COMPUTER COMPETITIVE CHAPTER 07 - ENG PART-2 - DATA REPRESENTATION & NUMBER SYSTEM

Total points 50/50

Minimum Passing Marks = 45

STUDENT NAME *

Viva

✓ 1. One megabyte is equal to approximately ..... * 1/1

- ○ 1000 bits
- ○ 1000 bytes
- ◉ 1 million bytes ✓
- ○ 1 million bits
- ○ 2000 bytes

✓ 2. How many options does a binary choice offer ? * 1/1

- ○ One
- ◉ Two ✓
- ○ Three
- ○ It depends on the amount of memory in the computer
- ○ None of these

✓ 3. The …… indicates how much data a particular storage medium can hold *1/1

- ○ Access
- ◉ Capacity ✓
- ○ Memory
- ○ Storage
- ○ None of these

✓ 4. The smallest unit of information a computer can understand and process is known as …… *1/1

- ○ Digit
- ○ Kilobyte
- ◉ Bit ✓
- ○ Byte
- ○ None of these

✓ 5. A compute works on a …….. number system * 1/1

- (●) Binary ✓
- ( ) Octal
- ( ) Decimal
- ( ) Hexadecimal
- ( ) None of these

✓ 6. Computers use the ….. system to process data . * 1/1

- ( ) Processing
- ( ) Kilobyte
- (●) Binary ✓
- ( ) Representational
- ( ) None of these

✓ 7. Information on a computer is stored as ……. * 1/1

- ( ) Analog data
- (●) Digital data ✓
- ( ) Modem data
- ( ) Watts data
- ( ) None of these

✓ 8. In the binary language each letter of the alphabet, each number and each special character is made up of a unique combination of ….. *1/1

- ○ Eight bytes
- ○ Eight kilobytes
- ○ Eight characters
- ◉ Eight bits ✓
- ○ None of these

✓ 9. A string of eight 0s and 1s is called a…… * 1/1

- ○ Megabyte
- ○ Kilobyte
- ○ Gigabyte
- ◉ Byte ✓
- ○ None of these

✓ **10.** What is the hexadecimal equivalent of decimal 15? * 1/1

- ○ A) D
- ○ B) E
- ◉ C) F ✓
- ○ D) 10

✓ **11.** Convert $(1100)_2$ to decimal: * 1/1

- A) 10
- B) 11
- C) 12 ✓
- D) 13

✓ **12.** 1 Kilobyte (KB) = * 1/1

- A) 1000 bytes
- B) 1024 bits
- C) 1024 bytes ✓
- D) 1000 bits

✓ **13.** Binary 10000 is equal to decimal: * 1/1

- A) 8
- B) 10
- C) 16 ✓
- D) 20

✓ **14.** Which of the following is not a number system? * 1/1

- A) Binary
- B) Decimal
- C) Symbolic ✓
- D) Hexadecimal

✓ **15.** The position of a digit in a number determines its: * 1/1

- A) Value ✓
- B) Base
- C) Weight
- D) Length

✓ **16.** In Hexadecimal, what is the decimal value of (A)? * 1/1

- A) 9
- B) 10 ✓
- C) 11
- D) 12

✓ **17.** The binary number system is also known as: * 1/1

- (●) A) Base 2 ✓
- ( ) B) Base 8
- ( ) C) Base 10
- ( ) D) Base 16

✓ **18.** Octal number $(17)_8$ is equal to decimal: * 1/1

- (●) A) 15 ✓
- ( ) B) 17
- ( ) C) 13
- ( ) D) 16

✓ **19.** Which one is **not** a valid binary number? * 1/1

- ( ) A) 101
- ( ) B) 1101
- (●) C) 210 ✓
- ( ) D) 1001

✓ **20.** The smallest unit of data in computer is: * 1/1

- A) Byte
- (●) B) Bit ✓
- C) Nibble
- D) Word

✓ **21.** $(1010)_2$ equals ___ in hexadecimal. * 1/1

- (●) A) A ✓
- B) B
- C) C
- D) D

✓ **22.** The hexadecimal number $(1A)_{16}$ equals ___ in decimal. * 1/1

- (●) A) 26 ✓
- B) 27
- C) 28
- D) 30

✓ **23.** Convert 100101 in binary to decimal: * 1/1

- A) 37
- B) 39
- C) 41 ✓
- D) 45

✓ **24.** Which of the following is **not** a positional number system? * 1/1

- A) Decimal
- B) Octal
- C) Binary
- D) Roman ✓

✓ **25.** Which base does the decimal system use? * 1/1

- A) 2
- B) 10 ✓
- C) 8
- D) 16

✓ **26.** ASCII stands for: * 1/1

- (●) A) American Standard Code for Information Interchange ✓
- ( ) B) American Symbolic Code for Internal Integration
- ( ) C) Associated System Code for Information Input
- ( ) D) American System Code for Integrated Interface

