

Q2

double a, b, c;

a = 8.0/0; ans: infinity

b = 0/4.0; ans: 0

c = 0/0.0; ans: undefined

Ans :- a) NAN

that's why we get an arithmetic exception  
so answer is not a number for undefined  
NAN.

Q3

int x;

x = 5;

{

int y = 6;

s.o.p: (x + " " + y);

}

s.o.p (x + " " + y);

}

ans :- a)

compilation error

In this case 1st print statement  
accept the x and y values.  
but 2nd print statement doesn't have  
access to y,  
Because y is declared in the method  
and 2nd print statement out of the  
method so they not have access to  
scope y was limited to the block defined  
after initialization of x.

Q4

byte b = 50;

b = b \* 50

~~b = b~~

ans :- \* operator has converted  
b \* 50 into int, which can not be converted

to byte without casting

while evaluating an expression containing int, bytes or shorts, the whole expression is converted to int then evaluated and the result is also of type int.

Q5 `arr[] = new int[] {0, 1, 2, 3, 4, 5, 6, 7, 8, 9};`  
`int n = 6;`  
`m = arr[arr[n]/2];`  
`S.O.P (arr[n]/2);`

$n = 6/2 = 3$   
 $S.O.P (3/2) = 1$

ans b) 1)

Q6 `i = x << 2`  
`y = (byte)(x << 2)`

ans :- c) 256.0

Q7) `int x = y = z = 20;`

actually 20 is assign only in x  
~~is not stored in y and z~~

y & z variable not stored a value  
 thats why it show compile time error

ans :- a) compile time error



99 arr[] = {1, 2, 3, 4, 5}

for (int i = 0; i < arr.length - 2; i++)

iteration 1 :- i = 0  $0 < 5 - 2$ ; 1 condition true  
 iteration 2 :- i = 1  $1 < 5 - 2$ ; 2 true  
 iteration 3 :- i = 2  $2 < 5 - 2$ ; 3 true  
 i = 3  $3 < 5 - 2$ ; 4 False

so for loop terminated  
 and print 1 2 3

ans :- d) 1 2 3

q. 10) No argument is passed to the code,  
 the length of args is 0,  
 so the code will not print

ans a) The snippet compiles & runs but does  
 not print anything.

11) int x[] = {1, 2}, y[] = {3, 4, 5}, z[] = {6, 7, 8, 9};  
 x[] = y[]  
 s.o.p y[2][1]

Both x and y are pointing to the same array  
 so ans :- d) 7

14) if (n == 1) result = fun(n-1);  
 (5 == 1)  
 return 1;

recursion

14 if ( $n \neq 1$ )  
return "  
result = Fun( $n-1$ )  
return result

①  
if ( $5 \neq 1$ )  
return "  
result = Fun( $5-1$ )  $5-1=4$   
return result

② if ( $4 \neq 1$ )  
Fun( $4-1$ )  
= 3

if ( $3 \neq 1$ )  
Fun( $3-1$ )  
= 2

if ( $2 \neq 1$ )  
Fun( $2-1$ )  
= 1

if ( $1 = 1$ ) ... So result is 1  
return 1 ;

ans a) 1

18)

19)

(double X) returns the smallest whole number greater than or equal to variable x.

ans :- c) 4

20) character . Min-value returns the smallest character value, which is of space character "  
"

ans :- b) space



917) `byteValue()` method returns the value of wrapper `i` as a byte value.  
`i` is 257 range of byte is 256. Here for `i` value exceeds byte range by 1 hence `i` is returned and stored in `x`.  
ans :- c) 1

18) `double x = 2.0`  
`double y = 8.0`  
`Math.pow(x, y)`  
 $2.0^8.0 = 8.0$   
ans : b) 8.0

22) `toExternalForm()` is used to know the full URL of an URL object  
so they print `https://google.com`.  
ans :- b) `https://google.com`

23) `ArrayList` is a dynamic array which can increase and decrease its size. `obj.add("x")` adds to the array element `x` and `obj.add(1, "x")` adds element `x` at index position 1 in the list. Hence  
`obj.add(1, "D")` stores `D` at index position 1 of `obj` & shifts the previous value stored at that position by 1.

24) Java provides the Date class available in java.util package. This class encapsulates the current date and time

Date () This constructor initializes the object with the current date and time

ans :- b) prints present Time and date

26) class Multithread-programming

{

public static void main (String args [])

{

Thread t = Thread.currentThread ();

t.setName ("New Thread");

System.out.println (t);

}

}

ans b) Thread [New Thread, 5, main]

27) This program was previously done by using Runnable interface. here we have used Thread class. This shows both the method are equivalent, we can use any of them to create a thread.  
ans :- b) False

30) obj.length calculate the string length as well as space in between the string so output of program is 11  
ans :- a) 11



31) When an array is declared using new operator then all of its elements are initialized to 0 automatically. For loop body is executed 5 times as whenever controls come in the loop  $i$  value is incremented twice first by  $i++$  in body of loop then by  $++i$  in increment condition of for loop.

ans :- a) 0 2 4 6 8

32) arr[i][j] is a 2D array. array has been allotted, memory in parts 1<sup>st</sup> row contains 1 element of array 2<sup>nd</sup> row contains 2 elements & 3<sup>rd</sup> row contains 3 elements. each element of array is given  $i+j$  value in loop. sum contains addition of all the elements of the array.

ans :- b) 10

34) class array-output

{

public static void main (String args[])

{

int array-variable[i][j] = {{1 2 3} {4 5 6} {7 8 9}};

int sum=0;

for (int i=0; i<3; ++i)

for (int j=0; j<3; ++j)

sum = sum + array-variable[i][j];

system.out.println (sum/5);

}

ans :- b) 9

38) `main()` method must be made public. without `main()` being public Java run time system will not be able to access `main()` & will not be able to execute the code.

so the compilation Error is raise  
Main Method not found in class output please define the main method  
as : `public static void main (String [] args)`

40) Since the base case of the recursive function `func()` is not defined  
hence infinite loop occurs and results in stack overflow.  
so Exception in thread "main" java.lang.  
StackOverflowError.

ans :- d) Runtime Error