(iii) fscanf ( )

(iv) fprintff ( ) 8

(b) What are self referential structures ? Explain.

6

(c) What are user defined data types ? Explain.

6

———❖———

B. C. A. (Part - I) Examination

Old Course

C PROGRAMMING

Paper – 4

P. Pages : 4

Time : Three Hours] [Max. Marks : 100

Note : (1) All questions are compulsory.
(2) Figures to the right indicate full marks.
(3) Assume suitable data wherever necessary.
(4) Illustrate your answer with the help of neat sketches wherever necessary.

1. (a) What is precedence ? Explain precedence of various operators with an example. 10

(b) What is preprocessor directive ? Explain its role in 'C' programming. 10

OR

2. (a) What are Symbolic constants ? Explain their use. How do they differ from constants.

10

(b) Explain various data types in 'C' language with an example. 10

3. (a) Explain the various single character input output functions with suitable example. 10

(b) Describe the syntax and working of 'while' and 'do–while' loops. How do they differ ? 10

OR

4. (a) What are 'infinite loops' ? Explain the use of 'break' and 'continue' statements. 10

(b) Write a program that reads 'n' numbers using a single variable and finds the largest among them. Use the 'goto' statement. 10

5. (a) Explain the methods for passing arguments to a function, using suitable example. 10

(b) What are strings ? How are they represented and initialized ? 10

OR

6. (a) Write a program which calculates the factorial of a given number using a recursive function. 10

(b) What is function prototype ? Explain with suitable example. 10

7. (a) What are pointers ? Explain how strings are represented using pointers. 10

(b) Write a program to read the 'n' elements array and find the maximum and minimum of them. Use pointers to initiatise and access array elements. 10

OR

8. (a) Write a program to read 10 strings and display them in reverse order. Use array of pointers to store strings. 10

(b) How can arrays be used to represent multidimensional arrays ? Explain. 10

9. (a) What is 'union' ? How does it differ from 'structure' ? Explain with an example. 10

(b) Write a program that reads the contents of a file and counts the number of words in it. 10

OR

10. (a) Explain the following functions :—

(i) fgcts ( )

(ii) fputs ( )