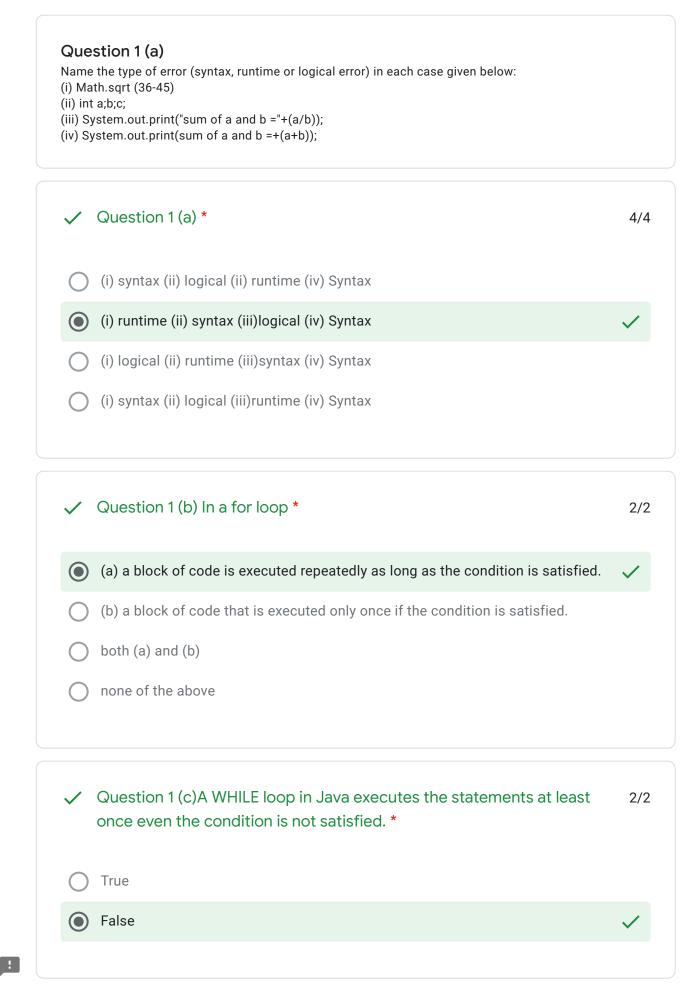
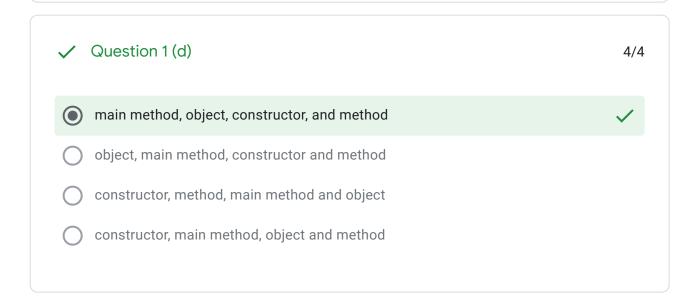
# The Brigade School Term Assessment 1

(2020-21)Total points 95/100 ? Class 10 Subject:Computer Applications Max Marks: 100 Email address \* mananmehtabatman@gmail.com School: \* **TBSG** Name: \* Manan Y Mehta Class: \* 10 A Part A(Marks: 40)

Answer all questions



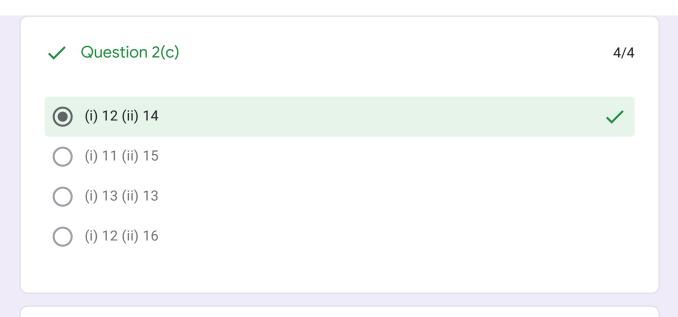
# Question 1 (d) What should be the execution order, if a class has a method, main method, object and constructor as shown below? public class First { public First() { int a=0; } public void myMethod() { System.out.println("Method"); } public void First\_C() { System.out.println("Constructor "); } public static void main(String[] args) { First c = new First(); c.First(); c.myMethod(); } }



```
Question 1 (e) 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;
  }
}</pre>
```

Question 1 (e) What will be the output of the following program? *	4/4
15 times ***	
Both will print only once	
8 times *** and 7 times +++++	
15 times +++++	
Question 2 (a) What is the output?  (i) Math.floor(3.6)  (ii) if x=3, y=5, and z=10:  ++z + y - y + z + x++  (iii) Math.ceil(3.6)	
✓ Question 2(a)	4/4
(i)4.0 (ii)24 (iii)4.0	
(i)4.0 (ii)24 (iii)3.0	
(i)4.0 (ii)25 (iii)3.0	

```
Question 2(b) Write the output of the given code snippet:
(i) String x= " is your name in this list"; (note: there is a space after the double quote)
int i=5;
int i1=x.indexOf( 'i' );
System.out.println(x.substring(2,5)+ " " + i1);
(ii) public void main() {
int p[]={4,8,12,16,20,24};
int i,j,m;
i=++p[1];
j=p[2]++;
m=p[3];
System.out.println(i+j+m); }
Question 2(b) *
                                                                                                   4/4
      (i) yo 0 (ii) 34
      (i) s 2 (ii) 38
 (i) s y 1 (ii) 37
      (i) yo0 (ii) 36
Question 2(c) Write the output:
(i) result= 5 > 12 ? 5 > 3 ? 5 : 3 : 12 > 3 ? 12 : 3;
(ii) String s1="computer";
String s2="car";
int n=s1.compareTo(s2);
System.out.println(n);
```



- ✓ Question 2(d) Differentiate between == operator, equals() and compareTo() methods. \*
   == ~ It is a operator (relational operator).
   ~ It compares two primitive data and checks if they are equal or not.
- equals() ~ It is a method/function (string function).

