

U.G. 1st Semester Examination - 2020**BCA****Course Code : BBCACCHC102****Course Title : Introduction to C Programming**

Full Marks : 30

Time : 2 Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*

1. Answer any **ten** questions: 1×10=10
- a) When → (arrow) operator is used?
 - b) What is modulus operator in C language?
 - c) Who designed C programming language?
 - d) What is an array?
 - e) What are the valid arithmetic operations can be performed on pointers?
 - f) What will be the outcome of the following statement if s=10?

s>10 && s<25 && s!=12
 - g) Write statement to check whether any number is even or odd using conditional operator(? :).

- h) What is debugging?
- i) What is the use of semicolon (;) at the end of every program statement?
- j) How can we store octal number to int data type in C? Give an example.
- k) What is the difference between # include <...> and # include "...."?
- l) What is an auto keyword in C?
- m) Define structure.
- n) What does the characters "r" and "w" mean when writing programs that will make use of files?
- o) Define void * (void pointer).

2. Answer any **five** questions: 2×5=10
- a) What is the difference between exit () and break statement?
 - b) Why C language being considered a middle level language?
 - c) Write advantages and disadvantages of pointer in C programming?
 - d) What do you mean by cyclic nature of data type in C?

e) What is the difference between static and dynamic memory allocation?

f) What is the equivalent code of the following in while loop format?

```
For (a=1; a<=100; a++)
```

```
Print f("%d/n", a*a);
```

g) What is exit controlled loop? Give example.

h) What is the behavioral difference when the header file is included in double-quotes (") and angular braces(<>)?

3. Answer any **two** questions: $5 \times 2 = 10$

a) i) Write C program to print truth table for basic gates (AND, OR, NOT) using logical operator.

ii) Give examples of unary, binary and ternary operators. $4 + 1 = 5$

b) Write a C program to check a given string is palindrome or not. Can we compile a C program without main () function? Justify. $3 + 2 = 5$

c) i) What are the differences between call by value and call by reference mechanism?

ii) What is FILE?

iii) What are different types of mode for opening a file? $3 + 1 + 1 = 5$
