50 Short Answer Type Questions (2-3 marks)

(Simple definitions, one-line concepts, basic terms)

1. What is Object Oriented Programming?
2. Define Class in OOP.
3. What is an Object?
4. What is Encapsulation?
5. Define Abstraction.
6. What do you mean by Inheritance?
7. Explain Polymorphism in one line.
8. What is a Constructor?
9. What is Destructor?
10. Define Method Overloading.
11. What is Method Overriding?
12. What is Dynamic Binding?
13. What is Static Binding?
14. What do you mean by Access Specifiers?
15. Name types of inheritance.
16. What is multiple inheritance?
17. Define hybrid inheritance.
18. What is a Friend Function?
19. What is Operator Overloading?
20. What do you mean by Data Hiding?
21. What is the difference between class and object?
22. What is OOPs paradigm?
23. Give an example of encapsulation.
24. What is virtual function?
25. What is an Interface?
26. Define Abstract Class.
27. What is the use of ‘this’ pointer?
28. What is a pure virtual function?
29. What is the use of ‘super’ keyword? (Java)
30. What is the meaning of reusability?
31. Give full form of OOPS.
32. Name any two OOP languages.
33. What is message passing?
34. What is the difference between abstraction and encapsulation?
35. What is data abstraction?
36. Define static function.
37. What is the use of the new operator?
38. What is destructor used for?
39. Name features of Object Oriented Programming.

40. What is object identity?
41. What is data member?
42. What is member function?
43. Give one example of polymorphism.
44. What is use of private keyword?
45. What is UML?
46. Define constructor overloading.
47. What is this pointer?
48. What is garbage collection?
49. What is copy constructor?
50. What is encapsulation in simple words?

✅ 50 Long Answer / 10 Marks Questions

(Explain with definition, diagram, advantages, examples)

1. Explain the main features of OOP with examples.
2. What is Inheritance? Explain types with diagrams.
3. Write advantages and disadvantages of OOP.
4. Explain polymorphism and its types with examples.
5. What is encapsulation? Explain its benefits with real-life example.
6. Explain abstraction with example and advantages.
7. What is constructor and destructor? Explain types.
8. Explain operator overloading with example.
9. What is method overloading and overriding? Compare both.
10. Explain data hiding with example.
11. Explain multiple inheritance with diagram and example code.
12. Explain hybrid inheritance with diagram.
13. What is interface? Explain difference between interface and abstract class.
14. Explain virtual function and pure virtual function.
15. Explain dynamic binding vs static binding with difference table.
16. Explain class and object with real life example.
17. Write difference between procedural programming and object-oriented programming.
18. What is reusability in OOP? Explain with suitable example.
19. Explain ‘this’ pointer and its uses with code example.
20. What is friend function? Write two advantages and one drawback.
21. Explain polymorphism with the help of diagram and real-life example.
22. Describe the concept of message passing in OOP.

23. Explain different types of constructors with example (default, parameterized, copy).
24. Explain access specifiers: public, private, protected with example.
25. Write a program in C++ to show single inheritance.
26. Explain abstraction vs encapsulation (table + example).
27. What is overriding? Explain rules of method overriding.
28. Explain how operator overloading is done in C++.
29. Write short note on garbage collection.
30. Explain difference between class and structure.
31. What is template in C++? Explain with example.
32. Explain how memory is allocated and deallocated in OOP.
33. Write 5 applications of OOP in real world.
34. Explain copy constructor with example.
35. Write short note on exception handling in OOP.
36. Explain concept of static data member and static member function.
37. Explain composition and aggregation in object oriented programming.
38. Explain inline function with example.
39. Explain friend class with example.
40. Discuss the pillars (4 main concepts) of OOP in detail.
41. Explain how polymorphism is implemented in Java with example.
42. Explain destructor with syntax and use. Why destructor does not take arguments?
43. Explain GUI and OOP relationship.
44. Explain the difference between overloading and overriding with examples.
45. What is object? Explain characteristics of an object.
46. Explain data abstraction in detail.
47. Explain the lifecycle of an object in OOP.
48. Explain the concept of visibility mode in inheritance.
49. Discuss real life examples of OOPs concepts.
50. Explain need and importance of Object-Oriented Programming in modern software development.