LINCOLN UNIVERSITY COLLEGE

Texas College of Mgmt & IT

Mitrapark, Chabahil, Ktm

Department of BIT & BCS

Midterm Test-2074

Student Name:…….

Roll No:…….

Program: BIT	**FM : 100**
Subject: BCA	**PM : 50**
Level: BIT 1st Semester (1ST Batch) SET 'A'	**Time: 3 hrs.**

Attempt All Questions (Group A)

MCQ (1x30=30)

1. The first counting tool was the
   a) Stepped Reckoned
   b) Aba Zaba
   c) Abacus
   d) Punch Card
2. The first electronic computer was called
   a) ENIAC
   b) Apple IIe
   c) EDVAC
   d) UNIVAC
3. UNIVAC is
   a) Universal Automatic Computer
   b) Universal Array Computer
   c) Unique Automatic Computer
   d) Unvalued Automatic Computer
4. The basic operations performed by a computer are
   a) Arithmetic operation
   b) Logical operation
   c) Storage and relative
   d) All the above
5. What is the main difference between a mainframe and a super computer?
   a) Super computer is much larger than mainframe computers
   b) Super computers are much smaller than mainframe computers
   c) Supercomputers are focused to execute few programs as fast as possible while mainframe uses its power to execute as many programs concurrently
   d) Supercomputers are focused to execute as many programs as possible while mainframe uses its power to execute few programs as fast as possible.
6. The two kinds of main memory are:
   a) Primary and secondary
   b) Random and sequential
   c) ROM and RAM
   d) All of above
7. Which of the following is the first computer to use Stored Program Concept?
   a) UNIVAC
   b) ENIAC
   c) EDSAC
   d) None of above
8. The term gigabyte refers to
   a) 1024 bytes
   b) 1024 kilobytes
   c) 1024 megabytes
   d) 1024 gigabyte
9. A compiler is a translating program which
   a) Translates instruction of a high level language into machine language
   b) Translates entire source program into machine language program
   c) It is not involved in program's execution
   d) All of above
10. Which of the following is used as a primary storage device?
    a) Floppy
    b) Magnetic drum
    c) Hard Disks
    d) All of above
11. A register organized to allow to move left or right operations is called a ____
    a) Counter
    b) Loader
    c) Adder
    d) Shift register
12. A physical connection between the microprocessor memory and other parts of the microcomputer is known as
    a) Path
    b) Address bus
    c) Route
    d) All of the above
13. One millisecond is
    a) 1 second
    b) 10th of a seconds
    c) 1000th of a seconds
    d) 10000th of a seconds

14. Which of the following IC was used in third generation of computers?
    a) LSI
    b) MSI
    c) SSI
    d) Both a and b
15. CD-ROM is a
    a) Semiconductor memory
    b) Memory register
    c) Magnetic memory
    d) None of above
16. Instructions and memory address are represented by
    a) Character code
    b) Binary codes
    c) Binary word
    d) Parity bit
17. Instruction in computer languages consists of
    a) OPCODE
    b) OPERAND
    c) None of above
    d) Both A & B
18. Secondary storage memory is basically
    a) Volatile memory
    b) Non-volatile memory
    c) Backup memory
    d) None of the above
19. When power is switched OFF, it will lost its data, such type of memory is classified as
    a) Volatile storage
    b) Non-volatile storage
    c) Impact storage
    d) Non-impact storage
20. Time a device takes to read actual data is classified as
    a) Transfer time
    b) Seek time
    c) Seek delay
    d) Access delay
21. Hard discs, fixed head discs, floppy discs and optical discs all are types of
    a) Serial access storage
    b) Volatile access storage
    c) Non impact access storage
    d) Direct access storage
22. In case of, Zero-address instruction method the operands are stored in _____
    a) Registers
    b) Push down stack
    c) Accumulators
    d) Cache
23. The instruction ADD R1, 45 _____
    a) Finds the memory location 45 and adds that content to that of R1and stores it in R1.
    b) Adds 45 to the value of R1 and stores it in R1
    c) Finds the memory location 45 and adds that content to that of R1
    d) None of the mentioned
24. An instruction used to set the carry flag in a computer can be classified as
    a) Data transfer
    b) Process control
    c) Logical
    d) None of these
25. Binary code which gives an actual instruction is called
    a) Instruction code
    b) Logical code
    c) Function code
    d) Address
26. Most of time, computer instructions are divided into
    a) Function code
    b) Instruction code
    c) Operand
    d) Both A and C
27. Convert octal 36 to binary.
    a) 110110
    b) 100110
    c) 110011
    d) 011110
28. The hexadecimal equivalent of a binary 00100011 is _____.
    a) 21
    b) 20
    c) 23
    d) 30
29. The decimal equivalent of binary 10111110 is _____.
    a) 190
    b) 200
    c) 186
    d) 198
30. Convert the decimal number 3.375 to binary.
    a) 0101.1100
    b) 0011.1010
    c) 0011.0011
    d) 0011.0110

THE END

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Attempt All Questions (Group A)

MCQ (1x30=30)

