Code : 303106

BCA 1st Semester Theory Examination, 2017

Problem Solving and Programming Concepts

3 Hrs   *Full Marks : 60*

ictions :

)   *The questions are of equal value.*

i)   *There are **Seven** questions in this Paper.*

ii)   *Attempt **Five** questions in all.*

iv)   ***Question Nos. 1 & 2 are compulsory.***

Answer any six of the following questions: **2×6=12**

a) Differentiate between & and &&.

(b) Differentiate between text and binary file.

(c) Differentiate between pointer to function and function pointer

(d) Differentiate between linker and loader.

(e) Which of the following are unary operators in C?

(1) !

(2) Sizeof

(3) ~

(4) &&

(i) 1, 2

P.T.O.

(ii) 1, 3

(iii) 2, 4

(iv) 1, 2, 3

(f) What is an Array?

(g) What is Syntaxerror?

(h) What is the role of sizeofoperator?

(i) What is an algorithm?

(j) What is compiler?

2. **Answer any three of the following:**   **4×3=1**

(a) Differentiate Structure and Union.

(b) What do you mean by a call by value and call b reference? Write a program to swap the two number by using third variable with both call by value an reference.

(c) What is an Array? What are its merits and demerits Explain how Array elements are accessed in 2-Dimentional arrays.

(d) Define recursion with example.

(e) Difference between functions and macros.

Answer any three of the following questions: **3×1**

3. How do we open and close an existing file in C? Also discus the various modes to open a file.

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4. What is Pointer ? Give example. Write a program to swap the value using 'pass by value' and 'pass by reference' method.

5. Explain dynamic memory allocation with examples.

6. What is an operator? Discuss the various Relational Operators, Logical Operators and Assignment operators available in C.

7. What is a storage class? Discuss its various storage classes.

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