

Question	Answer	Explanation
1	D	<code>public static final void main(String[] mydata)</code> is correct answer because method, argument, return type, modifiers and variable are defined correctly.
2	A	The diagram does not demonstrates platform independence in Java. The diagram demonstrates object-oriented design in Java. The Gold and Silver classes inherit weight and color attributes from the Metal class. Gold does not inherit the luster attribute.
3	C	<code>.class</code> is the proper filename extension for a Java bytecode compiled file.
4	B	<pre>import java.util; import java.sql; public class BirthdayManager { private Date rob = new Date(); private java.util.Date sharon = new java.util.Date(); }</pre> <p>The code does not compile because of line 4. This is the correct answer. It does not compile because of the <code>Date</code> class.</p>
5	A	An object can take many forms via casting. An object can hold data, referred to as attributes. An object can perform actions, via methods. Option A is not correct because object oriented Project tends to group data and the actions related to that data into a single object.
6	D	Local variables have a scope limited to a method.
7	B	<code>Java.lang</code> package is imported into every Java class by default. Others are options.
8	C	<code># Add configuration value</code> is not a valid code comment in Java.
9	D	It can not only contain one class declaration. It can not contain one public class declaration an done public interface definiton. It must not define at least one public class. It may define at most one public class.
10	B	<pre>package competition; public class Robot { static String weight = "A lot"; /* default */ double ageMonths = 5, ageDays = 2; private static boolean success = true; public void main(String[] args) { final String retries = "1"; // P1 } }</pre> <p>Class variables 2 Instance 2 Local 1</p>
11	B	The class will compile if it contains unused import statements. The class will compile if a duplicate import statement is present. If a class contains an import statement for a class used in the program that cannot be found, it can not compile. Unused import statements can be removed from the class without causing a class to become unable to be compiled.
12	A	<pre>public class ParkRanger { int birds = 10; public static void main(String[] data) { int trees = 5; System.out.print(trees+birds); } }</pre> <p>It does not compile because of the line 5. Method can not access the birds variable.</p>
13	D	Answer is that none are true. The java command can just execute compiled .class files. Java is object oriented and the java command compiles not directly into native machine code.
14	D	In java variable definition can not be in start so <code>int facilityNumber</code> is not allowed as the first line.
15	C	Every class is not required to include a package declaration. To create a new package, you do not need to add a package .init file to the directory. It is possible to restrict access to objects and methods within a package. Packages allow you to limit access to classes, methods, or data from classes outside the package.
16	B	<code>javac Manager.java</code> and <code>java Manager</code> are the correct commands to compile and run the

		applicaiton in Java.
17	D	Structuring a Java class such that only methods within the class can access its instance variables in referred to as encapsulation .
18	D	<pre> string tree = "pine"; int count = 0; if (tree.equals("pine")){ int height = 55; count = count + 1; } System.out.print(height + count); /* class can not access the height variable because of the if statement so it does not compile. </pre>
19	A	Right answer is that it can be run on any computer with a compatible JVM. Others are not correct. Bytecode is not human readable.
20	D	A semicolon(;) is the correct character for terminating a statement in Java.
21	C	<pre> public class Tolls { private static int yesterday = 1; int tomorrow = 10; public static void main(String[] args) { Tolls tolls = new Tools(); int today =20, tomorrow =40; System.out.print(today + tolls.tomorrow + tolls.yesterday); } } </pre> <p>Output is 31 because today = 20, tolls.tomorrow = 10, tolls.yesterday = 1 total = 31.</p>
22	C	<pre> public ThisClassDoesNotCompile { /* Missing the class keyword */ double int count; /* Contains two types for same variable */ void errors() {} /* no error */ static void private limit; } /* it must not be private */ </pre> <p>Line 3 does not contain a compilation error.</p>
23	D	Platform independence feature allows a Java class to be run on a wide variety of computers and devices.
24	A	It supports platform independence. It manages memory fort he application. It translate Java instructions to machine instructions. JVM does not prevent Java bytecode from being easily decoded/decompiled.
25	B	Class variables are in scope within the program.
26	C	<pre> import television.actor; import movie.director; </pre> <p>television.actor.Package is a only valid class accessible from the wildcard import.</p>
27	D	Java classes are defined in this order: package statement, import statement and class declaration.
28	D	<pre> package planetarium; import java.lang; import stars; import stars.Blackhole; public class Observer { public void find(Blackhole blackhole) {} } </pre> <p>Three import statements that can be discarded and still have the code compile. These discarded import statements are java.lang , stars and java.lang.Object.</p>
29	C	<pre> package forest; public class Deer { public static void main(String... deerParams) { System.out.print(theInput[2]); } } </pre> <p>Java forest.Deer Red deer White-tailed deer cause the application to output the message White-tailed</p>
30	B	The javac command compiles a .java file into a .class bytecode file.
31	B	Java is not a procedural programming language. Java does not allow operator overloading. Java does not allow direct asccess to objects in memory. Java allows method overloading.
32	D	package agent;

