livelink
 - (d) Alta Vista Forum
 - (e) Lotus Organizer.
52. Which among the following statements is/are **true** about intranet? [<Answer>](#)
- I. Intranet facilitates information sharing and communication of messages in a secure manner to employees inside the organization.
 - II. Use of intranet results in greater productivity.
 - III. In an organization, top management may oppose the installation of intranet as it would require expending of funds and recruitment of employees.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.
53. POP is a protocol used on the internet. POP is an acronym for [<Answer>](#)
- (a) Post Office Protocol
 - (b) Power Office Protocol
 - (c) Private Office Protocol
 - (d) Public Office Protocol
 - (e) Process Office Protocol.
54. IMAP is a protocol used on the internet. Which of the following statements is/are **false** about IMAP? [<Answer>](#)
- I. IMAP is an acronym for Internet Mail Administration Protocol.
 - II. IMAP is like a remote file server that allows the users to retain the mails on the server and organize them in folders.
 - III. IMAP4 version provides a mechanism for a client to ask the server to search for messages meeting a variety of criteria.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.
55. Which of the following is a collaborative work management tool that enables a person to access the files of team members and keep track of their work schedules? [<Answer>](#)
- (a) Task and project management
 - (b) Electronic meeting systems
 - (c) Document sharing
 - (d) Workflow systems
 - (e) Discussion forums.

56. Which of the following statements is/are **true** about decisions taken by the management at different levels? [<Answer>](#)
- I. Operational decisions are short-term in nature and usually involve large-scale processing of internal data such as attendance and daily cash flows.
 - II. Decisions at the strategical level are likely to have a medium to long-term impact on the organization and are made by the middle management.
 - III. Decisions at the tactical level are concerned with long-term business issues such as diversification, expansion of capacity and strategic alliances.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (I) and (III) above
 - (e) All (I), (II) and (III) above.
57. Management Information Systems (MIS) helps in generating a variety of reports that are useful to managers through the management reporting systems. Which of the following reports are alternatively termed as adhoc reports which are generated as and when the manager requires them? [<Answer>](#)
- (a) Periodic scheduled reports
 - (b) Exception reports
 - (c) Demand reports and responses
 - (d) Push reports
 - (e) Edit reports.
58. Documents that are generated by the transaction processing systems are known as transaction documents and that can be divided into various categories. Which of the following documents serve as confirmation or proof to their recipients that certain transactions have occurred? [<Answer>](#)
- (a) Turnaround documents
 - (b) Action documents
 - (c) Information documents
 - (d) Edit reports
 - (e) Control listings.
59. Business Process Re-engineering (BPR) refers to radically changing the design of business processes to improve the performance and efficiency. Which of the following statements is/are **true** about BPR? [<Answer>](#)
- I. Implementing BPR is expensive and disruptive.
 - II. BPR advocates decentralization of the decision-making authority.
 - III. BPR improves the quality of work and increases the number of external contacts.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.
60. Executive Information Systems (EIS) is a computerized information system which is designed to meet the informational requirements of the top executives of the organization. Which of the following statements is/are **true** about EIS? [<Answer>](#)
- I. These systems provide internal as well as external information that are significantly important for making decisions in order to meet the strategic objectives of the organization.
 - II. In these systems, information is mostly presented in graphical or diagrammatic form so that a user can understand it quickly.
 - III. These systems can be used to generate reports which are simple and user-friendly.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.

61. Human Resources Information Systems (HRIS) help in keeping track of the details of all the employees working in the organization as well as those of new applicants. HRIS supports various activities. Which of the following statements is/are related to staffing activity? [<Answer>](#)
- I. The basic function of staffing in an organization is to find out and establish a working relationship with the employees, both existing as well as prospective candidates.
 - II. The application that can improve the efficiency of staffing is personnel requirement forecasting.
 - III. Staffing would enable the company to make comparisons of the company's standards and other related economic indicators.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (I) and (III) above
 - (e) Both (II) and (III) above.
62. Which of the following statements is/are **true** about accounting information systems? [<Answer>](#)
- I. Accounting information systems record and report financial transactions and other economic proceedings that are taking place in an organization.
 - II. Accounting information systems are the oldest and perhaps the most widely used information systems in business.
 - III. The main purpose of an accounting information systems is to accumulate data pertaining to the financial transactions, process it to information and report it to the concerned external and internal entities in the organization.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (I) and (II) above
 - (e) All (I), (II) and (III) above.
63. Which of the following statements is/are **false** about Artificial Intelligence (AI)? [<Answer>](#)
- I. AI is a software-based technique and is applied on data like symbols, statements, and patterns.
 - II. AI systems have the capability to think, so they are exact substitutes for human beings.
 - III. The methods used by an AI system are symbolic processing, social reasoning, scientific reasoning, and conceptual modeling.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (I) and (III) above
 - (e) All (I), (II) and (III) above.
64. There are various financial information systems which assist managers in taking financial decisions. Which of the following statements is/are **false** about capital budgeting? [<Answer>](#)
- I. The process of capital budgeting involves the evaluation of profitability and the financial impact of proposed capital expenditures.
 - II. The capital budgeting application involves the use of spreadsheet models which incorporate present value analysis of expected cash flows and probability analysis of risk in order to arrive at the optimum mix of capital projects for the business.
 - III. Capital budgeting involves collection of information on all cash receipts and payments within a company on either real time or periodic basis.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (I) and (II) above
 - (e) Both (II) and (III) above.

