June—208

Subject Code—9447-X

P.G.D.C.A. EXAMINATION

(First Semester)

(Re-appear)

MS-02

Computer Programming and Problem Solving

Time : 3 Hours   *Maximum Marks :* 100

Note : Attempt any *Five* questions. All questions carry equal marks.

1.   Describe the following :

   (a)   Enumerated Data type

   (b)   Scope of a variable

   (c)   Operator = =

   (d)   Structure

   (e)   Macros

(f) Function Prototype

(g) Union

(h) File pointer

(i) Break.

(j) Continue.   20

2. (a) Explain the relational and bitwise opera-
       tors in C with suitable examples.

   (b) Describe getchar, putchar, gets and puts
       functions available in C. Write a pro-
       gram that reads lines from standard in-
       put and writes them to standard output.
                                            10+10

3. (a) What are the following keywords used
       for ?

       (i) auto

       (ii) short

       (iii) void

       (iv) default

       (v) sizeof.

(b) int a = 7;

    int b = 2

    float f;

        f = a/b

    Write output f for the above C code.

(c) Write a program in C to find the
    smallest value in a given array of 10
    integers.   10+2+8

4. (a) Write a program to output the following
       pattern :

       a

       b b

       c c c

       d d d d

       e e e e e

   (b) Explain the following control
       structures :

       (i) Switch

       (ii) If-else if else.   10+10

5. (a) Write functions for :

   (i) Find the larger of two integer values and return it.

   (ii) Swapping the values of two integer variables.

   (b) Write a note on parameter passing in C.

   10+10

6. (a) Assume "string.h" header file is not given to you write the following functions :

   (i) int string-length (chart * s)

   (ii) void string-copy (char * s1, char * s2)

   (b) Explain the following file handling function :

   (i) Open

   (ii) Seekp

   (iii) Close   **10+10**

7. (a) How are command line arguments used in C ? Give an example.

   (b) Write a program to add two matrices.

   10+10

8. Write a program to count number of spaces, no. of characters and no. of lines in a given text file 'abc.dat'.   **20**