SPPU Students - Core Java Basic level I Question Bank

```
1) Which of the following option leads to the portability and security of Java?
a. Bytecode is executed by JVMb.
b. The applet makes the Java code secure and portable
c. Use of exception handling
d. Dynamic binding between objects
Answer: A
2) Which of the following is not a Java features?
a. Dynamic
b. Architecture Neutral
c. Use of pointers
d. Object-oriented
Answer: C
3) What will be the output of the following program?
public class MyFirst {
   public static void main(String[] args) {
      MyFirst obj = new MyFirst(n);
static int a = 10;
static int n;
int b = 5;
int c;
public MyFirst(int m) {
    System.out.println(a + ", " + b + ", " + c + ", " + n + ", " + m);
// Instance Block
   b = 30:
   n = 20;
// Static Block
 static
{
      a = 60;
a. 10, 5, 0, 20, 0
b. 10, 30, 20
c. 60, 5, 0, 20
d. 60, 30, 0, 20, 0
```

Answer: D

- 4) The \u0021 article referred to as a
- a. Unicode escape sequence
- b. Octal escape
- c. Hexadecimal
- d. Line feed

Answer: A

- 5) _____ is used to find and fix bugs in the Java programs.
- a. JVM
- b. JRE
- c. JDK
- d. JDB

Answer: D

- 6) Which of the following is a valid declaration of a char?
- a. char ch = '\utea';
- b. char ca = 'tea';
- c. char cr = $\u0223$;
- d. char cc = '\itea';

Answer: A

- 7) What is the return type of the hashCode() method in the Object class?
- a. Object
- b. int
- c. long
- d. void

Answer: B

- 8) Which of the following is a valid long literal?
- a. ABH8097
- b. L990023
- c. 904423
- d. 0xnf029L

Answer: D

- 9) What does the expression float a = 35 / 0 return?
- a. 0
- b. Not a Number
- c. Infinity
- d. Run time exception

Answer: C

10) Evaluate the following Java expression, if x=3, y=5, and z=10:

++z + y - y + z + x++

- a. 24
- b. 23
- c. 20
- d. 25

Answer: A

11) What will be the output of the following program?

```
public class Test {
public static void main(String[] args) {
  int count = 1;
  while (count <= 15) {
  System.out.println(count % 2 == 1 ? "***" : "+++++");
  ++count:
         // end while
     }
       // end main
a. 15 times ***
b. 15 times +++++
c. 8 times *** and 7 times +++++
d. Both will print only once
Answer: C
12) Which of the following tool is used to generate API documentation in HTML format
from doc comments in source code?
a. javap tool
b. javaw command
c. Javadoc tool
d. javah command
Answer: C
13) Which of the following creates a List of 3 visible items and multiple selections abled?
a. new List(false, 3)
b. new List(3, true)
c. new List(true, 3)
d. new List(3, false)
Answer: B
14) Which of the following for loop declaration is not valid?
a. for (int i = 99; i >= 0; i / 9)
b. for (int i = 7; i <= 77; i += 7)
c. for (int i = 20; i >= 2; --i)
d. for (int i = 2; i \le 20; i = 2*i)
Answer: A
15) Which method of the Class.class is used to determine the name of a class
represented by the class object as a String?
a. getClass()
b. intern()
c. getName()
d. toString()
Answer: C
16) In which process, a local variable has the same name as one of the instance
variables?
a. Serialization
b. Variable Shadowing
c. Abstraction
```

