

1. Which of the following is not a feature of OOP?

- A. Encapsulation
- B. Inheritance
- C. Compilation
- D. Polymorphism

2. What is encapsulation in Java?

- A. Hiding code complexity
- B. Binding data and methods into a single unit
- C. Deriving new classes from existing ones
- D. Using methods of the same name

3. Which keyword is used for inheritance in Java?

- A. inherit
- B. extends
- C. implements
- D. derive

4. What is polymorphism in Java?

- A. Many functions in one class
- B. One interface with multiple implementations
- C. One class with many objects
- D. Data hiding technique

5. Which concept allows the same method name to behave differently in different classes?

- A. Abstraction
- B. Encapsulation
- C. Inheritance
- D. Polymorphism

6. Which of these is used to achieve abstraction in Java?

- A. Class
- B. Interface
- C. Object
- D. Method Overriding

7. What is the parent class of all Java classes?

- A. Object
- B. Class
- C. Super
- D. Base

8. Which of the following supports method overloading?

- A. Using same method names with different return types
- B. Using same method names with different access modifiers
- C. Using same method names with different parameter types or number of parameters
- D. Using method names in inherited classes

9. What does the keyword `super` refer to in Java?

- A. It refers to the parent class
- B. It refers to a static method
- C. It refers to the current object
- D. It is used to define abstract methods

10. Which of the following is not a pillar of OOP?

- A. Inheritance
- B. Polymorphism
- C. Abstraction
- D. Compilation

Java Environment Setup: JDK, JRE, JVM

11. What does JDK stand for?

- A. Java Developer Kit
- B. Java Deployment Kit
- C. Java Development Kit
- D. Java Debugging Kit

12. Which of the following is included in the JDK?

- A. JRE only
- B. JVM only
- C. JRE + Development tools
- D. JVM + Javadoc

13. What is the role of the JRE?

- A. Compiling Java code
- B. Debugging Java applications
- C. Running Java applications
- D. Writing Java programs

14. Which component is responsible for converting bytecode into machine code?

- A. JDK
- B. JRE
- C. JVM
- D. Java Compiler

15. What does the Java compiler (javac) do?

- A. Converts Java code to machine code
- B. Converts Java code to bytecode
- C. Runs Java code directly
- D. Executes Java classes

16. Which of the following is required to run a Java application but not develop it?

- A. JDK
- B. JRE
- C. JVM only
- D. Java Editor

17. The JVM is a part of which component?

- A. Java Compiler
- B. Java API
- C. JRE
- D. JDK

18. Which tool is used to compile Java source files?

- A. java
- B. javac
- C. javadoc
- D. jar

19. Which of the following is not part of the JDK?

- A. javac
- B. java

- C. javadoc
- D. Notepad

20. What does JVM stand for?

- A. Java Variable Machine
- B. Java Virtual Machine
- C. Java Visual Machine
- D. Java Verified Module

Class, Objects, Methods, and Constructors in Java.

21. What is a class in Java?

- A. A blueprint to create objects
- B. A real-world entity
- C. A type of method
- D. A variable container

22. Which of the following is used to create an object in Java?

- A. `className objectName = new className();`
- B. `objectName = new className();`
- C. `new className();`
- D. `class className();`

23. Which of the following is true about constructors?

- A. They must have a return type
- B. They can be called like regular methods
- C. They have the same name as the class
- D. They must be static

24. Which constructor is invoked when no arguments are passed during object creation?

- A. Default constructor
- B. Parameterized constructor
- C. Static constructor
- D. Abstract constructor

25. Which of the following statements about methods is true?

- A. Methods cannot return values
- B. Methods cannot be overloaded

- C. Methods define the behavior of objects
- D. Methods must be abstract

26. How many constructors can a class have in Java?

- A. Only one
- B. Two
- C. As many as needed (Overloading is allowed)
- D. None

27. What is constructor overloading?

- A. Using static constructors
- B. Multiple constructors with different names
- C. Multiple constructors with different parameters
- D. Calling a constructor from another class

28. What happens if no constructor is defined in a Java class?

- A. Compilation error
- B. Java provides a default constructor
- C. Object cannot be created
- D. Class becomes abstract

