SARDAR PATEL UNIVERSITY
BCA (SEM-1) External Examination
Friday, 18th Nov 2016
US01CBCA02 - Computer Organization

Time: 10:00a.m to 01:00p.m   **Marks: 70**

Q.1   Do as directed.   [10]
1. Where does a computer add and compare data?
         A.   Hard disk   B.   Floppy disk
         C.   CPU   D.   Memory chip

2 CPU does not perform the operation
         A.   data transfer   B.   logic operation
         C.   arithmetic operation   D.   all of above

3 Processors of all computers, whether micro, mini or
      mainframe must have
         A.   ALU   B.   Primary storage
         C.   Control unit   D.   All of above

4 The 4-bit binary number 0111 represents
         A.   15   B.   -7
         C.   7   D.   -1

5 A byte corresponds to
         A.   4 bits   B.   8 bits
         C.   16 bits   D.   32 bits

6 ASCII equivalent of A is
         A.   66   B.   67
         C.   68   D.   65

7 MIMD is_____
         A. Multiple Instruction Multiple Data
         B. Multiple Items Multiple Data
         C. Multiple Instruction Multiple Database
         D. None of above

8.   The Full form of RAM is.
         A. Read only memory   B. Read and write memory
         C. Random access memory   D. Really a memory

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

Q.2   Answer the following [Any ten]   [20]
         1. Define : Hardware with examples
         2. Define : Software with examples
         3. List applications of computer
         4. Draw the block diagram of computer
         5. What is number system? List all number systems
         6. Explain odd and eve parity
         7. Explain 2's complement method with example.
         8. Explain ASCII character code with example.

9. What is Instruction register?
10. Define Stack addressing.
11. Give two differences between input device and output device.
12. List steps of Instruction Execution cycle.

Q.3 A Do as directed . [06]
  1. $(110011101)_2 = (?)_{16}$
  2. $(345)_8 = (?)_{10}$
  3. $(9871)_{10} = (?)_2$

  B Explain binary number system with example. [04]

OR

Q.3 A Draw the Block diagram of Computer and explain its functions. [06]

  B Do as directed. [04]
  1. $100111.1000 + 111001.11100$
  2. $11100111.11 - 11111.01$

Q.4 A Explain storage representation method with example. [06]

  B Write a short note on Unicode. [04]

OR

Q.4 A Explain instruction execution cycle with Von Neumann machine [06]

  B Construct Even parity hamming code for "C" , where ASCII value of C = 67. [04]

Q.5 A Write a short note on Secondary Memory? [06]
  B Write a note on pipeline Machine. [04]

OR

Q.5 A Explain array processor with diagram [06]

  B Explain the role of Registers in computer storage [04]

Q.6 A List all Addressing Technique and Explain any two in detail with examples. [06]
  B Differentiate between line printer and inkjet printer. [04]

OR

Q.6 A List input devices explain any two. [06]
  B Differentiate between dot-matrix and laser printer. [04]

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