Name_____ **Score**_____

Multiple Choice questions. Circle A, B, C, D, or E (select **only one** as the solution for each of the MC questions (**0.75 pts** for each correct selection; the total score for this part is **30 pts**.)

1	a	b	c	d	e		**21**	a	b	c	d	e
2	a	b	c	d	e		**22**	a	b	c	d	e
3	a	b	c	d	e		**23**	a	b	c	d	e
4	a	b	c	d	e		**24**	a	b	c	d	e
5	a	b	c	d	e		**25**	a	b	c	d	e
6	a	b	c	d	e		**26**	a	b	c	d	e
7	a	b	c	d	e		**27**	a	b	c	d	e
8	a	b	c	d	e		**28**	a	b	c	d	e
9	a	b	c	d	e		**29**	a	b	c	d	e
10	a	b	c	d	e		**30**	a	b	c	d	e
11	a	b	c	d	e		**31**	a	b	c	d	e
12	a	b	c	d	e		**32**	a	b	c	d	e
13	a	b	c	d	e		**33**	a	b	c	d	e
14	a	b	c	d	e		**34**	a	b	c	d	e
15	a	b	c	d	e		**35**	a	b	c	d	e
16	a	b	c	d	e		**36**	a	b	c	d	e
17	a	b	c	d	e		**37**	a	b	c	d	e
18	a	b	c	d	e		**38**	a	b	c	d	e
19	a	b	c	d	e		**39**	a	b	c	d	e
20	a	b	c	d	e		**40**	a	b	c	d	e

- Midterm Exam questions
- All the assignments and quizzes
  - **Short Answer questions: Program Outputs, Correct Code, Debugging**

Play particular attention to the following:

- printf(): %d, %f, %s…and %10d, %-10d….%9.4f…
- String.format()
- In a class, private/public variables/methods
- How to declare, create, and initialize an array
- Double [] a = {2.1, 3.0, 5.0, 3.235} (and a.length). Array indices
- How to print array contents, operate on an array?
- To Java promotes int to double (and char to int, short to long), and how to cast (a double to int?)
- Difference between *break* and *continue* in a loop?
- How to use operator **? :**
- How Math static methods such as min, max, sqrt, ceil, … how to use
- Parameter list in a method head and arguments in method call must agree in order (number of …., datatype,…match)
- Operators: ++, --, +=, -=, *=, /=, ….
- How to create a class object/instance (with new, and constructor…passising arguments)
- How to use class Random to create a range of random numbers (such as [-3, -3]
- Block scope (i.e., {…..int a; …..})
- How to write and use loop statements such as for, while, do…while
- if-statement; if-else-statement, switch-statement
- Define a constant with final
- What does static means in the method main(…), in Math.min(…)
- Define several methods with the SAME method name but with different number of parameters (and/or different datatypes for same number of parameters—overloading)
- Coding—like projects/midterm project we did, but not so "large"
  a. Class instance variables, validation, ..
  b. Constructor(s) (with empty, several arguments)
  c. set, get methods (validation)
  d. methods: toString(), calculateXXX(), displayYYY()…..
  e. UML class diagram