d. Multi-threading

Answer: B

```
17) Which of the following is true about the anonymous inner class?
a. It has only methods
b. Objects can't be created
c. It has a fixed class name
d. It has no class name
Answer: D
18) Which package contains the Random class?
a. java.util package
b. java.lang package
c. java.awt package
d. java.io package
Answer: A
19) What do you mean by nameless objects?
a. An object created by using the new keyword.
b. An object of a superclass created in the subclass.
c. An object without having any name but having a reference.
d. An object that has no reference.
Answer: D
20) An interface with no fields or methods is known as a _____.
a. Runnable Interface
b. Marker Interface
c. Abstract Interface
d. CharSequence Interface
Answer: B
21) public class ExceptionTest
  class TestException extends Exception {}
  public void runTest() throws TestException {}
  public void test() /* Point X */
  {
     runTest();
At Point X on line 5, which code is necessary to make the code compile?
a. No code is necessary.
b. throws Exception
c. catch (Exception e)
d. throws RuntimeException
Answer: B
22) switch(x)
  default:
```

```
System.out.println("Hello");
}
Which two are acceptable types for x?
1. byte
2.long
3.char
4.float
5.Short
6.Long
a. 1 and 3
b. 2 and 4
c. 3 and 5
d. 4 and 6
Answer: A
```

- 23) Which two statements are true about comparing two instances of the same class, given that the equals() and hashCode() methods have been properly overridden?
- 1. If the equals() method returns true, the hashCode() comparison == must return true.
- 2. If the equals() method returns false, the hashCode() comparison != must return true.
- 3. If the hashCode() comparison == returns true, the equals() method must return true.
- 4. If the hashCode() comparison == returns true, the equals() method might return true.
- a. 1 and 4
- b. 2 and 3
- c. 3 and 4
- d. 1 and 3
- Answer: A
- 24) Which of the following are true statements?
- 1. The Iterator interface declares only three methods: hasNext, next and remove.
- 2. The ListIterator interface extends both the List and Iterator interfaces.
- 3. The ListIterator interface provides forward and backward iteration capabilities.
- 4. The ListIterator interface provides the ability to modify the List during iteration.
- 5. The ListIterator interface provides the ability to determine its position in the List.
- a. 2, 3, 4 and 5
- b. 1, 3, 4 and 5
- c. 3. 4 and 5
- d. 1, 2 and 3

Answer: B

- 25) Which statement is true for the class java.util.HashSet?
- a. The elements in the collection are ordered.
- b. The collection is guaranteed to be immutable.
- c. The elements in the collection are guaranteed to be unique.
- d. The elements in the collection are accessed using a unique key.

Answer: C

26) Which interface provides the capability to store objects using a key-value pair?

```
a. Java.util.Map
b. Java.util.Set
c. Java.util.List
d. Java.util.Collection
Answer: A
27) What will be the output of the program?
public class Test
  public static void main (String args[])
     String str = NULL;
     System.out.println(str);
  }
a. NULL
b. Compile Error
c. Code runs but no output
d. Runtime Exception
Answer: B
28) What will be the output of the program?
public class ExamQuestion6
  static int x;
  boolean catch()
     X++;
     return true;
  public static void main(String[] args)
     x=0:
     if ((catch() | catch()) || catch())
     System.out.println(x);
  }
}
a. 1
b. 2
c. 3
d. Compilation Fails
Answer: D
29) What will be the output of the program?
class MyThread extends Thread
  public static void main(String [] args)
```

```
MyThread t = new MyThread();
     t.start();
     System.out.print("one. ");
     t.start();
     System.out.print("two. ");
  public void run()
     System.out.print("Thread ");
}
a. Compilation fails
b. An exception occurs at runtime.
c. It prints "Thread one. Thread two."
d. The output cannot be determined.
Answer: B
30) What will be the output of the program?
public class Test
  public static void main (String [] args)
     final Foo f = new Foo();
     Thread t = new Thread(new Runnable()
        public void run()
          f.doStuff();
     });
     Thread g = new Thread()
        public void run()
          f.doStuff();
     };
     t.start();
     g.start();
classsss Foo
  int x = 5;
  public void doStuff()
     if (x < 10)
       // nothing to do
```

```
try
        {
          wait();
          } catch(InterruptedException ex) { }
     }
     else
        System.out.println("x is " + x++);
        if (x >= 10)
          notify();
     }
  }
a. The code will not compile because of an error on notify(); of class Foo.
b. The code will not compile because of some other error in class Test.
c. An exception occurs at runtime.
d. It prints "x is 5 x is 6".
Answer: C
31) Which two are equal?
1.
        32/4
2.
        (8 >> 2) << 4
3.
        2^5
4.
        128 >>> 2
5.
        2 >> 5
a. 1 and 2
b. 2 and 4
c. 1 and 3
d. 2 and 3
Answer: B
32) public class Test2
  public static int x;
  public static int foo(int y)
     return y * 2;
  public static void main(String [] args)
     int z = 5;
     assert z > 0; /* Line 11 */
     assert z > 2: foo(z); /* Line 12 */
     if (z < 7)
        assert z > 4; /* Line 14 */
```