65. Which of the following is/are the fundamental strategies of an agile competition? [<Answer>](#)
- I. Fostering entrepreneurial skills and empowering employees.
 - II. Maintaining a flexible organizational structure.
 - III. Pricing should be based on cost of production rather than on value to the customer.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.
66. Which of the following Online Analytical Processing (OLAP) functions refer to the process of changing the dimension of analysis to suit the analysts' requirements? [<Answer>](#)
- (a) Consolidation
 - (b) Expert system
 - (c) Change display
 - (d) Drill down
 - (e) Slicing and dicing.
67. Which of the following statements is/are **false** about the Decision Support Systems (DSS)? [<Answer>](#)
- I. DSSs are computer-based information systems that support the decision making activities of the organization.
 - II. DSSs are interactive systems and subsystems that provide assistance to the decision making group of the organization to effectively use organizational knowledge and various technologies to make decisions.
 - III. DSSs do not provide support to those decision making activities or processors that are specific in nature.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (I) and (II) above
 - (e) All (I), (II) and (III) above.
68. Data analysis systems, information analysis systems, accounting systems and status inquiry systems are the four basic types of Decision Support Systems (DSS). Which of the following are **true** about data analysis systems? [<Answer>](#)
- I. Data analysis systems are developed using simple data processing tools and business rules.
 - II. Data analysis systems rely on comparative analysis, application of formula and use of algorithms.
 - III. Data analysis systems track information regarding cash, inventory and personnel.
 - IV. Data analysis systems are generally used for conducting cash flow analysis and fund flow analysis.
- (a) Both (I) and (II) above
 - (b) Both (II) and (III) above
 - (c) (I), (II) and (III) above
 - (d) (I), (II) and (IV) above
 - (e) (II), (III) and (IV) above.
69. What-if analysis, goal-seeking analysis, sensitivity analysis and optimization analysis are the four basic types of analytical modeling supported by Decision Support Systems (DSS). Which of the following statements is/are **false** about what-if analysis? [<Answer>](#)
- I. End users can make use of what-if analysis to make changes in the variables or in the relationship amongst variables and observe the changes.
 - II. The what-if analysis is used for analyzing the various possibilities and deriving an appropriate strategy for each situation.
 - III. In what-if analysis the target is fixed and changes are made to the related variable so that the target is achieved.
- (a) Only (I) above
 - (b) Only (III) above
 - (c) Both (I) and (II) above
 - (d) Both (I) and (III) above
 - (e) Both (II) and (III) above.

70. In a flowchart, _____ symbol is used for the addition of descriptive comments or explanatory notes as clarification.

[<Answer>](#)

- (a) Processing
- (b) On page connector
- (c) Annotation
- (d) Preparation
- (e) Predefined process.

71. Which of the following statements is/are **false** about decision tables?

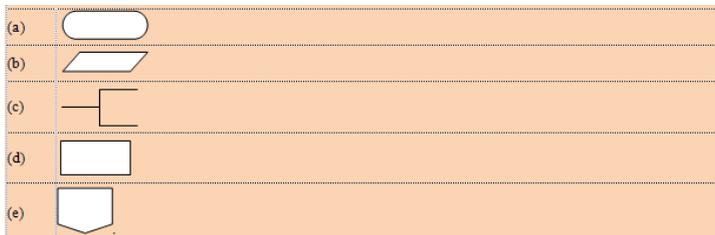
[<Answer>](#)

- I. Decision tables are difficult to draw and edit as compared to flow charts.
- II. Drawing a decision table is easy for beginners when compared to flow chart.
- III. Decision tables provide more compact documentation.

- (a) Only (I) above
- (b) Only (II) above
- (c) Only (III) above
- (d) Both (I) and (II) above
- (e) Both (II) and (III) above.

72. In flowchart, which of the following symbols represents an 'Off Page Connector'?

[<Answer>](#)



73. Which of the following statements is/are **false** about the flow charting rules?

[<Answer>](#)

- I. While drawing a flow chart, all the requirements should be listed in a logical order.
- II. The flow chart should be easy to comprehend and should not contain any ambiguity.
- III. The flow charts' validity should not be tested by using a simple set of data.

- (a) Only (I) above
- (b) Only (II) above
- (c) Only (III) above
- (d) Both (I) and (II) above
- (e) All (I), (II) and (III) above.

74. Which of the following represents the **correct** sequence of steps for constructing a decision table?

[<Answer>](#)

- I. State the problem clearly.
- II. Form a decision table using two lists.
- III. List all the conditions to be tested in the problem.
- IV. List the corresponding actions that should be taken with the combination of different conditions.

- (a) I-II-III-IV
- (b) I-III-IV-II
- (c) II-III-IV-I
- (d) III-I-IV-II
- (e) IV-III-I-II.

75. Which of the following statements is/are **false** about pseudocode? [<Answer>](#)
- I. In order to understand the pseudocode, we should require the knowledge of any particular programming language.
 - II. For a beginner, it is easy to follow the logic of or write a pseudocode, as compared to developing a flow chart.
 - III. Modifying the pseudocode to match changes in the program is easy.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (I) and (II) above
 - (e) Both (II) and (III) above.
76. Which of the following statements is/are **false** about 'Do While' looping structure? [<Answer>](#)
- I. When it is desirable to execute the loop at least once, Do While is used.
 - II. In Do While statement, the conditional expression is evaluated at the end of the loop.
 - III. Do While statement is used to check for multiple values of variables.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (I) and (II) above
 - (e) All (I), (II) and (III) above.
77. Which of the following is **not** a fifth generation language? [<Answer>](#)
- (a) Prolog
 - (b) Visual Basic
 - (c) OPS5
 - (d) LISP
 - (e) Mercury.
78. In Object-Oriented Programming, _____ binds together the code and the data it manipulates. [<Answer>](#)
- (a) Encapsulation
 - (b) Abstraction
 - (c) Polymorphism
 - (d) Inheritance
 - (e) Exception-handling.
79. Which of the following statements is/are **true** about machine language? [<Answer>](#)
- I. A machine language consists of binary numbers (0s and 1s) that directly correspond to the on and off electrical pulses generated by the computer and it is also called the first generation programming language.
 - II. The first part of the machine language instruction is the opcode (operation code) which tells the computer where to find or store the data that has to be manipulated.
 - III. The second part of the machine language instruction is the operand, which tells the computer what function to perform.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.
80. Which among the following statements is/are **false** about the programming language 'Pascal'? [<Answer>](#)
- I. Compared to other programming languages, Pascal is simple and expressive due to which it is used as a basis for teaching computer programming concepts.
 - II. The programming language Pascal encourages programmers to write well structured programs.
 - III. Pascal language is available only with compiler version.
- (a) Only (I) above
 - (b) Only (III) above
 - (c) Both (I) and (II) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.

