

SURENDRANATH COLLEGE

INTERNAL ASSESSMENT

SEMESTER-1, 2018-19

SUBJECT-Computer Science Hons.(CMS-A)

CC-1-2-TH (Programming Fundamentals using C)

Time- 01 Hr.

Full Marks-30

CU Reg. No.-	SECTION-	ROLL NO.-
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MARKS OBTAINED	Signature of Examiner- With date
MARKS CONVERTED TO 10	Approved by HOD- With date

*Your answer must fit within the provided space
You may use the last page of your answer booklet for ROUGH work*

Question Booklet < Total pages=12>

Answer question no. Q1 and any 4 from the rest (Q2 to Q9)

Q1. Answer any 4 questions out of 7 [Q1(a) to Q1(g)] .

4x1.5

(a) State the pros and cons of using pointers in C

(b) Explain what will happen if you define a function before and after your main() function

(c) What will happen if you mistakenly write `3[a]` instead of writing `a[3]` to access the third element of an array `a`?

(d) How will you detect whether an input character is an integer ranging between 0 to 9?

(e) Show the different use of asterisk(*) in C

(f) Add a statement in the following program to print 5

```
main()
{
    int i=5, *p;
    printf("%d", *p);
}
```

(g) What will be the output of the following code snippet?

```
main()
{
    int i,j,sum=0;
    for(i=1;i<=5;i++)
        for(j=1;j<=i;j++)
            sum+=j;
    printf("%d", sum);
}
```

Q2. Answer any 4 questions out of 8 (Q2 to Q9)

Q2.(a) why do we need structure in C? (b) Explain how will you access structure element using arrow and dot operators.

2+4

Q3.(a) State the advantages of using dynamic memory allocation. (b) Explain each step of constructing an array using dynamic memory allocation.

2+4

Q4. Explain call by value and call by address in c programming with the help of proper example.

Q5. (a) State the use of “continue” keyword in C. (b) How will you replace unconditional and conditional goto statements in c using loop construct?

2+4

Q6. Write a C program to print an “A” like structure using asterisk(*).

Q7. Write a c function that takes 'n' as an argument and print first 'n' non-fibonacci numbers.

Q8. Write a c function to check whether a string is palindrome.[palindrome is a string that reads identical forward or backward. Example “madam”]

Q9. Suppose a sorted array is given. Write a C function to search for a key element in the array. If the element is found return its location otherwise return the location of its nearest element.

Rough-work