

## ## \*\*Section 2 – Multiple Choice Questions (MCQs)\*\*

**\*\*1.\*\*** Which of the following is NOT a feature of Java?

- a) Platform Independence
- b) Object-Oriented
- c) Pointer Arithmetic
- d) Multithreading

**\*\*Answer:\*\*** c) Pointer Arithmetic

**\*\*2.\*\*** The Java compiler converts source code into:

- a) Machine code
- b) Bytecode
- c) Assembly code
- d) Executable file

**\*\*Answer:\*\*** b) Bytecode

**\*\*3.\*\*** Which Java principle combines data and methods into one unit?

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

**\*\*Answer:\*\*** b) Encapsulation

**\*\*4.\*\*** The default value of a char in Java is:

- a) '0'
- b) '\u0000'
- c) null
- d) 0

**\*\*Answer:\*\*** b) '\u0000'

**\*\*5.\*\*** Which of the following is NOT a Java primitive type?

- a) boolean
- b) String
- c) int
- d) double

**\*\*Answer:\*\*** b) String

**\*\*6.\*\*** Which loop guarantees execution at least once?

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

**\*\*Answer:\*\*** c) do-while

**\*\*7.\*\*** Which method in Java is used to terminate a program immediately?

- a) System.exit()
- b) break
- c) continue
- d) return

**\*\*Answer:\*\*** a) System.exit()

**\*\*8.\*\*** Which of these is a dynamic data structure in Java?

- a) Array
- b) ArrayList
- c) char\[]
- d) int\[]

**\*\*Answer:\*\* b) ArrayList**

**\*\*9.\*\*** In Java, which operator is used to perform a logical AND operation?

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

**\*\*Answer:\*\* b) &&**

**\*\*10.\*\*** Which feature of Java allows execution of code on different machines?

- a) Dynamic Loading
- b) Platform Independence
- c) Object-Oriented
- d) Encapsulation

**\*\*Answer:\*\* b) Platform Independence**

**\*\*11.\*\*** Which keyword is used to create an object in Java?

- a) new
- b) create
- c) object
- d) instance

**\*\*Answer:\*\* a) new**

**\*\*12.\*\*** What is the range of byte in Java?

- a) -128 to 127
- b) 0 to 255
- c) -256 to 255
- d) -127 to 128

**\*\*Answer:\*\*** a) -128 to 127

**\*\*13.\*\*** Which statement is true about Java arrays?

- a) They are fixed in size
- b) They can store mixed data types
- c) They resize automatically
- d) They are always one-dimensional

**\*\*Answer:\*\*** a) They are fixed in size

**\*\*14.\*\*** Which OOP concept allows multiple methods with the same name but different parameters?

- a) Overriding
- b) Overloading
- c) Inheritance
- d) Encapsulation

**\*\*Answer:\*\*** b) Overloading

**\*\*15.\*\*** The equalsIgnoreCase() method belongs to which class?

- a) Object
- b) String
- c) Character
- d) StringBuffer

**\*\*Answer:\*\*** b) String

**\*\*16.\*\*** Which loop is most suitable when the number of iterations is known?

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

d) foreach

**\*\*Answer:\*\* a) for**

**\*\*17.\*\*** Which package contains the Scanner class?

a) java.lang

b) java.util

c) java.io

d) java.net

**\*\*Answer:\*\* b) java.util**

**\*\*18.\*\*** Which Java feature ensures code safety in untrusted environments?

a) Encapsulation

b) Robustness

c) Security Manager

d) Polymorphism

**\*\*Answer:\*\* c) Security Manager**

**\*\*19.\*\*** Which method is the entry point for a Java application?

a) main()

b) start()

c) init()

d) run()

