K16U 1211

II Semester B.Sc. Degree (CCSS – Reg./Supple./Improv.)
Examination, May 2016
CORE COURSE IN COMPUTER SCIENCE
2B02 CSC : Advanced Programming in C
(2014 Adm. Onwards)

Time : 3 Hours

Max. Marks : 40
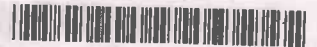
SECTION – A

(8×0.5=4 Marks)

1. **One** word answer :

a) If you don't initialize a static array _____ would be the element set to.

b) What will be the output of the following code ?

```
void main ()
{
    intj , *ptr;
    ptr = &j;
    *ptr = 35;
    prinft("\n%d", j);
}
```

c) In an array int arr [12] the word arr represents the _____ of the array.

d) A string is nothing but an array of characters terminated by _____

e) The structure FILE is defined in the header file _____

f) The array char name [10] can consist of a maximum of _____ characters.

P.T.O.

g) The variables that are both alive and active throughout the entire program are known as _____

h) _____ is the name of operator '*'.

i) The function _____ takes a file pointer and resets the position to the start of the file.

SECTION – B

Write short notes on **any seven** of the following questions : (7×2=14 Marks)

2. What is preprocessor ?

3. Difference between function and macro.

4. Distinguish between getc and getche.

5. Define the term pointer.

6. Write a macro to find the cube of a number.

7. Explain the meaning of sizeof operator.

8. What is mean by Nested structures ?

9. Distinguish between getw and putw.

10. Distinguish between malloc and calloc.

11. What are the common uses of rewind and ftell functions ?

SECTION – C

Answer **any four** of the following questions : (4×3=12 Marks)

12. Write a program that accepts two integer arguments by reference and perform a swap.

13. Explain any two steps that are followed while accessing a file.

14. Write program for adding a string to the end of another string.

15. What is recursion ? Explain its merits and demerits.

16. Write a function to find the factorial of a given number using recursion.

17. Explain the mechanism available in C for reading and writing into files.

SECTION – D

Write an essay on **any two** of the following questions :　　　　　**(2×5=10 Marks)**

18. Explain briefly the term 'user defined function' and its categories.

19. Explain string-handling functions in detail.

20. Write a program to count the number of words and lines in a text file.

21. Write a program to check whether the given string is palindrome or not using command line argument.

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