

Question Bank

BCA-T111: Computer Fundamentals

1. What is Computer? Why is it also known as a data processor?
2. What is data processing? Differentiate between data and information. Which is more useful to the people.
3. List out some important characteristics of Computer.
4. How many types of Computer System. Explain them.
5. What is meant by Computer Generations? List out the various generation in Computer technologies along with their characteristics.
6. What is a computer? Draw a block diagram of a computer system and discuss the functionalities of each in detail. Explain different generations of computers.
7. Compare microcomputers, minicomputers and main frames in terms of size and cost.
8. Differentiate between the characteristic of primary and secondary memory of computer.
9. Represent (2720) into the BCD, ASCII and EBCDIC format.
10. Convert $(1100110100)_2$ into
 - a) Decimal
 - b) Octal
 - c) Hexadecimal
11. Define the terms: Compiler, interpreter, Assembler, Loader, and Linker.
12. Define the software. List and explain the types of software. Give two examples of each category.
13. Short notes on-
 - a) Machine Language
 - b) High-Level Language
 - c) Assembly Language
14. What is an Operating System? Explain all the four types of operating systems.
15. Explain the usage of the following S / W constructs with an example for each:
 - (i) Variables and Constants
 - (ii) Arrays
 - (iii) If then... Else
 - (iv) "While" statement

16. What is the usage of recycle bin in MS Windows? Write the steps involved for doing the
17. following tasks:
 - (i) To empty recycle bin
 - (ii) To restore the files and folders
 - (iii) To adjust the amount of disk space
18. With the help of a diagram, explain any two LAN topologies.
19. Differentiate the following:
 - (i) Analog and Digital transmission
 - (ii) Parallel processing and Vector processing
20. Define the software. List and explain the types of software. Give two example of each category.
21. Explain the OSI model and explain the working of its various layers
22. Explain the various characteristics of RISC.
23. Explain the three categories of printers.
24. What do you mean by networks? Explain various types of networks.
25. Define the term Multimedia. List and explain any three multimedia tools and their usage.
26. Convert the octal number 577.46 to the Following:
 - (i) BCD equivalent
 - (ii) Decimal number
 - (iii) Binary number
 - (iv) Hexadecimal number
27. Write four differences between each of the following:
 - (i) Router and Gateway
 - (ii) Ring topology and Star topology
28. What are communication channels in Networking? List two transmission media.
Further,
29. describe any two such features of each that the other one does not have.
30. Write a step-by-step procedure to do the following activities in WINDOWS-95:
 - (i) Add/Remove applications
 - (ii) Controlling Access to files, folders
 - (iii) To record, play and edit sound files
31. Explain two differences between multiprogramming and multitasking. Also give an

32. example each of a multiprogramming and a multitasking operating system.
33. What are four measures that one should take to ensure that data does not get corrupted? Also, mention three measures needed for providing physical security to the computer systems.
34. Write the characteristics of RISC architecture.
35. Explain five resources used to manage windows and user-defined objects.
36. What is a dial-up? Explain how it is different from cable network.
37. What is Network security? Explain two measures than can be adopted for Network security.
38. optical disk over a magnetic disk.
39. What is a magnetic disk? Define 'optical disk'. List three advantages of an example
40. Explain five types of media through which data may be communicated..
41. Explain the four categories of programming languages. Also, indicate the category that is perceived to be the hardest to program.
42. Differentiate between Microcomputers, Minicomputers and Mainframes
43. Define computer virus. How do they infect and spread in a computer system? Explain at least three categories of viruses on the basis of their mode of existence. Give three examples of computer viruses.
44. Draw and explain any three topologies of a LAN.
45. What do you understand by formatting a disk? Write steps for formatting a disk and explain the various options for formatting a disk.
46. Differentiate the following:
 - (i) Volatile and Non-volatile memory
 - (ii) Magnetic disk and Magnetic tape
47. List all the layers in OSI reference model. Also, explain the functions and services offered by each and every layer.
48. What is an operating system? Mention the types of operating systems and explain any two of them in detail.
49. Explain the two different ways by which you can connect to the network.
50. Draw and briefly explain the memory hierarchy
51. Draw and explain the basic structure of CPU.
52. Define the basic characteristics of the following I/O devices.

(a) LCD Monitors

(b)Laser Printer

(c)Mouse

(d)Scanner

(e)Modems

53. Distinguish between primary and secondary memory.

54. What is meant by a microprocessor? Give the name of some popular microprocessors.

55. What capabilities does a computer possess? Give the limitations of a computer.

56. Give the full form of the abbreviations: CRT, TFT, VDU, OMR, MICR, OCR.

57. Explain multiprocessing in brief.

58. List out the various functions normally performed by an operating system.

59. What is System software? Give some example of system software.

60. Differentiate between the multiprogramming and multitasking.

61. Explain the three data transmission modes in brief.

62. Why modems are used in data communication systems?

63. Define the term network topology.

64. How WAN is different from LAN?

65. What is an OSI model?

66. What is an HTML document? Draw the structure of such a document.

67. What is meant by Internet? How it is related to Arpanet.

68. Differentiate between Application and Document windows.

69. Explain the following topics

- a. 1) .EXE 2) .COM 3) .BAT 4) .BAK

70. Write short notes on the following

- i. Virtual machine concept
- ii. Memory management
- iii. Scheduling

71. Explain the various states of a program in a computer system.

72. Explain two differences between multiprogramming and multitasking. Also give an example each of a multiprogramming and a multitasking operating system.

73. What is spooling? How does it improve the efficiency of an operating system?

74. Define the terms: Compiler, interpreter, Assembler, Loader, and Linker.

75. Differentiate between Buffering and Spooling.

76. Write the names of 4 popular operating systems.

77. Define the term internetworking.

78. Write short notes on :- 1) WWW 2) FTP 3) SMS 4) E-mail

79. What are the basic components of a data communication system?

80. Define the terms – Bridges, Gateways, Routers, and Switches