		<pre> Public class Banker { Private static long getMaxWithdrawal() { Return 10; } } </pre>
33	A	<pre> public class Airplane { static int start = 2; /** start is 2 */ final int end; /** end will be 4 */ public Airplane(int x) { x = 4; end = x; } public void fly(int distance) { System.out.print(end-start+" "); /** output will be 4-2 = 2 */ System.out.print(distance); /** distance is 5 */ } public static void main(String... start) { New Airplane(10).fly(5); } } </pre> <p>Output will be 2 5</p>
34	D	Developer can allow increased code reuse among classes by inheritance.
35	A	Double slash can be usable for comment lines so <code>//////// Walk my dog</code> is correct.
36	B	<code>public static void main(String arguments)</code> is invalid because it must be an String array like <code>String[]</code> .
37	D	<pre> // line a1 Public class Magnet { // line a2 Public void attach() { // line a3 } // line a4 } </pre> <p>a2 and a4 are possible place to define the instance variables.</p>
38	A	A class declaration is required to define a valid Java class file. Other answers are optional.
39	D	<code>.java</code> is the proper extension for a Java source file.
40	C	<pre> package pocket; import pocket.complex; import java.util; public class Calculator { public static void main(String[] args) { System.out.print(Math.floor(5)); } } </pre> <p>The code does not compile because of line 6. To work this code, <code>package math;</code> should be added.</p>
41	A	<pre> import dog; import dog.puppy; </pre> <p><code>dog.puppy.female.KC</code> is not accessible class without importing.</p>
42	B	Object-oriented programming is the technique of structuring data into objects, which may contain data and a set of actions that operate on the data.
43	A	<pre> package food; import food.vegetables; import food.fruit; import java.util.Date; public class Grocery { Apple a; Broccoli b; Date c; } </pre> <p>All import statements are required to compile the code so none of them can be discarded. The answer is 0.</p>
44	C	<pre> public class Keyboard { </pre>

		<pre>private boolean numLock = true; static boolean capLock = false; public static void main(String... shortcuts) { System.out.print(numLock+" "+capLock); } }</pre> <p>The numLock variable is not accessible in the static main() so it does not compile.</p>
45	D	<pre>public class RollerSkates { static int wheels = 1; /* this is the s.wheels = 1 */ int tracks = 5; public static void main(String[] arguments) { RollerSkates s = new RollerSkates(); int feet = 4, tracks = 15; System.out.print(feet + tracks + s.wheels); /* feet = 4, tracks =15, s.wheels = 1 so output is 4 + 15 + 1 = 20 */ } }</pre>
46	B	<pre>package sports; public class Bicycle { string color = "red"; private void printColor(String color){ color = "purple"; System.out.print(color); } public static void main(String[] rider) { new Bicycle().printColor("blue"); } }</pre> <p>Purple is the correct answer because color assigns to purple.</p>
47	C	<p>Java may not use a slash (/) to separate packages. Java may use a period .to separate packages and javac takes a .java file and returns a .class file.</p>
48	D	<pre>package forecast; Public class Weather { private static boolean heatWave = true; public static void main() { boolean heatWave = false; System.out.print(heatWave); } }</pre> <p>The array of String is missing so it compiles but throws an error at runtime.</p>
49	C	<pre>public class Book { public int numberOfPages; /* attribute */ public String getRatint() {return null;} } /* method */</pre> <p>Method and attribute are defined in the correct answer.</p>
50	C	<p>The JVM does not schedule garbage collection on a predictable schedule. The JVM does not ensure that the application will always terminate. A Java compiled code can not be run on any computer. The JVM requires a properly defined entry point method to execute the application.</p>