

## Review Test Submission: Homework 7


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Course	Java Programming (Intermediate) (92759)
Test	Homework 7
Started	3/26/24 11:30 AM
Submitted	3/26/24 11:49 AM
Due Date	4/7/24 11:59 PM
Status	Completed
Attempt Score	30 out of 30 points
Time Elapsed	18 minutes
Results Displayed	All Answers, Submitted Answers, Correct Answers

### Question 1

2 out of 2 points

When compiling a generic class, the \_\_\_\_\_ option should be used to view the unchecked warning message.


Selected Answer:  -Xlint:unchecked.


Answers:  -Xlint:unchecked.  
-X:unchecked.  
-warning:unchecked.  
-unchecked.

### Question 2

2 out of 2 points

Suppose Stack is a generic class that has one type parameter. The assignment  
`Stack<Integer> integerStack = new Stack(10);`

Selected Answer:  is permitted but unsafe, the compiler issues a warning message.

Answers: is illegal.  
is permitted and safe.  
 is permitted but unsafe, the compiler issues a warning message.

is permitted but unsafe, the runtime environment issues a warning message.

### Question 3

2 out of 2 points

\_\_\_\_\_ enable programmers to specify, with a single method declaration, a set of related methods.

Selected Answer: ☒ Generic methods.

Answers: ☐ Overloaded methods.

☐ Overridden methods.

☒ Generic methods.

☐ Generics.

### Question 4

2 out of 2 points

Which of the following statements is true?

Selected Answer: ☒ Both a) and b) are true.

Answer:

Answers: ☐ Overloaded methods are often used to perform similar operations on different types of data.

☐ When the compiler encounters a method call, it attempts to locate a method declaration with a name and parameters that are compatible with the argument types in the method call.

☒ Both a) and b) are true.

☐ Neither a) nor b) is true.

### Question 5

2 out of 2 points

Which statement is false?

Selected Answer: ☒ A generic method cannot be overloaded by non-generic methods.

Answer:

Answers: ☐ A generic method may be overloaded.

☐ A class can provide two or more generic methods that specify the same method name but different method parameters.

☒ A generic method cannot be overloaded by non-generic methods.

☐ When the compiler encounters a method call, it searches for the method declaration that most precisely matches the method name and the argument types specified in the call.

**Question 6**

2 out of 2 points

All generic method declarations have a type parameter section delimited by \_\_\_\_\_.

Selected Answer: ☒ angle brackets (< and >).

Answers: curly brackets ({ and }).

☒ angle brackets (< and >).

square brackets ([ and ] ).

parenthesis.

**Question 7**

2 out of 2 points

Which statement is false?

Selected Answer: ☒ Each type parameter section contains only one type parameter.

Answers: When declaring a generic method, the type parameter section is placed before the return type of the method.

☒ Each type parameter section contains only one type parameter.

A type parameter is an identifier that specifies a generic type name.

Type parameters can represent only reference types.

**Question 8**

2 out of 2 points

When a generic class is instantiated without specifying a type argument, it is said to have a \_\_\_\_\_.

Selected Answer: ☒ raw type.

Answers: empty type.

☒ raw type.

null type.

abstract type.

**Question 9**

2 out of 2 points

One generic Stack class could be the basis for creating many Stack classes, e.g., Stack<Double>, Stack<Integer> and Stack<Employee>. These classes are known as \_\_\_\_\_.

Selected Answer: ☒ parameterized classes.

Answers:

- subclasses.
- generic subclasses.
- concrete classes.
- ☒ parameterized classes.

### Question 10

2 out of 2 points

Generics provide \_\_\_\_\_ that allows programmers to catch invalid types at compile time.

Selected Answer: ☒ compile-time type safety.

Answers:

- ☒ compile-time type safety.
- compile-time exception handling.
- compile-time error checking.
- run-time type safety.

### Question 11

2 out of 2 points

Class Number is \_\_\_\_\_ of both Integer and Double.

Selected Answer: ☒ the superclass

Answers:

- the subclass
- composed
- a descendent
- ☒ the superclass

### Question 12

2 out of 2 points

A wildcard type argument is denoted by a(n) \_\_\_\_\_.

Selected Answer: ☒ question mark (?).

Answers:

- asterisk (\*).
- underscore (\_).
- ☒ question mark (?).
- caret (^).

**Question 13**

2 out of 2 points

\_\_\_\_\_ is the default upper bound of a type parameter.

Selected Answer: ☒ Object.

Answers:

- ☐ String.
- ☐ Comparable.
- ☐ Class.
- ☒ Object.

**Question 14**

2 out of 2 points

Which of the following statements is false?

Selected Answer: ☒  
Answer: Because a wildcard is a type-parameter name, you can use it as a type name throughout a method's body.

Answers: Wildcard type arguments enable you to specify method parameters, return values, variables, and so on, that act as supertypes of parameterized types.

A wildcard-type argument is denoted by ?, which represents an "unknown type."

☒  
Because a wildcard is a type-parameter name, you can use it as a type name throughout a method's body.

If a wildcard is specified without an upper bound, then only the methods of type Object can be invoked on values of the wildcard type.

**Question 15**

2 out of 2 points

When the compiler translates a generic method into Java bytecodes, it uses \_\_\_\_\_ to replace the type parameters with actual types.

Selected Answer: ☒ erasure.

Answers:

- ☒ erasure.
- ☐ compile-time type replacement.
- ☐ compile-time type checking.
- ☐ compile-time type safety.

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← OK