C.U.SHAH UNIVERSITY
Winter Examination-2020

Subject Name: Computer Basics & Organization

Subject Code: 4CS01BCB1   **Branch: BCA**

Semester: 1   **Date: 10/03/2021**   **Time: 03:00 To 06:00**   **Marks: 70**

Instructions:
(1) Use of Programmable calculator & any other electronic instrument is prohibited.
(2) Instructions written on main answer book are strictly to be obeyed.
(3) Draw neat diagrams and figures (if necessary) at right places.
(4) Assume suitable data if needed.

Q-1	**Attempt the following questions:**	**(14)**
a)	Write a full form of DMA.	
b)	Define : Number System	
c)	4 Nibble = ___ bit.	
d)	Write full form of PROM.	
e)	Find 2's complement of (11011111).	
f)	Define Interrupt.	
g)	Write a full form of DVD.	
h)	Write a full form of IBM.	
i)	What is IEEE standard for WiMAX?	
j)	Write a name of first microprocessor.	
k)	Write full form of LCD..	
l)	Write application of main frame computer.	
m)	Write full form of MICR.	
n)	Write full form of BCD.	

Attempt any four questions from Q-2 to Q-8.

Q-2	**Attempt all questions.**	**(14)**
(a)	What do you mean by Asynchronous Data Transfer? Explain in detail	**07**
(b)	Draw memory hierarchy and explain RAM and ROM with its types	**07**

Q-3	**Attempt all questions**	**(14)**
(a)	Write a short note on Wi-Fi	**04**
(b)	Write a short note on GPS	**03**
(c)	Explain Computer Generations.	**07**

Q-4	**Attempt all questions**	**(14)**
(a)	Explain 4:1 MUX.	**07**
(b)	Enlist and explain characteristics of Computer.	**04**

(c) Explain Ports. (any three)   **03**

Q-5   **(14)**

(a) Explain AND,OR,NOT,NAND,NOR,XOR,XNOR gate with its logical symbol, truth table, equation.   **07**

(b) Explain Duplex system.   **03**

(c) Explain Assembler, Interpreter and Compiler.   **04**

Q-6   **(14)**

(a) Write a short note on Mouse and Keyboard.   **07**

(b) Explain Scanner with its types.   **07**

Q-7   **(14)**

(a) Do as directed :   **07**
1. $(144)_{10} = (~ ? ~)_2$
2. $(10110111)_2 = (~ ? ~)_8$
3. $(1010110) + (1101)$
4. $(11010) - (001)$
5. $(56)_{10} = (~ ? ~)_8$
6. $(64)_8 = (~ ? ~)_{16}$
7. Find 2's complement of (10010111)

(b) Explain: Stack Operation with example.[Perform $5*4+3*2$]   **07**

Q-8   **(14)**

(a) Explain Printer with its types.   **07**

(b) Write a note on: Magnetic Tape.   **03**

(c) Explain: Half Adder.   **04**