Primitive values, Wrapper classes, Types and casting

Multiple choice questions

1. First four data types hold-
(a) Real numbers (b) Integers
(c) Single character (d) Whole numbers

2. Next two data types hold-
(a) Real numbers (b) Integers
(c) Single character (d) Whole numbers

3. From the Unicode character set, what does a character data type hold ?
(a) Real numbers (b) Integers
(c) Single character (d) Word

4. Data types used in Java are also called:
(a) Fixed Data Types
(b) Ancient Data Types
(c) Primitive Data Types
(d) New Data Types

5. Elements which are machine independent in Java:
(a) Data types (b) Variables
(c) Literals (d) Characters

6. In Java what are adaptable with IEEE 754?
(a) Real numbers (b) Integers
(c) Single character (d) Corrective

7. Which character set is used in Java:
(a) Numerical (b) IEEE
(c) Character (d) Integer

8. How many bits of precision are there in char type?
(a) 13 (b) 14
(c) 15 (d) 16

9. Which data type is not a number ?
(a) Char (b) Real
(c) Boolean (d) Integer

10. Which element manipulates the data that is stored in memory?
(a) Information (b) Programs
(c) Comments (d) Characters

11. If anything is to be remembered by the computer, what will be required during program execution? It should be stored in the memory of the computer. What will be that?
(a) Variables (b) Literals
(c) Comments (d) Operators

12. Which address of the location in memory is needed if we want to refer a data in machine language?
(a) Numerical (b) Alpha numerical
(c) Alphabetical (d) Real

13. Language in which names are used instead of numerical address of the memory location to refer to data is :
(a) Low level (b) Middle level
(c) High level (d) Top level

14. If we use a name to refer to the data stored in the memory, it is called?
(a) Variable (b) Literal
(c) Comment (d) Operator

15. Where do we declare variables in Java?
(a) Beginning (b) Initial
(c) Declaration (d) Comment

16. To be specified by user in conventional syntax, an item should not be enclosed with:
(a) Curly bracket (b) Square brackets
(c) Angle brackets (d) Round bracket

17. The list of item should not have _____ if separated by commas in conventional syntax.
(a) Curly bracket (b) Square brackets
(c) Angle brackets (d) Round bracket

18. Lists containing more than one item can be separated by:
(a) Using semi colon
(b) Using commas
(c) Using full stops
(d) Using Colon

19. Which is the incorrect statement while defining the variable name?

(a) It must begin with an alphabet underscore (_)

(b) It must begin with a percentage sign (%)

(c) No spaces are allowed in variables

(d) It cannot be a reserved word

20. Which example of variable is correct?

(a) Int marks;

(b) Double amount, interest

(c) Float rate;

(d) All of these

21. In which type of statement Computer sets aside memory for the variable and associates the variables name with that memory ?

(a) Data type

(b) Initial

(c) Variable declaration statement

(d) Comment

22. What is used to determine the size of variable the value it can hold and the operations that can be performed on it?

(a) Real numbers (b) Variables

(c) Data types (d) Floats

23. Which classes are not included in Java.language ?

(a) Byte (b) Integer

(c) Array (d) Class

24. Which of the following is a process of converting the simple data type into a class?

(a) Type wrapping (b) Type conversion

(c) Type casting (d) None of the above

25. Which of the following class is a super class of wrappers double and integer?

(a) Long (b) Digits

(c) Float (d) Number

26. Which is a wrapper for simple data type float?

(a) Float (b) double

(c) float (d) Double

27. Which method is a method of wrapper float for converting the value of an object into byte?

(a) bytevalue() (b) byte bytevalue()

(c) byteBytevalue() (d) Bytevalue()

28. Which is a wrapper for data type int?

(a) Integers (b) Long

(c) Byte (d) Double

29. Which of the following options are the method of heparin teacher for obtaining hash code for the invoking object?

(a) int hash()

(b) int hashcode()

(c) int hashCode()

(d) interger hashcode()

30. Which is a super class of wrappers long ,character and integer?

(a) Long (b) Digits

(c) Float (d) Number

31. Which is a wrapper for simple data type char?

(a) Float (b) Character

(c) String (d) Integer

32. Which method of integer is used for converting the value of an object into int?

(a) Bytevalue() (b) int intValue();

(c) int Bytevalue() (d) Byte Bytevalue()

33. Which method is used to obtain value of invoking object as a long?

(a) long value () (b) long longValue()

(c) Long longvalue() (d) Long Longvalue()

34. What type of conversions are available in Java language?

(a) Narrowing type conversion

(b) Widening type conversion

(c) A and B

(d) None of the above

35. Which of the following is higher data type in Java language?

(a) Data type which holds more data than other data types

(b) Order type whose size is more than other data type

(c) Order type which can hold more precision digits than other data type

(d) All of the above

36. Widening type conversion in Java includes?

(a) Conversion of data from higher data type to lower data type

(b) Conversion of data from lower data type to higher data type

(c) Conversion of data from any data type to any data type

(d) None of the above

37. Narrowing type conversion in Java includes?

(a) Conversion of data from lower data type to higher data type

(b) Conversion of data from a higher data type to lower data type

(c) Conversion of data from any data type to any data type

(d) None of the above

Fill in the blanks

38. _____ is the result of a narrowing type conversion.

