BITS PILANI, DUBAI CAMPUS

DUBAI INTERNATIONAL ACADEMIC CITY, DUBAI

**FIRST SEMESTER 2024 – 2025**

**COURSE:** F213 (Object Oriented Programming)

**COMPONENT:** Practical Sheet 5 **DATE:** 23rd Sep 2024

**Q.1**

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| **Area** |
| Data:  -side1  -side2 |
| Methods:  +calc\_Area(int)  +calc\_Area(float)  +calc\_Area(float,float)  +display() |
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| Note:   1. – indicates private access specifier, + indicates public access specifier 2. +calc\_Area(int): a method to calculate area of square which takes one input of type int   Area of square: side \* side   1. +calc\_Area(float): a method to calculate area of circle which takes one input of type float   Area of circle: 3.14 \* radius \* radius   1. +calc\_Area(float, float): a method to calculate area of rectangle which takes two inputs both of type float   Area of rectangle: side1 \* side2  5. +display(): a method to print the calculated area. |
| Create a class AreaTester to include main method. Create objects of Area in this main method and work on method overloading with switch case: |

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| case 1: calculating area of square. case 2: calculating area of circle case 3: calculating area of rectangle  1 $vi AreaTester.java |
| class Area {  }  public class AreaTester {  public static void main(String[] args) {  // Read Input from user. and test the Area class.  }  } |
| $javac AreaTester.java  $java AreaTester |

**Q.2** Write a program in java which takes an array of 10 floating point numbers. Find the min, max and average of the numbers.

**Q.3**

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| **Purse** |
| Data:  -dirham  -50fills  -25fills  -total |
| Methods:  +purse()  +add\_dirham(int)  +remove\_dirham(int)  +add\_50fills(int)  +remove\_50fills(int) |

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| +add\_25fills(int)  +remove\_25fills(int)  +total\_cash() |
|  |
| Note:  1. – indicates private access specifier, + indicates public access specifier  2. +total\_cash(): a method to print the total cash |
| Create a class PurseTester to include main method. Create objects of Purse in this main method and work on functionalities:  1 $vi PurseTester.java |
| class Purse {  }  public class PurseTester {  public static void main(String[] args) {  // Read Input from user. and test the Purse class.  }  } |
| $javac PurseTester.java  $java PurseTester |

**END**