What is the purpose of using private variables in a class?

a) To make them globally accessible

**b) To restrict direct access from outside the class (Correct Answer)**

c) To initialize them automatically

d) To improve performance

In the Employee class example, what is the purpose of the makeString method?

a) Modifies the employee's details

**b) Returns a formatted string representation of the employee's details (Correct Answer)**

c) Compares employee details

d) Deletes employee details

Which of the following statements is true about encapsulation in Java?

a) It makes all class members public.

**b) It hides the internal implementation details of an object** **(Correct Answer)**

c) It only allows variables to be static.

d) It restricts the use of classes to a single method.

What keyword is used in Java to refer to the current instance of a class?

a) super

b) static

c) class

**d) this (Correct Answer)**

What keyword is used in Java to handle exceptions that may occur in a block of code?

a) error

b) throw

**c) try (Correct Answer)**

d) check

What is an advantage of using exception handling in Java?

a) Reduces the size of the compiled code

**b) Improves code reliability by managing run-time errors** **(Correct Answer)**

c) Automatically optimizes performance

d) Eliminates the need for debugging

In inheritance, what does a subclass inherit from its superclass?

a) Private methods

b) Constructors only

**c) Public and protected members** **(Correct Answer)**

d) Instance variables with the same value

In Java, what does the term "reference" mean?

a) The actual object stored in memory

**b) A way to access an object in memory** **(Correct Answer)**

c) A copy of an object

d) A method that refers to itself

What message is displayed when the display() method of a House instance is called in a polymorphic way using a Building reference?

a) This is a building.

b) This is an office.

**c) This is a house** **(Correct Answer)**

d) Display method not found.

Which class in the Java exercise demonstrates composition by including instances of MyCoffeeMaker, MyRefrigerator, and MyDishWasher?

a) MainClass

b) KitchenController

c) **MySmartKitchen** **(Correct Answer)**

d) ApplianceManager