



**PUNE VIDYARTHI GRIHA'S**  
**COLLEGE OF SCIENCE AND TECHNOLOGY**  
Affiliated to University of Mumbai

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## Question Bank

**Class: S.Y.B. Sc.IT**  
**Subject: Core Java**

**Semester: IV**

### Unit 1

1. Java is a Successor to which programming language?
  - a. B
  - b. C
  - c. C++
  - d. D
  
2. Who invented the Java language?
  - a. Dennis Ritchie
  - b. James Gosling
  - c. Larry Page
  - d. Serge Page
  
3. The name "JAVA" is known to the world as?
  - a. A Tea Brand in India
  - b. A Coffee Brand in Africa
  - c. An Island in Indonesia
  - d. Ragi Malt Juice
  
4. Java language was originally developed for operating
  - a. Web Applications
  - b. Mobile Phone
  - c. Enterprise Applications
  - d. Embedded System equipment
  
5. What type of Java Programs can be run inside a Java supported Web Browser?
  - a. Stand alone

- b. Struts
- c. Applets
- d. AWT

6. \_\_\_\_\_ interprets compiled Java binary code (called bytecode) for a computer's processor.

- a. JVM
- b. Register
- c. Stack
- d. Heap

7. \_\_\_\_\_ is a subsystem of JVM that is used to load class files.

- a. Classloader
- b. Class (Method) Area
- c. Heap
- d. Stack

8. \_\_\_\_\_ stores per-class structures such as the runtime constant pool, field and method data, the code for methods.

- a. Classloader
- b. Class (Method) Area
- c. Heap
- d. Stack

9. \_\_\_\_\_ is the runtime data area in which objects are allocated.

- a. Classloader
- b. Class (Method) Area
- c. Heap
- d. Stack

10. \_\_\_\_\_ holds local variables and partial results, and plays a part in method invocation and return.

- a. Classloader
- b. Class (Method) Area
- c. Heap
- d. Stack

11. \_\_\_\_\_ contains the address of the Java virtual machine instruction currently being executed.

- a. Native Method Stack

- b. Program Counter Register
  - c. Execution Engine
  - d. Stack
12. \_\_\_\_\_ contains all the native methods used in the application.
- a. Native Method Stack
  - b. Program Counter Register
  - c. Execution Engine
  - d. Stack
13. \_\_\_\_\_ read bytecode stream then execute the instructions.
- a. Native Method Stack
  - b. Program Counter Register
  - c. Execution Engine
  - d. Interpreter
14. \_\_\_\_\_ compiles parts of the byte code that have similar functionality at the same time
- a. Native Method Stack
  - b. Program Counter Register
  - c. Just-In-Time (JIT) compiler
  - d. Interpreter
15. \_\_\_\_\_ have states and behaviors
- a. Class
  - b. Objects
  - c. Methods
  - d. Variables
16. \_\_\_\_\_ can be defined as a template/blueprint that describes the behaviors/states that object of its type support.
- a. Class
  - b. Objects
  - c. Methods
  - d. Variables
17. Names used for classes, variables and methods are called \_\_\_\_\_.
- a. Identifiers
  - b. Variables
  - c. Data Types

d. Methods

18. For general-purpose use on desktop PCs, servers and similar devices \_\_\_\_\_ edition is used.

- a. Standard
- b. Enterprise
- c. Mobile
- d. Java Card

19. \_\_\_\_\_ provides a clear and concise way to represent one method interface using an expression.

- a. Lambda Expression
- b. Interface
- c. Abstract Class
- d. Class

20. \_\_\_\_\_ is used to refer to a method of functional interface.

- a. Lambda Expression
- b. Method Reference
- c. Interface
- d. Abstract class

21. `ContainingClass::staticMethodName` is the syntax of \_\_\_\_\_

- a. Reference to a static method.
- b. Reference to an instance method of a particular object.
- c. Reference to a constructor.
- d. Reference to a class.

22. `containingObject::instanceMethodName` is the syntax of \_\_\_\_\_

- a. Reference to a static method.
- b. Reference to an instance method of a particular object.
- c. Reference to a constructor.
- d. Reference to a class.

23. `ClassName::new` is the syntax of \_\_\_\_\_

- a. Reference to a static method.
- e. Reference to an instance method of a particular object.
- f. Reference to a constructor.
- g. Reference to a class.

24. \_\_\_\_\_ is a source code representation of a fixed value.
- Variables
  - Literals
  - Class
  - Object
25. \_\_\_\_\_ is a sequence of characters.
- Strings
  - Variables
  - Literals
  - Data types
26. \_\_\_\_\_ method converts this string into uppercase letters.
- toUpperCase()
  - toupperCase()
  - toUppercase()
  - toupperCase()
27. \_\_\_\_\_ method eliminates white spaces before and after string.
- Delete
  - Trim
  - Remove
  - Flush
28. `String s="Sachin"; System.out.println(s.startsWith("Sa"));` Output of this will be:
- True
  - False
  - 1
  - 0
29. \_\_\_\_\_ method returns a character at specified index.
- charAt()
  - charat()
  - CharAt()
  - Charat()
30. \_\_\_\_\_ method returns the length of the string.
- length()
  - intern()
  - Length()

d. Intern()

31. \_\_\_\_\_ method converts given type such as int, long, float, double, boolean, char and char array into string.

