C.U.SHAH UNIVERSITY
Winter Examination-2020

Subject Name: Computer Basics & Organization

Subject Code: 4CS01ICO2   **Branch: B.Sc.IT**

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) Nibble =_____bit.
b) Plotter is _____type of device.
c) What is Operating system?
d) ASCII stands for_____.
e) Stack pointer always point to _____ of the stack.
f) _____ is the base of hexadecimal number system.
g) Conversion: $(1000101)_2=(\text{_____})_8$
h) MICR Stands for_____.
i) What is the use of Joystick?
j) What is computer?
k) Conversion: $(152)_8=(\text{_____})_{16}$
l) OCR Stands for _____.
m) What is Bluetooth?
n) BCD Code has ____bits.

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

Q-2   **Attempt all questions**
a) Do as directed: **07**
   i.) $(532.11)_{10}=(\text{_____})_2$
   ii.) $(11010111.111)_2=(\text{_____})_8$
   iii.) $(353)_{10}=(\text{_____})_{16}$
   iv.) $(4A9.2B)_{16}=(\text{_____})_{10}$
   v.)   Binary Addition: 00011010 +10001100
   vi.)   Binary Subtraction: 10110101 − 00101101
   vii.)   2's Complement : 111011101
b) Draw a neat block diagram of computer & explain it.   **07**

Q-3   **Attempt all questions**

a) What is Printer? Explain it with its types.   **07**

b)	Write a short note on types of computers based on its size.	**07**

Q-4   **Attempt all questions**

a)	What is adder? Explain Half adder with its block diagram, circuit and truth table.	**05**
b)	What are gates? Explain basic gates (AND, OR & NOT) with its symbol and truth table.	**05**
c)	Explain Assembler and Compiler.	**04**

Q-5   **Attempt all questions**

a)	Explain Duplex System	**07**
b)	List out various types of OS. Explain any 3 types of operating system.	**07**

Q-6   **Attempt all questions**

a)	Write a note on Bluetooth. Explain Piconet and Scatternet.	**07**
b)	Write a note on Asynchronous data transfer.	**07**

Q-7   **Attempt all questions**

a)	Explain in detail : Generation of computer	**07**
b)	Explain memory hierarchy in detail.	**07**

Q-8   **Attempt all questions**

a)	List out Input devices & explain any 3 Input devices.	**07**
b)	What is Monitor? Explain CRT and LCD monitors.	**07**