29. Which keyword is used to refer to the current object inside a class method or constructor?

- A. super
- B. class
- C. this
- D. new

30. What is the correct way to call a method named `display()` on an object `obj`?

- A. `display(obj);`
- B. `obj.display();`
- C. `call obj.display();`
- D. `object.display;`

31. What is inheritance in Java?

- A. Writing code in multiple classes
- B. Creating new methods in a class
- C. Acquiring properties and methods of another class
- D. Creating multiple constructors

32. Which keyword is used to inherit a class in Java?

- A. inherit
- B. implements
- C. extends
- D. import

33. What type of inheritance does Java support directly?

- A. Multiple inheritance using classes
- B. Single and multilevel inheritance using classes
- C. Hybrid inheritance using classes
- D. Multiple inheritance using classes and interfaces

34. Can a class implement multiple interfaces in Java?

- A. No
- B. Yes, by using extends
- C. Yes, by using implements
- D. Only one interface is allowed

35. What is the purpose of an interface in Java?

- A. To create abstract classes
- B. To define constants only
- C. To achieve multiple inheritance
- D. To allow overloading of methods

36. Which of the following is correct about interfaces in Java?

- A. Interfaces can have constructors
- B. Interfaces can have only abstract methods (before Java 8)
- C. Interfaces cannot extend another interface
- D. Interfaces can be instantiated

37. What is the correct syntax for a class implementing an interface?

- A. class MyClass extends MyInterface
- B. class MyClass implements MyInterface
- C. interface MyClass extends MyInterface
- D. class MyClass inherits MyInterface

38. What happens if a class does not implement all methods of an interface?

- A. It compiles normally
- B. It becomes an abstract class
- C. It throws a runtime error
- D. It can't be instantiated

39. Which of the following is true about the `super` keyword?

- A. It refers to the current object
- B. It refers to the subclass
- C. It refers to the superclass
- D. It is used to implement interfaces

40. Which access modifier allows a subclass in a different package to access the superclass member?

- A. private
- B. public
- C. default
- D. protected

Working with Packages in Java

41. What is a package in Java?

- A. A type of variable
- B. A collection of classes and interfaces
- C. A set of instructions
- D. A data type

42. Which keyword is used to define a package in Java?

- A. import
- B. include
- C. package
- D. export

43. Which statement is used to access a class from another package?

- A. include
- B. using
- C. import
- D. extends

44. What is the correct syntax to create a package in Java?

- A. create package mypack;
- B. make package mypack;
- C. package mypack;
- D. new package mypack;

45. Which of the following is a valid use of the import keyword?

- A. import java.util.Scanner;
- B. import Scanner from java.util;
- C. import package.java.util.Scanner;
- D. include java.util.Scanner;

46. What happens if two packages have a class with the same name?

- A. Compilation error
- B. The class from the last package is used
- C. You must use the fully qualified class name
- D. Java randomly selects one

47. Which of the following is not a built-in Java package?

- A. java.util
- B. java.io
- C. java.pkg
- D. java.lang

48. Which package is automatically imported in every Java program?

- A. java.util
- B. java.io
- C. java.lang
- D. java.net

49. How can you compile a Java file that uses a package?

- A. javac -d . ClassName.java
- B. java -p ClassName.java

- C. javac ClassName.java
- D. javac -pack ClassName.java

50. Where should the package statement appear in a Java source file?

- A. At the end
- B. After import statements
- C. Before the class definition
- D. As the first statement

ANDROID BASICS, HISTORY & VERSION

51. Who developed Android initially?

- A. Google
- B. Apple
- C. Android Inc.
- D. Microsoft

52. In which year was Android acquired by Google?

- A. 2003
- B. 2004
- C. 2005
- D. 2006

53. Android is based on which operating system?

- A. Unix
- B. Linux
- C. Windows
- D. iOS

54. What is the first version of Android released for commercial use?

- A. Android 0.9
- B. Android 1.0
- C. Android 1.1
- D. Android Cupcake

55. What was the codename of Android 1.5?

- A. Donut
- B. Eclair
- C. Cupcake
- D. Froyo

56. Which of the following is NOT a feature of Android?

- A. Open source
- B. Supports cloud messaging
- C. Proprietary OS
- D. Supports multiple languages

