QUIZIZZ Worksheets

Name

Class

Date

OOPS JAVA UNIT-5 TEST-2

Total questions: 40

Worksheet time: 1hrs 20mins

Instructor name: Mr. PRASHANT ATMAKURI

1. Which of the following statements about arrays is true?

a) Arrays can be resized after declaration.

b) Arrays can hold both homogeneous and heterogeneous data elements.

c) Arrays can hold only homogeneous data type elements.

d) Arrays are implemented based on some standard data structure.

2. Which of the following is a limitation of arrays?

a) They can hold only objects but not primitives.

b) They are growable in nature.

c) They are based on some standard data structure.

d) They are fixed in size.

3. What is the main advantage of arrays?

a) They can represent a huge number of elements using a single variable.

b) They are implemented based on some data structure.

c) They have ready-made method support.

d) They can hold heterogeneous data elements.

4. Which of the following can hold both primitives and object types?

a) Both Arrays and Collections

b) Arrays

c) Collections

d) Neither Arrays nor Collections

5. Which of the following is a characteristic of Collections?

   a) They can hold only homogeneous data type elements.
   b) They are fixed in size.
   c) They are implemented based on some standard data structure.
   d) They are recommended for performance point of view.

6. If you need to represent a group of objects as a single entity, which concept should you opt for?

   a) Primitives
   b) Data structures
   c) Collection
   d) Arrays

7. Which programming language uses STL (Standard Template Library) for its collection framework?

   a) C++
   b) C#
   c) Java
   d) Python

8. Which of the following is NOT one of the nine key interfaces of the collection framework?

   a) Map
   b) Array
   c) Queue
   d) List

9. What kind of data can collections hold?

   a) Both primitives and objects
   b) Neither primitives nor objects
   c) Only primitives
   d) Only objects

10. From the performance point of view, which of the following is recommended to use?

    a) Collections
    b) Neither Arrays nor Collections
    c) Both Arrays and Collections
    d) Arrays

11. What is the main purpose of the Collection interface?

    a) To represent a group of individual objects as a single entity.
    b) To provide several utility methods for Collection objects.
    c) To represent a group of objects as key-value pairs.
    d) To ensure that duplicates are not allowed.

12. Which interface should you use if you want to allow duplicates and preserve insertion order?

    a) Set
    b) NavigableSet
    c) List
    d) SortedSet

13. Which statement is true about the Set interface?

    a) It is the child interface of List.
    b) It represents a group of objects as key-value pairs.
    c) It doesn't allow duplicates and doesn't preserve insertion order.
    d) It allows duplicates and preserves insertion order.

14. What does the NavigableSet interface provide?

    a) Methods for navigation purposes.
    b) Methods to represent objects as key-value pairs.
    c) Methods to ensure insertion order is preserved.
    d) Methods to allow duplicates.

15. Which statement is true about the Map interface?

    a) It only allows unique values.
    b) It represents a group of objects as a single entity.
    c) It represents a group of objects as key-value pairs.
    d) It is a child interface of Collection.

16. Which interface would you use to represent a group of unique objects according to some sorting order?

    a) Queue
    b) Set
    c) NavigableSet
    d) SortedSet

17. What is the difference between Collection and Collections in the Java Collection framework?

a) There is no difference; they are the same.
b) Collection is a class and Collections is an interface.
c) Both are utility classes in java.util.
d) Collection is an interface and Collections is a class.

18. Which of the following is NOT a legacy character in the collection framework?

a) Dictionary(AC)
b) List(C)
c) Vector(C)
d) Enumeration(I)

19. Which interface is not a direct child of the Collection interface?

a) Map
b) Set
c) Queue
d) List

20. If you want to represent a group of objects as key va

a) Set
b) List
c) SortedMap
d) SortedSet

21. Which of the following is NOT a method present in the Collection interface?

a) boolean put(Object o);
b) boolean isEmpty();
c) boolean add(Object o);
d) Object[] toArray();