81. Attribute in relational model is known as _____ in database. [<Answer>](#)
- (a) File
 - (b) Column
 - (c) Record
 - (d) Table
 - (e) Identifier.
82. In which of the following file organization, data is collected in the order in which it arrives and that is more suitable to be used as a temporary storage medium so that the data can be structured or organized later? [<Answer>](#)
- (a) Indexed
 - (b) Pile
 - (c) Sequential
 - (d) Indexed-Sequential
 - (e) Hashed.
83. Entity instance in Entity-Relationship model is known as _____ in relational model. [<Answer>](#)
- (a) Tuple
 - (b) Relation
 - (c) Key
 - (d) Row
 - (e) Field.
84. Entity-Relationship model is based on various structures. Which of the following statements is/are **true** about tree structure? [<Answer>](#)
- I. The tree structure is also referred to as a hierarchy, which is a series of 1: N relationships.
 - II. In a tree structure, each node has only one parent and each parent has zero, one, or many children.
 - III. In a tree structure, the children with a common parent are called siblings.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.
85. Which of the following statements is/are **false** about normal forms? [<Answer>](#)
- I. A relational table is said to be in a normal form if it satisfies a set of constraints.
 - II. To be in the first normal form, every table must have a primary key, which is a column (or set of columns) that uniquely identifies each row.
 - III. To be in the second normal form, there should not be any transitivity.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (I) and (II) above
 - (e) Both (II) and (III) above.
86. In relational database, data is entered either directly or through input forms or input screens. Which of the following statements is/are **false** about direct entry of data? [<Answer>](#)
- I. Direct entry of data into a relational database is possible if the data is collected for an unlimited period of time and if the tables are not constantly updated.
 - II. Direct entry of data can be done in situations when it is not possible to work with one table at a time.
 - III. Most database systems directly enter certain types of data such as current date, order number, etc.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.

87. Consider the table Sales which contains the attributes: Customer_ID, Customer_Name, Salesperson and Zone. [<Answer>](#)
Which of the following statements is/are **true** about the given table?
- I. The above table does not comply with the first normal form.
 - II. The above table complies with the second normal form.
 - III. In the above table there exists a transitive dependency between the attributes Salesperson and Zone.
 - IV. The above table contains Customer_ID which uniquely identifies the Customer_Name, Salesperson and Zone.
- (a) Only (I) above
 - (b) Both (I) and (II) above
 - (c) (I), (II) and (III) above
 - (d) (II), (III) and (IV) above
 - (e) All (I), (II), (III) and (IV) above.
88. Which of the following statements is/are **false** about sequential file organization? [<Answer>](#)
- I. It has fixed length of records.
 - II. It has fixed set of fields.
 - III. In this, the sequential order is based on key field.
 - IV. It is used where timeliness of data is critical.
- (a) Only (I) above
 - (b) Only (IV) above
 - (c) Both (I) and (II) above
 - (d) (II), (III) and (IV) above
 - (e) All (I), (II), (III) and (IV) above.
89. Consider following tables: [<Answer>](#)
Sailors(Sailor_Id, Sailor_Name, Age, Grade)
Reserves(Reser_Id, Sailor_Id, Reser_Date)
Boats(Boat_Id, Reser_Id, Boat_Color)
Which of the following are the foreign keys in the tables Reserves and Boats?
- (a) Reser_Date, Boat_Id
 - (b) Boat_Color, Sailor_Id
 - (c) Sailor_Id, Reser_Id
 - (d) Boat_Color, Reser_Date
 - (e) Sailor_Id, Boat_Id.
90. A Student table contains the following attributes: Stud_Id, Stud_name, Age and Grade. Which of the following SQL [<Answer>](#)
queries display the entire students' details whose grades are not equal to 'C'?
- (a) SELECT * FROM Student WHERE Grade<>'C';
 - (b) SELECT Stud_Id, Stud_name FROM Student WHERE Grade<='C';
 - (c) SELECT Stud_Id, Stud_name FROM Student WHERE Grade>='C';
 - (d) SELECT * FROM Student WHERE Grade<'C';
 - (e) SELECT * FROM Student WHERE Grade>'C';.
91. Which of the following statements is/are **false** about the data storage in Distributed Database Management Systems (DDBMS)? [<Answer>](#)
- I. In DDBMS, the storage devices are connected to a common CPU.
 - II. The DDBMS periodically synchronize all the data located in the databases.
 - III. DDBMS ensures that any modifications made to the data from a particular location are automatically reflected in the data stored at other locations on the computer network.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.

92. Which of the following are examples of object-oriented databases?

[<Answer>](#)

- I. Ingres.
 - II. Vbase.
 - III. SQLite.
 - IV. Iris.
- (a) Both (I) and (II) above
 - (b) Both (I) and (III) above
 - (c) Both (II) and (IV) above
 - (d) (I), (II) and (III) above
 - (e) (II), (III) and (IV) above.