- a. valueOf()
- b. ValueOf()
- c. Valueof()
- d. valueof()

32. \_\_\_\_\_ in Java is used to cast one class or interface to another, if they are from same type hierarchy.

- a. Type Casting
- b. Object Casting
- c. String Reference
- d. Intern

33. When you are assigning a larger type value to a variable of smaller type, then you need to Perform \_\_\_\_\_ type casting.

- a. Explicit
- b. Implicit
- c. Intern
- d. ValueOf

34. The automatic conversion of wrapper class type into corresponding primitive type, is known as \_\_\_\_\_

- a. Autoboxing
- b. Unboxing
- c. Type Casting
- d. Object Casting

35. An expression involving byte, int, and literal numbers is promoted to which of these?

- a) int
- b) long
- c) byte
- d) float

36. What will be the output of the following Java code?

```
class increment {
```

```
public static void main(String args[])
{
    int g = 3;
    System.out.print(++g * 8);
}
}
```

- a) 25
- b) 24
- c) 32
- d) 33

37. What is the numerical range of a char data type in Java?

- a) -128 to 127
- b) 0 to 256
- c) 0 to 32767
- d) 0 to 65535

38. Which one is a valid declaration of a boolean?

- a) boolean b1 = 1;
- b) boolean b2 = 'false';
- c) boolean b3 = false;
- d) boolean b4 = 'true'

39. What will be the output of the following Java code?

```
class booloperators {
    public static void main(String args[])
    {
        boolean var1 = true;
```

```
boolean var2 = false;
System.out.println((var1 & var2));
}
}
```

- a) 0
- b) 1
- c) true
- d) false

40. Which of these can not be used for a variable name in Java?

- a) identifier
- b) keyword
- c) identifier & keyword
- d) constant

41. What will be the output of the following Java program?

```
class c
{
    public void main( String[] args )
    {
        System.out.println( "Hello" + args[0] );
    }
}
```

- a) Hello c
- b) Hello
- c) Hello world
- d) Runtime Error

42. Which of the following can be operands of arithmetic operators?

- a) Numeric
- b) Boolean
- c) Characters
- d) Numeric & Characters

43. With  $x = 0$ , which of the following are legal lines of Java code for changing the value of  $x$  to 1?

- 1.  $x++$ ;
- 2.  $x = x + 1$ ;
- 3.  $x += 1$ ;
- 4.  $x =+ 1$ ;

- a) 1, 2 & 3
- b) 1 & 4
- c) 1, 2, 3 & 4
- d) 3 & 2

44. Decrement operator,  $--$ , decreases the value of variable by what number?

- a) 1
- b) 2
- c) 3
- d) 4

45. What will be the output of the following Java program?

```
class increment
{
```

```
public static void main(String args[])
{
    int g = 3;
    System.out.print(++g * 8);
}
}
```

- a) 25
- b) 24
- c) 32
- d) 33

46. Which of these is not a bitwise operator?

- a) &
- b) &=
- c) |=
- d) <=

47. Which right shift operator preserves the sign of the value?

- a) <<
- b) >>
- c) <<=
- d) >>=

48. What is the output of relational operators?

- a) Integer
- b) Boolean
- c) Characters

d) Double

49. Which of these is returned by “greater than”, “less than” and “equal to” operators?

a) Integers

b) Floating – point numbers

c) Boolean

d) Character

50. Which of these have highest precedence?

a) ()

b) ++

c) \*

d) >>

## Unit 2

51. . \_\_\_\_\_ statement consists of a Boolean expression followed by one or more statements

a. If

b. Else if

c. If Else

d. While

52. \_\_\_\_\_ statement allows a variable to be tested for equality against a list of values.

a. Switch

b. Else if

c. If Else

d. While

53. \_\_\_\_\_ loop first check the condition if condition is true then control goes inside the loop body otherwise goes outside of the body.

a. Switch

b. Else if

- c. If Else
- d. While

54. \_\_\_\_\_ loop contains 3 parts Initialization, Condition and Increment or Decrements.

- a. Switch
- b. For
- c. If Else
- d. While

55. When the \_\_\_\_\_ statement is encountered inside a loop, the loop is immediately terminated and the program control resumes at the next statement following the loop.

- a. Break
- b. Finally
- c. Continue
- d. Final

56. The \_\_\_\_\_ keyword can be used in any of the loop control structures. It causes the loop to immediately jump to the next iteration of the loop.

- a. Break
- b. Finally
- c. Continue
- d. Final

57. \_\_\_\_\_ loop used to traverse array or collection elements.

- a. For-each
- b. Finally
- c. Continue
- d. Final

58. \_\_\_\_\_ First Increment Value and then Assign Value.

- a. Pre Increment
- b. Post Increment
- c. Unary Operator
- d. Binary Operator

59. \_\_\_\_\_ Increment Value of Variable After Assigning.

