

BACHELOR OF MEDICAL LABORATORY TECHNOLOGY
SECOND SEMESTER
FUNDAMENTALS OF COMPUTER SCIENCE
BMLT - 206

(USE SEPARATE ANSWER SCRIPTS FOR OBJECTIVE & DESCRIPTIVE)

Duration: 3 hrs.

Full Marks: 70

Time: 20 min.

(PART-A: Objective)

Marks: 20

Choose the correct answer from the following:

1×20=20

1. The fastest type of computer is
 - a. Mainframe computer
 - b. Apple notebook
 - c. Super computer
 - d. Mini computer
2. CPU consists of
 - a. ALU & Memory
 - b. ALU & Control Unit
 - c. Control Unit & Memory
 - d. All of these
3. Which of the following is responsible for arithmetic and logic operations?
 - a. ALU
 - b. CPU
 - c. Memory
 - d. All of these
4. The translator which converts high level language into machine language is called
 - a. Assembler
 - b. Multiplexer
 - c. Compiler
 - d. None of these
5. DEMUX is also called
 - a. Data distributor
 - b. Data selector
 - c. Data analyzer
 - d. none
6. In 4:1 MUX, the number of select line is
 - a. 3
 - b. 2
 - c. 1
 - d. 4
7. The 2's compliment of the number 10101101 is
 - a. 01010010
 - b. 11010010
 - c. 01010011
 - d. 11101111
8. The hexadecimal form of the binary number 11111010 is
 - a. AF
 - b. EA
 - c. CD
 - d. FA
9. The 1's compliment of the number 10101101 is
 - a. 01010010
 - b. 11011010
 - c. 01011110
 - d. 01010011
10. Which of the following is Universal gate?
 - a. AND
 - b. OR
 - c. NOR
 - d. NOT

11. MS word is an example of
a. System software
c. Operating system
b. Application software
d. None of the above
12. Vacuum tube was used in
a. 3rd generation of computer
c. 1st generation of computer
b. 2nd generation of computer
d. 5th generation of computer
13. The base of binary number system is
a. 2
c. 8
b. 10
d. 16
14. The binary form of decimal 7 is
a. 101
c. 111
b. 110
d. 011
15. Hybrid computer uses
a. Digital signal
c. Both (a) & (b)
b. Analog signal
d. None
16. An example of output device is
a. Keyboard
c. CPU
b. Mouse
d. Printer
17. Which of the followings can store data permanently?
a. Main memory
c. Both (a) & (b)
b. Secondary memory
d. None
18. The decimal form of the binary number 1010 is
a. 7
c. 12
b. 8
d. 10
19. A computer can understand
a. Machine language
c. Assembly language
b. High level language
d. None of the above
20. Laptop is an example of
a. Mini computer
c. Mainframe
b. Micro computer
d. None of the above

[Part-B : Descriptive]

Time : 2 hrs. 40 min.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

1. Discuss the features, advantages and disadvantages of generation of computer. 10
2. What do you mean by MUX? Design a 4:1 MUX with the help of truth table. 10
3. a) Find the binary equivalent of the decimal number 13.25. 5+5=10
b) Convert $(11011.1011)_2$ into decimal.
4. What are the different types of software available in computer? Explain briefly. 10
5. a) Define DEMUX. Design a 1:2 DEMUX. 6+4=10
b) Convert $(101110101111)_2$ into hexadecimal number.
6. a) Explain with the help of diagram the Computer architecture. 6+4=10
b) Define Assembler and Compiler.
7. What are the different types of Computer? Explain briefly. 10
8. Write short notes on the followings: 5+5=10
 - a) Computer Language.
 - b) Half Adder.

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