93. Which of the following statements is/are **true** about views in a database?

[<Answer>](#)

- I. A view is a virtual table that comprises the fields of one or more tables in the database or fields from other views.
 - II. View draws its data from the tables or views upon which it is based.
 - III. Since a view does not store data, only its structure is saved in the database and it is not recreated each time when it is accessed.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (I) and (II) above
 - (e) All (I), (II) and (III) above.

94. In a database system, users can be classified into various types. Which of the following statements is/are **true** about application programmers?

[<Answer>](#)

- I. The application programmers are the ones who write application programs, which are written in languages like COBOL, C or Pascal.
 - II. Application programmers provide the necessary technical support for implementing the strategic and policy decisions related to the data in an organization.
 - III. Application programmers interact with users and ensure that the required data is made available to them.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (I) and (II) above
 - (e) All (I), (II) and (III) above.

95. Which of the following statements is/are **false** about the different types of files?

[<Answer>](#)

- I. The transaction file contains records of all transactions occurring during a period and might be used periodically to update the master file.
 - II. Master files contain temporary record of files.
 - III. A history file is an obsolete file which is used for backup purposes.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (I) and (II) above
 - (e) All (I), (II) and (III) above.

96. Which of the following statements is/are **false** about indexed-sequential file organization?

[<Answer>](#)

- I. In indexed-sequential file organization, the records are organized on the basis of a key field.
 - II. In indexed-sequential file organization, when a query is executed, the index is searched to find the lowest key value, which is equal to or less than the desired key value.
 - III. New records in the indexed-sequential file are added to the overflow file.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Only (III) above
 - (d) Both (I) and (II) above
 - (e) All (I), (II) and (III) above.

97. Which of the following statements is/are **false** about the models that fall under Record-Based Logical Models (RBLMs)? [<Answer>](#)
- I. Relational model does not provide adhoc request flexibility.
 - II. Network model provides adhoc request flexibility.
 - III. Hierarchical model is designed to handle large transaction-based applications.
- (a) Only (II) above
 - (b) Only (III) above
 - (c) Both (I) and (II) above
 - (d) Both (I) and (III) above
 - (e) Both (II) and (III) above.
98. There are various categories of databases based on their use in an organization. Which of the following databases is also called as management databases? [<Answer>](#)
- (a) Operational databases
 - (b) Analytical databases
 - (c) Hypermedia databases
 - (d) Data warehousing
 - (e) Distributed databases.
99. Which of the following statements is/are **false** about data dictionary? [<Answer>](#)
- I. Data dictionary is a file that defines the way in which the database is organized.
 - II. Data dictionaries contain all real data from the database.
 - III. Data dictionary contains details of all the files in the database, the records in each file, and the details of the fields in each record.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.
100. Report generators are part of the database system and are used for retrieving and displaying information in a specified format. Which of the following statements is/are **true** about report generators? [<Answer>](#)
- I. A report generator is alternatively called a report writer.
 - II. Formatting and presenting information in the form of pie charts and other diagrams is also possible using a report generator.
 - III. Report generator is an important component of a database since it reflects the flexibility in generating an output.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.

END OF QUESTION PAPER

Suggested Answers

Information Technology and Systems – I (MB1C3): January 2009

Answer	Reason	
1.	B	The Memory Buffer Register (MBR) is used for storing the data that is on its way to and from memory. Accumulators (AC) are used for arithmetic and logic and other similar operations. Memory Address Registers (MAR) are used for storing the addresses of active and specific memory locations. Program Counter (PC) register holds the address of the next instruction that is inline for execution. Instruction Register (IR) is used for holding the Instructions while they are being executed. <TOP
2.	D	RISC microprocessors execute the instructions very fast compared to CISC microprocessor and RISC chips are cheaper to design and produce compared to CISC chips. The third option is false because RISC uses less complex set of instructions when compared to CISC architecture. <TOP
3.	C	Second storage medium is used to store the data as well as the processed information permanently therefore it is non-volatile in nature. It can be detached as well as fitted therefore its called as an External memory. It is best used for storing information during a power loss. It is not directly accessible to the CPU of a computer system and requires the Input and Output channels. <TOP
4.	C	IBM4300 is a Mainframe computer, PDP-1 is a minicomputer and CRAYXMP is a Supercomputer. <TOP
5.	D	The instructions to start the computer are placed on a special chip known as ROM BIOS (Basic Input /Output System) chip. To allow ROM upgrades, most computers use flash memory also called as flash BIOS. <TOP
6.	D	A digitizer comprises a digitizer tablet which is connected to a pen-like Stylus. This Stylus is used to trace the image, store it in the RAM and display it on the monitor. <TOP
7.	E	ALU (Arithmetic Logic Unit) performs arithmetic and logical operations. Statements (II) and (III) are related to the control unit. <TOP
8.	A	Based on utility, computers are classified into general purpose computers and special purpose computers. <TOP
9.	C	Cache memory can be accessed more easily and quickly by a microprocessor than the random access memory. Cache memory increases the speed of processing by making current programs and data available to CPU at a rapid rate. Although cache memory is much faster than RAM, it is much more expensive. <TOP
10.	A	UNIVAC was the first digital computer and the first computer to be commercially available in the market place. The UNIVAC was first installed at the US Census Bureau in 1951 while the Prudential Insurance Company was the first business organization to purchase it. <TOP
11.	D	Sheet fed scanners draw in the sheets by means of a roller mechanism. Handheld Scanners are used to copy smaller originals such as photographs. These scanners are operated by hand and are not used much as the image quality is not good as compared to the flatbed scanners. Flatbed scanners work on a single sheet of paper at a time and are the most commonly used scanners in offices. <TOP
12.	B	RAID is an acronym for Redundant Array of Inexpensive Disks. <TOP