✓ **27.** In 8-bit ASCII, how many characters can be represented? * 1/1

- ( ) A) 128
- (●) B) 256 ✓
- ( ) C) 512
- ( ) D) 64

✓ **28.** Unicode supports how many characters? * 1/1

- ( ) A) 128
- ( ) B) 256
- (●) C) 65,536 ✓
- ( ) D) 1,000

✓ **29.** A group of 16 bits is called: * 1/1

- A) Byte
- B) Nibble
- C) Word ✓
- D) Double word

✓ **30.** How many bits are in 1 Megabyte (MB)? * 1/1

- A) 1,048,576 bits
- B) 1,024 bits
- C) 8,388,608 bits ✓
- D) 8,000 bits

✓ **31.** Which number system is used internally by computers? * 1/1

- A) Decimal
- B) Octal
- C) Binary ✓
- D) Hexadecimal

✓ **32.** How many symbols are used in binary system? * 1/1

- (●) A) 2 ✓
- ( ) B) 8
- ( ) C) 10
- ( ) D) 16

✓ **33.** Which of the following is used to represent characters in computers? *1/1

- ( ) A) BCD
- ( ) B) ASCII
- ( ) C) EBCDIC
- (●) D) Both B and C ✓

✓ **34.** Convert decimal 255 to binary: * 1/1

- ( ) A) 11111100
- ( ) B) 11110000
- (●) C) 11111111 ✓
- ( ) D) 11001111

✓ **35.** How is negative number represented in binary? * 1/1

- ○ A) 1's complement
- ○ B) 2's complement
- ○ C) Sign-magnitude
- ◉ D) All of the above ✓

✓ **36.** Which is not a data representation form? * 1/1

- ○ A) Text
- ○ B) Graphics
- ○ C) Video
- ◉ D) Storage ✓

✓ **37.** Convert hexadecimal (2F) to decimal: * 1/1

- ○ A) 46
- ◉ B) 47 ✓
- ○ C) 48
- ○ D) 49

✓ **38.** Which of the following converts high-level language to machine code? *1/1

- A) Compiler
- B) Assembler
- C) Interpreter
- D) All of these ✓

✓ **39.** In 2's complement, 1111 represents which number in decimal (4-bit)? *1/1

- A) -1 ✓
- B) -2
- C) 15
- D) 14

✓ **40.** What is the binary equivalent of $(3F)_{16}$? * 1/1

- A) 111111 ✓
- B) 111110
- C) 101111
- D) 111100

✓ **41.** Which number system is also called base-16? * 1/1

- A) Binary
- B) Octal
- C) Decimal
- (●) D) Hexadecimal ✓

✓ **42.** Which of the following represents characters in binary form? * 1/1

- A) Unicode
- B) ASCII
- C) EBCDIC
- (●) D) All of the above ✓

✓ **43.** What is the decimal value of binary 11010? * 1/1

- A) 24
- B) 25
- (●) C) 26 ✓
- D) 27

✓ **44.** How many bits are required to represent a single ASCII character? * 1/1

- (●) A) 8 ✓
- ( ) B) 16
- ( ) C) 32
- ( ) D) 4

✓ **45.** In binary, what is the result of 1011 + 1100? * 1/1

- (●) A) 10111 ✓
- ( ) B) 10011
- ( ) C) 11011
- ( ) D) 11111

✓ **46.** What is the hexadecimal representation of binary 11011010? * 1/1

- (●) A) DA ✓
- ( ) B) AB
- ( ) C) AD
- ( ) D) BD

✓ **47.** The process of converting from decimal to binary is known as: * 1/1

- A) Encoding
- B) Decoding
- (●) C) Conversion ✓
- D) Digitization

✓ **48.** Convert octal 75 to decimal: * 1/1

- (●) A) 61 ✓
- B) 62
- C) 61
- D) 65

✓ **49.** Which is the odd one out? * 1/1

- A) Bit
- B) Byte
- C) Nibble
- (●) D) Node ✓

✓ **50.** The binary equivalent of decimal 10.25 is: * 1/1

- (●) A) 1010.01 ✓
- ( ) B) 1010.1
- ( ) C) 1010.10
- ( ) D) 1011.01