	Selvam College Of Technology, Namakkal (Autonomous) IT Support & Development Training Programme (ISDTP)	
Worksheet -5 (Polymorphism)		

Bundle & Subject Name	Advanced Bundle V2 (2025) - Java Programming V2	**Semester**	VI

Answer all the questions. (10*1=10)

1. Polymorphism is a fundamental concept of which programming paradigm?

   A) Functional programming B) Procedural programming

   C) Object-oriented programming D) Declarative programming

   Ans: C. Object-oriented programming

2. What is another term for Compile-time Polymorphism?

   A) Overloading B) Overriding

   C) Inheritance D) Encapsulation

   Ans: A. Overloading

3. Can the main () method in Java be overloaded?

   A) Yes B) No

   C) Only in abstract classes D) Only in final classes

   Ans: A. Yes

4. Which of the following is true about Method Overriding?

   A) The method in the parent class must be static.

   B) The method in the child class must have the same name and parameter list as the parent class method.

   C) The return type of the child method must always be void.

   D) Method Overriding does not require inheritance.

   Ans: B. The method in the child class must have the same name and parameter list as the parent class method

5. Which of the following can be overridden in a child class?

   A) Static methods B) Private methods

   C) Final methods D) Non-static instance methods

   Ans: D. Non-static instance methods

6. In which type of polymorphism is the method call resolved by the compiler?

   A) Compile-time Polymorphism

   B) Run-time Polymorphism

   C) Both Compile-time and Run-time Polymorphism

   D) Static Binding

   Ans: A. Compile-time Polymorphism

7. What is another term for Late Binding?

   A) Static binding B) Early binding

   C) Dynamic binding D) Compile-time binding

   Ans: C. Dynamic binding

8. Can the main () method in Java be inherited by a subclass?

   A) Yes, the main () method can be inherited and overridden.

   B) No, the main () method is inherited but cannot be overridden.

   C) Yes, but only if it is defined as public.

   D) No, the main () method cannot be inherited because it is static.

   Ans: D. No, the main () method cannot be inherited because it is static.

9. What will happen if we try to override a static method in a subclass?

   A) The compiler will throw an error because static methods cannot be overridden.

   B) The subclass method will override the static method in the parent class.

   C) The superclass method will be called, ignoring the subclass method.

   D) The program will run successfully without any issues.

   Ans: A. The compiler will throw an error because static methods cannot be overridden.

10. What makes polymorphism harder to debug?

    A) The method resolution happens at compile-time.

    B) The object's behavior can change at runtime based on its actual type.

    C) It makes code simpler to trace.

    D) It always uses the same method.

    Ans: B. The object's behavior can change at runtime based on its actual type.