**\*\*Answer:\*\* a) main()**

**\*\*20.\*\*** Which type of casting is performed automatically by Java?

a) Narrowing

b) Widening

c) Explicit

d) Reference Casting

**\*\*Answer:\*\*** b) Widening

**\*\*21.\*\*** The modulus operator (%) returns:

a) The quotient

b) The remainder

c) The absolute value

d) The division result

**\*\*Answer:\*\*** b) The remainder

**\*\*22.\*\*** Which of these can be a case label in a switch statement?

a) double

b) String

c) float

d) long

**\*\*Answer:\*\*** b) String

**\*\*23.\*\*** Which statement skips the rest of the current loop iteration?

a) break

b) exit

c) continue

d) return

**\*\*Answer:\*\*** c) continue

**\*\*24.\*\*** The default value of an object reference in Java is:

a) 0

b) null

c) empty

d) undefined

**\*\*Answer:\*\*** b) null

**\*\*25.\*\*** Which operator is used for bitwise OR in Java?

a) &&

b) ||

c) |

d) &

**\*\*Answer:\*\*** c)

**\*\*26.\*\*** Which class is at the top of the Java class hierarchy?

a) Object

b) Class

c) Base

d) Root

**\*\*Answer:\*\*** a) Object

**\*\*27.\*\*** Which data type is used for storing 64-bit integer values?

a) int

b) long

c) short

d) double

**\*\*Answer:\*\*** b) long

**\*\*28.\*\*** The ++ operator in Java is used for:

a) Addition

b) Increment

c) Concatenation

d) Comparison

**\*\*Answer:\*\*** b) Increment

**\*\*29.\*\*** Which of the following is an example of a reference data type?

a) int

b) float

c) String

d) double

**\*\*Answer:\*\*** c) String

**\*\*30.\*\*** Which keyword is used to inherit a class?

a) super

b) implements

c) extends

d) inherit

**\*\*Answer:\*\*** c) extends

**\*\*31.\*\*** Which of these methods can be used to find the position of a substring?

a) search()

b) indexOf()

c) position()

d) locate()

**\*\*Answer:\*\*** b) indexOf()

**\*\*32.\*\*** Which primitive type is used to store a single character?

a) String

b) char

c) character



d) text

**\*\*Answer:\*\*** b) char

**\*\*33.\*\*** Which feature allows Java code to be compiled once and run anywhere?

a) JVM

b) Garbage Collection

c) Inheritance

d) Polymorphism

**\*\*Answer:\*\*** a) JVM

**\*\*34.\*\*** Which of these is NOT a type of Java variable?

a) Local Variable

b) Instance Variable

c) Class Variable

d) Static Local Variable

**\*\*Answer:\*\*** d) Static Local Variable

**\*\*35.\*\*** The conditional operator in Java is represented by:

a) if-else

b) ?:

c) &&

d) ||

**\*\*Answer:\*\*** b) ?:

**\*\*36.\*\*** Which loop in Java is best for iterating over an array without using an index?

a) while

b) do-while

c) for-each

d) for

**\*\*Answer:\*\* c) for-each**

**\*\*37.\*\*** Which operator is used for equality comparison?

a) =

b) ==

c) !=

d) equals()

**\*\*Answer:\*\* b) ==**

**\*\*38.\*\*** Which Java feature ensures the same size for primitive data types across platforms?

a) Robustness

b) Architecture Neutral

c) Portability

d) Dynamic Loading

**\*\*Answer:\*\* b) Architecture Neutral**

**\*\*39.\*\*** Which method in the String class is used to replace text?

a) substitute()

b) replace()

c) change()

d) modify()

**\*\*Answer:\*\* b) replace()**

**\*\*40.\*\*** Which Java control statement is used for multi-way branching?

a) if-else-if

b) switch

c) while

d) do-while

**\*\*Answer:\*\*** b) switch

**\*\*41.\*\*** The process of converting a primitive into a wrapper object is called:

a) Unboxing

b) Auto-boxing

c) Type Casting

d) Wrapping

**\*\*Answer:\*\*** b) Auto-boxing

**\*\*42.\*\*** Which operator in Java is used for bitwise XOR?

a) ^

b) &

c) |

d) %

**\*\*Answer:\*\*** a) ^

**\*\*43.\*\*** Which method converts a string to lowercase?

a) lower()

b) toLowerCase()

c) makeLower()

d) caseLower()