(a) Loss of data (b) Addition of data

(c) Corruption of data (d) None of the above

39. _____ is the result of widening type conversion in Java.

(a) Loss of data (b) Gain of data

(c) No change (d) None of the above

40. Type promotion in Java uses only _____ .

(a) Narrowing type conversion

(b) Widening type conversion

(c) No type conversion

(d) None of the above

41. Type casting in Java uses _____ type conversion.

(a) Narrowing type conversion

(b) Widening type conversion

(c) No type conversion

(d) None of the above

42. Explicit type conversion in Java refers to _____.

(a) Narrowing type conversion

(b) Widening type conversion

(c) No type conversion

(d) None of the above

43. Implicit type conversion in java is also called _____.

(a) Narrowing type conversion

(b) Widening type conversion

(c) No type conversion

(d) None of the above

44. _____ are the compatible data types for type promotion or type casting.

(a) byte, char , short (b) char. int, float

(c) float. long , double (d) All of the above

45. A boolean literal in Java can be type casted to _____ data type.

(a) Byte (b) Short

(c) Int (d) None of the above

46. If a variable or operand in an expression is type long then all the brands are type promoted to _____ data type.

(a) Int (b) Long

(c) Float (d) Double

47. Java is an object oriented programming language developed by _____ .

(a) Oracle

(b) Sun Microsystems

(c) UNIX

(d) Netscape

Match the following

48. Match the columns:

Group A	Group B
1. Java program is composed of	(i) Native
2. Code is faster to execute	(ii) classes
3. Java provides tools	(iii) slow execution speed
4. Disadvantage of byte codes	(iv) convert javabyte into native codes

(a) 1-(ii), 2-(i), 3-(iv), 4-(iii)

(b) 1-(i), 2-(ii), 3-(iv), 4-(iii)

(c) 1-(ii), 2-(i), 3-(iii), 4-(iv)

(d) 1-(ii), 2-(iv), 3-(i), 4-(iii)

49. Match the columns:

Group A	Group B
1. Primitive	(i) a class whose object wraps
2. Wrapper classes	(ii) data type
3. Primitive types	(iii) convert data type to another data type
4. User defined casting	(iv) int, short, long, byte

(a) 1-(ii), 2-(i), 3-(iv), 4-(iii)

(b) 1-(i), 2-(ii), 3-(iv), 4-(iii)

(c) 1-(ii), 2-(i), 3-(iii), 4-(iv)

(d) 1-(ii), 2-(iv), 3-(i), 4-(iii)

50. Match the columns:

Group A	Group B
1. Primitive data types	(i) 32 bit
2. int in java	(ii) 8
3. Signed	(iii) byte
4. Smallest integer type	(iv) int, short, long, byte

(a) 1-(ii), 2-(i), 3-(iv), 4-(iii)

(b) 1-(i), 2-(ii), 3-(iv), 4-(iii)

(c) 1-(ii), 2-(i), 3-(iii), 4-(iv)

(d) 1-(ii), 2-(iv), 3-(i), 4-(iii)

51. Match the columns:

Group A	Group B
1. Size of float and double	(i) int to long
2. Automatic type conversion	(ii) 32 and 64
3. Word true is	(iii) double
4. Not an integer data type	(iv) Boolean literal

(a) 1-(ii), 2-(i), 3-(iv), 4-(iii)

(b) 1-(i), 2-(ii), 3-(iv), 4-(iii)

(c) 1-(ii), 2-(i), 3-(iii), 4-(iv)

(d) 1-(ii), 2-(iv), 3-(i), 4-(iii)

52. Match the columns:

Group A	Group B
1. Floating data type	(i) string
2. Character data type cannot store	(ii) double
3. Range of byte data type	(iii) 4 byte
4. Size of integer	(iv) -128-127

(a) 1-(ii), 2-(i), 3-(iv), 4-(iii)

(b) 1-(i), 2-(ii), 3-(iv), 4-(iii)

(c) 1-(ii), 2-(i), 3-(iii), 4-(iv)

(d) 1-(ii), 2-(iv), 3-(i), 4-(iii)

Programming based questions

53. Choose the right statement:

int x = 25;

Integer y = new Integer(33);

What is the difference between these two statements?