57. What is the latest Android version name as per recent updates (as of 2024)?

- A. Android 11
- B. Android 12
- C. Android 13
- D. Android 14

58. Which programming language is officially supported for Android app development?

- A. Python
- B. Java
- C. Swift
- D. C#

59. What is the function of the Android SDK?

- A. Manages device storage
- B. Allows app development
- C. Compiles Java into .NET
- D. Provides cloud storage

60. Which Android version introduced Material Design UI?

- A. Android 4.4 (KitKat)
- B. Android 5.0 (Lollipop)
- C. Android 6.0 (Marshmallow)
- D. Android 7.0 (Nougat)

ANDROID LAYOUTS – RELATIVELAYOUT & LINEARLAYOUT MCQ

61. Which layout arranges child views in a single row or column?

- A. RelativeLayout
- B. TableLayout

- C. FrameLayout
- D. LinearLayout

62. What attribute defines the direction of a LinearLayout?

- A. layout_gravity
- B. orientation
- C. layout_align
- D. layout_position

63. In LinearLayout, what values can android:orientation have?

- A. start, end
- B. horizontal, vertical
- C. top, bottom
- D. left, right

64. Which layout allows you to position child views relative to each other or the parent?

- A. ConstraintLayout
- B. FrameLayout
- C. RelativeLayout
- D. GridLayout

65. Which attribute in RelativeLayout aligns a view to the right of another view?

- A. android:alignParentRight
- B. android:toRightOf
- C. android:rightOf
- D. android:layout_toRightOf

66. Which layout is better for complex UI with many view relationships?

- A. LinearLayout
- B. RelativeLayout
- C. FrameLayout
- D. AbsoluteLayout

67. What is the default orientation of LinearLayout if not specified?

- A. horizontal
- B. vertical
- C. depends on system settings
- D. none

68. Which layout is more efficient in terms of performance for deeply nested views?

- A. Nested LinearLayouts
- B. RelativeLayout
- C. AbsoluteLayout
- D. TableLayout

69. What will happen if you use `layout_weight` in RelativeLayout?

- A. It works normally
- B. It creates flexible views
- C. It is ignored; only works in LinearLayout
- D. It crashes the app

70. Which layout should be used when you want views to be centered relative to the parent?

- A. LinearLayout
- B. ConstraintLayout
- C. RelativeLayout
- D. FrameLayout

ANDROID – TABLELAYOUT MCQ

71. What is the purpose of a TableLayout in Android?

- A. To stack views on top of each other
- B. To place views in a grid-like table format
- C. To scroll views vertically
- D. To group buttons horizontally

72. Which layout does TableLayout resemble in terms of structure?

- A. FrameLayout
- B. GridLayout
- C. HTML table
- D. LinearLayout

73. Which child layout is used inside a TableLayout?

- A. LinearLayout
- B. FrameLayout

- C. TableRow
- D. RowLayout

74. What is the function of `android:layout_span` in `TableLayout`?

- A. To merge columns
- B. To span rows
- C. To center the layout
- D. To set padding

75. Can you use `layout_weight` in `TableLayout`?

- A. Yes, it behaves the same as `LinearLayout`
- B. No, it's not supported
- C. Yes, but only in `TableRow`
- D. Only in the parent layout

76. Which tag is used to define a row in a `TableLayout`?

- A. `<row>`
- B. `<tr>`
- C. `<TableRow>`
- D. `<table>`

77. What happens if columns are uneven in `TableRows`?

- A. The layout will throw an error
- B. Android automatically adjusts the columns
- C. Views are clipped
- D. Extra columns are ignored

78. What attribute defines how many columns a view in a `TableRow` should occupy?

- A. `android:layout_width`
- B. `android:columnSpan`
- C. `android:layout_span`
- D. `android:span_count`