**\*\*Answer:\*\*** b) toLowerCase()

**\*\*44.\*\*** Which data type in Java is used for true/false values?

a) binary

b) boolean

c) char

d) flag

**\*\*Answer:\*\* b) boolean**

**\*\*45.\*\*** Which access modifier makes a member accessible only within its own class?

a) public

b) protected

c) private

d) default

**\*\*Answer:\*\* c) private**

**\*\*46.\*\*** Which Java statement is used to exit from a loop completely?

a) stop

b) return

c) break

d) continue

**\*\*Answer:\*\* c) break**

**\*\*47.\*\*** Which class in Java is used for reading input from the console?

a) Console

b) Scanner

c) InputReader

d) Reader

**\*\*Answer:\*\* b) Scanner**

**\*\*48.\*\*** What is the default value of an int variable in Java?

a) null

b) 0

c) undefined

d) garbage value

**\*\*Answer:\*\* b) 0**

**\*\*49.\*\*** Which method in Java splits a string into an array?

a) break()

b) split()

c) divide()

d) explode()

**\*\*Answer:\*\* b) split()**

**\*\*50.\*\*** The keyword used to call a superclass constructor is:

a) super

b) this

c) parent

d) base

**\*\*Answer:\*\* a) super**

**\*\*51.\*\*** Which of the following is a jump statement in Java?

a) if

b) break

c) switch

d) loop

**\*\*Answer:\*\* b) break**

**\*\*52.\*\*** Which of these is a valid array declaration?

a) int\[] arr;

b) arr\[] int;

c) int arr\[];

d) Both a and c

**\*\*Answer:\*\*** d) Both a and c

**\*\*53.\*\*** Which Java operator performs an unsigned right shift?

a) >>

b) >>>

c) <<

d) ^

**\*\*Answer:\*\*** b) >>>

**\*\*54.\*\*** Which method in the String class compares two strings for equality?

a) compareTo()

b) equals()

c) match()

d) compare()

**\*\*Answer:\*\*** b) equals()

**\*\*55.\*\*** Which of the following is NOT a Java control statement?

a) if

b) for

c) goto

d) switch

**\*\*Answer:\*\*** c) goto

**\*\*56.\*\*** Which keyword is used to define an interface in Java?

a) interface

b) implements

c) abstract

d) protocol

**\*\*Answer:\*\*** a) interface

**\*\*57.\*\*** Which feature of Java ensures automatic memory management?

a) Garbage Collection

b) Inheritance

c) Encapsulation

d) JIT Compilation

**\*\*Answer:\*\*** a) Garbage Collection

**\*\*58.\*\*** The smallest unit of a Java array is called:

a) Index

b) Element

c) Cell

d) Byte

**\*\*Answer:\*\*** b) Element

**\*\*59.\*\*** Which loop is entry-controlled in Java?

a) while

b) do-while

c) both a and b

d) for-each

**\*\*Answer:\*\*** a) while

**\*\*60.\*\*** Which of the following is an example of narrowing casting?

a) int to double

b) double to int

c) int to long

d) float to double

**\*\*Answer:\*\*** b) double to int

**\*\*61.\*\*** Which of these is a valid way to create a new thread in Java?

a) Extending the Thread class

b) Implementing the Runnable interface

c) Both a and b

d) None of the above

**\*\*Answer:\*\*** c) Both a and b

**\*\*62.\*\*** Which keyword is used to define a constant variable in Java?

a) static

b) const

c) final

d) immutable

**\*\*Answer:\*\*** c) final

**\*\*63.\*\*** Which method is automatically invoked before an object is garbage collected?

a) dispose()

b) finalize()

c) clean()

d) destroy()