1. UNIVAC is
   a) Universal Automatic Computer
   b) Universal Array Computer
   c) Unique Automatic Computer
   d) Unvalued Automatic Computer
2. EDVAC stands for _____.
   a) Electronic Discrete Variable Automatic Calculator
   b) Electronic Discrete Variable Automatic Computer
   c) Electronic Data Variable Automatic Calculator
   d) Electronic Data Variable Automatic Computer
3. Who invented the punch card?
   a) Charles Babbage
   b) Semen Korsakov
   c) Herman Hollerith
   d) Joseph Marie Jacquard
4. The basic operations performed by a computer are
   a) Arithmetic operation
   b) Logical operation
   c) Storage and relative
   d) All the above
5. Specific type of memory that can be erased anytime is classified as
   a) BROM
   b) DROM
   c) EPROM
   d) EROM
6. When Type of memory which is used to read data but not to write on it is classified as
   a) Random only memory
   b) Read access memory
   c) Read only memory
   d) Random access memory
7. What is the main difference between a mainframe and a super computer?
   a) Super computer is much larger than mainframe computers
   b) Super computers are much smaller than mainframe computers
   c) Supercomputers are focused to execute few programs as fast as possible while mainframe uses its power to execute as many programs concurrently
   d) Supercomputers are focused to execute as many programs as possible while mainframe uses its power to execute few programs as fast as possible.
8. The ALU of a computer responds to the commands coming from
   a) Primary memory
   b) Control section
   c) External memory
   d) Cache memory
9. A compiler is a translating program which
   a) Translates instruction of a high level language into machine language
   b) Translates entire source program into machine language program
   c) It is not involved in program's execution
   d) All of above
10. Which of the following is used as a primary storage device?
    a) Floppy
    b) Magnetic drum
    c) Hard Disks
    d) All of above
11. The A byte consists of
    a) One bit
    b) Four bits
    c) Eight bits
    d) Sixteen bits
12. A register organized to allow to move left or right operations is called a ____
    a) Counter
    b) Loader
    c) Adder
    d) Shift register

13. A physical connection between the microprocessor memory and other parts of the microcomputer is known as
    a) Path
    b) Address bus
    c) Route
    d) All of the above
14. One millisecond is
    a) 1 second
    b) 10th of a seconds
    c) 1000th of a seconds
    d) 10000th of a seconds
15. The main electronic component used in first generation computers was
    a) Transistors
    b) Vacuum Tubes and Valves
    c) Integrated Circuits
    d) None of above
16. Instructions and memory address are represented by
    a) Character code
    b) Binary codes
    c) Binary word
    d) Parity bit
17. CD-ROM is a
    a) Semiconductor memory
    b) Memory register
    c) Magnetic memory
    d) None of above
18. Secondary storage memory is basically
    a) Volatile memory
    b) Non-volatile memory
    c) Backup memory
    d) None of the above
19. When power is switched OFF, it will lost its data, such type of memory is classified as
    a) Volatile storage
    b) Non-volatile storage
    c) Impact storage
    d) Non-impact storage
20. Time In instruction format, address of any data location is said to be
    a) Function code
    b) Instruction code
    c) Operand
    d) Logical code
21. Hard discs, fixed head discs, floppy discs and optical discs all are types of
    a) Serial access storage
    b) Volatile access storage
    c) Non impact access storage
    d) Direct access storage
22. In case of, Zero-address instruction method the operands are stored in _____
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23. The instruction ADD R1, 45 _____
    a) Finds the memory location 45 and adds that content to that of R1and stores it in R1.
    b) Adds 45 to the value of R1 and stores it in R1
    c) Finds the memory location 45 and adds that content to that of R1
    d) None of the mentioned
24. The control unit of computer
    a) Performs ALU operations on the data
    b) Controls the operation of the output devices
    c) Both (a) and (b)
    d) Directs the other unit of computers
25. A basic instruction that can be interpreted by a computer generally has
    a) An operand and an address
    b) A decoder and an accumulator
    c) Sequence register and decoder
    d) None of these
26. Binary code which gives an actual instruction is called
    a) Instruction code
    b) Logical code
    c) Function code
    d) Address
27. Convert binary 10101010 to octal.
    a) 2068
    b) 5228
    c) 2558
    d) 2528
28. The hexadecimal equivalent of a binary 10001100 is _____
    a) 8C16
    b) C816
    c) 8616
    d) CC16
29. Convert octal 377 to binary.
    a) 11101101
    b) 01111011
    c) 10110111
    d) 11111111
30. Convert the decimal number 6.75 to binary.
    a) 0110.1100
    b) 0111.1100
    c) 0110.0110
    d) 0110.1010

THE END

BIT – BCA

SET "A"

GROUP 'B'

Long Questions (2 × 20 =40)

Attempt all questions:

1. What is an instruction format and on what basis the instruction sets are differentiated. Explain the term addressing mode and different types of addressing modes with examples.
2. Describe the term storage device and explain the four basic types of storage devices with example. Explain in detail the difference between RAM and ROM along with its classification.

GROUP 'C'

Short Question (6 × 5 =30)

Attempt all questions:

3. Define the term Computer. Explain the structural components of CPU with diagram.
4. What do you mean by stack? Explain the register stack organization in detail.
5. Explain the difference between RAM and ROM in brief.
6. Explain basic four logical micro-operation in detail with figure.
7. Evaluate the following instruction X=(A+B)*(C+D) with the help of two address and three address instruction.
8. Convert $(1101101101)_2$ to equivalent octal, hexadecimal and decimal number system.

THE END

BIT – BCA

SET "B"

GROUP 'B'

Long Questions (2 × 20 =40)

Attempt all questions:

1. What do you mean by the term stack and explain types of stack organization in detail? Explain the general register organization in detail with figure.
2. Define CPU and explain the various basic components of CPU and operations performed by CPU in brief. Explain the various types of instruction types with example.

GROUP 'C'

Short Question (6 × 5 =30)

Attempt all questions:

3. What do you mean by the term data? Explain the various types of data with example.
4. What do you mean by storage device? Explain the secondary storage devices with example.
5. Explain the difference between Volatile and Non-volatile memory.
6. Explain shift micro operation in detail.
7. Explain the different types of instruction on the basis of number of addresses of instruction.
8. Evaluate the following instruction X=(A+B)*(C+D) with the help of two address and three address instruction.

THE END