switch (z)

```
case 4: System.out.println("4");
        case 5: System.out.println("5");
        default: assert z < 10:
     }
     if (z < 10)
        assert z > 4: z++; /* Line 22 */
     System.out.println(z);
  }
which line is an example of an inappropriate use of assertions?
a. Line 11
b. Line 12
c. Line 14
d. Line 22
Answer: D
33) Which cause a compiler error?
a. int[] scores = \{3, 5, 7\};
b. int [][] scores = \{2,7,6\}, \{9,3,45\};
c. String cats[] = {"Fluffy", "Spot", "Zeus"};
d. boolean results[] = new boolean [] {true, false, true};
Answer: B
34) Which three form part of correct array declarations?
1.
       public int a []
2.
       static int [] a
3.
       public [] int a
4.
       private int a [3]
5.
       private int [3] a []
6.
       public final int [] a
a. 1, 3, 4
b. 2, 4, 5
c. 1, 2, 6
d. 2, 5, 6
Answer: C
35) Which constructs an anonymous inner class instance?
a. Runnable r = new Runnable() { };
b. Runnable r = new Runnable(public void run() { });
c. Runnable r = new Runnable { public void run(){}};
d. System.out.println(new Runnable() {public void run() { }});
Answer: D
       What will be the output of the program?
class SSBool
```

```
public static void main(String [] args)
     boolean b1 = true;
     boolean b2 = false;
     boolean b3 = true;
     if ( b1 & b2 | b2 & b3 | b2 ) /* Line 8 */
        System.out.print("ok ");
     if ( b1 & b2 | b2 & b3 | b2 | b1 ) /*Line 10*/
        System.out.println("dokey");
  }
}
a. dokey
b. ok dokey
c. No output is produced
d. Compilation error
Answer: A
37) What will be the output of the program?
for(int i = 0; i < 3; i++)
  switch(i)
     case 0: break;
     case 1: System.out.print("one ");
     case 2: System.out.print("two ");
     case 3: System.out.print("three ");
  }
System.out.println("done");
a. done
b. one two done
c. one two three done
d. one two three two three done
Answer: D
38) What will be the output of the program?
public class If1
  static boolean b;
  public static void main(String [] args)
     short hand = 42;
     if ( hand < 50 && !b ) /* Line 7 */
       hand++;
     if (hand > 50); /* Line 9 */
     else if (hand > 40)
       hand += 7;
       hand++;
```

```
else
       --hand;
     System.out.println(hand);
  }
}
a. 41
b. 42
c. 50
d. 51
Answer: D
39) Which of the following would compile without error?
a. int a = Math.abs(-5);
b. int b = Math.abs(5.0);
c. int c = Math.abs(5.5F);
d. int d = Math.abs(5L);
Answer: A
40) public class MyRunnable implements Runnable
  public void run()
     // some code here
  }
which of these will create and start this thread?
a. new Runnable(MyRunnable).start();
b. new Thread(MyRunnable).run();
c. new Thread(new MyRunnable()).start();
d. new MyRunnable().start();
Answer: C
41) What is the default value of Object variable?
a. undefined
b. 0
c. null
d. not defined
Answer: C
42) Which of the following statement is treu?
Statement 1: Can a top level class be private or protected?
Statement 2: Objects are stored on Stack.
a. Statement 1 is true.
b. Statement 2 is true.
c. Both statement 1 and statement 2 is true.
d. Neither statement 1 nor statement 2 is true.
Answer: d
43) What of the following is the default value of an instance variable?
a. null
```

- b. 0
- c. Depends upon the type of variable
- d. Not assigned

Answer: C

- 44) What is the default value of byte variable?
- a. 0
- b. 0.0
- c. null
- d. not defined

Answer: A

- 45) What happens when thread's yield() method is called?
- a. Thread returns to the ready state.
- b. Thread returns to the waiting state.
- c. Thread starts running.
- d. None of the above.