- a. Pre Increment
- b. Post Increment
- c. Unary Operator

d. Binary Operator

60. When we need to repeat the statement block at least one time then use \_\_\_\_\_ loop.

- a. While
- b. Do-while
- c. If Else
- d. Else If

61. A constructor that have no parameter is known as \_\_\_\_\_ constructor.

- a. Default
- b. Parameterised
- c. Argument
- d. One

62. \_\_\_\_\_ in java is a special type of method that is used to initialize the object

- a. Class
- b. constructor
- c. Method
- d. variable

63. If a class has multiple methods having same name but different in parameters, it is known as \_\_\_\_\_

- a. Method Overloading
- b. Method Overriding
- c. Method Abstraction
- d. Method Parameters

64. \_\_\_\_\_ represents data (value) of an object.

- a. State
- b. Behavior
- c. Identity
- d. Instance

65. \_\_\_\_\_ represents the behavior (functionality) of an object .

- a. State
- b. Behavior
- c. Identity
- d. Instance

66. Object \_\_\_\_\_ is typically implemented via a unique ID.

- a. State
- b. Behavior
- c. Identity
- d. Instance

67. \_\_\_\_\_ is a template for manufacturing objects.

- a. Class
- b. Objects
- c. Methods
- d. Variables

68. An entity that has state and behavior is known as an \_\_\_\_\_

- a. Class
- b. Objects
- c. Methods
- d. Variables

69. \_\_\_\_\_ in java is a mechanism in which one object acquires all the properties and behaviors of the parent objects.

- a. Inheritance
- b. Polymorphism
- c. Encapsulation
- d. Abstraction

70. \_\_\_\_\_ is a collection of abstract methods.

- a. Class
- b. Interface
- c. Packages
- d. Inheritance

71. \_\_\_\_\_ can be defined as a grouping of related types providing access protection and name space management.

- a. Class
- b. Interface
- c. Packages
- d. Inheritance

72. What is the value stored in x in the following lines of Java code?

```
int x, y, z;
```

```
x = 0;
```

```
y = 1;
```

```
x = y = z = 8;
```

a) 0

b) 1

c) 9

d) 8

73. What is the value stored in x in the following lines of Java code?

```
int x, y, z;
```

```
x = 0;
```

```
y = 1;
```

```
x = y = z = 8;
```

a) 0

b) 1

c) 9

d) 8

74. Which of these access specifiers can be used for a class so that its members can be accessed by a different class in the different package?

a) Public

b) Protected

c) Private

d) Friendly

75. Which of these selection statements test only for equality?

a) if

b) switch

c) if & switch

d) if-else

76. Which of these are selection statements in Java?

- a) if()
- b) for()
- c) continue
- d) break

77. Which of the following loops will execute the body of loop even when condition controlling the loop is initially false?

- a) do-while
- b) while
- c) for
- d) for-each

78. Which of these jump statements can skip processing the remainder of the code in its body for a particular iteration?

- a) break
- b) return
- c) exit
- d) continue

79. Which of this statement is incorrect?

- a) switch statement is more efficient than a set of nested ifs
- b) two case constants in the same switch can have identical values
- c) switch statement can only test for equality, whereas if statement can evaluate any type of boolean expression
- d) it is possible to create a nested switch statements

80. What is the output of Java program with IF statement?

```
if(1)
```

```
{
```

```
    System.out.println("OK");
```

}

- A) OK
- B) No output
- C) Compiler error
- D) Runtime error

81. If the condition of an IF-statement is false, which is true below.

- A) IF block is executed.
- B) ELSE block is executed.
- C) Both IF and ELSE blocks are skipped.
- D) Both IF and ELSE blocks are executed.

82. When does method overloading is determined?

- a) At run time
- b) At compile time
- c) At coding time
- d) At execution time

83. Which of these keywords is used to make a class?

- a) class
- b) struct
- c) int
- d) none of the mentioned

84. Which of the following is a valid declaration of an object of class Box?

- a) `Box obj = new Box();`
- b) `Box obj = new Box;`
- c) `obj = new Box();`
- d) `new Box obj;`

85. Which of these operators is used to allocate memory for an object?

- a) `malloc`

- b) alloc
- c) new
- d) give

86. What is the process of defining more than one method in a class differentiated by method signature?

- a) Function overriding
- b) Function overloading
- c) Function doubling
- d) Function integration

87. Which of the following is a method having same name as that of it's class?

- a) finalize
- b) delete
- c) class
- d) constructor

88. Which method can be defined only once in a program?

- a) main method
- b) finalize method
- c) static method
- d) private method

89. \_\_\_\_\_ which belongs to the class and not to object(instance)

- a. Static method
- b. Static class
- c. Static variables
- d. Static objects

90. \_\_\_\_\_ method can call only other static methods and can not call a non-static method from it.

- A. Static method
- B. Static class
- C. Static variables
- D. Static objects

91. A non-static class that is created inside a class but outside a method is called member \_\_\_\_\_.

- a. Inner class
- b. Outer class
- c. Super Class
- d. Sub Class

92. \_\_\_\_\_ can be used to invoke immediate parent class constructor.

