

Exam.Code:0002
Sub. Code: 0186

2071
B.A./B.Sc. (General) Second Semester
Information Technology
Paper – B: Computer Programming Using C

Time allowed: 3 Hours

Max. Marks: 65

NOTE: Attempt five questions in all, including Question No. IX (Unit-V) which is compulsory and selecting one question each from Unit I -IV.

x-x-x

UNIT - I

- I. a) What is the use of functions for modular designing in C language?
b) Classify the Programming languages, (6,7)
- II. a) What are the different strategies used in program design?
b) What do you mean by Documentation of a program? How is it beneficial? (6,7)

UNIT - II

- III. a) What are the scope rules of local and global variables?
b) Explain the different categories of operators and their precedence in C. (6,7)
- IV. a) Differentiate:
i) One dimensional and two dimensional arrays
ii) While loop and do-while loop
b) What are static and automatic storage classes? Give their class specifiers for data types. (6,7)

UNIT - III

- V. a) What are user defined functions? What are Call by value and Call by reference?
b) What is a pointer variable? How do you declare it? What are the pointer operators? How do you declare an array of pointers? (6,7)
- VI. a) Write an algorithm for Recursive 'Tower of Hanoi' problem.
b) What are command line arguments in C? How do you use them? (6,7)

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(2)

UNIT - IV

- VII. a) How do you declare a file pointer in C program? How do you open and close a file?
b) Describe the various string I/O functions in C language. (6,7)
- VIII. a) What is structure? How do you define a structure in C program? How do you access the fields of a structure?
b) How do you define a macro in C? Give examples. (6,7)

UNIT - V

- IX. Attempt the following:-
- a) What is type Casting? (2)
 - b) What is the use of math.h? (2)
 - c) What is a flow chart? (2)
 - d) What are break and continue statements? (2)
 - e) What is exit()? (2)
 - f) What are malloc() and calloc()? (2)
 - g) A ___ is a variable that contains the address of a variable. (1)

x-x-x