2025/06

SET A

BACHELOR OF COMPUTER APPLICATION
SECOND SEMESTER
COMPUTER ORGANIZATION
BCA-921 [IDMJ]

[USE OMR FOR OBJECTIVE PART]

Duration: 3 hrs. **Full Marks: 70**

Objective

Time: 30 min. **Marks: 20**

Choose the correct answer from the following: *1X20=20*

1. 8085 is a
   a. 5-bit microprocessor
   b. 2-bit microprocessor
   c. 8-bit microprocessor
   d. None of the above

2. 8086 can access up to
   a. 128kb of memory
   b. 64kb of memory
   c. 1 Mb of memory
   d. None of the above

3. The Operating system that does not interact with the computer directly is
   a. Distributed OS
   b. Time Sharing OS
   c. Batch OS
   d. Network OS

4. The length of address bus of 8086 microprocessor is
   a. 16- bit
   b. 8- bit
   c. 20-bit
   d. 36-bit

5. A program written using only 0's and 1's is called
   a. High level language
   b. Assembly language
   c. Machine language
   d. All of these

6. Which of the following is a Non-volatile memory?
   a. ROM
   b. RAM
   c. Both
   d. None of the above

7. A computer can't operate without
   a. Primary memory
   b. Secondary memory
   c. Both
   d. None of the above

8. The decimal form of the binary number $(111)_2$ is
   a. 3
   b. 10
   c. 5
   d. 7

9. The 1's compliment of the number 10101101 is

a. 01010010 b. 11011010
c. 01011110 d. 01010011

10. Which of the followings does not have an instruction queue?

a. 8085 microprocessor b. 8086 microprocessor
c. Both d. None of the above

11. Which component of IoT is used to collect and transmit data ?

a. Gateway b. Sensors
c. Cloud d. Analytics

12. Microprocessor was used in

a. 3rd generation of computer b. 2nd generation of computer
c. 1st generation of computer d. 4th generation of computer

13. The base of Octal number system is

a. 2 b. 10
c. 8 d. 16

14. Which of the following is responsible for arithmetic and logic operations?

a. ALU b. CPU
c. Memory d. All of these

15. SIM is a

a. 1-bit instruction b. 2-bit instruction
c. 1-byte instruction d. 2-byte instruction

16. An example of output device is

a. Keyboard b. Mouse
c. Scanner d. Printer

17. Which of the followings is known as backup memory?

a. Primary memory b. Secondary memory
c. Both (a) & (b) d. None

18. Which of the following is a system software?

a. Application Software b. Operating System
c. Utility Software d. None of the above

19. CPU consists of

a. ALU & Memory b. ALU & Control Unit
c. Control Unit & Memory d. All of these

20. How to erase data in EPROM?

a. Using Vacuum tube

b. Using Transistor

c. Using Ultra-violet rays

d. All of these

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Descriptive

Time : 2 hrs. 30 min. Marks : 50

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

1. Discuss the features, advantages and disadvantages of generation of computers. 10

2. Discuss with the help of block diagram the architecture of computer. 10

3. Differentiate between 8085 and 8086 microprocessor. State the features of 8086 microprocessor. 10

4. What do you mean by Instruction set? Discuss the types of instruction set of computer. 10

5. a. Find the binary equivalent of the decimal number $(10.875)_{10}$. 5+5=10

   b. Convert $(1101.101)_2$ into decimal.

6. Explain the different types of memory available in computer. 10

7. What do you mean by operating system? Explain the functions and types of operating system. 10

8. What is SIM instruction? Write the advantages and disadvantages of SIM instruction. 10

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