- a. super()
- b. sub()
- c. class()
- d. object()

93. An ELSE statement must be preceded by \_\_\_\_ statement in Java.

- A) IF
- B) ELSE IF
- C) IF or ELSE IF
- D) IF ELSE

94. An IF statement in Java is also a \_\_\_\_ statement.

- A) boolean
- B) conditional
- C) iterative
- D) optional

95. \_\_\_\_\_ keyword can be used to refer to a current class instance variable.

- a. this
- b. that
- c. their
- d. there

96. A constructor that has parameters is known as \_\_\_\_\_ constructor.

- a. Default
- b. Parameterised
- c. Method
- d. Function

97. \_\_\_\_\_ allows the method to accept zero or multiple arguments.

- a. Varargs
- b. Method Overriding
- c. Method Overloading
- d. Super

98. An IF or ELSE IF statement accepts \_\_\_ as input before branching.

- A) boolean
- B) int
- C) float
- D) char

99. Which of the following is not OOPS concept in Java?

- a) Inheritance
- b) Encapsulation
- c) Polymorphism
- d) Compilation

100. When does method overloading is determined?

- a) At run time
- b) At compile time

- c) At coding time
- d) At execution time

### Unit 3

101. To implement one class to another class \_\_\_\_\_ keyword is used.
- a. extends
  - b. implements
  - c. inherit
  - d. abstract
102. An interface can \_\_\_\_\_ another interface.
- a. extends
  - b. implements
  - c. inherit
  - d. abstract
103. A class can \_\_\_\_\_ another interface.
- a. extends
  - b. implements
  - c. inherit
  - d. abstract
104. When invoking a superclass version of an overridden method the \_\_\_\_\_ keyword is used.
- a. super
  - b. sub
  - c. inherit
  - d. extends
105. When a class extends another class(Only one class) then we call it as \_\_\_\_\_
- a. Single Inheritance
  - b. Multi-Level Inheritance
  - c. Multiple Inheritance
  - d. Hybrid Inheritance
106. In \_\_\_\_\_ Inheritance a derived class will be inheriting a parent class and as well as the derived class act as the parent class to other class.
- a. Single Inheritance
  - b. Multi-Level Inheritance
  - c. Multiple Inheritance

d. Hybrid Inheritance

107. In \_\_\_\_\_ inheritance one parent class will be inherited by many sub classes.

- a. Hierarchical
- b. Multi-Level Inheritance
- c. Multiple Inheritance
- d. Hybrid Inheritance

108. \_\_\_\_\_ Inheritance is nothing but one class extending more than one class.

- a. Hierarchical
- b. Multi-Level Inheritance
- c. Multiple Inheritance
- d. Hybrid Inheritance

109. \_\_\_\_\_ Inheritance is the combination of both Single and Multiple Inheritance.

- a. Hierarchical
- b. Multi-Level Inheritance
- c. Multiple Inheritance
- d. Hybrid Inheritance

110. \_\_\_\_\_ is a process of hiding the implementation details and showing only functionality to the user.

- a. Abstraction
- b. Encapsulation
- c. Polymorphism
- d. Interfaces

111. Variables, methods, and constructors, which are declared \_\_\_\_\_ in a superclass can be accessed only by the subclasses in other package or any class within the package of the protected members' class.

- a. Public
- b. Private
- c. Protected
- d. Hybrid

112. A-class, method, constructor, interface, etc. declared \_\_\_\_\_ can be accessed from any other class.

- a. Public
- b. Private
- c. Protected

d. Hybrid

113. Methods, variables, and constructors that are declared \_\_\_\_\_ can only be accessed within the declared class itself.

- a. Public
- b. Private
- c. Protected
- d. Hybrid

114. \_\_\_\_\_ access modifier means we do not explicitly declare an access modifier for a class, field, method, etc.

- a. Default
- b. Private
- c. Protected
- d. Hybrid

115. A java \_\_\_\_\_ is a group of similar types of classes, interfaces and sub-packages.

- a. Package
- b. Collection
- c. Class
- d. Interfaces

116. If you use \_\_\_\_\_ then all the classes and interfaces inside this package will be accessible but not subpackages.

- a. package.\*
- b. Package.classname;
- c. fully qualified name
- d. Package.packagename;

117. If you import \_\_\_\_\_ then only declared class of this package will be accessible.

- a. package.\*
- b. Package.classname;
- c. fully qualified name
- d. Package.packagename;

118. If you use \_\_\_\_\_ then only declared class of this package will be accessible.

- a. package.\*

- b. `Package.classname;`
- c. fully qualified name
- d. `Package.packagename;`

119. Which of these class is superclass of `String` and `StringBuffer` class?

- a) `java.util`
- b) `java.lang`
- c) `java.sql`
- d) `java.io`

120. Which of this method of class `String` is used to obtain a length of `String` object?

- a) `get()`
- b) `Sizeof()`
- c) `lengthof()`
- d) `length()`

121. Which of these method of class `String` is used to extract a single character from a `String` object?

- a) `CHARAT()`
- b) `chatat()`
- c) `charAt()`
- d) `ChatAt()`

122. Which of these constructors is used to create an empty `String` object?

- a) `String()`
- b) `String(void)`
- c) `String(0)`
- d) `String`

123. Which of these is correct way of inheriting class A by class B?

- a) class B + class A { }
- b) class B inherits class A { }
- c) class B extends A { }
- d) class B extends class A { }

