

Paper Code : 21301

F-401

B.C.A. Ist Year (First Semester)

Examination, 2021

(New Course)

Paper-BCA-101

**COMPUTER FUNDAMENTAL AND
PROGRAMMING IN C**

Time : Three Hours] [Maximum Marks : 70

Note : Attempt any five questions.

1. (a) What do you mean by Computers?
Discuss various generations of Computer in brief?
- (b) Draw and explain a neat block diagram of Computer?
2. (a) What are various memories, types, explain their characteristics?

(1)

P.T.O.

(b) Write classification of Computer?

3. (a) Convert following :

(i) $(3AC)_{16} = (?)_2$

(ii) $(53.72)_{10} = (?)_{16}$

(iii) $(746)_8 = (?)_2$

(iv) $(101010111)_2 = (?)_{10}$

(v) $(5.72 \times 10^2)_{10} = (?)_8$

(b) What do you mean by ASCII Character?

4. (a) What are various Software types, explain?

(b) Differentiate between :

(i) Machine Language and Assembly language

(ii) Top down and bottem up approach?

5. What are various program planning tools, explain in brief? Draw and explain a flow Chart to find larger of two numbers?

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(2)

6. (a) What are arrays? Write a 'C' program to find smallest number of an array of 10 numbers?
- (b) Write a 'C' program to perform searching an element in an array of 10 numbers?
7. (a) What are loops, write a program to print "Hello World" 20 times using any loop?
- (b) What do you mean by debugging explain?
8. Write short notes (any **four**) :
- (i) EBSDIC
 - (ii) Library functions
 - (iii) Variables in 'C' programs
 - (iv) I/O devices
 - (v) Testing
 - (vi) History of computers