

00494

Seat No. \_\_\_\_\_

First Year B. C. A. (Sem. II) Examination

October / November – 2002

Programming Language : Paper - I

Time : 3 Hours]

[Total Marks : 70

- Instructions :
- (1) The question paper contains 5 questions, 14 marks each.
  - (2) The marks to the right indicates full marks of the question.
  - (3) Attempt each new question on a different sheet.
  - (4) Q. 1 is compulsory.

1 Answer the following (Any Seven) :

14

- 1. What role is played by default label in the switch statement?
- 2. What is indirection? How do you achieve it in C?
- 3. Distinguish between printf and fprintf function.
- 4. What is conversion specification? Give Example.
- 5. What is meant by the term coercion?
- 6. Distinguish w+ and a+ modes of file operations.
- 7. How can comment be included within a C program? Where can comments be placed?
- 8. What is the purpose of scanf function? Compare with getch function.
- 9. Distinguish between a user-defined function and one supplied in the library.
- 10. If an array is declared as, char str[10][100]; what is referred to by str[5]?

2 A. Explain various looping constraints in C.

5

B. Differentiate break; and continue statements with example.

4

C. Write a C program to reverse an inputted positive integer number.

5

OR

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2 A. Explain bitwise operators with example. 5

B. Write the output or error, if any, of the following: 4

```

1. #include <stdio.h>
   main()
   {
       int i=10;
       count(i);
   }
   count( int n)
   {
       if (n == 0)
           return;
       else
           count(n-1);
       printf("\n%d", n);
   }

```

```

2. #include <stdio.h>
   main()
   {
       int i = 1;
       while ( i <= 10 );
       {
           printf("%d", i);
           i++;
       }
   }

```

C. Explain while loop and do.... while loop with example. 5

3 A. Explain multidimensional arrays in C. 5

B. Which are the mathematical functions available in C? Explain 5

C. Write a program in C to input an array of integers and display the second highest number.

OR

3 A. Explain various string functions in C. 5

B. Write a program in C to count and display all the vowels in a given line of text. 5

C. Explain getch, getche and getch function. How are they different from printf and scanf function. 4

4 (A) Explain structures with example. Also explain how its members accessed. 5

(B) What do you mean by pointer? How it is used in a program? Also explain address operator and pointer to an array. 5

(C) Give the similarities and differences between structure and union. 4

OR

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- 5  
4
- 4 (A) What is meant by the following terms? 5  
i. Nested Structure  
ii. Array of Structures
- (B) Explain recursion in C. Write a recursive function to display binary value of inputted integer number. 5  
(C) Explain call by value and call by reference with example 4
- 5 (A) Explain text mode and binary modes of file. 5  
(B) Explain fgetc(), fputc(), fgets() and fputs(). 5  
(C) Write a C command line program to count the number of words in a Text file. 4
- OR
- 5 (A) Explain different file open modes of File operations in C. 5  
(B) Write a C command line program to copy the contents of a text file 5  
(C) Explain fread() and fwrite() functions. 4

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