Subject Title: Object Oriented Programming with C++ Prepared by: Nashra Tazeen
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Unit - I:

1. Write about the evolution of object oriented programming language.
2. Explain the differences between procedures oriented programming and object oriented programming.
3. List the advantages of OOP.
4. Write the differences between c and C++.
5. Give a brief introduction about C++. Illustrate structure of C++ program with an example.
6. List out various types of operators of C++.
7. Explain in detail various data types in C++
8. Explain in detail about functional concepts of OOP/ Principles of OOP in C++
9. Discuss in detail about control structures.
10. Define Function. Write how a function can be declared and defined.

Unit - II:

11. Define object. How an object is created in C++.
12. What is constructor? Explain types of constructors.
13. What is encapsulation? Explain with an example.
14. What is data hiding? Explain with an example.
15. How do you specify default arguments in function definition? Illustrate with an example.
16. What is inline function? Explain with an example.
17. Write a short notes on a)Garbage Collection b) Dynamic memory allocation
18. Write a short notes on a) Abstract Class b) Meta Class

Unit - III:

19. Define function overloading. Illustrate with an example.
20. What is operator overloading? Explain with suitable example overloading of unary operator.
21. Write a C++ program to implement binary operator overloading over + operator to add two complex numbers.
22. What is type conversion?
23. Discuss briefly the three possibilities of data conversion with example program for each.
24. Discuss various visibility modes of C++.

25. Define inheritance. Explain various types of inheritance.

Unit - IV:

26. What is virtual function?
27. Define polymorphism.
28. What is pure virtual function?
29. State the need of virtual classes
30. What is standard output stream?
31. Define get() and put() functions.
32. What is polymorphism? Explain different types of polymorphism.
33. Define and explain virtual classes.
34. Explain virtual function with an example.
35. Explain the different types of file stream classes.
36. Explain formatted I/O functions with example.
37. Explain unformatted I/O functions with example.

Unit - V :

38. Explain exception handling mechanism with an example.
39. What is data structure? What are different types of data structure? Explain with suitable examples.
40. Differentiate between stacks and queues.
41. Define Linked List. Advantages and disadvantages of LL. Operations possible on LL.
42. What is stack?
43. What is queue? Explain primitive operations on queue.