

First Semester PGDCA Examination

MODEL QUESTION PAPER

PGD1C02 - Fundamentals of Programming and Problem Solving Using C

(With effect from 2012 Admission)

Time: 3 Hours

Maximum: 100 Marks

Answer FIVE full questions; Each Question carries 20 marks.

1. a) What is an algorithm? Write an algorithm for comparing 3 numbers and display the largest number. 10
b) Draw a flow chart that is used to find the reverse of a given number? 10
2. a) What is a datatype?. Explain different datatypes in C. 10
b) Explain input output management in C. 10
3. a) Discuss the precedence of operator in C. 5
b) Explain array and Multidimension array in C. 10
4. a) Explain decision making statements in C. 10
b) Explain with example where a 'for' loop is suitable and where a 'do-while' loop is suitable. 10
5. a) Explain different string manipulation function with suitable examples. 10
b) How an array can be passed to a function? 10
6. a) Explain the structure of functions. Explain user defined and library functions of 'C'. 10
b) What is recursion? Explain with the help of an example. 10
7. a) How is call-by-value method of function invoking different from call-by-reference method? 10
b) Explain the concept of pointers. Also explain operations on pointers and array of pointers. 10
8. a) Differentiate between structure and union. 5
b) Write short notes on the following: 5
i) Malloc () and Calloc () functions
c) Write a program in 'C' to store the roll no. and marks of 5 subjects of in a file. Read the contents of file and display the roll no. and total marks obtained by each student in a class. 10