

| Question   | Option1                               | Option2                           | Option3                  | Option4                        | Right Answer |
|--|---------------------------------------|-----------------------------------|--------------------------|--------------------------------|--------------|
| Which cannot be thrown by user manually?   | Exception                             | Throwable                         | Error                    | RuntimeException               | Option3      |
| Which cannot be thrown by user manually?   | Exception                             | Throwable                         | Error                    | RuntimeException               | Option3      |
| Which must be handled or declared?   | Checked                               | Runtime                           | Error                    | AssertionError                 | Option1      |
| Which statement is correct?  | finally executes only if no exception | finally never executes            | finally executes always  | finally executes only in catch | Option3      |
| Which returns exception description?   | printStackTrace                       | toString                          | getMessage               | getCause                       | Option3      |
| Which is superclass of RuntimeException?   | Throwable                             | Error                             | Exception                | IOException                    | Option3      |
| Which is thrown when accessing null object?  | NullPointerException                  | IllegalState                      | IOException              | AssertionError                 | Option1      |
| FileNotFoundException is subclass of:  | IOException                           | Exception                         | Error                    | Throwable                      | Option1      |
| try-with-resources requires resource to implement:   | Serializable                          | AutoCloseable                     | Runnable                 | Comparable                     | Option2      |
| StackOverflowError occurs due to:  | Overflowing array                     | Deep recursion                    | Large file               | Invalid cast                   | Option2      |
| Which exception is thrown by new instance of Integer("abc")?   | IOException                           | NumberFormatException             | IllegalArgumentException | RuntimeException               | Option2      |
| catch(Exception e) catches:  | Only checked                          | Only unchecked                    | All exceptions           | Errors                         | Option3      |
| catch(Exception e) catches:  | Only checked                          | Only unchecked                    | All exceptions           | Errors                         | Option3      |
| catch block order:   | Specific first, general later         | General first                     | Alphabetical             | Any order                      | Option1      |
| Which exception is thrown when thread interrupted during sleep?  | SleepException                        | InterruptedException              | IllegalStateException    | ThreadException                | Option2      |
| Which is thrown when class not found?  | ClassNotFoundException                | ClassCastException                | IllegalArgumentException | NoSuchClassError               | Option1      |
| Which exception is thrown by wait() without notify()?  | IllegalMonitorStateException          | IllegalState                      | NullPointerException     | IOException                    | Option1      |
| RuntimeException is:   | Checked                               | Unchecked                         | Error                    | None                           | Option2      |
| What is true about Exception propagation?  | Checked propagate automatically       | Unchecked propagate automatically | Errors propagate only    | None                           | Option2      |
| Which Java 8 feature allows us to filter a collection based on a predicate?  | Lambda Expression                     | Default Method                    | Optional class           | Stream API                     | Option4      |
| Which Java 8 feature allows us to pass behavior as a parameter to a method?  | Lambda expressions                    | Optional class                    | Stream API               | Functional Interface           | Option1      |
| What is the output of the following program?<br>List<String> names = Arrays.asList("ABC", "CAB", "BCA");<br>String result = names.stream().reduce("", (a, b) -> a + b.charAt(1));<br>System.out.println(result); | "ABC"                                 | "ACB"                             | "BAC"                    | "CBA"                          | Option3      |

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| Which is the new method introduced in the String class in Java 8?   | offsetByCodePoints()  | matches()   | intern()  | join()  | Option4      |
| What will be the output of the following code snippet?<br>Optional num= Stream.of(9, 5, 8, 7, 4, 9, 2, 11, 10, 3)<br>.filter(n -> n > 10)<br>.filter(n -> n % 5 == 0)<br>.findFirst();<br>System.out.println(num);  | Optional[8]   | Optional.empty  | Optional[11]  | 11  | Option2      |
| Which one is the correct syntax for declaring a lambda expression in Java 8?  | (param1, param2) =><br>expression                                 | (param1, param2) :: {<br>expression }                     | (param1, param2) -><br>expression                                   | (param1, param2) :<br>expression                        | Option3      |
| Which of the following interface is not a functional interface?   | An interface with a single abstract method                        | An interface with an abstract method and a default method | An interface with an abstract method and an equals() method         | An interface with an abstract method and a run() method | Option4      |
| What is the new Date and Time API in Java 8?  | A replacement for the java.sql.Date and java.sql.Calendar classes | A new API for working with Optional                       | A replacement for the java.util.Date and java.util.Calendar classes | A new API for working with Java Stream API              | Option3      |
| Which one among the following is the main feature introduced in Java 8?   | Annotations   | Generics  | Lambda expressions  | Enumerations  | Option3      |
| Which feature out of following is introduced in Java 8?   | Strings in switch statement                                       | Improved type inference: the diamond operator <>          | StringJoiner Class  | Private methods in Interfaces                           | Option3      |
| What is the output of the following program?<br>List<Integer> numbers = Arrays.asList(1, 2, 3, 4, 5);<br>int result= numbers.stream()<br>.filter(n -> n % 2 == 0)<br>.mapToInt(Integer::intValue)<br>.sum();<br>System.out.println(result);                                       | 10  | 9   | 6   | 15  | Option3      |
| Mary is a Java developer. She is working in an assignment. She wants to use a predefined functional interface introduced in Java 8 that doesn't take any input and it always returns some object. Which one among the following option should she use to complete her assignment? | Consumer  | Predicate   | Supplier  | BiConsumer  | Option3      |

