C 41845 **(Pages : 3)** **Name**.....

Reg. No.....

SECOND SEMESTER B.Sc. DEGREE EXAMINATION, APRIL/MAY 2013

(CCSS)

Computer Science

CS 2C 02—PROGRAMMING IN C

Time : Three Hours Maximum : 30 Weightage

Section A

Answer **all** *questions*

What will be the output of the following programe ?

main 0

```
int n=125, sum=0 re;
while(n>0)

re=n%10;
sum+=re;
n/= 10;

printf ("sum is=%d",sum);
```

2. What will be the output of the following C program segment for the values of x *and y* if **n** assumes a value of (a) 1 and (b) 0.

```
int x =1;
int y = 1;
if(n>0)
  x = x + 1;
  y = y – 1 ;
printf("%d%d", x,y);
```

Turn over

3. What will be the output of the following program :

```
main()

  int x=10;
  int y = 20;
  int p,q;
  p = prod(x,y);
    q = prod(p,prod(x,2));
    printf("%d%d\n",p,q);
}
prod(a,b)
int a,b;

  return(a*b);
```

4. Give the syntax of ternary operator in C.
5. Which loop control statement in C is called as entry control loop ?
6. Write down the function name which frees previously allocated memory space in C ?
7. What will be output of following program ?

```
int main(){
  int i = 3;
  int *j;
  int **k;
  j=&i;
  k=&j;
  printf("%u %u %u",i,*j,**k);
return 0;
```

8. What is the range of values that can be represented by a variable *of signed int* in a compiler in which size of *int is* two byte ?
9. Which statement is used in C for by passing a loop construct ?
10. Which is the terminator symbol in C ?

11. Write down the function name which frees previously allocated memory space in C ?
12. Write down the C code for declaring an array of size 10.

(12 x ¼ = 3 weightage)

Section B

Answer **all** *questions*

13. Give any *four* relational operators in C ?
14. Distinguish between *break* **and** *continue* statement in C.
15. List any four string handling functions in C.
16. How will you define a pointer variable in C ?
17. Explain the use of *fseek()* function ?
18. What is the scope of a local variable ?
19. Differentiate *structure* and *union.*
20. What is the use of *enum* data type in-C ?
21. Explain syntax of *calloc()* function in C.

(9 x 1= 9 weightage)

Section C

Answer any **five** *questions.*

22. Explain the fundamental data types in C.
23. Explain *else if* ladder using suitable example.
24. What is recursion? Explain with an example.
25. Using suitable example explain actual and formal arguments in C.
26. What is *structure* variable ? How a *structure* variable can be accessed using *pointer* ?
27. Write a note on command line arguments.
28. Discuss the different storage classes in C.

(5 x 2 = 10 weightage)

Section D

Answer any **two** *questions.*

29. Write a C program to sort N numbers in descending order.
30. Write a C program to compute x^x where x is an integer number accepted as input.
31. Write a C program to read two matrices of suitable order and find its product.

(2 x 4 = 8 weightage)