**\*\*Answer:\*\*** b) finalize()

**\*\*64.\*\*** Which Java statement can be used to execute one block of code among many options?

a) if

b) for



c) switch

d) break

**\*\*Answer:\*\*** c) switch

**\*\*65.\*\*** Which method of the Scanner class reads a single word from input?

a) nextWord()

b) nextString()

c) next()

d) read()

**\*\*Answer:\*\*** c) next()

**\*\*66.\*\*** Which Java operator checks if two references point to the same object?

a) ==

b) equals()

c) !=

d) compareTo()

**\*\*Answer:\*\*** a) ==

**\*\*67.\*\*** Which of these is a mutable sequence of characters?

a) String

b) StringBuffer

c) char

d) text

**\*\*Answer:\*\*** b) StringBuffer

**\*\*68.\*\*** Which data type has the largest range in Java?

a) int

b) float

c) double

d) long

**\*\*Answer:\*\* c) double**

**\*\*69.\*\*** Which Java loop iterates through each element in an array without using an index?

a) for

b) while

c) for-each

d) do-while

**\*\*Answer:\*\* c) for-each**

**\*\*70.\*\*** Which operator is used for bitwise NOT?

a)  $\sim$

b) !

c) ^

d) &

**\*\*Answer:\*\* a)  $\sim$**

**\*\*71.\*\*** Which method converts a string to an integer?

a) Integer.parseInt()

b) Integer.valueOf()

c) Double.parseDouble()

d) parseInt()

**\*\*Answer:\*\* a) Integer.parseInt()**

**\*\*72.\*\*** Which statement about Java arrays is true?

a) Arrays can store primitive and object types

b) Arrays can be resized dynamically

- c) Arrays can store only primitive types
- d) Arrays can store different data types together

**\*\*Answer:\*\*** a) Arrays can store primitive and object types

**\*\*73.\*\*** Which loop is best suited when the condition should be checked after execution?

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

**\*\*Answer:\*\*** b) do-while

**\*\*74.\*\*** Which Java feature prevents memory leaks by reclaiming unused objects?

- a) Garbage Collection
- b) Encapsulation
- c) Polymorphism
- d) JIT Compilation

**\*\*Answer:\*\*** a) Garbage Collection

**\*\*75.\*\*** Which keyword is used to import a package in Java?

- a) package
- b) import
- c) include
- d) use

**\*\*Answer:\*\*** b) import

**\*\*76.\*\*** Which package contains classes for handling input and output?

- a) java.lang
- b) java.io

c) java.util

d) java.net

**\*\*Answer:\*\*** b) java.io

**\*\*77.\*\*** Which of these is NOT a valid identifier in Java?

a) \\_count

b) \\$price

c) 2value

d) value2

**\*\*Answer:\*\*** c) 2value

**\*\*78.\*\*** Which type of loop is also known as an entry-controlled loop?

a) while

b) do-while

c) foreach

d) switch

**\*\*Answer:\*\*** a) while

**\*\*79.\*\*** Which method in String returns the number of characters in it?

a) length()

b) size()

c) count()

d) chars()

**\*\*Answer:\*\*** a) length()

**\*\*80.\*\*** Which Java keyword is used to declare a method without implementation?

a) abstract

b) final

c) static

d) void

**\*\*Answer:\*\* a) abstract**

**\*\*81.\*\* Which is NOT a valid access modifier in Java?**

a) public

b) default

c) private

d) internal

**\*\*Answer:\*\* d) internal**

**\*\*82.\*\* Which feature of Java allows it to call functions from C and C++?**

a) Dynamic Loading

b) JNI (Java Native Interface)

c) Garbage Collection

d) Multithreading

**\*\*Answer:\*\* b) JNI (Java Native Interface)**

**\*\*83.\*\* Which Java statement is used to terminate a method early?**

a) break

b) return

c) exit

d) stop

**\*\*Answer:\*\* b) return**

**\*\*84.\*\* Which Java principle allows the same method to behave differently based on context?**

a) Inheritance

b) Encapsulation

c) Polymorphism

d) Abstraction

**\*\*Answer:\*\* c) Polymorphism**

**\*\*85.\*\*** Which method is used to join two strings?

a) append()

b) concat()

c) join()

d) merge()

