

AP Midsem Set-1 Rubric (20)

Question	Criteria	Description	Marks
Q1 (8)	User Defined Exception Class	To throw a user defined exception, a custom class must be defined. This class has been named ValueOutOfBounds in the solution, but students can name it anything they want.	1
	Earthquake Class	Check for 3 components: 1.Both attributes declared are private, 2. Parametrised constructor is defined, 3. The toString() method is defined	2 (0.5+0.5+1)
	User Input	A string and a double value must be taken as user input. Kindly award mark if float has been used instead of double.	1
	Try Catch Block	Code must throw the user defined exception in the try block if float value is not in range 2-8, and catch it to terminate the program without runtime error. (Binary Mark)	1
	Print Object	The Object must be printed as a whole, and the 2 attributes should NOT be printed separately. (the toString() method was required earlier to facilitate this). Note that if the toString() method has not been defined, and the attributes have been printed separately using 2 print statements, award 0.5 mark.	1
	Correct Implementation	Code should give correct output for given test case. Evaluator can check for 1-2 small test cases as well. Binary marking to be followed. No marks to be awarded for partially correct outputs. The output format may vary a little but it should be complete.	2 (1 mark for each type of test case)
Q2 (12)	Classes created	These classes must be present - Shape, Circle, Triangle and Quadrilateral and Shape should be the parent class. Parent class should have functions to calculate area and perimeter which will be overridden / implemented by child classes.	2 (1 for all classes, 1 for child classes overriding / implementing parent methods)
	Encapsulation / correct use of modifiers	data members must have private access unless it's absolutely necessary to grant them public/default access.	1
		getters/setters should be used for accessing/modifying the private members.	1
	Class methods	Correct implementation of checkIntersection for circle, getType for triangle and getType for quadrilateral	2+2+2 (binary marking if code does not run)

	Correct output on test case	binary marking - give full marks if all the outputs are correct as shown in the test case (calculate by hand to verify)	2 (binary marking if output is not completely correct)
		Total	20