

**End Semester Examination of Semester-I, 2018**

**Subject : BCA**

**Paper : BCA-102**

**Full Marks : 70**

**Time : 3 Hrs**

*The figures in the margin indicate the marks  
corresponding to the question*

*Candidates are requested to give their answers  
in their own word as far as practicable.*

*Illustrate the answers wherever necessary.*

**Group A**

1. Answer any five out of eight questions: 2x5=10
- i) Define “continue” statement with proper example.
  - ii) How can you measure the memory size of a variable in C. Give example?
  - iii) What do you mean by pointer?
  - iv) Define Recursion. Give a simple example of infinite recursion in C.
  - v) What are the basic difference between int and long int data type in C?
  - vi) Differentiate bitwise OR and logical OR operation in C.
  - vii) Why C-Language is called case-sensitive?
  - viii) What is structure?

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**Group B**

Answer any five out of seven questions :

5x4=20

2. Differentiate between while and do-while loop using suitable example.
3. Write a program to swap the contents of two variables without using third variable.
4. Explain the utility of gets( ), getch( ) and getche( ) functions.
5. What do you mean by type casting in C? Explain with an example?
6. Write a C program to print fibonacci series upto n terms using recursion.
7. What do you mean by the post increment and pre-increment of a variable? Differentiate between them using suitable example.
8. What do you mean by "Pointer to an array"?

**Group C**

Answer any four out of six questions:

10x4=40

9. What do you mean by "Call by Value" and "Call by Reference" mechanism in C. Explain with proper example?

10. a) What is string? Give example.  
b) What will be the output of the following code with reason?

```
main()
{ int a = 5;
  int *b, **c;
  b = &a;
  c = &b;
  print f ("%d%d", *b, **c),
}
```

- c) Write a program to reverse a string. 2+3+5
11. Define storage classes in C? Explain all the storage classes with example?
12. What is function prototyping? How functions are defined? Give example?  
Using an example explain the utility of strcat() and strcmp() functions. 2+2+6
13. a) Write a program to find the factorial of 0 to 10.  
b) Write a program to check whether a number is prime or not. 6+4
14. a) Write a program to find maximum and minimum no from an array of 10 elements.  
b) What are macros? Explain with example. 6+4
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