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Total No. of Printed Pages: [1]

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BCA (Semester – 1st)
PROBLEM SOLVING USING C
Subject Code: BCAP1101
Paper ID: [160101]

Time: 03 Hours

Maximum Marks: 60

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A

(2 marks each)

Q1. Attempt the following:

- a) What are the various symbols used in Flow Charts?
- b) What is the difference between Top-down and Bottom-up design?
- c) Write down the steps of program development.
- d) What is the difference between break and continue statement?
- e) Write a short note on function prototyping?
- f) Write a short note on Type casting.
- g) Write a short note on Recursive functions.
- h) What is the difference between formal and actual arguments in 'C' language?
- i) Write a short note on Dynamic Memory allocation?
- j) What are the different storage classes used in 'C' language?

Section – B

(5 marks each)

- Q2. What are the different types of Programming languages? Explain each of them.
- Q3. What are the various Data Types supported by 'C' language. Explain with the help of example.
- Q4. Write a program in 'C' to find the largest of three numbers using nested If-else statement.
- Q5. What is Structure? How it is declared and accessed? Discuss how the Structure is different from Union?
- Q6. What is Pointer? What are the different operations that can be performed on Pointers?

Section – C

(10 marks each)

- Q7. Explain the different Control statements used in 'C' language with syntax and suitable examples.
- Q8. What is the need of Array? What are the One-dimensional and Multi-dimensional arrays? Explain the declaration and initialization of one and two dimensional arrays with the help of 'C' program.
- Q9. What is the use of functions in 'C' language? Discuss the concept of "Pass by Value" and "Pass by reference" with the help of suitable program of 'C language'.