22. Which interface should you use if you want to preserve the insertion order and allow duplicates?

a) Map
b) List
c) Queue
d) Set

23. Which of the following methods is specific to the List interface?

a) boolean contains(Object o);
b) boolean remove(Object o);
c) Object get(int index);
d) boolean add(Object o);

24. What is the underlying data structure of LinkedList?

a) HashTable
b) Double LinkedList
c) Single LinkedList
d) Resizable array

25. Which among the following is NOT a method in LinkedList to support stack and queue implementation?

a) void addFirst(Object o);
b) boolean remove(Object o);
c) Object removeLast();
d) Object removeFirst();

26. Which of the following is true about Vector?

a) It does not preserve insertion order.
b) Every method in Vector is synchronized.
c) The underlying data structure is a double LinkedList.
d) It does not allow null insertion.

27. What is the default initial capacity of a Vector?

a) 20
b) 10
c) 5
d) 15

28. Which method is used in Vector to get the first element?

a) Object first();
b) Object elementAt(int index);
c) Object firstElement();
d) Object get(int index);

29. What will be the capacity of a Vector after adding 11 elements if it was initialized with a default capacity?

a) 10
b) 20
c) 11
d) 15

30. Which class or interface provides a method to check if a Collection object is empty?

a) Set
b) List
c) Vector
d) Collection

31. Which cursor can be used to move in both forward and backward directions?

a) Iterator
b) Enumeration
c) None of the above
d) ListIterator

32. Which method is used to determine if there are more elements in an Enumeration?

a) hasNext()
b) hasMore()
c) hasMoreElements()
d) nextElement()

33. Which cursor allows replacement of objects while iterating?

a) Iterator
b) Both Iterator and ListIterator
c) ListIterator
d) Enumeration

34. Which of the following is NOT a method of the ListIterator interface?

a) hasPrevious()
b) previousIndex()
c) lastElement()
d) add(Object new)

35. What is the limitation of the ListIterator?

a) It cannot add new objects.
b) It cannot perform removal operations.
c) It can only move in a single direction.
d) It is applicable only for List objects.

36. Which of the following is a legacy cursor?

a) Iterator
b) ListIterator
c) Enumeration
d) Both Iterator and ListIterator

37. Using which cursor can we perform both read and remove operations?

a) ListIterator
b) Both Iterator and ListIterator
c) Enumeration
d) Iterator

38. The `set(Object new)` method, associated with which cursor, is used for replacement?

a) None of the above
b) ListIterator
c) Enumeration
d) Iterator

39. Which cursor is applicable only for legacy classes?

a) None of the above
b) Enumeration
c) ListIterator
d) Iterator

40. How can you get a ListIterator object?

a) Using `iterator()` method
b) Using `elements()` method
c) Using `next()` method
d) Using `listIterator()` method

Answer Keys

1. c) Arrays can hold only homogeneous data type elements.
2. d) They are fixed in size.
3. a) They can represent a huge number of elements using a single variable.
4. b) Arrays
5. c) They are implemented based on some standard data structure.
6. c) Collection
7. a) C++
8. b) Array
9. d) Only objects
10. d) Arrays
11. a) To represent a group of individual objects as a single entity.
12. c) List
13. c) It doesn't allow duplicates and doesn't preserve insertion order.
14. a) Methods for navigation purposes.
15. c) It represents a group of objects as key-value pairs.
16. d) SortedSet
17. d) Collection is an interface and Collections is a class.
18. b) List(C)
19. a) Map
20. c) SortedMap
21. a) boolean put(Object o);
22. b) List
23. c) Object get(int index);
24. b) Double LinkedList
25. b) boolean remove(Object o);
26. b) Every method in Vector is synchronized.
27. b) 10
28. c) Object firstElement();
29. b) 20
30. d) Collection

31. d) ListIterator
32. c) hasMoreElements()
33. c) ListIterator
34. c) lastElement()
35. d) It is applicable only for List objects.
36. c) Enumeration
37. b) Both Iterator and ListIterator
38. b) ListIterator
39. b) Enumeration
40. d) Using `listIterator()` method