



**First Year (F.Y.B.C.A.Science)**

**BCA-11101 & 11102: Fundamentals of Computers and C Programming**

**(Semester I)**

**Program:** BCA  
**Program Specific:** BCA(Sci)  
**Course Type:** CC  
**Paper:** I & II

**Credits:** 4  
**Time:** 3 Hours  
**Max. Marks:** 60  
**SET:** A

**Instructions to the candidate:**

- 1) All questions are compulsory.
- 2) Figures to the right indicate full marks.
- 3) Draw a well labelled diagram wherever necessary
- 4) Use Separate Answer sheet for Section-I and Section-II.

**Section - I: Fundamentals of Computers**

**Q1) Answer the following**

**[5 X 1= 5]**

1. Define the term Computer?
2. Define Peripherals
3. What is Editor?
4. What is spreadsheet?
5. What is Google Drive.

**Q2) Answer the following (Attempt any 5)**

**[5 X 2 =10]**

1. Explain the functionality of Computer?
2. Write a note on binary number system?
3. List different types of programming languages?
4. List the parts of computers.
5. What are the features of Word processors?
6. Define the terms: a) Bit & Byte b) File & Folder
7. Differentiate between RAM and ROM ?

**Q3) Answer the following/Write short notes on following (Attempt any 2)**

**[2 X 5= 10]**

1. What is operating system? List the types of operating system and explain any two.
2. Perform the following binary operation with steps.
  - a.  $(10101)_2 + (1011)_2 = (?)_2$
  - b.  $(11101)_2 - (1010)_2 = (?)_2$

3. What are the Network Devices? Explain working function of any three devices.
4. What are the I/O devices? Explain working function of any three output devices.

**Q4) Answer the following (Attempt any 1)**

**[1X 5 = 5]**

1. Explain any five characteristic of Computer?
2. What is Software? Explain types of Softwares.

## **Section - II: C Programming**

**Q1) Answer the following**

**[5 X 1= 5]**

1. What is the return type of a function that doesn't return any value in C?
2. List basic data types in C.
3. What is syntax of conditional operator?
4. What is use of getchar ( ) function?
5. Which operator is used for assigning a value to a variable in C.

**Q2) Answer the following (Attempt any 5)**

**[5 X 2 =10]**

1. Define 1) Flowchart 2) Algorithm
2. Explain increment and decrement operators in C?
3. What will be the output of following program?

```
#include<stdio.h>

int main()
{ int i=1;
  for(i=1;i<=5;i++)
  {
    if(i==3)
    {
      continue;
    }
    printf("%d \n",i);
  }
  return 0;
}
```

4. Explain control statements in C?
5. What is an infinite loop and how can you create one in C?
6. What is a variable in C?
7. What is function recursion in C?

**Q3) Answer the following/Write short notes on following (Attempt any 2) [2 X 5= 10]**

1. Write an algorithm to find maximum of three numbers. Write program for same.
2. Illustrate with an example difference between while and do while loop.
3. What is a function? What are types of function? Explain user defined function with example.
4. Write short note on Array.

**Q4) Answer the following (Attempt any 1) [1X 5 = 5]**

1. Explain with example nested if statement in C.
2. Define an identifier? State the rules for naming identifiers.

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