**Part I - Logical Questions**

1. Look at this series: 2, 1, (1/2), (1/4), ... What number should come next?  
   A. (1/3) B. (1/8)  
   C. (2/8) D. (1/16)
2. Look at this series: 7, 10, 8, 11, 9, 12, ... What number should come next?  
   A. 7 B. 10  
   C. 12 D. 13
3. Look at this series: 36, 34, 30, 28, 24, ... What number should come next?  
   A. 20 B. 22

C. 23 D. 26

1. Look at this series: 53, 53, 40, 40, 27, 27, ... What number should come next?  
   A. 12 B. 14  
   C. 27 D. 53
2. Look at this series: 22, 21, 23, 22, 24, 23, ... What number should come next?  
   A. 22 B. 24  
   C. 25 D. 26
3. Statements: Some kings are queens. All queens are beautiful.  
   Conclusions:  
   *All kings are beautiful.  
   All queens are kings.*  
   A. Only conclusion I follows B. Only conclusion II follows  
   C. Either I or II follows D. Neither I nor II follows  
   E. Both I and II follow
4. Statements: Some doctors are fools. Some fools are rich.  
   Conclusions:  
   *Some doctors are rich  
   Some rich are doctors.*  
   A. Only conclusion I follows B. Only conclusion II follows  
   C. Either I or II follows D. Neither I nor II follows  
   E. Both I and II follow
5. Statements: All roads are waters. Some waters are boats.  
   Conclusions:  
   *Some boats are roads.  
   All waters are boats.*A. Only conclusion I follows B. Only conclusion II follows  
   C. Either I or II follows D. Neither I nor II follows  
   E. Both I and II follow
6. Statements: All flowers are trees. No fruit is tree.  
   Conclusions:  
   *No fruit is flower.  
   Some trees are flowers.*  
   A. Only conclusion I follows B. Only conclusion II follows  
   C. Either I or II follows D. Neither I nor II follows  
   E. Both I and II follow
7. Statements: Every minister is a student. Every student is inexperienced.  
   Conclusions:  
   *Every minister is inexperienced.  
   Some inexperienced are students.*A. Only conclusion I follows B. Only conclusion II follows  
   C. Either I or II follows D. Neither I nor II follows  
   E. Both I and II follow

***Directions to Solve***  
Each problem consists of three statements. Based on the first two statements, the third statement may be true, false, or uncertain.

1. *Tanya is older than Eric.  
   Cliff is older than Tanya.  
   Eric is older than Cliff.*

If the first two statements are true, the third statement is:  
A. true B. false C. uncertain

1. *Blueberries cost more than strawberries.*

*Blueberries cost less than raspberries.*

*Raspberries cost more than strawberries and blueberries.*

If the first two statements are true, the third statement is:

A. true B. false C. uncertain

1. *Mara runs faster than Gail.*

*Lily runs faster than Mara.*

*Gail runs faster than Lily.*

If the first two statements are true, the third statement is

1. true B. false C. uncertain
2. *Rover weighs less than Fido.*

*Rover weighs more than Boomer.*

*Of the three dogs, Boomer weighs the least.*

If the first two statements are true, the third statement is:

A. true B. false C. uncertain

1. *Class A has a higher enrollment than Class B.*

*Class C has a lower enrollment than Class B.*

*Class A has a lower enrollment than Class C.*

If the first two statements are true, the third statement is

A. true B. false C. uncertain

1. *A fruit basket contains more apples than lemons.*

*There are more lemons in the basket than there are oranges.*

*The basket contains more apples than oranges.*

If the first two statements are true, the third statement is

A. true B. false C. uncertain

1. *Joe is younger than Kathy.*

*Mark was born after Joe.*

*Kathy is older than Mark.*

If the first two statements are true, the third statement is

A. true B. false C. uncertain

1. *The temperature on Monday was lower than on Tuesday.*

*The temperature on Wednesday was lower than on Tuesday.*

*The temperature on Monday was higher than on Wednesday*

If the first two statements are true, the third statement is

A. true B. false C. uncertain

1. *A toothpick is useful.*

*Useful things are valuable.*

*A toothpick is valuable.*

If the first two statements are true, the third statement is

A. true B. false C. uncertain

1. *Three pencils cost the same as two erasers.*

*Four erasers cost the same as one ruler.*

*Pencils are more expensive than rulers.*

If the first two statements are true, the third statement is

A. true B. false C. uncertain

1. *Fact 1: All dogs like to run.*

*Fact 2: Some dogs like to swim.*

*Fact 3: Some dogs look like their masters.*

If the first three statements are facts, which of the following statements must also be a fact?