	Answer	Reason	
13.	B	Operating systems can be classified based according to the number of tasks they carry out .There are two classifications: Single-tasking operating systems and Multi-tasking operating systems. Users who need to work with more than one application during a single session would find single-tasking operating system very inconvenient. MS-DOS is an example of single-tasking operating system. Linux is an example for multitasking operating system. In multi-tasking operating system, one program called the foreground program is active while the other called the background program is inactive.	<TOP
14.	B	Preemptive multitasking is a type of multi-tasking which enables the operating system to regain control of the CPU if an application stops running and crashes. In preemptive multitasking, the operating system allocates CPU time to all running processes. In preemptive multitasking the failure of one application does not bring down the entire system.	<TOP
15.	B	Cooperative multi-tasking is a simple form of multi-tasking in which the users can run two or more programs. In cooperative multi-tasking, different programs control the CPU at different points of time. The foreground program gains control of the CPU, retains this control until the program's task is finished, and then hands over the control of the CPU to other programs. If the foreground program crashes, i.e., stops working, the crashed program does not surrender the CPU. The computer would then hang or come to a halt, thus forcing the user to restart it. The user would lose unsaved data in any of the programs.	<TOP
16.	E	Multi-threading extends the concept of multi-tasking by allowing individual programs to carry out several tasks simultaneously. With this, the computer can execute more than one task in a single program. Users can work on one task in an application and keeping other tasks running in the background.	<TOP
17.	D	Command-line user interface is a character-based user interface. Menu-driven user interface provide the users with a list that contains a range of options from which they have to select the commands. Command-line user interface is not very popular as it involves a lot of memorization of commands and syntaxes.	<TOP
18.	D	Only statement (I) is true. Whereas, remaining statements (II) and (III) are false. NetWare 4.0 was an upgrade of the NetWare 3.12 version and was available for a wide range of platforms like DOS, MAC OS/2 and some versions of UNIX. Novell developed higher versions of NetWare (i.e., 5.x, 6.x) which were compatible with SQL servers and other servers. NetWare 4.x series of operating systems are not compatible with Windows-based servers such as SQL server 2000, Windows Exchange server etc. NetWare 6.5 is an open source system and provides a browser-based interface making the synchronization of various business processes easier.	<TOP
19.	B	Though UNIX is the most widely used among the operating systems, it suffers from certain drawbacks like lack of compatibility with different versions, cryptic commands that are difficult to learn and lack of user-friendliness.	<TOP
20.	C	IO.SYS is loaded when the computer is booted and it is loaded before MSDOS.SYS and is responsible for executing MSDOS.SYS. COMMAND.COM is the interactive portion of the operating system which accepts user input at the command prompt and contains a set of internal commands to perform the basic functions. MSDOS.SYS handles application management tasks such as file and record management, memory management, access to real time clock.	<TOP
21.	C	PATH is used to set or display directories that will be searched for programs not in the current directory.	<TOP
22.	D	ssh nd: Login securely to remote node alias name1 name2: Create command alias(csh /tcsh) alias name1= "name2":Create Command alias (Ksh/ bash) unalias name1[na2..] : Remove command alias na mv fl[f2..] d-: move file f to directory d.	<TOP

	Answer	Reason	
23.	C	Linux is cheap or free for desktop or home use. Windows is expensive for desktop or home use as well as for use as a server. Linux can make enormous clusters of computers. Windows can not support large clusters.	<TOP
24.	D	Statements (I) and (III) are false. Whereas, statement (II) is true. Sampled information is a type of information which is obtained by examining a set of items that are randomly selected. Aggregated information provides details about all the entities in a group. Summarized information draws conclusions about a single entity in the group and it also provides an outline of the entire information.	<TOP
25.	C	There are specific rules, standards and specifications that need to be adhered to while planning. The documents containing the details of operational standards and quality standards form planning information. Information collected through library reports and research studies is known as knowledge information. Information that is required to put in place a feedback mechanism is called planning information. Control information is used to compare the actual with the predetermined standards and to take corrective action wherever there are deviations.	<TOP
26.	C	Professor John Dearden of Harvard University classified information into: action and no-action information, recurring and non-recurring information, and internal and external information. Control information do not come under his classification.	<TOP
27.	B	Subjective estimation is a method of collecting data from experts in a particular field. In this method, the views and opinions of a few experts are collected and this acts as a source for data. The subjective estimation method is employed in situations where no other data sources are available. It is used for conducting an analysis regarding issues that are difficult to be described in actual, objective, or numeric terms. For instance, psychologists use the method of subjective estimation to gather information about their patients.	<TOP
28.	C	Validity refers to the use of information and its suitability. Consistency refers to uniformity or continuity in data collection. Reliability refers to the credibility and accuracy of the sources of data collection and the methods of presenting data Impartiality refers to the information which is free from errors and bias. Age refers to the suitability or usefulness of the data for current times. Therefore the series will be I-C, II-D, III-E, IV-B, and V-A.	<TOP
29.	B	Hardware resources include all the physical devices and materials that are used in recording and processing the information. These resources include all tangible objects or machines on which the data is recorded and is processed like computers and data media. Software resources of an information system constitute all the sets of instructions that are required for the processor data into information.	<TOP
30.	E	Information System (IS) in business helps in simplifying complex tasks. IS in business are used for speeding up the process of conducting tasks. Use of IS reduces the chances of errors to a large extent.	<TOP
31.	E	In order to avoid resistance from employees in the organization it is important to set the goals of the organization, conduct training sessions for the employees, involve employees in building the system, and to counsel them from time to time.	<TOP
32.	E	An effective IS should have the ability to provide information that will reduce ambiguity and uncertainty. An effective IS should build a knowledge base. An effective IS should have a design that does not encourage any misuse of information.	<TOP