  ~ It compares two strings and checks whether they are identical or not.
  - ~ It results in a Boolean type of value true or false.
- compareTo() ~ It is a function/method (string function).
  - ~It compares and checks whether a string is equal, bigger or smaller than the other string.
  - ~ It results in integer type of value.

### Question 2(e)

In the program given below, state the name and the value of the:

- (i) method argument or argument variable
- (ii) class variable(s)
- (iii) local variable(s)
- (iv) instance variable(s)

class Myclass {

Static int x=7;

int y=2;

public static void main(String args[]) {

Myclass obj=new Myclass();

System.out.println(x);

obj.samplemethod(5);

int a=6;

System.out.println(a); }

void samplemethod(int n) {

System.out.println(n);

System.out.println(y); } }



4/4

- (i) n, n = 5
- (ii) x, x = 7
- (iii) a, a = 6
- (iv) y, y = 2

### Question 2(f) Write java expression for:

- (i)  $X = ab\sqrt{4} + \sqrt[3]{b} + c$
- (ii) s=ut+1/2 at2

# Question 2(f) \*

4/4

(i) X = (a\*b\* (Math.sqrt(4))) + (Math.cbrt(b)) + c;

(ii) s = (u\*t) + ((1/2)\*a\*t\*t);

### **PART B**

Answer all questions. VDT should be written for all the programs.

Question 3 Write a program to input a number and count the number 14/15 of digits in the number using functions.

```
import java.util.*;
class countdig
{
Scanner sc = new Scanner(System.in);
System.out.println("Enter a number")
String num = sc.next();
int count = 0;
public void count()
int i = 0;
for(i=0; i<num.length(); i++)</pre>
if(num.charAt(i)!='')
count++
System.out.println("The number of digits are = "+count)
public static void main(String args[])
 count();
}
VARIABLE DESCRIPTION TABLE
Variable's Name ---- Datatype ---- Description
count() ---- void ---- Function to find number of digits
i ---- int ---- loop variable
num ----- String ---- Stores the number
```

Question 4 Write a program to accept a number and check if it is a 15/15 palindrome or not.

```
import java.util.*;
class plaindrome_check
 public static void main (String args[])
   Scanner sc = new Scanner (System.in);
   System.out.println("Enter a number");
   int x = sc.nextInt();
   int n = x;
   int d = 0;
   int r = 0;
   while(n>0)
    d = n\%10;
    r = r*10+d;
    n = n/10;
if(x==r)
 System.out.println("The number entered is palindrome");
}
else
 System.out.println("The number entered is not palindrome");
}
}
VARIABLE DESCRIPTION TABLE
Variable's Name ---- Datatype ---- Description
x ---- int ---- Stores the user entered number
n ---- int --- Stores the value of x to perform functions on it.
d ---- int ---- Divides variable n
r ---- int ---- Stores the reversed number
```

## Question 5 Design a class to overload a function calc() as follows:

(i) void calc(int n, double x)- with one integer argument and one double argument to find the sum of the series

s = x/2+x/5+x/10+x/17... up to n terms

(ii) void calc() - to print the given pattern

5

5 7

579

57911

X Question 5

```
import java.util.*;
class fn_ovrld
Scanner sc = new Scanner(System.in);
double sum = 0;
int i = 0;
public void calc(int n, double x)
double nr = x;
double dr;
double term;
int y = 3;
i = 2;
for(i=2;i\leq n;i=i+y)
dr = i;
term = nr/dr;
sum=sum+term;
System.out.println("Sum of Series"+sum);
public void calc()
for(i=1;i<=4;i++)
x=5;
for(int j=1;j<=i;j++)
System.out.print(x+" ");
x+=2;
System.out.println();
public static void main(String args[])
 calc(10,3);
 calc();
}
}
```

Question 6 Write a program to input an array of 10 phone numbers and 15/15 the corresponding names and search and display the given name and phone number.

```
import java.util.*;
class SDA_telephone
 public static void main(String args[])
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter the phone numbers and names");
    int num[] = new int[10];
    String name[] = new String[10];
    int i = 0;
    for(i=0; i<10; i++)
       num[i] = sc.nextInt();
       name[i] = sc.next();
    System.out.println("Enter the name to find its phine number");
    String srch = sc.next();
    int k = 0;
    int x = 0;
    for(i=0; i<10; i++)
       if(name[i]==srch)
       {
         k=1;
         x=i;
         break;
       }
    }
    if(k==1)
       System.out.println("The phone number of "+srch+" is "+num[x]);
}
}
}
VARIABLE DESCRIPTION TABLE
Variable's Name ---- Datatype ---- Description
num[i] ---- int ---- SDA to store phone number
name[i] ---- String ---- SDA to store names
i ---- int ---- Loop Variable
k ---- int ---- Increments itself if it the name is present
```

x ----- int ----- Stores position of the name entered srch ----- String ----- Stores the name to be searched

This content is neither created nor endorsed by Google. - <u>Terms of Service</u> - <u>Privacy Policy</u>

Google Forms