Aryan College

C++

Unit -1

1. What is message passing? (2015)
2. Explain this pointer. (2015)
3. Define getline() function. (2015)
4. What is token? (2015)
5. What is difference between C and C++ array? (2017)
6. Define access modifiers. (2015)
7. Explain inline function with example. (2015)
8. Write a program for calculating factorial of a no. (2015)
9. Why stream keyword is used in C++? (2015)
10. Explain dynamic memory allocation. (2015)
11. Explain the basic paradigms of OOP's. Also write difference between OO's and procedural oriented programming language. Explain properties of OOP's in brief. (2015)
12. Recursion with example of Fibonacci series. (2015)
13. What do you mean by reusability? (2014)
14. What are the user defined data types? (2014)
15. What is the difference between keyword and identifiers. (2014)
16. Defines expression? (2014)
17. What is storage class? (2014)
18. What is member function? (2014)
19. What do you mean by object oriented analysis and design? What are various characteristics and features of object oriented programming. (2014)
20. Discuss the structure of a C++ program, using an example. What is a compile time error and what is a runtime error? Give an example of each. (2014)
21. Using C++ program fragment differentiate between passing simple data types by value and be reference. (2014)
22. The && and || operator operate on the value type? (2017)
23. What is the purpose of default case in switch statement? (2017)
24. When a member function can be declared static? (2017)
25. Given the array declaration (2017)

    int x[10];

    what does *(x+3) mean?
26. In which order the operator will evaluate in the following: (2017)

    Y=a* ++b + m/z;

27. Differentiate the following statements: (2017)

    Const int M=100;

    #define M 100
28. A character array name is defined as follows: (2017)

```
Char name[30]=”Programming”;
What will the value of m and n?
Int m=sizeof(name);
Int n=strlen(name);
```

29. Give the output of the following: (2017)

```
Int n=0;
For(int i=1;i<=n;i++)
        Cout<<I;
```

Unit-2

1. Define Destructor. (2015)
2. Explain the term Object. (2015)
3. Define Early Binding. (2015)
4. Define Encapsulation. (2015)
5. Write difference between friend function and member function. (2015)
6. Write a program for new and delete keyword. (2015)
7. Define polymorphism. Explain overloading with example. Write a program for method overriding. Also discuss differences between method overloading and method overriding. (2015)
8. Write difference between structure and class. (2015)
9. Pointer to object. (2015)
10. Copy constructor. (2015)
11. Can we have more than one construction in a class? If yes, explain the need for such situation with example. (2017)
12. Scope of object and class. (2015)
13. Array of object. (2015)
14. Virtual class and rule for virtual function. (2015)
15. Write a program for friend function. (2015)
16. Explain scope resolution operator in brief. (2014)
17. Explain pointer to class and pointer to object. (2014)
18. Differentiate and explain function and operator overloading with one example of each. (2014)
19. Discuss the principles of abstraction. How do we achieve this in OPP? Discuss class declaration with an example. (2014)
20. What is the difference between overloading and overriding? (2014
21. What is container class? (2014)
22. Explain Pure virtual function. (2014)
23. What is Recursion? Explain. (2014)
24. Explain reference variable by suitable example. (2014)
25. What is constructor? How is constructor function invoked? Give a suitable C++ program fragment, which explain how construction functions is invoked. (2014)
26. How is OOP implement in C++? (2013)

27. What is abstract class? (2013)
28. What is preprocessor directive? (2013)
29. Why main function is special in C++? (2013)
30. How can we initialize a pointer to a function? (2013)
31. What do you mean by inline function? (2013)
32. What is run time error, logical error and syntax error? (2013)
33. What is virtual class and friend class? What is its significance? (2013)
34. What is dynamic binding? Explain with suitable example. (2013)
35. Describe the concept of pointer in C++. How it is different from pointer in C? (2013)
36. Differentiate operator overloading and function overloading with suitable example. (2013)
37. Explain the concept of file handling. How do you open and close a file in C++? (2013)
38. Differentiate between object and classes. (2016)
39. Give any five function used for file processing. (2016)
40. Why can't friend function be used to overload assignment operator? (2016)
41. What is polymorphism? Explain different types of polymorphism with example. (2016)
42. What is an abstract class? (2016)
43. What is parameterized constructor? (2016)
44. What is base and derived classes? (2016)
45. What is an inline function? Write its limitation. (2016)
46. What is copy constructor? (2016)

Unit-3

1. Explain the term Inheritance? Discuss different types of inheritance with diagram. Write a program for multiple inheritance. (2015)
2. What is mean by inheritance in OOP and how many types of inheritance available in OOPs. (2013)

Unit-4

1. Explain file handling. Write a program for opening a file using open() function. Also differentiate between opening a file with a constructor function and open() function. (2015)
2. Explain write() and read() function is C++. (2014)
3. What is a dynamic memory allocation? (2014)
4. How are binary files different from that file in C+? (2013)
5. What is type casting in C++? (2013)
6. What is a stream? Name the streams generally used for file I/O (input/output). (2013)

Unit-5

1. Differentiate between a template class and class template? (2013)
2. What is templates? (2016)