DE–1304 **14**

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, MAY 2011.

C PROGRAMMING

(2003 onwards)

Time : Three hours Maximum : 100 marks

Answer any FIVE questions.

$(5 \times 20 = 100)$

1. (a) Explain the structured programming technique. (10)

   (b) Briefly explain the operators available in C language. (10)

2. (a) Explain any five data types with example. (10)

   (b) Explain the control statements

      (i) do…while (5)

      (ii) switch …. case with example program. (5)

3. (a) Explain in detail the concept of arrays in C. (10)

   (b) Write a C program to sort the given N numbers in ascending order. (10)

4. (a) Write a program to find the multiplication of two matrices of order $n \times n$. (10)

   (b) Define pointers. Illustrate the concept of pointers with example program. (10)

5. (a) Explain the concept of function with return by value. Give an example. (10)

   (b) Explain the storage classes

      (i) extern

      (ii) static. (10)

6. (a) Explain the concept of dynamic storage allocation with an example program. (10)

   (b) Create a student structure with the members Roll no, Name, Mark1, Mark2, Mark3 for ten students. Also calculate the total and average of each student and display them. (10)

7. (a) Explain buffering and error handling. (10)

(b) Explain any four file operation functions with example. (10)

8. (a) Write a C program to copy the contents of one file to another file. (10)

(b) Explain the concept of random access operation in file handling with example. (10)