Mock Question Bank Structured Programming Approach (FEC-205)
CBCGS/CBGS Semester II

1. The _____ is a program design tool that is a visual representation of the logic in a function within a program. **(1M)**

(a) Flowchart
(b) Algorithm
(c) Pseudo code
(d) Source code

2. Which operators are used to test the relationship between two variables and a constant? **(1M)**

(a) Special Operator
(b) Arithmetic Operator
(c) Logical Operator
(d) Relational Operator

3. In C programming language 'else' is a part of which building block? **(1M)**

(a) Loop
(b) List Structure
(c) Counter
(d) Selection

4. AND, OR and NOT are logical operator. What data type are expected for their operands **(1M)**

(a) Character
(b) Integer
(c) Decimal
(d) Boolean

5. Which type of files can't be opened using fopen()? **(1M)**

(a) .txt
(b) .bin
(c) .c
(d) .exe

6. Which is the invalid variable name? **(1M)**

(a) Var_2
(b) 2_var
(c) _2var
(d) _var

7. If you want to store dissimilar data together, then which type will you use? **(1M)**

(a) Array
(b) Structure
(c) Stack
(d) None

8. Compiler helps in the translation from **(1M)**
(a) Integer to binary
(b) High-level program to binary digits
(c) High-level language to machine level language
(d) Pseudo code to computer program

9. The loop which is executed at least once: **(1M)**
(a) while
(b) do-while
(c) for
(d) if-else

10. What would be the output after the following statements are executed? **(2M)**
Char ch;
int I;
ch='G';
i=ch - 'A';
printf("%d",i);

(a) Error
(b) 7
(c) 6
(d) A

11. When we write X=10 and Y=X, which of the following memory assignment is correct? **(1M)**
(a) X and Y will have same location and 10 will be stored.
(b) X and Y will have two distinct locations and 10 will be stored in both.
(c) X and Y will have same location and only X will contain value 10
(d) X and Y will have two distinct locations and only X will contain value 10

12. If integer needs two bytes of storage, then the minimum value of a signed integer in C would be: Give the range if the value is n **(1M)**
(a) -(216-1)
(b) 0
(c) -(215-1)
(d) -215

13. Which of the following are incorrect statements? **(1M)**
1) if(a==7) printf("hello");
2) if(7==a) printf("hello");
3) if(a=7) printf("hello");
4) if(7=a) printf("hello");

(a) 1 and 2
(b) 3 only
(c) 4 only

(d) 2,3 and 4

14. What is the output of the following code and write down the value of y? **(2M)**

```
#include<stdio.h>
int main()
{
int y=10;
int z= y+(y==10);
printf("%d",z);
return 0;
}
```

(a) 10
(b) 11
(c) 20
(d) Compiler error

15. What does this shape represent? **(1M)**

(a) Decision
(b) Process
(c) Input/ Output
(d) Start/ Stop

16. To repeat a task number of times we use **(1M)**
(a) input statement
(b) conditional statement
(c) loop statement
(d) output statement

17. What will be the output of the following? **(2M)**

```
#include<stdio.h>
int main()
{
        if(printf("1"))
                printf("inside if statement");
        else
                printf("inside else statement");
        return 0;
}
```

(a) inside if statement
(b) inside else statement
(c) 1inside else statement
(d) 1inside if statement

18. What will be the output of the following code? **(2M)**

```
#include <stdio.h>
#include <math.h>
void main()
```

```
{
   int k = pow(2, 3);
   printf("%d", k);
  getch();
}
```

(a) -1 (b) 9 (c) 8 (d) 6

19. Which one of the following statement is the most appropriate? **(1M)**

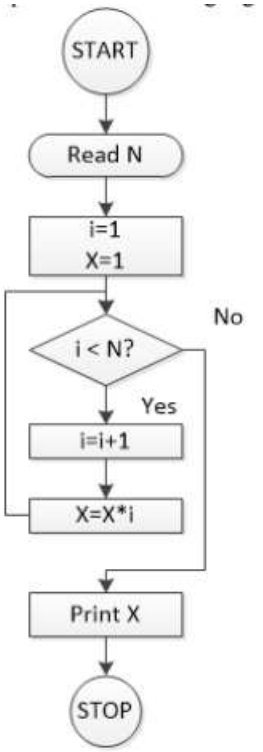
(a) Pseudo code is basically a diagrammatic representation of the algorithm. Whereas in flowchart normal English language is translated into the programming languages to be worked on.

(b) Flowchart is diagrammatic representation of the algorithm. Pseudo code is just another name of algorithm.

(c) Pseudo code is another name of programming. Whereas in flowchart is diagrammatic representation of algorithm.