Answer**Reason**

33. B Horizontal applications are general purpose programs that can be used for writing, carrying out numerical calculations, and data storage. They are common across different functional divisions of business and can be used by anybody in the organization. Personal productivity software is a popular horizontal application that includes word processing, spreadsheets and special programs for storing address, preparing schedules etc. Vertical applications only cater to the specific function in an organization and therefore special programmers or operators are required to carry out these applications. Hence vertical applications are more expensive than horizontal applications. [<TOP](#)
34. B Application software comprises programs that enable users to perform certain tasks like creating documents, conducting analysis, making presentations etc without writing any code. Some examples of application software are word processors, database programs, communication programs and spreadsheet. The use of application software may enable efficiency in operations. [<TOP](#)
35. D Paragraph formatting includes justification, that is the position of the text in the document and line spacing that is the space between the lines and indentation. Paragraph formatting also includes footnotes and endnotes, automatic hyphenation, tables, table of contents and index, style sheets, graphics and web integration. Section level formatting refers to formatting or changing the sections in a document. [<TOP](#)
36. A The default alignment of numbers in the cell is to the right. Dates and times will be displayed based on the format selected. To consider a number as text, an apostrophe (') should be typed before the number. A formatted number will be displayed as ##### if it does not fit in a cell. [<TOP](#)
37. C Operators and their Order of Priority [<TOP](#)

Order	Operator
1	%
2	^
3	* and /
4	+ and -
5	&

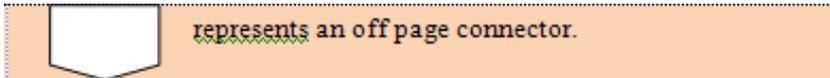
If the operators belong to the same order of priority, they will be evaluated in the formula from left to right. One can also change the order of evaluation within a formula. This can be done by using parentheses. The expression within the parentheses will be evaluated before all the arithmetic operators. From the above table the expression evaluates as follows:

$$\begin{aligned}
 &3*2^2*3/2 \& 2^2 \\
 &= 3*4*3/2 \& 4 \\
 &= 36/2 \& 4 \\
 &= 18 \& 4 \\
 &= 184.
 \end{aligned}$$

38. D Custom AutoFilter dialog box takes a maximum of two conditions on the selected column. [<TOP](#)
39. A Lookup & Reference functions in excel enable the user to look up for a particular row or column or find a specific reference in the worksheet. Database functions are used for a range of values that extend more than one row or one column. Using database functions a database can be referred to by using the range or cell references. Statistical functions in excel help in summarizing, comparing and grouping data and finding out the relationships between two sets of data. [<TOP](#)

	Answer	Reason	
40.	D	Line charts are also used in time series analysis to show trends or changes over different time periods. Column charts can also be used to show changes over time. In pie charts, values are expressed in percentage terms. Pie charts are used to express the relative percentage of each portion as a part of the whole.	<TOP
41.	B	Macros help in automating a frequently performed task in Microsoft excel. Macros are stored in a separate location in the spreadsheet. A macro is a symbol, name, or key that represents a list of commands. Macros are saved as files on the system and later, when the macro name is entered, the entire set of operations is executed.	<TOP
42.	A	(a) Slide view: In this view, the slides can be viewed one by one. Slides can be created and edited in this option. (b) Outline view: This view shows an outline of the presentation's text. This view enables the user to build the presentation quickly, in an organized manner. (c) Slide sorter view: This view displays thumbnails (small graphical images) of each slide and enables the user to change their order. (d) Notes view: This view enables a person to add speaker notes to each slide. (e) Master view: Like the master pages in a desktop publishing program, each presentation has a master slide that contains the basic slide layout.	<TOP
43.	E	The syntax is: PERMUT(number, number_chosen). It gives the number of permutations in which the given number of objects could be selected from the total set of objects.	<TOP
44.	B	The syntax is: IRR(values, guess). It calculates the internal rate of return for the given set of cash flows.	<TOP
45.	E	& symbol cannot be used along with formula. & symbol can be used for concatenation of a text or a word. Hence the result will be #VALUE!.	<TOP
46.	A	SUBSTITUTE replaces the existing string of text with a new text. CLEAN deletes all the non-printable characters from the text. CHAR gives the character that refers to the specified code number from the set of character in the computer.	<TOP
47.	E	Since there is no common area in the worksheet it gives a NULL result.	<TOP
48.	B	Groupware establishes a platform for collaboration and communication within the organization. The use of groupware helps reduce the time and effort required to transfer only ideas, views and documents across workgroups. The basic objective behind creating groupware is to enable group of workers working at different geographical locations to communicate with each other.	<TOP
49.	B	Teleconferencing comes in the category of enterprise conferencing tools. Enterprise communication tools include electronic mail, faxing, voice mail, instant messaging, web publishing, Internet phone and paging systems, instant messaging, web publishing, Internet phone and paging systems and the use net.	<TOP
50.	C	Project management groupware helps project teams work together and keep track of the deadlines. Tasks and project management software helps in drawing graphs and charts. Workflow systems are generally based on rules that govern the flow of tasks.	<TOP
51.	C	'Livelink' intranet groupware helps the user create a document management library at an intranet website.	<TOP
52.	E	Intranet facilitates information sharing and communication of messages in a secure manner to employees inside the organization. Use of intranet results in greater productivity. In an organization, top management may oppose the installation of intranet as it would require expending of funds and recruitment of employees.	<TOP
53.	A	POP is an acronym for Post Office Protocol.	<TOP

