ITMD 413/513 (Quick Review chap. 10- Classes and OOP) **-solutions**

1. A(n) \_\_\_\_\_ is a set of real-world objects, parties, and major events related to the problem.

|  |  |
| --- | --- |
| a. | class |
| b. | problem domain |
| c. | object |
| d. | instance |

ANS: B

2. What does the acronym UML stand for?

|  |  |
| --- | --- |
| a. | Unified Modeling Language |
| b. | United Modeling Language |
| c. | Unified Model Language |
| d. | United Model Language |

ANS: A

3. Which section in the UML holds the list of the class’s data attributes?

|  |  |
| --- | --- |
| a. | First |
| b. | Second |
| c. | Third |
| d. | Fourth |

ANS: B

4. Which section in the UML holds the list of the class’s methods?

|  |  |
| --- | --- |
| a. | First |
| b. | Second |
| c. | Third |
| d. | Fourth |

ANS: C

5. What type of method provides a safe way for code outside a class to retrieve the values of attributes, without exposing the attributes in a way that they could be changed by the code outside the method?

|  |  |
| --- | --- |
| a. | Accessor |
| b. | Mutator |
| c. | Setter |
| d. | Class |

ANS: A

6. What attributes belong to a specific instance of the class?

|  |  |
| --- | --- |
| a. | Instance |
| b. | Self |
| c. | Object |
| d. | Data |

ANS: A

7. What is the special name given to the method that returns a string containing the object’s state?

|  |  |  |
| --- | --- | --- |
| a. | \_\_state\_\_ |  |
| b. | \_\_obj\_\_ |  |
| c. | \_\_str\_\_ |  |
| d. | \_\_init\_\_ |  |

ANS: C

8. Which method is automatically executed when an instance of the class is created in memory?

|  |  |  |
| --- | --- | --- |
| a. | \_\_state\_\_ |  |
| b. | \_\_obj\_\_ |  |
| c. | \_\_str\_\_ |  |
| d. | \_\_init\_\_ |  |

ANS: D

9. When a method is called, what does Python make to reference the specific object on which the method is supposed to operate?

|  |  |
| --- | --- |
| a. | state variable |
| b. | self parameter |
| c. | object data |
| d. | init procedure |

ANS: B

10. What type of programming contains class definitions?

|  |  |
| --- | --- |
| a. | Procedural |
| b. | Object |
| c. | Object-oriented |
| d. | Modular |

ANS: C

11. What is, conceptually, a self-contained unit that consists of data attributes and methods that operate on the data attributes?

|  |  |
| --- | --- |
| a. | Class |
| b. | Object |
| c. | Instance |
| d. | Module |

ANS: B

12. What are the procedures that an object performs called?

|  |  |
| --- | --- |
| a. | Methods |
| b. | Actions |
| c. | Modules |
| d. | Instances |

ANS: A

13. What is the combining of data and code in a single object known as?

|  |  |
| --- | --- |
| a. | Modularity |
| b. | Instantiation |
| c. | Encapsulation |
| d. | Objectification |

ANS: C

14. What is another name for the mutator methods?

|  |  |  |
| --- | --- | --- |
| a. | Setters |  |
| b. | Getters |  |
| c. | Instances |  |
| d. | Attributes |  |

ANS: A

15. What is another name for the accessor methods?

|  |  |  |
| --- | --- | --- |
| a. | Setters |  |
| b. | Getters |  |
| c. | Instances |  |
| d. | Attributes |  |

ANS: B

16. True/False: A mutator method has no control over the way that a class’s data attributes are modified.

ANS: F

17. True/False: In a UML diagram, the middle section holds the list of the class’s methods.

ANS: F

18. True/False: Procedures operate on data items that are separate from the procedures.

ANS: T

19. An object’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is simply the values of the object’s attributes at any given moment.

ANS: state

20. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ attributes are created by the self parameter and they belong to a specific instance of the class.

ANS: instance