



GG-133

Seat No. _____

B. C. A. (Sem. I) Examination

March – 2021

BCA-103 : Computer Organization

(Old & New Course)

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

1 (A) Answer the following : 6

- (1) Explain: Computer, Software.
- (2) Difference between Digital and Analog system.
- (3) Full form: BITS, GUI

(B) Attempt any Two : 12

- (1) Explain Laptop and Super Computer in detail.
- (2) Discuss any three Generation of Computer in detail.
- (3) Explain Major Parts of Computer.

2 (A) Answer the following : 5

- (1) What is Seek time and Latency time?
- (2) Give Full Name: LCD, VDU
- (3) List out Input & Output Device
- (4) What is Pixel?
- (5) What is Cache Memory?

(B) Attempt any Two : 12

- (1) Explain CRT in detail.
- (2) Explain ROM with its types.
- (3) Explain Communication Device.

3 (A) Answer the following :

6

- (1) List out the types of Number System:
Explain any one with Example.
- (2) Explain, Binary Addition Rules with Ex:
 $1010 + 1010$
- (3) Subtract 11011 from 11110

$$\begin{array}{r} 11 \\ 1010 \\ + 1010 \\ \hline 11000 \end{array}$$

(B) Attempt any **Six** :

- (1) $1010.11 + 1101.10 + 1001.11 + 1111.11$
- (2) $(10111101.10111)_2 = ()_{10} = ()_8$
- (3) $(B9AF.AE)_{16} = ()_8$
- (4) $(4057.06)_8 = ()_{10}$
- (5) $(8715)_{10} = ()_{16}$
- (6) $(4BAC)_{16} = ()_2$
- (7) $(49056)_{10} = ()_2$

$$\begin{array}{r} 12 \\ 11011 \\ - 11110 \\ \hline 00010 \end{array}$$

4 (A) Answer the following :

5

- (1) Explain XS-3 code with Ex: $5 + 3$
- (2) What is gate? Explain Universal gate.

(B) Attempt any **Two** :

12

- (1) Explain Half adder and Full adder in detail.
- (2) Explain 8421 BCD code with Ex: $25 + 13$
- (3) Explain Decoder with its types.