124. What is not type of inheritance?

- a) Single inheritance
- b) Double inheritance
- c) Hierarchical inheritance
- d) Multiple inheritance

125. Using which of the following, multiple inheritance in Java can be implemented?

- a) Interfaces
- b) Multithreading
- c) Protected methods
- d) Private methods

126. All classes in Java are inherited from which class?

- a) java.lang.class
- b) java.class.inherited
- c) java.class.object
- d) java.lang.Object

127. In order to restrict a variable of a class from inheriting to subclass, how variable should be declared?

- a) Protected
- b) Private

- c) Public
- d) Static

128. Which of these operators can be used to concatenate two or more String objects?

- a) +
- b) +=
- c) &
- d) ||

129. Which of the following is not OOPS concept in Java?

- a) Inheritance
- b) Encapsulation
- c) Polymorphism
- d) Compilation

130. Which of the following is the correct way of importing an entire package 'pkg'?

- a) import pkg.
- b) Import pkg.
- c) import pkg.\*
- d) Import pkg.\*

131. Which of the following is an incorrect statement about packages?

- a) Package defines a namespace in which classes are stored
- b) A package can contain other package within it
- c) Java uses file system directories to store packages
- d) A package can be renamed without renaming the directory in which the classes are stored

132. Which of these is a mechanism for naming and visibility control of a class and its content?

- a) Object
- b) Packages
- c) Interfaces
- d) Variables

133. Which of these keywords is used to define packages in Java?

- a) pkg
- b) Pkg
- c) package
- d) Package

134. Which inheritance in java programming is not supported

- 1. Multiple inheritance using classes
- 2. Multiple inheritance using interfaces
- 3. Multilevel inheritance
- 4. Single inheritance

135. If class B is subclassed from class A then which is the correct syntax

- 1. class B:A{ }
- 2. class B extends A{ }
- 3. class B extends class A{ }
- 4. class B implements A{ }

136. Which of these access specifiers can be used for a class so that its members can be accessed by a different class in the different package?

- a) Public
- b) Protected
- c) Private
- d) No Modifier

137. Which of the following package stores all the standard java classes?

- a) lang
- b) java

- c) util
- d) java.packages

138. .... is one of the cornerstones of object-oriented programming because it allows the creation of hierarchical classifications.

- A) Mutual Exclusion
- B) Inheritance
- C) Package
- D) Interface

139. .... package in java contents language utility classes such as vectors, hash tables, random numbers date etc.

- A) java.util
- B) java.awt
- C) java.net
- D) java.lang

140. A package is a collection of

- A) Classes
- B) interfaces
- C) editing tools
- D) classes and interfaces

141. The Date class includes within ..... package.

- A) java.io
- B) java.awt
- C) java.net
- D) java.util

142. An ..... is an incomplete class that requires further specification.

- A) abstract class
- B) final class
- C) static class
- D) super class

143. A class can be declared as ..... if you do not want the class to be subclassed.

- A) abstract
- B) final
- C) static
- D) super

144. The ..... keyword is used to derive a class from a super-class.

- A) adds
- B) extends
- C) duplicate
- D) inherit

145. If a class that implements an interface does not implement all the methods of the interface, then the class becomes a/an ..... class.

- A) abstract
- B) final
- C) static
- D) super

146. By convention, java packages begin with ..... letters while all the class names begin with an ..... letter.

- A) uppercase, uppercase
- B) lowercase, lowercase
- C) uppercase, lowercase
- D) lowercase, uppercase

147. Math class is in .....package.

- a. java.io
- b. java.lang
- c. java.util
- d. Java.applet

148. Wrapper classes are found in \_\_\_\_\_ package

- a. Java.io
- b. Java.lang
- c. java.util
- d. Java.applet

149. An \_\_\_\_\_ statement can be used to access the classes and interface of a different package from the current package.

- A. instanceof
- B. import
- C. extends
- D. implement

150. Packages that are inside another package are the \_\_\_\_\_

- A. packages
- B. nested packages
- C. util subpackages
- D. subpackages

151. The ..... package contains a large number of broadcast classes that offer the ability to process all types of data.

- A) java.awt
- B) java.io
- C) java.util
- D) java.net

152. Which of the following methods is not included in the InputStream section.

- A) available( )
- B) reset( )
- C) flush( )
- D) close( )

153. Which of the following methods is not included in the OutputStream class.

- A) write ( )
- B) skipping ( )
- C) close ( )
- D) flush( )

154. The DataInputStream class expands ..... .. and uses the interface DataInput.

- A) FileInputStream
- B) SequenceInputStream
- C) FilterInputStream
- D) InputStream

155. The Method ....., Power writes whenever data is collected in the output stream.

- A) write( )
- B) flush( )
- C) read( )
- D) reset( )

156. DataInputStream and DataOutputStream classes are ..... .. streams that allow the reading and writing of Java data types.