Answer: A

- 46) What is TreeSet Interface?
- a. It is a Set implemented when we want elements in a tree based order.
- b. It is a Set implemented when we want elements in a sorted order.
- c. It is a Set implemented when we want elements in a binary tree format.
- d. It is a Set implemented when we want elements in a hiearchical order.

Answer: B

- 46) What is Encapsulation?
- a. Encapsulation is a technique to define different methods of same type.
- b. Encapsulation is the ability of an object to take on many forms.
- c. Encapsulation is the technique of making the fields in a class private and providing access to the fields via public methods.
- d. None of the above.

Answer: C

- 47) What is Abstraction?
- a. Abstraction is a technique to define different methods of same type.
- b. Abstraction is the ability of an object to take on many forms.
- c. It refers to the ability to make a class abstract in OOP.
- d. None of the above.

Answer: C

- 48) What is synchronization?
- a. Synchronization is the capability to control the access of multiple threads to shared resources.
- b. Synchronization is the process of writing the state of an object to another object.
- c. Synchronization is the process of writing the state of an object to byte stream.
- d. None of the above.

Answer: A

49) What is runtime polymorphism?

- a. Runtime polymorphism is a process in which a call to an overridden method is resolved at runtime rather than at compile-time.
- b. Runtime polymorphism is a process in which a call to an overloaded method is resolved at runtime rather than at compile-time.
- c. Both of the above.
- d. None of the above.

Answer: A

- 50) What is the size of char variable?
- a. 8 bit
- b. 16 bit
- c. 32 bit
- d. 64 bit

Answer: B

- 51) What is a class in java?
- a. A class is a blue print from which individual objects are created. A class can contain fields and methods to describe the behavior of an object.
- b. class is a special data type.
- c. class is used to allocate memory to a data type.
- d. none of the above.

Answer: A

- 52) What is the size of long variable?
- a. 8 bit
- b. 16 bit
- c. 32 bit
- d. 64 bit

Answer: D

- 53) Which arithmetic operations can result in the throwing of an ArithmeticException?
- a. /, %
- b. *,+
- c. !,-
- d. >>, <<

Answer: A

- 54) What is JRE?
- a. JRE is a java based GUI application.
- b. JRE is an application development framework.
- c. JRE is an implementation of the Java Virtual Machine which executes Java programs.
- d. None of the above.

Answer: C

- 55) What is currentThread()?
- a. It is a Thread public static method used to obtain a reference to the current thread.
- b. It is a thread's instance method used to get thread count.
- c. It is a object's public static method used obtain a reference to the current thread.
- d. It is a object's instance method used to get thread count.

Answer: A

```
56) What is the size of boolean variable?
a. 8 bit
b. 16 bit
c. 32 bit
d. not precisely defined
Answer: B
57) What is true about a final class?
a. class declard final is a final class.
b. Final classes are created so the methods implemented by that class cannot be
overridden.
c. It can't be inherited.
d. All of the above.
Answer: D
58) Which of the following lines will compile without warning or error.
a. float f=1.3;
b. char c = 2.58:
c. byte b=257;
d. int i=10;
Answer: D
59) What will happen if you try to compile and run the following code?
public class MyClass
public static void main(String arguments[])
amethod(arguments);
public void amethod(String[] arguments)
System.out.println(arguments);
System.out.println(arguments[1]);
a. error Can't make static reference to void amethod.
b. error method main not correct
c. error array must include parameter
d. amethod must be declared with String
Answer: A
60) A byte can be of what size
a. -128 to 127
b. (-2 power 8 )-1 to 2 power 8
c. -255 to 256
d. depends on the particular implementation of the Java Virtual machine
Answer: A
```

