



K18U 2221

Reg. No.: .....

Name: .....

I Semester B.C.A. Degree (CBCSS – Reg./Supple./Improv.) Examination,  
November 2018

Core Course

1B01BCA : PROGRAMMING IN C

(2014 Admn. Onwards)

Time : 3 Hours

Max. Marks : 40

SECTION – A

Answer **all** questions. **Half** mark **each**.

1. a) The number of Keywords in C is \_\_\_\_\_.
- b) Specify the operator/function used to do exponentiation.
- c) Formal arguments are created at a place in memory called \_\_\_\_\_.
- d) ASCII value of last character in a string is \_\_\_\_\_.
- e) C compiler performs bounds checking on character arrays. True or False.
- f) \_\_\_\_\_ function places the pointer at the beginning of a file.
- g) main() is an example for \_\_\_\_\_ function.
- h) The initial value of a variable declared in static storage class is \_\_\_\_\_.

(8×.5=4)

SECTION – B

Answer **any 7** questions. **2** marks **each**.

2. What is algorithm ?
3. What are the different types of instructions ?
4. List out the operations that can be performed on pointers.
5. What are the different types of functions ?

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```
6. char a[] = "Ist", *b = "BCA";  
   a = "UG"; b = "DC";
```

How do the above statements work ?

7. What do you mean by a recursive function ?
8. Distinguish between array and structure.
9. What are the advantages of using low level file I/O functions ?
10. List and explain logical operators in C.
11. What is the value of Z if  $X = 2$ ;  $Y = X++$ ;  $Z = ++X$ ; (7×2=14)

#### SECTION – C

Answer **any 4** questions. **3** marks **each**.

12. Distinguish between source code, object code and executable file.
13. Write a program to generate all Pythagorean Triplets with side length up to 30.
14. What are the different ways to pass a 2D array to a function ?
15. Discuss about any 6 string handling functions.
16. Write an algorithm to find the roots of a quadratic equation.
17. Discuss about different file operations. (4×3=12)

#### SECTION – D

Answer **any 2** questions. **5** marks **each**.

18. Write a recursive function to find  $N^{\text{th}}$  fibonacci number.
19. Write a program to sort strings in ascending order using array of pointers.
20. Explain about looping statements in C.
21. Draw a flowchart to check for a prime number. (2×5=10)