

Total No. of Questions :12]  
P1919

Nov-15

SEAT No. :

[Total No. of Pages :3

F.Y. M.C.A. (Engineering)  
CAND C++ PROGRAMMING  
(2013 Course) (Semester - I) (310901)

Time : 3 Hours]

Instructions to the candidates:

- 1) Neat diagrams must be drawn wherever necessary.
- 2) Figures to the right side indicate full marks.
- 3) Assume suitable data, if necessary.

[Max. Marks :50

Q1) a) What is procedure oriented programming? Why C programming is called top down design approach? [4]

b) Find output of the following program: [4]

```
int main()
{
    int i;
    for(i=0;i<5;i++)
    {
        int i=10;
        printf("%d",i);
        i++;
    }
    return 0;
}

ii) void main ()
{
    char M [] = "Hello",
    int i;
    for (i = 0 ; M [i] : i++)
    {
        printf("\n %c %c %c %c", M [i], * (M+i), * (i+M), i [M]);
    }
}
```

OR

P.T.O.

Q2) a) What is constant? List data types in C. Explain any three data types. [4]

b) i) #include<stdio.h> [4]

void main ()

{

char arr[11] = "India";

printf("%s",arr);

}

ii) main ()

{

int i;

i = 10;

printf("%d %d %d %d", i++, ++i, --i, i--);

}

Q3) What is the difference between structure and union? Create a union with three data elements and display it. [8]

OR

Q4) Explain malloc () and free () function with example. [8]

Q5) a) What is a recursion function? Write a recursion function to find factorial of given number. [5]

b) Explain the use of #includes and #define directives of C language. [4]

OR

Q6) a) What is function? Explain call by value and call by reference with example. [5]

b) Define macro. Write a macro to compute the area of circle. [4]

Q7) a) Explain destructor with example. [4]

b) Explain the concept of class and encapsulation with example. [4]

OR

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- Q8) a) What is constructor? What are the characteristics of constructor? [4]  
b) What is inline function? How does the inline function differ from Preprocessor macro. [4]

- Q9) a) What is the inheritance? Explain multilevel inheritance with example. [4]  
b) Explain the difference between function overloading and function overriding. [4]

OR

- Q10) a) What is function overloading? Write a C++ program to overload area () function to calculate area of rectangle and circle. [4]

- b) Explain the various access modifiers in C++ with example. [4]

- Q11) a) List Formatted I/O and unformatted I/O Functions in C++. Explain any two functions of each type. [5]

- b) Short notes on: [4]

i) open ()

ii) get ()

OR

- Q12) a) Explain managing console formatted I/O with example. [5]

- b) Short notes on: [4]

i) Put ()

ii) Seekg ()

EEE