61) What will be printed out if this code is run with the following command line? java myprog good morning

```
public class myprog{ public static void main(String argv[])
System.out.println(argv[2]);
a. myprog
b. good
c. morning
d. Exception raised: 'java.lang.ArrayIndexOutOfBoundsException: 2'
Answer: D
62) Which of the following is NOT a keywords or reserved words in Java?
a. if
b. then
c. goto
d. while
Answer: B
63) What will happen if you try to compile and run the following code?
public class Q
public static void main(String argv[])
int anar[]=new int[]{1,2,3};
System.out.println(anar[1]);
a. Error anar is referenced before it is initialized
b. Error: size of array must be defined
c. Compile and run without error
d. None of above
Answer: B
64) What will be printed out if you attempt to compile and run the following code?
int i=9;
switch (i)
default: System.out.println("default");
case 0: System.out.println("zero");
break:
case 1: System.out.println("one");
case 2: System.out.println("two");
}
a. default
b. default, zero
c. error default clause not defined
d. no output displayed
Answer: B
```

```
65) What will happen if you attempt to compile and run the following code?
class Base {}
class Sub extends Base {}
class Sub2 extends Base {}
public class CEx
public static void main(String argv[])
Base b=new Base();
Sub s=(Sub) b;
a. Compile and run without error
b. Compile time Exception
c. Runtime Exception
d. None of above
Answer: C
66) What will happen when you attempt to compile and run the following code?
public class Tux extends Thread
static String sName = "vandeleur";
public static void main(String argv[])
Tux t = new Tux();
t.piggy(sName);
System.out.println(sName);
public void piggy(String sName)
sName = sName + " wiggy";
start();
public void run()
for(int i=0; i < 4; i++)
sName = sName + " " + i;
a. Compile time error
b. Compilation and output of 'vandeleur wiggy'
c. Compilation and output of 'vandeleur wiggy 0 1 2 3'
d. Compilation and output of either 'vandeleur', 'vandeleur 0', 'vandeleur 0 1' 'vandaleur 0
1 2' or 'vandaleur 0 1 2 3'
Answer: D
67) What will be output by the following code?
public class MyFor{ public static void main(String argv[])
```

```
int i; int j;
outer: for (i=1;i < 3;i++)
inner: for(j=1; j<3; j++)
if (j==2)
continue outer;
System.out.println("Value for i=" + i + " Value for j=" +j);
a. Value for i=1 Value for i=1
b. Value for i=3 Value for j=1
c. Value for i=2 Value for j=1
d. None of above
Answer: A
68) In Java a _____ is a sequence of character.
a. String
b. ArrayChar
c. GroupChar
d. Collection
Answer: A
69) The String is defined in _____ namespace.
a. Java.lang
b. Java.string
c. Java.char
d. Java.awt
Answer: A
70) is a special member function.
a. Method
b. Class
c. User defined function
d. Constructor
Answer: D
71) Keyword _____ is always a reference to the object.
a. New
b. This
c. Invoke
d. Class
Answer: B
72) _____ is the mechanism that binds together the code and the data.
a. Polymorphism.
b. Encapsulation.
c. Inheritance.
d. Together.
Answer: B
```

a. Development b. Deducting c. Distributed d. Web design Answer: C
74) is a small unit of a process. a. Method b. Thread c. Applet d. Stream Answer: B
75) Wrapper class is a wrapper around a data type. a. Normal b. Central c. Primitive d. Concrete Answer: C
76) Once an interface has been defined, one or more can implement that interface. a. Class b. Object c. Methods d. Keywords Answer: A
77) Variable declared as do not occupy memory on a per instance basis. a. Static b. Final c. Abstract d. Code Answer: B
78) must be the first statement executed inside a subclass Constructor. a. final() b. super() c. static{} d. None of these Answer: B
79) Which function is used to perform some action when the object is to be destroyed? a. finalize() b. delete() c. main() d. None of the above Answer: A
80) The statement is used to terminate a statement sequence.