79. Can a `TableLayout` have nested `TableRows`?

- A. Yes
- B. No
- C. Only one level is allowed
- D. Only with `LinearLayout`

80. Which of the following layouts best supports a spreadsheet-like design?

- A. LinearLayout
- B. RelativeLayout
- C. TableLayout
- D. FrameLayout

ANDROID UI COMPONENTS MCQs – TextView, ImageView, Button, Toast

81. Which view is used to display text in Android?

- A. Button
- B. TextView
- C. EditText
- D. Label

82. Which attribute sets the text size in a TextView?

- A. android:text_height
- B. android:font_size
- C. android:textSize
- D. android:labelSize

83. Which view is used to display images in Android?

- A. ImageTextView
- B. TextImageView
- C. PictureBox
- D. ImageView

84. What attribute is used to set an image in an ImageView from resources?

- A. android:src
- B. android:img
- C. android:image
- D. android:setImage

85. Which view is used to perform a click action in Android?

- A. TextView
- B. ImageView

- C. Button
- D. Switch

86. What method is used to handle button clicks in Java code?

- A. setTapListener()
- B. setClickListener()
- C. setOnClickListener()
- D. setButtonClick()

87. What is a Toast in Android?

- A. A button style
- B. A temporary message displayed on the screen
- C. A layout type
- D. A type of view

88. How long can a Toast message be shown?

- A. 1 second
- B. 5 seconds
- C. LENGTH_SHORT or LENGTH_LONG
- D. 10 seconds

89. Which method is used to display a Toast?

- A. Toast.message()
- B. Toast.view()
- C. Toast.show()
- D. Toast.print()

90. What is the correct syntax to create a Toast in Java?

- A. Toast.create("Hello", Toast.LENGTH_SHORT);
- B. Toast.makeText(context, "Hello", Toast.LENGTH_SHORT).show();
- C. Toast.new("Hello").display();
- D. Toast.setText("Hello").show();

ANDROID WIDGETS MCQs – ImageButton, RadioButton, CheckBox

91. What is an ImageButton in Android?

- A. A button with text only
- B. An image that cannot be clicked

- C. A clickable button that displays an image
- D. A combination of CheckBox and Button

92. Which attribute sets the image for an ImageButton?

- A. android:src
- B. android:image
- C. android:background
- D. android:icon

93. What is the main difference between Button and ImageButton?

- A. ImageButton can't be clicked
- B. Button uses images, ImageButton uses text
- C. ImageButton displays an image instead of text
- D. No difference

94. Which widget allows the user to select only one option from a group?

- A. CheckBox
- B. Switch
- C. RadioButton
- D. ToggleButton

95. What must RadioButtons be grouped in to allow only one selection at a time?

- A. CheckGroup
- B. RadioGroup
- C. ViewGroup
- D. ButtonGroup

96. Which method is used to check if a CheckBox is selected?

- A. isSelected()
- B. isChecked()
- C. isClicked()
- D. isToggled()

97. Which widget allows multiple selections in Android?

- A. RadioButton
- B. ImageButton
- C. CheckBox
- D. Button

98. Which method is used to respond to CheckBox state changes?

- A. `setOnClickListener()`
- B. `setOnCheckedChangeListener()`
- C. `setCheckedListener()`
- D. `setToggleListener()`

99. What is the default state of a CheckBox or RadioButton when created?

- A. Checked
- B. Disabled
- C. Unchecked
- D. Focused

100. Which layout is commonly used to group RadioButtons together?

- A. `LinearLayout`
- B. `FrameLayout`
- C. `RadioGroup`
- D. `RelativeLayout`

ANDROID INTENTS MCQs – Explicit & Implicit Intents

101. What is an Intent in Android?

- A. A component to store data
- B. A message to request an action from another component
- C. A layout manager
- D. A type of adapter

102. Which of the following is used to launch another activity explicitly?

- A. Implicit Intent
- B. Notification
- C. Explicit Intent
- D. Broadcast

103. What is the correct syntax to create an explicit intent?

- A. `new Intent(actionName);`
- B. `new Intent(this, TargetActivity.class);`
- C. `Intent.from(this).start(TargetActivity.class);`
- D. `Intent(TargetActivity);`

104. What is an Implicit Intent used for?

- A. To start an activity from the same app only
- B. To call specific components by class name

- C. To request an action from another app or the system
- D. To pass data between methods

