SARDAR PATEL UNIVERSITY
BBA(ISM) -1st SEM Examination
Logical Organization Of Computers (UM01CBBS02)
Date: 16/04/2016 , Saturday
Time: 2.30 P.M TO 4.30 P.M

Total Marks: 60

Note: All Question Carry Equal Marks.

Q-1 [A] What is number system? Explain Binary ,Octal ,Hexadecimal &
Decimal number system. [07]

[B] Convert following number System [08]

i) $(1AF)_{16} = (\quad)_{10}$ ii) $(101010.101)_2 = (\quad)_{10}$

iii) $(25.75)_{10} = (\quad)_2$ iv) $(25)_8 = (\quad)_{10}$

OR

Q-1 [A] Explain Signed Magnitude, 1's Complement & 2's Complement? [07]

[B] What is error detection & Correction code? Explain Hamming code
method with suitable examples. [08]

Q-2 [A] Explain AND , NOT, NOR Gates in detail with **Circuit diagram** &
Truth table. [07]

[B] Prove the following theorem by method of perfect induction

i) $x + x \cdot y = X$ ii) $x \cdot (\overline{X} + y) = X \cdot y$ [08]

OR

Q-2 [A] Explain OR , NAND, XOR Gates in detail with **Circuit diagram** &
Truth table. [07]

[B] Prove the following theorem i) $x + x = X$ $X \cdot X = X$ [08]

ii) $x + 1 = 1$ $x \cdot 0 = 0$

(P.T.O.)

①

Q-3 [A] Explain Instruction Execution Cycle in details?   [07]

    [B] What is ALU? Explain Registers .What are the different types of registers

        & their functions.   [08]

<div align="center">

OR

</div>

Q-3 [A] Explain control unit in detail with diagram.   [07]

    [B] What is difference between Multifunctional unit processor &

        Multiprocessor. Explain with diagram   [08]

Q-4 [A] What is difference between Volatile & Non-Volatile memory?   [07]

    [B] What is Printer ?Explain any two types of Printers in detail with

        Diagram.   [08]

<div align="center">

OR

</div>

Q-4 [A] What is KEY BOARD? Explain functionality of KEY BOARD.   [07]

    [B] Explain in detail : i) Floppy Disk   ii) OCR   [08]

<div align="center">

-----------BEST LUCK---------

</div>