a. Break b. Switch c. Continue d. Wait Answer: A
81) Multidimensional arrays are actually a. Arrays of element. b. Array and variable. c. Arrays of arrays. d. None of the above Answer: C
82) statement in java is multiway branch statement. a. Declaration b. Case c. Multi d. Switch Answer: D
83) What is the output of relational operators?a. Integer.b. Boolean.c. Character.d. Double.Answer: B
84) Which exception is thrown by the read() method of Input Stream class? a. Exception. b. ClassNotFoundException. c. ReadException. d. IOException. Answer: D
85) Which of the following denotes a javadoc comment? a. //# b. /* c. /** d. //** Answer: C
86) In java, thread to thread communication is called a. Passing b. Sending c. Messaging d. Calling Answer: C
87) Which of these access specifiers can be used for an Interface? a. Public

b. Protected

```
c. Private
d. All of the above
Answer: A
88) What is the range of the char type?
a. 0 to 2^16.
b. 0 to 2^15.
c. 0 to 2<sup>1</sup>6-1.
d. 0 to 2<sup>15-1</sup>.
Answer: C
89) must be the first non comment statement in the file.
a. Package.
b. Class.
c. Object.
d. Declaration.
Answer: A
90) What will be the result of the expression 13 & 25?
a. 38
b. 25
c. 9
d. 12
Answer: C
91) Which of the following is not a valid way to create String object?
a. String str2 = new String(new char[]{'a','b','c'});
b. String str = new String("abc");
c. String str1 = "abc";
d. String str3 = 'a' + 'b' + 'c';
Answer: D
92) How many new objects are created in given code?
String str = new String("Hello");
a. 0
b. 1
c. 2
d. 3
Answer: C
93) Which method is used to convert a primitive type into String?
a. toString()
b. valueOf()
c. toChar()
d. None of above
Answer: B
94) What will be the output of following code?
```

String str = "Java was developed by James Ghosling";

System.out.println(str.substring(19));

a by lames Charling

a. by James Ghosling

```
b. y James Ghosling
c. James Ghosling
d. Java was developed
Answer: A
95) Which type of exception will be thrown when you run this code?
int a = 100, b = 0;
int c = a/b;
a. java.lang.Exception
b. java.lang.Throwable
c. java.lang.DivideByZeroException
d. java.lang.ArithmeticException
Answer: D
96) What will happen on running the following code?
try
{
 int arr[]=\{1,2\};
 arr[2]=3/0;
 System.out.println(a[0]);
catch(Exception e)
 System.out.println("Exception");
catch(ArithmeticException e)
 System.out.println("Divide by Zero");
a. Exception is printed
b. Divide by Zero is printed
c. compilation error
d. 1 is printed
Answer: C
97) getCause() method of Throwable is used to?
a. to relate one exception with another exception.
b. return the Error associated with code.
c. return the actual cause associated with current exception
d. None of above
Answer: C
98) Give One Word for ?
A situation where two or more threads are blocked forever and waiting for each other to
release resources.
a. Critical Section
b. Mutual Exclusion
c. Deadlock
d. Synchronization
Answer: C
```

```
99) What will be the Output of given code?
public class Test implements Runnable
 public void run()
  System.out.println("r1");
  System.out.println("r2");
public static void main( String[] args )
  Thread t = new Thread(new Test());
  t.start();
  System.out.println("m1 ");
  t.join();
  System.out.println("m2");
}
a. compilation error.
b. r1 r2 m1 m2
c. m1 m2 r1 r2
d. m1 r1 r2 m2
Answer: A
100) Which class or interface defines the wait(), notify(), and notifyAll() methods?
a. Object
b. Thread
c. Runnable
d. Class
Answer: A
```