	Answer	Reason	
54.	A	IMAP is an acronym for Internet Message Access Protocol. It was developed in 1986 at Stanford University and is also used for retrieving e-mails. IMAP is like a remote file server that allows the users to retain the mails on the server and organize them in folders. In IMAP4 version, one can search and choose the e-mails based on keywords while they are located on the mail server and can then download these messages. IMAP4 provides a mechanism for a client to ask the server to search for messages meeting a variety of criteria. This mechanism avoids requiring clients to download every message in the mailbox in order to perform these searches.	<TOP
55.	C	Document sharing is a collaborative work management tool that enables a person to access the files of team members and keep track of their work schedules.	<TOP
56.	A	Operational decisions are short-term in nature and usually involve large-scale processing of internal data such as attendance and daily cash flows. Decisions at the tactical level are likely to have a medium to long-term impact on the organization and are made by the middle management. Decisions at the strategical level are concerned with long-term business issues such as diversification, expansion of capacity and strategic alliances.	<TOP
57.	C	Demand reports and responses are alternatively termed as adhoc reports which are generated as and when the manager requires them.	<TOP
58.	C	Information documents serve as confirmation or proof to their recipients that certain transactions have occurred.	<TOP
59.	C	Implementing BPR is expensive and disruptive. BPR advocates decentralization of the decision-making authority. BPR improves the quality of work and reduces the number of external contacts.	<TOP
60.	E	Executive Information Systems provide internal as well as external information that are significantly important for making decisions in order to meet the strategic objectives of the organization. In these systems, information is mostly presented in graphical or diagrammatic form so that a user can understand it quickly. These systems can be used to generate reports which are simple and user-friendly.	<TOP
61.	C	The basic function of staffing in an organization is to find out and establish a working relationship with the employees, both existing as well as prospective candidates. The application that can improve the efficiency of staffing is personnel requirement forecasting. Compensation analysis would enable the company to make comparisons of the company's standards and other related economic indicators.	<TOP
62.	E	Accounting information systems record and report financial transactions and other economic proceedings that are taking place in an organization. They are the oldest and perhaps the most widely used information systems in business. The main purpose of an accounting information system is to accumulate data pertaining to the financial transactions, process it to information and report it o the concerned external and internal entities in the organization.	<TOP
63.	B	Artificial Intelligence (AI) is a software-based technique and is applied on numeric data like symbols, statements, and patterns. The methods used by an artificial intelligence system are symbolic processing, social reasoning, scientific reasoning, and conceptual modeling. Though these systems have the capability to think, they are not substitutes for human beings. They are only designed to help solve complex problems.	<TOP
64.	C	The process of capital budgeting involves the evaluation of profitability and the financial impact of proposed capital expenditures. The capital budgeting application involves the use of spreadsheet models which incorporate present value analysis of expected cash flows and probability analysis of risk in order to arrive at the optimum mix of capital projects for the business. Cash management involves collection of information on all cash receipts and payments within a company on either real time or periodic basis.	<TOP

	Answer	Reason	
65.	C	Fostering entrepreneurial skills and empowering employees. Maintaining a flexible organizational structure. Pricing should be based on value to the customer rather than on cost of production.	<TOP
66.	E	Online analytical processing consists of three functions – drilling, slicing and dicing, and changing displays. Slicing and dicing refer to the process of changing the dimension of analysis to suit the analysts’ requirements. It involves examining the database from different standpoints. For instance, region-wise monthly sales report can be converted into monthly sales report.	<TOP
67.	C	DSSs are computer-based information systems that support the decision making activities of the organization. These are interactive systems and subsystems that provide assistance to the decision making group of the organization to effectively use organizational knowledge and various technologies to make decisions. DSSs provides support to those decision making activities or processors that are specific in nature.	<TOP
68.	D	Data analysis systems are developed using simple data processing tools and business rules. Data analysis systems rely on comparative analysis, application of formula and use of algorithms. Accounting systems track information regarding cash, inventory and personnel. Data analysis systems are generally used for conducting cash flow analysis and fund flow analysis.	<TOP
69.	B	End users can make use of what-if analysis to make changes in the variables or in the relationship amongst variables and observe the changes. The what-if analysis is used for analyzing the various possibilities and deriving an appropriate strategy for each situation. In goal seek analysis the target is fixed and changes are made to the related variable so that the target is achieved.	<TOP
70.	C	In a flowchart, annotation symbol is used for the addition of descriptive comments or explanatory notes as clarification.	<TOP
71.	D	Decision tables are easier to draw and edit as compared to flow charts. Decision tables provide more compact documentation. A small table can replace several pages of charts. For beginners flowcharts is the best option. i.e. drawing a decision table is difficult for beginners when compared to flow chart.	<TOP
72.	E	 <p>represents an off page connector.</p>	<TOP
73.	C	While drawing a flow chart, all the requirements should be listed in a logical order. The flow chart should be easy to comprehend and should not contain any ambiguity. The flow charts’ validity should be tested by using simple set of data.	<TOP
74.	B	<p>Following are the steps necessary for constructing a Decision Table</p> <p>State the problem clearly.</p> <p>List all the conditions to be tested in the problem.</p> <p>List the corresponding actions that should be taken with the combination of different conditions.</p> <p>Form a decision table using the two lists.</p>	<TOP
75.	D	Modifying the pseudocode to match changes in the program is easy. It is easy to understand a pseudocode as it does not require the knowledge of any particular programming language to understand it. For a beginner, it is more difficult to follow the logic of or write a pseudocode, as compared to developing a flow chart.	<TOP
76.	C	<p>When it is desirable to execute the loop at least once, Do While is used. In this statement, the conditional expression is evaluated at the end of the loop.</p> <p>Switch statement is used to check for multiple values of variables.</p>	<TOP
77.	D	LISP is a third generation language. Remaining others are Fifth generation languages.	<TOP