**\*\*Answer:\*\* b) concat()**

**\*\*86.\*\*** Which keyword is used to execute a block when none of the switch cases match?

a) else

b) break

c) default

d) none

**\*\*Answer:\*\* c) default**

**\*\*87.\*\*** Which of these is NOT a relational operator in Java?

a) <

b) >

c) !=

d) +=

**\*\*Answer:\*\* d) +=**

**\*\*88.\*\*** Which keyword is used to create a subclass from an abstract class?

a) implements

b) inherits

c) extends

d) super

**\*\*Answer:\*\*** c) extends

**\*\*89.\*\*** Which variable type belongs to the class and is shared by all its objects?

a) Instance Variable

b) Local Variable

c) Static Variable

d) Final Variable

**\*\*Answer:\*\*** c) Static Variable

**\*\*90.\*\*** Which method in String is used to check if it contains a specific sequence of characters?

a) has()

b) contains()

c) includes()

d) check()

**\*\*Answer:\*\*** b) contains()

**\*\*91.\*\*** Which operator in Java is used for multiplication?

a) x

b) \\*

c) multiply

d) times

**\*\*Answer:\*\*** b) \\*

**\*\*92.\*\*** Which keyword is used to prevent method overriding?

- a) static
- b) final
- c) const
- d) super

**\*\*Answer:\*\*** b) final

**\*\*93.\*\*** Which loop executes when the termination condition is false at the beginning?

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

**\*\*Answer:\*\*** c) do-while

**\*\*94.\*\*** Which of these is NOT a valid Java primitive type?

- a) float
- b) double
- c) String
- d) boolean

**\*\*Answer:\*\*** c) String

**\*\*95.\*\*** Which operator is used to combine conditions in Java?

- a) && and ||
- b) ++ and --
- c) \\* and /
- d) % and ^

**\*\*Answer:\*\*** a) && and ||

**\*\*96.\*\*** Which of these keywords is used to handle exceptions?



- a) try
- b) catch
- c) throw
- d) All of the above

**\*\*Answer:\*\*** d) All of the above

**\*\*97.\*\*** Which package is automatically imported in every Java program?

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

**\*\*Answer:\*\*** c) java.lang

**\*\*98.\*\*** Which operator is used to divide numbers and return an integer quotient?

- a) /
- b) %
- c) //
- d) div

**\*\*Answer:\*\*** a) /

**\*\*99.\*\*** Which method of String compares two strings ignoring case differences?

- a) compareToIgnoreCase()
- b) equalsIgnoreCase()
- c) ignoreCase()
- d) matchIgnoreCase()

**\*\*Answer:\*\*** b) equalsIgnoreCase()

**\*\*100.\*\*** Which Java loop structure is ideal for iterating over collections?

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

**\*\*Answer:\*\*** b) foreach

**\*\*101.\*\*** Which Java feature enables dynamic class loading?

- a) Reflection
- b) Garbage Collection
- c) JVM
- d) Encapsulation

**\*\*Answer:\*\*** a) Reflection

**\*\*102.\*\*** Which statement is true about static methods?

- a) They require an object to be called
- b) They belong to the class, not objects
- c) They cannot be called without inheritance
- d) They must return a value

**\*\*Answer:\*\*** b) They belong to the class, not objects

**\*\*103.\*\*** Which Java statement is used to repeat code while a condition is true?

- a) if
- b) while
- c) switch
- d) return

**\*\*Answer:\*\*** b) while

**\*\*104.\*\*** Which is NOT an advantage of Java's object-oriented model?

- a) Code reusability
- b) Modularity
- c) Multiple inheritance via classes
- d) Data hiding

**\*\*Answer:\*\* c) Multiple inheritance via classes**

**\*\*105.\*\*** Which keyword is used to indicate a method can be overridden in subclasses?

- a) final
- b) override
- c) virtual
- d) None (all non-final, non-static, non-private methods can be overridden)