(d) Flowchart is basically a diagrammatic representation of the algorithm. Whereas in pseudo code normal English language is translated into the programming languages to be worked on

20. The input N from the user is 6. The output of the following algorithm is **(2M)**



(a) 120 (b) 720 (c) 5040 (d) 46656

21. **(2M)**

What will be the output?

```
#include <stdio.h>
int main()
{
  float a = 6.0;
  printf ("%.2f", (9/5)*a + 11);
  return 0;
}
```

(a) 21.80 (b) 21.00 (c) 0.00 (d) 17.00

22. **(2M)**

What if the output of the program below?

```
#include <stdio.h>
int main()
{
   int a = 1, b = -1, c = 0, d;
   d = ++a && ++b || c--;
   if (d)
        printf("Kolkata \n");
   else if(c)
        printf("Delhi \n");
   else
        printf("Bangalore \n");
   return 0;
}
```

(a) Kolkata (b) Delhi (c) Bangalore (d) Compile error

23. What will be the output of the following C program? **(2M)**

```
#include<stdio.h>
int main()
{
        int a, b, c;
        int arr[5] = {1, 2, 3, 25, 7};
        a = ++arr[1];
        b = arr[1]++;
        c = arr[a++];
        printf("%d--%d--%d", a, b, c);
        return 0;
}
```

(a) 4--3—25
(b) 3--3—25
(c) 4--4—25
(d) 3--4--25

24. What will be the output of the C program? **(2M)**

```
#include<stdio.h>
int main()
{
        int arr[3], i = 0;
        while(i < 3)
        {
                arr[i] = ++i;
        }
        for(i=0; i<3; i++)
        {
                printf("%d--", arr[i]);
        }
return 0;
}
```

(a) Compilation error
(b) 1--2--3—
(c) Garbage value--1--2—
(d) Garbage value--2--3—

25. What will be the output of the C program? **(2M)**

```
#include<stdio.h>
int main(){
        int a = 25, b;
        int *ptr, *ptr1;
        ptr = &a;
        ptr1 = &b;
        b = 36;
        printf("%d %d",*ptr, *ptr1);
        return 0;
}
```

(a) 25 45632845
(b) Run time error
(c) Compilation Error
(d) 25 36

26. What will be the output of the C program? **(2M)**

```
#include<stdio.h>
int main()
{
        struct simp
        {
                int i = 6;
                char city[] = "chennai";
        };
        struct simp s1;
        printf("%d",s1.city);
        printf("%d", s1.i);
```

```
        return 0;
}
```

(a) chennai 6
(b) Nothing will be displayed
(c) Runtime Error
(d) Compilation Error

27. What will be the output of the C program? **(2M)**

```
#include<stdio.h>
int main()
{
        EOF++;
        printf("%d", EOF);
        return 0;
}
```

(a) Compilation Error (b) -1 (c) 0 (d) 1

28. What will be the output of the C program? **(2M)**

```
#include<stdio.h>
int main(){
int num = 5;
switch(num++ == 5)
{
        case 1:
        printf("TRUE");
        break;
        case 0:
        printf("FALSE");
        break;
        default:
        printf("inside default");
}
  return 0;
}
```

(a) inside default (b) FALSE (c) TRUE (d) Compilation Error

29. What will be the output of the following C program segment? **(2M)**

```
char p[20];
char *s = "string";
int length = strlen(s);
int i;
for (i = 0; i < length; i++)
   p[i] = s[length — i];
printf("%s", p);
```

(a) gnirts (b) gnirt (c) string (d) no output is printed

30. If the two strings are identical, then strcmp() function returns **(1M)**

(a) 1 (b) 0 (c) -1 (d) Yes

31. What will be the output of the C program? **(2M)**

```
#include<stdio.h>
int function(int, int);
int main()
{
        int a = 25, b = 24 + 1, c;
        printf("%d", function(a, b));
        return 0;
}
int function(int x, int y)
{
        return (x - (x == y));
}
```

(a) Compilation error (b) 25 (c) 1 (d) 24

32. What will be the output of the C program, if input is 6? **(2M)**

```
#include<stdio.h>
int fun();
int main(){
        for(fun();fun();fun())
        {
        printf("%d ", fun());
        }
        return 0;
}
int fun()
{
   int static num = 10;
   return num--;
}
```

(a) 8 5 2 (b) 7 4 1 (c) 6 3 0 (d) 8 1 5

33. What will be the output of the C program? **(2M)**

```
#include<stdio.h>
int main()
{
        int i[3] = {1, 4, 0};
        while(i[2] == i[3])
        {
                if(i[3])
           printf("Loop ");
                else
                break;
        }
        return 0;
}
```

(a) Compilation Error (b) Runtime Error (c) Prints Nothing (d) Loop