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**Total No. of Pages: 02**  
**Total No. of Questions: 07**

**BCA (Sem.-1<sup>ST</sup>)**  
**PROGRAMMING IN C**

**Subject Code: BSBC-102**

**Paper ID: B1109**

**Time: 3 Hrs.**

**Max. Marks: 60**

**INSTRUCTION TO CANDIDATES:-**

1. All questions of SECTIONS-A are compulsory. Each question carry Two marks.
2. Attempt any Four questions from SECTION-B. Each question carry TEN marks.

**SECTION - A**

**10x2=20**

Q.1. Write short notes on:

- a) What are arrays?
- b) What are unary operators?
- c) What are the applications of C programming?
- d) What are null pointers?
- e) What is use of switch loop.
- f) What are header files?
- g) What is the purpose of getch () function?
- h) What is the difference between pre increment and post increment operators?
- i) What are macros in C?
- j) What are nested loops?

**SECTION - B**

**4x10=40**

- Q.2. a) What are various control structures available in C. 6
- b) What is difference between Union and Structure? 4
- Q.3. a) Write a program to input a one dimensional array of 10 numbers. Arrange the numbers stored in the array in such a way that the odd numbers are followed by even numbers. 6
- b) WAP to swap two numbers using call by value and call by references. 4
- Q.4. Write a program that calculate the perimeter and area of rectangle. Also provide SET and GET functions for the LENGTH and WIDTH attributes. GET function should take

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the values of LENGTH and WIDTH attributes from the user. The SET function should verify that LENGTH and WIDTH are each floating point larger than 0.0 and less than 20.0. 10

Q.5. What are files in C? Discuss the method of creating, opening, reading and closing a data file. 10

Q.6. a) Write a short note on various storage classes. 5

b) Explain recursion with the help of a C program. 5

Q.7. a) 'C is a middle level language', comment on this statement. 5

b) Explain various C operators. 5

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