- A) file
- B) sequence
- C) object
- D) filter

157. The ..... section provides the ability to read old data types in the input stream.

- A) pushbackInputStream
- B) DataInputStream
- C) BufferedInputStream
- D) PipeInputStream

158. DataInput is

- A) an abstract class defined in java.io
- B) a class we can use to read primitive data types
- C) an interface that defines methods to open files
- D) an interface that defines methods to read primitives data types

159. What exceptions are thrown at the InputStream reading method.

- A) Exception
- B) IOException
- C) ReadException
- D) File Not Found Unusual

160. The BufferedReader class ..... method is used to read lines of text from a console, file or other input streams.

- A) read ()
- B) read (byte [] b)
- C) readLine ()
- D) readByte ()

161. .... class is used to increase the efficiency of the input process.

- A) DataInputStream
- B) FileInputStream
- C) BufferedInputStream
- D) PipeInputStream

162. Method ..... the section uses the DataInput and DataOutput interface to create an I / O using older data types.

- A) RandomAccessFile
- B) ResultStream Reader
- C) InputStreamReader

D) DataOutputStream

163. Class ..... a subclass of the object category that can be used to separate text streams from input text file into logical pieces.

- A) StreamTokenizer
- B) RandomAccessFile
- C) InputStreamReader
- D) DataOutputStream

164. Combining two or more input streams in a single input stream can be achieved using ..... section.

- A) SequenceOutputStream
- B) BufferedInputStream
- C) BufferedOutputStream
- D) SequenceInputStream

165. .... streams provide the performance of threads for communication and data exchange between them.

- A) Into
- B) Piped
- C) Reversal
- D) filtered

166. \_\_\_\_\_ means “the action of mentioning a number of things one by one” or “a symbolic name for a set of values”.

- a. Enumerations
- b. Arrays
- c. List
- d. Stack

167. \_\_\_\_\_ is a problem that arises during the execution of a program.

- a. Exception
- b. Error
- c. Infinity Loop
- d. Invalidate Value

168. \_\_\_\_\_ is an exception that is typically a user error or a problem that cannot be foreseen by the programmer.

- a. Checked Exception

- b. Unchecked Exception
- c. Runtime Exception
- d. Errors

169. \_\_\_\_\_ is an exception that occurs that probably could have been avoided by the programmer.

- a. Checked Exception
- b. Unchecked Exception
- c. Runtime Exception
- d. Errors

170. If a method does not handle a checked exception, the method must declare it using the \_\_\_\_\_ keyword.

- a. throws
- b. throw
- c. finally
- d. catch

171. \_\_\_\_\_ keyword is used to create a block of code that follows a try block.

- a. throws
- b. throw
- c. finally
- d. Catch

172. \_\_\_\_\_ program contains two or more parts that can run concurrently and each part can handle different task at the same time.

- a. Multithreading
- b. Interface
- c. Multiple inheritances
- d. Inheritance

173. \_\_\_\_\_ describes a situation where two or more threads are blocked forever, waiting for each other.

- a. Deadlock
- b. Suspend
- c. Resume
- d. Wait

174. \_\_\_\_\_ stores similar data types which means array can hold data of same data type values.

- a. Enumerations
- b. Arrays
- c. List
- d. Stack

175. \_\_\_\_\_ are commonly used instead of arrays, because they expand automatically when new data is added to them

- a. Enumerations
- b. Arrays
- c. Vectors
- d. Stack

176. The \_\_\_\_\_ interface should be implemented by any class whose instances are intended to be executed by a thread.

- a. Runnable
- b. Movable
- c. Running
- d. Multi Thread

177. Which of these is an incorrect array declaration?

- a) `int arr[] = new int[5]`
- b) `int [] arr = new int[5]`
- c) `int arr[] = new int[5]`
- d) `int arr[] = int [5] new`

178. What will be the output of the following Java code?

```
int arr[] = new int [5];
```

```
System.out.print(arr);
```

- a) 0
- b) value stored in `arr[0]`
- c) 00000
- d) Class name@ hashCode in hexadecimal form

179. Which of these is an incorrect Statement?

- a) It is necessary to use new operator to initialize an array
- b) Array can be initialized using comma separated expressions surrounded by curly braces
- c) Array can be initialized when they are declared
- d) Array used curly braces

180. Which of these is necessary to specify at time of array initialization?

- a) Row
- b) Column
- c) Both Row and Column
- d) Table

181. What will be the output of the following Java code?

```
class evaluate
{
    public static void main(String args[])
    {
        int arr[] = new int[] {0 , 1, 2, 3, 4, 5, 6, 7, 8, 9};
        int n = 6;
        n = arr[arr[n] / 2];
        System.out.println(arr[n] / 2);
    }
}
```

- a) 3
- b) 0
- c) 6
- d) 1

182. When does Exceptions in Java arises in code sequence?

- a) Run Time
- b) Compilation Time
- c) Can Occur Any Time
- d) None of the mentioned

