

Total No. of Questions : 5]

SEAT No. :

P5129

[5823] - 201

[Total No. of Pages : 2

First Year B.Sc. (Computer Science)
CS 121 : ADVANCED 'C' PROGRAMMING
(CBCS 2019 Pattern) (Semester - II)

Time : 2 Hours]

[Max. Marks : 35

Instructions to the candidates:

- 1) *Figures to the right indicate full marks.*
- 2) *All questions are compulsory.*

Q1) Attempt any EIGHT of the following.

[8×1=8]

- a) What is the use of strcpy() function in C?
- b) Demonstrate puts () function.
- c) What is file opening mode.
- d) What is pointer variable? Give example.
- e) What is macro?
- f) What is the use of strcat () function.
- g) What is command line argument.
- h) Demonstrate type def keyword with example.
- i) What is string? Give example.
- j) Demonstrate “structure within structure” with example.

Q2) Attempt any FOUR of the following (Out of FIVE)

[4×2=8]

- a) Differentiate between static & dynamic memory allocation.
- b) Explain the file opening modes for text file.
- c) What is the use of # include directive.
- d) Explain the use of fgets() and fputs() with suitable example.
- e) Explain in brief concept of macros.

P.T.O.

Q3) Attempt any TWO of the following (Out of THREE) **[2×4=8]**

- a) Write a 'C' program to calculate area, & perimeter and diameter of circle using one function for all & use pointers.
- b) Write a 'C' program to accept a string & convert in uppercase without using built - in function.
- c) Write a 'C' program to accept a time from user as hh:mm:ss & check the validity of it. If it is invalid, validate it. Use pointer to structure.

Q4) Attempt any TWO of the following (Out of THREE) **[2×4=8]**

- a) Write a program in 'C' to accept details 'n' employees & print the details of highest salaried employee. Use structure to store the employee data.
- b) Differentiate macros and functions.
- c) Explain following functions with syntax and example.
fgetc(), fputc(), fscanf (), fprintf ()

Q5) Attempt any ONE of the following (Out of TWO) **[1×3=3]**

- a) What is the output of following code?

```
# include <stdio.h>
int main ()
{
    char str[100];
    char *ptr;
    strcpy(str, "India is GREAT");
    ptr = str + strlen (str)
    printf ("The string is:");
    while (*ptr != str)
    printf ("%c", *ptr --);
    return 0;
}
```

- b) Differentiate structure and union.