**\*\*Answer:\*\* d) None**

**\*\*106.\*\*** Which method in StringBuffer appends text to the end?

- a) add()
- b) concat()
- c) append()
- d) merge()

**\*\*Answer:\*\* c) append()**

**\*\*107.\*\*** Which Java feature allows method calls from C libraries?

- a) JNI
- b) JDK
- c) JRE
- d) JVM

**\*\*Answer:\*\* a) JNI**

**\*\*108.\*\*** Which keyword is used to define a package?

- a) import
- b) package
- c) namespace
- d) module

**\*\*Answer:\*\*** b) package

**\*\*109.\*\*** Which Java statement executes code only if a condition is false?

- a) if
- b) else
- c) switch
- d) break

**\*\*Answer:\*\*** b) else

**\*\*110.\*\*** Which of these is NOT a valid loop in Java?

- a) for
- b) foreach
- c) do-while
- d) loop-until

**\*\*Answer:\*\*** d) loop-until

**\*\*111.\*\*** Which Java class represents a sequence of characters that can be modified?

- a) String
- b) StringBuffer
- c) StringBuilder
- d) Both b and c

**\*\*Answer:\*\*** d) Both b and c

**\*\*112.\*\*** Which operator in Java is used for left shift?

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

**\*\*Answer:\*\*** a) <<

**\*\*113.\*\*** Which method of String removes leading and trailing spaces?

- a) strip()
- b) trim()
- c) cut()
- d) removeSpaces()

**\*\*Answer:\*\*** b) trim()

**\*\*114.\*\*** Which Java feature compiles bytecode into native code at runtime?

- a) JVM
- b) JIT Compiler
- c) Interpreter
- d) Compiler

**\*\*Answer:\*\*** b) JIT Compiler

**\*\*115.\*\*** Which operator in Java is used to check inequality?

- a) !=
- b) <>
- c) notEqual()
- d) !==

**\*\*Answer:\*\*** a) !=

**\*\*116.\*\*** Which Java keyword is used to create a new object?

- a) new
- b) object
- c) create
- d) instance

**\*\*Answer:\*\*** a) new

**\*\*117.\*\*** Which method in String returns part of the string based on index range?

- a) substring()
- b) slice()
- c) cut()
- d) sub()

**\*\*Answer:\*\*** a) substring()

**\*\*118.\*\*** Which control structure executes one block if a condition is true, otherwise another block?

- a) if-else
- b) switch
- c) for
- d) while

**\*\*Answer:\*\*** a) if-else

**\*\*119.\*\*** Which operator is used to perform logical OR?

- a) ||
- b) |
- c) or
- d) &

**\*\*Answer:\*\*** a) ||

**\*\*120.\*\*** Which type of casting must be done manually?

- a) Widening
- b) Narrowing
- c) Boxing
- d) Unboxing

**\*\*Answer:\*\*** b) Narrowing

**\*\*121.\*\*** Which variable type is declared inside a method?

- a) Instance Variable
- b) Local Variable
- c) Static Variable
- d) Class Variable

**\*\*Answer:\*\*** b) Local Variable

**\*\*122.\*\*** Which of these is a valid wrapper class for a primitive type?

- a) Int
- b) Integer
- c) number
- d) float

**\*\*Answer:\*\*** b) Integer

**\*\*123.\*\*** Which control statement skips to the next iteration of the loop?

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

**\*\*Answer:\*\*** b) continue

**\*\*124.\*\*** Which Java feature ensures type safety at compile time?

- a) Strong Typing
- b) Encapsulation
- c) Abstraction
- d) Garbage Collection

**\*\*Answer:\*\*** a) Strong Typing

**\*\*125.\*\*** Which method of the String class checks if a string starts with a given prefix?

- a) startsWith()
- b) beginsWith()
- c) hasPrefix()
- d) starts()

**\*\*Answer:\*\*** a) startsWith()