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SEAT No._____ No. of Printed Pages: 2

[21]

SARDAR PATEL UNIVERSITY

BCA SEM-I EXAMINATION ---2022

Fundamental of Computer Organization (US01CBCA25)

DATE: 16-06-2022 Thursday **TIME:** 09:00AM TO 11:00AM **MARK: 70**

16/06/22, Thursday

Q1. MCQ **[10]**

1. Numbers are stored and transmitted inside a computer in
   A. Binary form B. ASCII code form
   C. Decimal form D. alphanumeric form
2. Which generation of computer developed using Vacuum tube?
   A. First generation B. Second generation
   C. Third generation D. Forth generation
3. The number of digits in Octal system is
   A. 15 B. 17
   C. 16 D. 8
4. The maximum number stored in 8 bits using 1's complement is ___
   A. 127 B. 128
   C. 129 D. -127
5. ASCII stands for
   A. America standard coded information interchange
   B. American standard code for information interchange
   C. America standard coded interchange information
   D. American standard coded interchange information
6. Extra bit added to a string of bits to detect errors is known as_____
   A. Additional bit B. Correction bit
   C. Parity bit D. updation bit
7. Floppy disk is a
   A. Removable disk B. Permanent Disk
   C. direct access disk D. None of these
8. MIMD is_____
   A. Multiple Instruction Multiple Data
   B. Multiple Items Multiple Data
   C. Multiple Instruction Multiple Database
   D. None of above
9. Which one is the input device?
   A. Printer B. Scanner
   C. Plotter D. none of them
10. Which printer gives the best result of printing?
    A. Dot-matrix printer B. Laser printer
    C. inkjet printer D. none of these

Q2. True / False & Blanks. [08]

1. The digit B in Hexadecimal system is equivalent to _____in decimal system
2. In _____ parity the total number of 1's in the complete code including parity bit is odd number.
3. In pipeline a single instruction is divided in _____ stages.
4. _____ is a pointing device.

(P.T.O.)

5. The ALU and CU jointly known as CPU. (T/F)
6. ASCII equivalent of "d" is 100 (T/F)
7. ROM memory is permanent type memory (T/F)
8. Plotter is input device (T/F)

Q3. Answer in brief. (Any 10 out of 12) [20]

1. Write any five features of second generation computer.
2. $(753)_8 = (?)_{16}$
3. $(110011)_2 - (1100)_2$
4. Explain 2's complement method with example.
5. Explain even parity.
6. Explain ASCII character code with example.
7. Explain Cache memory.
8. List stages of pipelining
9. What is the importance of memory Buffer Register (MBR).
10. What do you mean by inkjet printer?
11. Give Two differences between input device and output device.
12. What is mouse?

Q4. Answer in detail. (Any 4 out of 8) [32]

1. Explain Hexa-decimal number system in detail and calculate $(765)_{10} = (?)_{16}$
2. Explain first generation of computer
3. Write down steps of instruction execution cycle.
4. Explain Hamming code method with example (odd parity hamming code of "a").
5. Explain Hard Disk with diagram.
6. Explain multifunctional unit.
7. Explain Keyboard with all kind of keys.
8. Explain dot-matrix and laser printer.

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