183. Which of these keywords is not a part of exception handling?

- a) try
- b) finally
- c) thrown
- d) catch

184. Which of these keywords must be used to monitor for exceptions?

- a) try
- b) finally
- c) throw
- d) catch

185. Which of these keywords must be used to handle the exception thrown by try block in some rational manner?

- a) try
- b) finally
- c) throw
- d) catch

186. Which of these keywords is used to manually throw an exception?

- a) try
- b) finally
- c) throw

d) catch

187. What requires less resources?

a) Thread

b) Process

c) Thread and Process

d) Neither Thread nor Process

188. What does not prevent JVM from terminating?

a) Process

b) Daemon Thread

c) User Thread

d) JVM Thread

189. What decides thread priority?

a) Process

b) Process scheduler

c) Thread

d) Thread scheduler

190. What is true about time slicing?

a) Time slicing is OS service that allocates CPU time to available runnable thread

b) Time slicing is the process to divide the available CPU time to available runnable thread

c) Time slicing depends on its implementation in OS

d) Time slicing allocates more resources to thread

191. What should not be done to avoid deadlock?

- a) Avoid using multiple threads
- b) Avoid hold several locks at once
- c) Execute foreign code while holding a lock
- d) Use interruptible locks

192. What is true about threading?

- a) run() method calls start() method and runs the code
- b) run() method creates new thread
- c) run() method can be called directly without start() method being called
- d) start() method creates new thread and calls code written in run() method

193. Which of the following is a correct constructor for thread?

- a) Thread(Runnable a, String str)
- b) Thread(int priority)
- c) Thread(Runnable a, int priority)
- d) Thread(Runnable a, ThreadGroup t)

194. Which of the following stops execution of a thread?

- a) Calling SetPriority() method on a Thread object
- b) Calling notify() method on an object
- c) Calling wait() method on an object
- d) Calling read() method on an InputStream object

195. Which of these stream contains the classes which can work on character stream?

- a) InputStream
- b) OutputStream
- c) Character Stream

d) All of the mentioned

196. Which of these class is used to read characters in a file?

- a) FileReader
- b) FileWriter
- c) FileInputStream
- d) InputStreamReader

197. Which of these method of FileReader class is used to read characters from a file?

- a) read()
- b) scanf()
- c) get()
- d) getInteger()

198. Which of these class can be used to implement the input stream that uses a character array as the source?

- a) BufferedReader
- b) FileReader
- c) CharArrayReader
- d) FileArrayReader

199. Which of these class is used to read bytes in a file?

- a) FileReader
- b) FileWriter
- c) FileInputStream
- d) InputStreamReader

200. Which of the following will ensure the thread will be in running state?

- a) yield()

- b) notify()
- c) wait()
- d) Thread.killThread()

## Unit 5

201. Which of these packages contains all the categories and ways needed for event handling in Java?

- a) java.applet
- b) java.awt
- c) java.event
- d) java.awt.event

202. What is an occurrence in the delegation event model employed by Java programming language?

- a) An event is an object that describes a state change in a source
- b) An event is an object that describes a state change in processing
- c) An event is an object that describes any change by the user and system
- d) An event is a class used for defining object, to create events

203. Which of the following methods can be used to register a keyboard event listener?

- a) KeyListener()
- b) addKistener()
- c) addKeyListener()
- d) eventKeyboardListener()

204. Which of the following given methods is correct for registering a Mouse Motion Listener?

- a) addMouse()
- b) addMouseListener()
- c) addMouseMotionListner()
- d) eventMouseMotionListener()

205. In which of these libraries Event class is defined?

- a) java.io
- b) java.lang
- c) java.net
- d) java.util

206. Which of these events will be invoked if the scroll bar is moved?

- a) ActionEvent
- b) ComponentEvent
- c) AdjustmentEvent
- d) WindowEvent

207. If we close an applet's window, which of these events will be generated ?

- a) ActionEvent
- b) ComponentEvent
- c) AdjustmentEvent
- d) WindowEvent

208. Suppose that you want to have an object 'te' to handle the TextEvent of a TextArea object t. How should you add the as the event handler for t?

- a. t.addTextListener(te);
- b. eh.addTextListener(t);
- c. addTextListener(te.t);
- d. addTextListener(t,te);

209. Which of the given following class is considered a super class of all the events?

- a) EventObject
- b) EventClass
- c) ActionEvent
- d) ItemEvent

210. To determine the type of event, which of the given following methods can be used?

- a) getID()
- b) getSource()
- c) getEvent()
- d) getEventObject()

211. Which of the given following containers doesn't contain a title bar and MenuBars?

- a. Window
- b. Frame
- c. Panel
- d. Container

212. What will be the expected work done by the following given code?

```
Textfield text = new Textfield(10);
```

- a. Creates a text object that can hold 10 columns of text.
- b. Creates a text object that can hold 10 rows of text.
- c. Creates the object text and initializes it with the value 10.
- d. The code is illegal.

213. The setBackground() can be used as a part of the following class:

- a. Graphics
- b. Applet
- c. Container
- d. Component

214. Give the abbreviation of AWT?

- a. Applet Windowing Toolkit
- b. Abstract Windowing Toolkit
- c. Absolute Windowing Toolkit
- d. Applet Window Tools

215. Which of the following methods can be used to set or change the text in a Label?

- a) setText()
- b) getText()
- c) getLabel()
- d) setLabel()

216. Which of the following components in AWT can include other components?

- a) Window
- b) Container
- c) Panel
- d) Frame

217. Which are the following controls that do not interact with the user?

- a. Choice
- b. List
- c. Labels
- d. Checkbox

218. Which of the following packages provides Event classes and Listener interfaces for event handling?

- a. java.awt
- b. java.awt.Graphics
- c. java.awt.event
- d. javax.awt.event

219. 1. Which of these packages contains all the classes and methods required for even handling in Java?