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| What is the purpose of default method in Java 8?   | A method that is automatically called when an object is created       | A method that is automatically called when an object is destroyed | A method that is defined in an interface with a default implementation | A method that is called by the garbage collector to free up memory | Option3      |
| What is the method reference feature in Java 8?  | A way to create a new object using a constructor reference            | A way to call a static method using a method reference            | A way to call an instance method using a method reference              | All of the above   | Option4      |
| What is the Optional class in Java 8?  | A class that represents a value which can either be present or absent | A class that represents an immutable collection                   | A class that represents optional values to stream of elements          | A class as an alternative to functional interface                  | Option1      |
| What is the new feature introduced in Java 8 in the context of concurrent programming?   | ExecutorService   | CompletableFuture   | ThreadLocal  | ReentrantLock  | Option2      |
| What is the purpose of the forEach() method in Java 8 Streams API?   | To apply an operation to each element of a stream                     | To filter the elements of a stream                                | To print the elements of a stream                                      | To map the elements of a stream to a different type                | Option1      |
| Robert is working in a Java project. In one of his assignment, he is using Stream API of Java 8 where he wants to transform each element to multiple values and also compress the resulting stream. Which of the following method of Stream API will be the best option for him? | map()   | filter()  | flatMap()  | reduce()   | Option3      |
| What is the Stream API in Java 8?  | A new file I/O stream library   | A new concurrency library   | A new API for working with collections                                 | A new API for working with databases                               | Option3      |
| In the context of Java 8 Stream API, assume that you have a requirement to convert a stream into an array or a collection. Which of the following method of the Stream interface will you apply on the stream to achieve that?   | toCollection()  | toArray()   | toList()   | collect()  | Option4      |
| What is the output of the following code?<br>Stream<String> stream = Stream.of("hello", "world", "java");<br>stream.filter(s -> s.contains("o"))<br>.map(String::toUpperCase)<br>.forEach(System.out::print);  | HELLO WORLD JAVA  | hello world java  | HELLOWORLD   | HELLO WORLD  | Option3      |

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| When should we use the reduce() method in Java 8 streams?  | When we wish to apply a transformation to each element of a stream     | When we wish to convert a nested stream into a single stream | When we wish to produce one single result from a sequence of elements | When we wish to filter the elements of a stream      | Option3      |
| What is the output of the following code?<br>Stream<Integer> stream = Stream.of(1, 2, 3, 4, 5);<br>stream.reduce((a, b) -> a + b)<br>.ifPresent(System.out::println);  | 15   | 10   | 6   | 5  | Option1      |
| Which is the mandatory condition to define a functional interface in Java 8?   | The interface should have @FunctionalInterface annotation on top of it | The interface should have only one method                    | The interface should have only one abstract method                    | The interface should at least have one method        | Option3      |
| What is the purpose of the parallelStream() method in Java 8?  | To filter the elements of a stream                                     | To apply an operation to each element of a stream            | To create a parallel stream from a sequential stream                  | To create a sequential stream from a parallel stream | Option3      |
| What is the output of the following code?<br>List<Integer> list = Arrays.asList(1, 15, 3, 10, 27);<br>int sum = list.stream()<br>.filter(i -> i % 3 == 0)<br>.mapToInt(Integer::intValue)<br>.sum();<br>System.out.println(sum); | 18   | 45   | 30  | 56   | Option2      |
| What is the purpose of the Optional class in Java 8?   | To provide optional values to a stream                                 | To store a reference to a value that may or may not be null  | To apply a transformation to each element of a stream                 | To filter the elements of a stream                   | Option2      |
| What is the output of the following code?<br>List<String> list = Arrays.asList("banana", "apple", "cherry");<br>list.stream()<br>.sorted((s1, s2) -> s1.compareTo(s2))<br>.forEach(System.out::println);                         | apple, banana, cherry  | cherry, banana, apple  | banana, apple, cherry   | apple, cherry, banana                                | Option1      |

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| What is the purpose of the peek() method in Java 8 streams?   | To apply an operation to each element of a stream                  | To filter the elements of a stream                                | To convert a stream into an array or a collection                 | To apply a transformation to each element of a stream              | Option1      |
| What is the output of the following code?<br>IntStream.range(1, 6)<br>.mapToObj(i -> i + " ")<br>.forEach(System.out::print);   | 1 2 3 4 5 6  | 2 3 4 5   | 1 2 3 4 5   | 1 2 3 4  | Option3      |
| Which of the following is a valid lambda expression in Java 8?  | () -> {<br>System.out.println("Hello"); }                          | (int x) -> { x++; }   | (String s, int x) -> {<br>System.out.println(s + x); }            | All of the above   | Option1      |
| Which Java 8 feature allows us to iterate through a collection using lambda expressions?  | Stream API   | Method Reference  | Optional  | Annotation Processing  | Option1      |
| Which of the following is not a valid target type for a lambda expression in Java 8?  | An interface with a single abstract method                         | A functional interface  | A class with a single abstract method                             | All of the above are valid target types                            | Option3      |
| What is the purpose of the Supplier interface in Java 8?  | To represent a method that takes no arguments and returns no value | To represent a method that takes one argument and returns a value | To represent a method that takes no arguments and returns a value | To represent a method that takes one argument and returns no value | Option3      |
| What is the output of the following code snippet?<br>List<String> words = Arrays.asList("Peris", "London", "New York", "Sydney", "Washington");<br>String result = words.stream()<br>.filter(w -> w.length() > 10)<br>.findFirst()<br>.orElse("none");<br>System.out.println(result); | none   | Washington  | New York  | An error is thrown   | Option1      |