*I: All dogs who like to swim look like their masters.*

*II: Dogs who like to swim also like to run.*

*III: Dogs who like to run do not look like their masters.*

A. I only B. II only C. II and III only D. None

1. *Fact 1: Jessica has four children*

*Fact 2: Two of the children have blue eyes and two of the children have brown eyes.*

*Fact 3: Half of the children are girls.*

If the first three statements are facts, which of the following statements must also be a fact?

*I: At least one girl has blue eyes.*

*II: Two of the children are boys.*

*III: The boys have brown eyes.*

A. I only B. II only C. II and III only D. None

1. *Fact 1: All chickens are birds.*

*Fact 2: Some chickens are hens.*

*Fact 3: Female birds lay eggs.*

*If the first three statements are facts, which of the following statements must also be a fact?*

*I: All birds lay eggs.*

*II: Some Hens are birds.*

*III: Some chickens are not hens.*

A. I only B. II only C. II and III only D. None

1. *Here are some words translated from an artificial language.*

*gorblflur means fan belt*

*pixngorbl means ceiling fan*

*arthtusl means tile roof*

*Which word could mean "*ceiling *tile"?*

A. gorbltusl B. flurgorbl C. arthflur D. pixnarth

1. *Here are some words translated from an artificial language.*

*hapllesh means cloudburst*

*srenchoch means pinball*

*resbosrench means ninepin*

Which word could mean "cloud nine"?

A. leshsrench B. ochhapl C. haploch D. haplresbo

1. *Here are some words translated from an artificial language.*

*migenlasan means cupboard*

*lasanpoen means boardwalk*

*cuopdansa means pullman*

Which word could mean "walkway"?

A. poenmigen B. cuopeisel C. lasandansa D. poenforc

1. *Here are some words translated from an artificial language.*

*moolokarn means blue sky*

*wilkospadi means bicycle race*

*moolowilko means blue bicycle*

*Which word could mean "racecar"?*

A. wilkozwet B. spadiwilko C. moolobreil D. spadivolo

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**Part 2 - Computer Questions:**

1. A piece of hardware that is used to enter information into the computer by using keys
2. keyboard B. monitor C. hard disk D. icon
3. A personal computer is
4. MC B. SC C. YC D. PC
5. What would you do to highlight a word? You position the cursor next to the word, and then
6. Drag mouse while holding button down B. Click mouse once

C. Roll and then click mouse D. None of these

1. Which is the part of the computer system that one can physically touch?
2. Data B. Operating systems C. Hardware D. Software
3. A ………. is an electronic device that process data, converting it into information?
4. Computer B. Processor C. Case D. Stylus
5. The ………… tells the computer how to use its components.
6. Utility B. Network C. Operating System D. Mother board
7. An output device that lets you see what the computer is doing ……………
8. A disk drive B. Monitor-screen C. Shift key D. Printer
9. Which of the following is READ only disc?
10. DVD-R B. DVD-ROM C. DVDRW D. CD-R
11. Which of the following is not an example of Operating System?
12. Microsoft Office B. Windows Vista C. Unix D. Ubuntu Linux
13. A button that makes character either upper or lower case and numbers to symbols.
14. Monitor B. Shift key C. Icon D. Mouse
15. RAM means
16. Random Access Memory B. Rigid Access Memory

C. Rapid Access Memory D. Revolving Access Memory

1. The file extension of MS-Word document in Office 2013 is .................
2. .pdf B. .doc C. .docx D. .txt
3. Statistical calculations and preparation of tables and graphs can be done using
4. Adobe Photoshop B. Excel C. Notepad D. Power Point
5. Identify a web browser from the following
6. Yahoo B. Internet Explorer C. Bing D. DuckDuckGo
7. Date and Time are available on the desktop at …………
8. Keyboard B. Recycle Bin C. My Computer D. Task bar
9. Which is the largest unit of storage among the following?
10. Terabyte B. Megabyte C. Kilobyte D. Gigabyte
11. Various applications and documents are represented on the Windows desktop by
12. Symbols B. Labels C. Graphs D. Icons
13. Computer virus is
14. A micro organism B. A useful computer component