- a) java.applet
- b) java.awt
- c) java.event
- d) java.awt.event

220. What is an event in delegation event model used by Java programming language?

- a) An event is an object that describes a state change in a source
- b) An event is an object that describes a state change in processing
- c) An event is an object that describes any change by the user and system
- d) An event is a class used for defining object, to create events

221. Which of these methods are used to register a keyboard event listener?

- a) KeyListener()
- b) addKistener()
- c) addKeyListener()
- d) eventKeyboardListener()

222. Which of these methods are used to register a mouse motion listener?

- a) addMouse()
- b) addMouseListener()

- c) addMouseMotionListner()
- d) eventMouseMotionListener()

223. What is a listener in context to event handling?

- a) A listener is a variable that is notified when an event occurs
- b) A listener is a object that is notified when an event occurs
- c) A listener is a method that is notified when an event occurs
- d) None of the mentioned

224. Event class is defined in which of these libraries?

- a) java.io
- b) java.lang
- c) java.net
- d) java.util

225. Which of these methods can be used to determine the type of event?

- a) getID()
- b) getSource()
- c) getEvent()
- d) getEventObject()

226. Which of these class is super class of all the events?

- a) EventObject
- b) EventClass
- c) ActionEvent
- d) ItemEvent

227. Which of these events will be notified if scroll bar is manipulated?

- a) ActionEvent
- b) ComponentEvent
- c) AdjustmentEvent
- d) WindowEvent

228. Which of these events will be generated if we close an applet's window?

- a) ActionEvent
- b) ComponentEvent
- c) AdjustmentEvent
- d) WindowEvent

229. Which of these packages contains all the event handling interfaces?

- a) java.lang
- b) java.awt
- c) java.awt.event
- d) java.event

230. Which of these interfaces handles the event when a component is added to a container?

- a) ComponentListener
- b) ContainerListener
- c) FocusListener
- d) InputListener

231. Which of these interfaces define a method actionPerformed()?

- a) ComponentListener
- b) ContainerListener

- c) ActionListener
- d) InputListener

232. Which of these interfaces define four methods?

- a) ComponentListener
- b) ContainerListener
- c) ActionListener
- d) InputListener

233. Which of these interfaces define a method itemStateChanged()?

- a) ComponentListener
- b) ContainerListener
- c) ActionListener
- d) ItemListener

234. Which of these methods will be invoked if a character is entered?

- a) keyPressed()
- b) keyReleased()
- c) keyTyped()
- d) keyEntered()

235. Which of these methods is defined in MouseMotionAdapter class?

- a) mouseDragged()
- b) mousePressed()
- c) mouseReleased()
- d) mouseClicked()

236. Which of these is a superclass of all Adapter classes?

- a) Applet
- b) ComponentEvent
- c) Event
- d) InputEvent

237. Which of the following class is derived from the container class?

- a) Component
- b) Panel
- c) MenuComponent
- d) List

238. Name of the class used to represent a GUI application window, which is optionally resizable and can have a title bar, an icon, and menus.

- a) Window
- b) Panel
- c) Dialog
- d) Frame

239. Which abstract class is the super class of all menu related classes?

- a) MenuComponent
- b) MenuBar
- c) MenuItem
- d) CheckboxMenuItem

239. Which of the following is the default Layout Manager ?

- a) FlowLayout

- b) BorderLayout
- c) GridLayout
- d) CardLayout

240. How do you change the current layout manager for container?

- A. use `setLayout()`
- B. once created you cannot change it
- C. You set `setLayoutManager()`
- D. use `updateLayout()`

241. AWT components are

- A) lightweight
- B) heavyweight
- C) equalweight
- D) weightless

242. Which of these packages contain all the collection classes?

- a) `java.lang`
- b) `java.util`
- c) `java.net`
- d) `java.awt`

243. Which of these classes is not part of Java's collection framework?

- a) `Maps`
- b) `Array`
- c) `Stack`
- d) `Queue`

244. Which of this interface is not a part of Java's collection framework?

- a) List
- b) Set
- c) SortedMap
- d) SortedList

245. Which of these methods deletes all the elements from invoking collection?

- a) clear()
- b) reset()
- c) delete()
- d) refresh()

246. What is Collection in Java?

- a) A group of objects
- b) A group of classes
- c) A group of interfaces
- d) A group of array

247. AWT components are available in

- (A) java.util package
- (B) java.io package
- (C) javax.awt package
- (D) java.awt package

248. Which of the following classes is derived from the container class?

- (A) Component

- (B) List
- (C) Panel
- (D) MenuComponent

249. Which component in AWT can contain other components like buttons, text fields, labels etc.?

- (A) Panel
- (B) Container
- (C) Frame
- (D) Window

250. setBackground() method to set the background color for \_\_\_\_?

- (A) Component
- (B) Container
- (C) JComponent
- (D) JContainer