105. Which component is needed to handle an implicit intent?

- A. Receiver
- B. Filter
- C. Intent Filter
- D. Adapter

106. Which of the following can be used with an Implicit Intent?

- A. Specific class name
- B. `android.intent.action.VIEW`
- C. Activity class reference
- D. Java object

107. Which method is used to launch an activity using an Intent?

- A. `startActivity(intent);`
- B. `callActivity(intent);`
- C. `launchActivity(intent);`
- D. `newActivity(intent);`

108. What is the purpose of `Intent.putExtra()`?

- A. To launch an app
- B. To add extra information to an Intent
- C. To start services
- D. To create notifications

109. Which of the following is an example of an Implicit Intent?

- A. `new Intent(this, MainActivity.class);`
- B. `Intent i = new Intent(Intent.ACTION_VIEW, Uri.parse("http://www.google.com"));`
- C. `Intent i = new Intent(this, AnotherActivity.class);`
- D. `startActivity(new Intent(this, HelpActivity.class));`

110. Which Android component can be started using an Intent?

- A. Activity
- B. Service
- C. BroadcastReceiver
- D. All of the above

SEC_FUNDAMENTALS OF MOBILE APPLICATION DEVELOPMENT
SUB_CODE:306
QUESTION_BANK [MCQ]

ANDROID MCQs – ListView & AlertDialog

111. What is ListView in Android used for?

- A. To show web content
- B. To display a list of scrollable items
- C. To show notifications
- D. To play audio

112. Which adapter is commonly used with ListView?

- A. ArrayAdapter
- B. GridAdapter
- C. PageAdapter
- D. CustomAdapter

113. What layout is used to define the look of each ListView item?

- A. Main layout
- B. item_layout.xml
- C. Content layout
- D. Base layout

114. Which method is used to respond to item clicks in ListView?

- A. setOnItemClickListener()
- B. setOnClickListener()
- C. onClickItem()
- D. setClickListener()

115. What does ListView require to populate its items?

- A. Cursor
- B. Adapter
- C. ViewModel
- D. Toast

ALERTDIALOG MCQs

116. What is AlertDialog used for in Android?

- A. Showing a map
- B. Displaying a dialog box with a message and buttons

- C. Playing music
- D. Opening a camera

117. Which class is used to build an AlertDialog?

- A. DialogBuilder
- B. AlertBuilder
- C. AlertDialog.Builder
- D. Dialog.Alert

118. What method is used to display an AlertDialog on screen?

- A. show()
- B. open()
- C. start()
- D. begin()

119. Which method is used to set the title in an AlertDialog?

- A. setHeading()
- B. setTitle()
- C. setTopText()
- D. setName()

120. Which of the following can be added to an AlertDialog?

- A. Positive button
- B. Negative button
- C. Neutral button
- D. All of the above

ANDROID MCQs – SQLite Database

121. What is SQLite in Android?

- A. A cloud database
- B. A file-based lightweight database embedded in Android
- C. A remote MySQL database
- D. A messaging protocol

122. Which class helps manage database creation and versioning in Android?

- A. SQLiteManager
- B. SQLiteHelper

- C. SQLiteOpenHelper
- D. SQLiteAdapter

123. Which method is called when the database is created for the first time?

- A. onStart()
- B. onInit()
- C. onCreate()
- D. createDB()

124. What is the file extension of SQLite databases in Android?

- A. .db
- B. .sqlite
- C. .sql
- D. .data

125. What is the default location of the SQLite database in Android?

- A. /data/data/<package_name>/databases/
- B. /sdcard/databases/
- C. /root/databases/
- D. /system/db/

126. Which method is used to insert a row into a database?

- A. insertRow()
- B. insertData()
- C. insert()
- D. addRecord()

127. What is used to read data from a SQLite database in Android?

- A. InputStream
- B. Cursor
- C. ResultSet
- D. Scanner

128. Which method is used to upgrade the database schema?

- A. onUpgrade()
- B. updateDB()
- C. upgradeSchema()
- D. onChange()

129. How do you execute raw SQL queries in SQLite?

- A. execute()
- B. querySQL()
- C. execSQL()
- D. run()

130. What is the return type of `rawQuery()` method?

- A. ResultSet
- B. Cursor
- C. Query
- D. Boolean

HETAL PATEL