C. Electromagnetic waves entering the computer from internet D. A program

1. A Laser printer is:
2. An input device B. An output device C. both (A) and (B) D. None of these
3. There are ……….. bits in one byte.
4. 4 B. 8 C. 12 D. 32
5. How many different documents can you have open at any one time?
6. Not more than three B. Only one

C. As many as your computer memory will hold D. No more than your Taskbar can display

1. The fastest memory in a computer system is:
2. ROM B. RAM C. Cache D. Hard disk
3. To "maximize" a window means to ……….....
4. Fill it to capacity B. Expand it to fit the desktop

C. Put only like files inside D. Drag it to the Recycle Bin

1. The "home page" of a web site is …………….
2. the largest page. B. the last page C. the first page D. the most colorful page
3. Saving is the process of ………….
4. copying a document from memory to a storage medium
5. making changes to a document's existing content
6. changing the appearance, or overall look, of a document
7. developing a document by entering text using a keyboard
8. The brain of any computer system is
9. ALU B. Memory C. CPU D. Control unit E. None

1. The list of coded instructions is called
2. Computer program. B. Algorithm C. Flowchart D. Utility programs E. None
3. What's the best way to protect your hard drive data?
4. regular backups B. periodically defrag it C. run chkdsk at least once a week

D. run scandisk at least once a week E. run a regular diagnostic

1. Process is
2. program in High level language kept on disk B.contents of main memory

C. a program in execution D. a job in secondary memory E. None

1. The file type \_\_\_\_\_ indicates the file is a Word document.
2. .msw B. .wor C. .wrd D. .doc

**Part 3 Programming:**

1. Which four options describe the correct default values for array elements of the types indicated?

int -> 0

String -> "null"

Dog -> null

char -> '\u0000'

float -> 0.0f

boolean -> true

1. 1, 2, 3, 4 B. 1, 3, 4, 5 C. 2, 4, 5, 6 D. 3, 4, 5, 6
2. Which will legally declare, construct, and initialize an array?
3. int [] myList = {"1", "2", "3"}; B. int [] myList = (5, 8, 2);

C. int myList [] [] = {4,9,7,0}; D. int myList [] = {4, 3, 7};

1. Which is a valid keyword in java?
2. Interface B. string C. Float D. unsigned
3. Which three are legal array declarations?

int [] myScores [];

char [] myChars;

int [6] myScores;

Dog myDogs [];

Dog myDogs [7];

1. 1, 2, 4 B. 2, 4, 5 C. 2, 3, 4 D. All are correct.

1. 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*
2. 1 and 3 B. 2 and 4 C. 3 and 5 D. 4 and 6

1. public class While {

   public void loop() {

       int x= 0;

       while ( 1 ) /\* Line 6 \*/

       {

           System.out.print("x plus one is " + (x + 1)); /\* Line 8 \*/

       }

   }

}

Which statement is true?

A. There is a syntax error on line 1. B. There are syntax errors on lines 1 and 6.

C. There are syntax errors on lines 1, 6, and 8. D. There is a syntax error on line 6.

1. What will be the output of the program?

class Equals {

   public static void main(String [] args) {

       int x = 100;

       double y = 100.1;

       boolean b = (x = y); /\* Line 7 \*/

       System.out.println(b);

    }

}

1. true B. false C. Compilation fails D. An exception is thrown at runtime
2. What will be the output of the program?

class Test {

   public static void main(String [] args)

   {

       int x=20;

       String sup = (x < 15) ? "small" : (x < 22)? "tiny" : "huge";

       System.out.println(sup);

   }

}

A. small B. tiny C. huge D. Compilation fails

1. What will be the output of the program?

class Test {

   public static void main(String [] args)  {

       int x= 0;

       int y= 0;

       for (int z = 0; z < 5; z++)

       {

           if (( ++x > 2 ) && (++y > 2))

           {

               x++;

           }

       }

       System.out.println(x + " " + y);

    }

}

A. 5 2 B. 5 3 C. 6 3 D. 6 4

1. You want subclasses in any package to have access to members of a superclass. Which is the most restrictive access that accomplishes this objective?

A. public B. private C. protected D. transient

**Part 4:**

1. Why did you choose this subject to study in Code to Inspire?
2. What are your future plans, considering the subject you selected to study in Code to Inspire?

**Best of luck!**