

Unit– II

Classes and Objects

1. *State the characteristics of destructor. [2]*
2. *Explain memory allocation for objects. [4]*
3. *Write a program to declare a class 'Journal' having data members as journal-name, price & no-of-pages. Accept this data for two objects & display the name of journal having greater price. [4]*
4. *Write a program to define a class having data members principle, duration & rate-of-interest. Declare rate-of-interest as static member variable. Calculate the simple interest & display it for one object. [4]*
5. *Illustrate the concept of constructor with default argument with suitable example. [4]*
6. *State any four characteristics of constructor. [4]*
7. *Explain the concept of friend function. [4]*
8. *Explain the concept of overloaded constructors in a class with suitable example. [4]*
9. *Write a program to declare a class 'staff' having data members as name & department. Accept this data for 10 staffs & display names of staff that are in cm department. [8]*
10. *Define class with its syntax. [2]*
11. *Write any two rules to define friend function. [2]*
12. *What is copy constructor?*
13. *Write any two characteristics of static member function.*
14. *How do we invoke a constructor? [2]*
15. *Explain how memory is allocated to an object of a class with diagram. [4]*
16. *Write any four rules to define constructor in a class. [4]*
17. *Write a program to define a class student having data members name and roll no. Accept and display data for one object. [4]*
18. *What is destructor? Give its syntax. How many destructors can be defined in a single class? [4]*
19. *Write a program to declare a class staff having data members as name and post. Accept and display data for five staff members. (Using array of object) [4]*
20. *Explain object as function argument. [4]*
21. *How many ways we can define member function in class? Give its syntax. [4]*
22. *Explain constructor with default argument. [4]*
23. *Define constructor. State any two type of constructor. [2]*
24. *State any two access specifier with example. [2]*
25. *Define constructor overloading. [2]*

26. Explain any two visibility modes with example. [4]
27. Explain any two' types of constructor with syntax and example. [4]
28. Explain the concept of destructor in a class with example. [4]
29. Write general form of member function, definition out of class. [2]
30. Define constructor and destructor. [2]
31. Write syntax to declare constructor. [2]
32. Explain multiple constructor in class with example. [4]
33. List any four properties of constructor function. [4]
34. List four types of constructors. [2]
35. Write example code of constructor with default argument (example code of constructor, only, not whole program) [2]
36. Explain concept of overloaded constructor in a class with example. [4]
37. How memory is allocated to the objects of class, explain with diagram. [4]
38. State any four characteristics of static data members. [4]
39. How function is defined outside of class, write general syntax and example of same. [4]
40. State any four characteristics of constructor. [4]
41. Define friend function. Write syntax of declaring it. [4]
42. Write a program to declare class 'staff' having data members as name and post. Accept this data for 5 staffs and display name of staff who are HOD. [8]
43. Differentiate between constructor and destructor. [4]
44. What is over loaded constructor in a class? Explain .with example. [4]
45. Write a program to create a class "student" having data member as name, roll no. and percentage to read and display details for 10 students. [4]
46. Explain : (i) Static member function (ii) Friend function [4]
47. Explain syntax for declaring the function inside the class and outside the class with example. [4]
48. Explain the concept of parameterized constructor with example. [4]
49. Explain copy constructor with example. [4]
50. Write a program to show use of passing object as a parameter to function showdata () for a class "student" having data member as name and roll no. & member function as getdata (). [4]
51. Explain memory allocation for object with example. [4]
52. Write a program to create a class "employee" with data member as name, designation and basic salary & gross salary. Create member functions as getdata () to read and showdata () to display details. Create sum () as friend function to calculate gross salary. $gs = bs + 0.5 * bs + 9.0 * bs$; [8]
53. Write only errors if any from following code.


```
class abc
{ private : int x ;
public : void getdata ( ) ;
{ cout << "Enter·data" ;
cin<<x;}
};
```