**ITMD 413/513 Quick Review (Chapter 9 – Dicts & Sets)**

1. In a dictionary, you use a(n) \_\_\_\_\_ to locate a specific value.

|  |  |
| --- | --- |
| a. | datum |
| b. | element |
| c. | item |
| d. | key |

2. What is the correct structure for creating a dictionary of month names to be accessed by month numbers?

|  |  |
| --- | --- |
| a. | { 1 ; 'January', 2 ; 'February', 3 ; 'March' } |
| b. | { 1 : 'January', 2 : 'February', 3 : 'March' } |
| c. | [ 1 : 'January', 2 : 'February', 3 : 'March' ] |
| d. | { 1, 2, 3 : 'January', 'February', 'March' } |

3. What would be the result of the following code?

ages = {'Aaron' : 6, 'Kelly' : 3, 'Abigail' : 1 }

value = ages['Brianna']

|  |  |
| --- | --- |
| a. | false |
| b. | -1 |
| c. | 0 |
| d. | KeyError |

4. What is the number of the first index in a list dictionary?

|  |  |  |
| --- | --- | --- |
| a. | 0 |  |
| b. | 1 |  |
| c. | Dictionary is not indexed by number. |  |
| d. | Size of the dictionary minus one. |  |

5. You created the following dictionary relationships = {'Jimmy':'brother'}. You then executed the following code, and received a KeyError exception. What is the reason for the exception?

relationships['jimmy']

|  |  |  |
| --- | --- | --- |
| a. | String comparisons are case sensitive so 'jimmy' does not equal 'Jimmy'. |  |
| b. | You used the wrong syntax for creating the dictionary. |  |
| c. | You should have used the code relationships['brother']. |  |
| d. | There is a bug in Python. |  |

6. In order to avoid KeyError exceptions, you can check whether a key is in the dictionary using the \_\_\_\_\_ operator.

|  |  |  |
| --- | --- | --- |
| a. | included |  |
| b. | of |  |
| c. | in |  |
| d. | not in |  |

7. What is the value of the variable phones after the execution of the following code?

phones = {'John': '5555555', 'Julie' : '7777777'}

phones['John'] = '1234567'

|  |  |  |
| --- | --- | --- |
| a. | {'John': '5555555', 'Julie' : '7777777'} |  |
| b. | {'John': '1234567', 'Julie' : '7777777'} |  |
| c. | {'John': '1234567' } |  |
| d. | invalid code |  |

8. Which statement would you use to delete an existing key-value pair from a dictionary?

|  |  |  |
| --- | --- | --- |
| a. | del |  |
| b. | remove |  |
| c. | delete |  |
| d. | unpair |  |

9. Which function would you use to get the number of elements in a dictionary?

|  |  |  |
| --- | --- | --- |
| a. | size |  |
| b. | length |  |
| c. | len |  |
| d. | invalid code |  |

10. Which method would you use to returns all the elements in the dictionary as a list of tuples?

|  |  |  |
| --- | --- | --- |
| a. | list |  |
| b. | items |  |
| c. | pop |  |
| d. | keys |  |

11. Which method would you use to return the value associated with a specified key and remove that key-value pair from the dictionary?

|  |  |  |
| --- | --- | --- |
| a. | list |  |
| b. | items |  |
| c. | popitem |  |
| d. | pop |  |

12. What does the get method do if the specified key is not found in the dictionary?

|  |  |  |
| --- | --- | --- |
| a. | Throw an exception |  |
| b. | Nothing |  |
| c. | Return a default value |  |
| d. | You do not specify a key for the get method |  |

13. Which of the following does not apply to sets?

|  |  |  |
| --- | --- | --- |
| a. | The stored elements can be of different data types. |  |
| b. | All the elements must be unique – no two elements can have the same value. |  |
| c. | The elements are unordered. |  |
| d. | The elements are pairs. |  |

14. What method can be used to add a group of elements to a set?

|  |  |  |
| --- | --- | --- |
| a. | add |  |
| b. | addgroup |  |
| c. | update |  |
| d. | Elements must be added one at a time. |  |

15. What is the process used to convert an object to a stream of bytes that can be saved in a file?

|  |  |  |
| --- | --- | --- |
| a. | Pickling |  |
| b. | Streaming |  |
| c. | Writing |  |
| d. | Dumping |  |