# Exam 2 (Total: 100 Points)

1- **Define** the four concepts of OOP with short explain?   **(15 Points)**

2- **What** is the difference between access modifiers? **(15 Points)**

3- **Write** an example for Template? **(15 Points)**

4- **Write** an example for Exception Handling? **(15 Points)**

5- **What** is the difference between Overloading and Overriding? **(20 Points)**

6- **Solve** the below problem. **(20 Points)**

```
                    Point2D
-x:float = 0.0f
-y:float = 0.0f
+Point2D(x:float,y:float)
+Point2D()
+getX():float
+setX(x:float):void
+getY():float
+setY(y:float):void
+setXY(x:float,y:float):void
+getXY():float[2]• ------------  Array of {x,y}

            extends  △

                    Point3D
-z:float = 0.0f
+Point3D(x:float,y:float,z:float)
+Point3D()
+getZ():float
+setZ(z:flaot):void
+setXYZ(x:float,y:flaot,z:float):void --- Array of {x,y,z}
+getXYZ():float[3] • -----------
```