	Answer	Reason	
78.	A	In object-oriented programming, encapsulation binds together the code and the data it manipulates.	<TOP
79.	A	The first part is the opcode (operation code) which tells the computer what function to perform. Every computer has an operation code or opcode for each of its functions. The second part of the instruction is the Operand, which tells the computer where to find or store the data that has to be manipulated. Each instruction tells the control unit of the CPU what to do, and also the length and location of the data fields involved in the operation. A machine language consists of binary numbers (0s and 1s) that directly correspond to the on and off electrical pulses generated by the computer and it is also called the first generation programming language.	<TOP
80.	B	Compared to other programming languages, Pascal is simple and expressive due to which it is used as a basis for teaching computer programming concepts. The programming language Pascal encourages programmers to write well structured programs. Pascal language is available in both interpreter and compiler versions.	<TOP
81.	B	Attribute in relational model is known as column in database.	<TOP
82.	B	In Pile file organization, data is collected in the order in which it arrives and that is more suitable to be used as a temporary storage medium so that the data can be structured or organized later.	<TOP
83.	A	Entity instance in Entity-Relationship model is known as tuple in relational model.	<TOP
84.	E	The Tree structure is also referred to as a hierarchy which is a series of 1: N relationships. In this structure, each node has only one parent and each parent has zero, one, or many children. The children with a common parent are called siblings. For example, a company is a parent which consists of many departments. All departments are part of a single entity called the company and they are together called siblings.	<TOP
85.	C	A relational table is said to be in a normal form if it satisfies a set of constraints. A database can be normalized up to six normal forms but most databases are normalized only up to third normal form. To be in the first normal form, every table must have a primary key, which is a column (or set of columns) that uniquely identifies each row. To be in second normal form, the table should be in the first normal form and there should not be any partial dependency.	<TOP
86.	A	Direct entry of data into a relational database is possible if the data is collected for over period of time and if the tables are constantly updated. Direct entry of data can be done in situations when it is not possible to work with one table at a time. Most database systems automatically enter certain types of data such as current date, order number, etc. If necessary, users can change the date, but accepting the given date by pressing ENTER saves time.	<TOP
87.	D	The table Sales containing the attributes: Customer_ID, Customer_Name, Salesperson and Zone. The following facts hold for this table: The above table contains Customer_ID which uniquely identifies the Customer_Name, Salesperson and the Zone. The above table complies with the Second Normal form. In the above table there exists a transitive dependency between the attributes Salesperson and Zone.	<TOP
88.	B	Sequential file organization has fixed length of records, it has fixed set of fields. In this, the sequential order is based on key field. Indexed file organization is used where timeliness of data is critical.	<TOP

	Answer	Reason	
89.	C	For the Sailors table Sailor_Id uniquely identifies the tuples, for Reserves table Reser_Id uniquely identifies the tuples, and in the Boats table Boat_Id uniquely identifies the tuples. In Reserves table Sailor_Id again appears, so that it is a foreign key in that table which makes a reference of data with Sailors table. Similarly in Boats table Reser_Id also appears, which is a foreign key that makes the reference with the Reserves table.	<TOP >
90.	A	SELECT * FROM Student WHERE Grade <>'C'. The Symbol <> denotes not equal to. This query will extract the full details of the students whose grade is not equal to 'C'.	<TOP >
91.	A	In a Distributed database management systems (DDBMS) the storage devices are not connected to a common CPU. Data is stored on multiple computers that are located either at the same location or scattered over a network of computers that are interconnected. DDBMS periodically synchronize all the data located in the databases. It ensures that any modifications made to the data from a particular location are automatically reflected in the data stored at other locations on the computer network.	<TOP >
92.	C	Ingres and SQLite are examples for relational database management systems. Vbase and Iris are examples for object-oriented databases.	<TOP >
93.	D	A view is a virtual table that comprises the fields of one or more tables in the database or fields from other views. It draws its data from the tables or views upon which it is based. Because a view does not store data, only its structure is saved in the database and it is recreated each time it is accessed.	<TOP >
94.	A	The application programmers are the ones who write application programs in languages like COBOL, C, Pascal. The application program written by the programmers can retrieve existing information, insert new information, and delete or make modifications to the existing information in the database. Database administrators provide the necessary technical support for implementing the strategic and policy decisions related to the data in an organization. Database administrators interact with users and ensure that the required data is made available to them.	<TOP >
95.	B	The transaction file contains records of all transactions occurring during a period and might be used periodically to update the master file. Master files contain Permanent record of files. A history file is an obsolete file which is used for backup purposes which is also called an archival storage.	<TOP >
96.	B	In Indexed-sequential file organization the records are organized on the basis of key field. When a query is executed, the index is searched to find the highest key value, which is equal to or less than the desired key value. New records in the indexed-sequential file are added to the overflow file.	<TOP >
97.	C	Relational model provides ad hoc request flexibility. Network databases support many-to-many relationships. They may be suitable for handling voluminous transactions but not for handling ad hoc request. Hierarchical model is designed to handle large transaction-based applications.	<TOP >
98.	B	Analytical databases store information that is extracted from the operational and external databases. Analytical databases are also called management databases.	<TOP >
99.	B	A relational database system must maintain data about the tables and all other objects in the database. This information is called the data dictionary or the system catalog. A data dictionary is a file that defines the way in which the database is organized. Data dictionaries do not contain any real data from the database but only bookkeeping information about how to manage the data. It contains details of all the files in the database, the records in each file, and the details of the fields in each record.	<TOP >

Answer**Reason**

- 100.** E Report generators are part of the database system and are used for retrieving and displaying information in a specified format. A report generator is alternatively called a report writer. Formatting and presenting information in the form of pie charts and other diagrams is also possible using a report generator. Report generator is an important component of a database since it reflects the flexibility in generating an output.

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