(a) Primitive data types

(b) Primitive data type and an object of a wrapper class

(c) Wrapper class

(d) None of the above

54. Choose the correct output of the following Java Code:

```
int a=9;
float b = a/2;
System.out.println(b);
```

(a) 4.0 (b) 4.5

(c) 5.0 (d) None of the above

55. Choose the correct output of the Java code snippet?

```
char ch = 'A';//ASCII 65
int a = ch + 1;
ch = (char)a;
System.out.println(ch);
```

(a) 66 (b) A

(c) B (d) 65

56. Regarding the program code given below, answer the questions that follow:

```
// char can be handled like integers
public class CharClass
{
    public static void main(String args[])
    {
    char myChar1 = 'A';
    char myChar2 = 'B';
    System.out.println("myChar1: " +myChar1);
    System.out.println("myChar2: " +myChar2);
    }
}
```

(a) What will be the output?

(i) myChar1: A
myChar2: B

(ii) myChar1: B
myChar2: C

(iii) myChar1: C
myChar2: D

(iv) myChar1: D
myChar2: E

(b) What is the name of the class?

(i) System.out.println

(ii) static void main()

(iii) public

(iv) CharClass

57. Concerning the program code given below, answer the questions that follow:

```
public class ShortDataType
{
    public static void main(String args[])
    {
    short myShort = 6000;
    System.out.println("myShort: " + myShort);
    }
}
```

(a) What will be the output?

(i) myShort: 6000

(ii) myShort: 7000

(iii) myShort: 8000

(iv) myShort: 4000

(b) What is the name of the data type used to store myshort price?

(i) ShortDatatype

(ii) static void main()

(iii) public

(iv) Short

Answers

Multiple choice questions

1. (b) Integers

Explanation: Integer. ,Floating-point number. Character. Boolean

2. (a) Real numbers

3. (c) Single character

4. (c) Primitive Data Types

Explanation: The eight primitives defined in Java are int, byte, short, long, float, double, boolean, and char – those aren't considered objects and represent raw values.

5. (a) Data types

6. (a) Real numbers

7. (c) Character

8. (d) 16

Explanation: The char data type is a single 16-bit Unicode character. It has a minimum value of '\ u0000' (or 0) and a maximum value of '\uffff' (or 65,535 inclusive).

9. (c) Boolean

Explanation: The BOOLEAN data type stores TRUE or FALSE data values as a single byte.

10. (b) Programs

11. (a) Variables

12. (a) Numerical

13. (c) High level

14. (a) Variable

Explanation: Syntax type variable = value;

15. (a) Beginning

16. (c) Angle brackets

17. (a) Curly bracket

18. (b) Using commas

19. (b) It must begin with a percentage sign (%)

20. (d) All of these

21. (c) Variable declaration statement

22. (c) Data types

23. (c) Array

24. (b) Type conversion

Explanation: Syntax dataType variableName = (dataType) variableToConvert;

25. (d) Number

26. (a) Float

27. (b) byte bytevalue()

28. (a) Integers

Explanation: The wrapper class in Java provides the mechanism to convert primitive into object and object into primitive.

29. (c) int hashCode()

30. (d) Number

31. (b) Character

32. (b) int intValue();

33. (b) long longValue()

34. (c) A and B

35. (d) All of above

36. (b) alteration of data from lower data type to higher data type

37. (b) alteration of data from a higher data type to lower data type

Fill in the blanks

38. (a) Loss of data

39. (c) No change
40. (b) Widening type conversion
41. (a) Narrowing type conversion
42. (a) Narrowing type conversion
43. (b) Widening type conversion
44. (d) All of the above
45. (d) None of the above
46. (b) Long
47. (b) Sun Microsystems

Match the following

48. (a) 1-(ii), 2-(i), 3-(iv), 4-(iii)
49. (a) 1-(ii), 2-(i), 3-(iv), 4-(iii)
50. (a) 1-(ii), 2-(i), 3-(iv), 4-(iii)
51. (a) 1-(ii), 2-(i), 3-(iv), 4-(iii)
52. (a) 1-(ii), 2-(i), 3-(iv), 4-(iii)

Programming based questions

53. (b) Primitive data type and an object of a wrapper class
54. (a) 4.0
55. (c) B
56. (a) (i) myChar1: A
myChar2: B
(b) (iv) CharClass
57. (a) (i) myShort: 6000
(b) (iv) Short