MCA 1st Semester PROGRAMMING IN C 2006

Time: Three hours Maximum: 100 marks

PART A Answer ALL questions. (8 x 5 =40 marks)

1. (a) When should parantheses be included within an expression? In what order the operations are carried out within an expression that contains nested parantheses?
Or
(b) Explain about the following:
(i) Break
(ii) Continue

2. (a) How can the getchar and put character function be used to read and write multicharacter strings?
Or
(b) What is the purpose of the goto statement? Summarize the syntactic rules associated with the goto statement.

3. (a) What is the relationship between formal arguments and actual arguments? How they can be declared within a function?
Or
(b) In what way is the initialization of an external variable more restricted than the
I initialization of an automatic variable? Explain.

4. (a) What advantage is there in using function. prototypes within a program?
Or
(b) What is the purpose of the following:
(i) Header file
(ii) Static function in a multifile program.

5. (a) How is an array name interpreted? When it is passed to a function? Explain with example.
Or
(b) How a multidimensional array defined in terms of a pointer? Explain.

6. (a) Explain the processing of an array with suitable example.
Or
(b) Write the short notes on pointers and ine dimensional arrays.

7. (a) How can an entire structure be passed to a function and returned from a function? Discuss in detailed manner.
Or
(b) In what sense can unions, structures and arrays be intermoved? Explain.

8. (a) Write short notes on

(i) fopen, fclose
(ii) fread, :fwrite.
Or
Discuss about the purpose of library function feof?

PART B Answer ALL questions. (5 x 12 =60 marks)

9. (a) Briefly explain about the various types of operators involved in formation of expressions?
Or
(b) Explain in detail about the following.
(i) If else statement
(ii) Switch statement ..
(iii) Continue statement
(iv) Break statement.

10. (a) Write a complete C program to create an array of names and inserted in alphabetical order, interactively.
Or
(b) Write a C program that includes a recursive function to determine the value of the nth Fibonacci . number Fn.

11. (a) Write a C program that will enter a line of text, store it in an array and then write it out backwards. Assume that the length of the line will not exceed 80 characters.
Or
(b) Explain in detail about arrays of pointers and use it for finding product of two into arrays.

12. (a) Write a C program that reads several different names and addresses, rearrange the names into alphabetical order, and then writes out the alphabetlized list. Make use of structure variables within the program.
Or
(b) Describe the term union. How does a union differ from structure? Explain.

13. (a) Describe the term standard data files and storage classes. Explain w~th a suitable C program.
Or
. (b) Briefly explain about the following:
(i) Creating a stream-oriented data file.
(ii) Processing a stream-oriented data file.