



DELHI PUBLIC SCHOOL NEWTOWN
SESSION 2020-21
MONDAY TEST

CLASS: IX FULL MARKS: 40 SUBJECT: COMPUTER
APPLICATIONS DATE: 26.11.2020

Instructions:

- Attempt all questions.
 - The question paper consists of three printed pages.
 - Answer should be to the point.
 - VDT should be written with the program.
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- Question 1 [2x5=10]** a. What is the significance of `System.exit(0)`? What are the other possible numbers that can replace '0'.
- b. What is a compound statement? Give an example.
- c. State one similarity and one difference between `while()` and `for()` loop. Show with the help of an example.
- d. Discuss "run time error" with the help of an example.
- e. Define a package. Write the syntax to import all the methods of a class `Fruit` belonging to `citrus` package which again belongs to `health` package.

Question 2

- a. Rewrite the given program using for loop: [2] class Test

```
{ public static void main( )  
    { int x=10, c=20;  
      while(c>=10)  
      { x++;  
        c=c-2;  
      } System.out.println(x);  
    }  
}
```

b. class Test2

```

int a=5; float b; double
d; void m(int a1, int b1)
{ System.out.println("Hello"); }
int m1(float d)
{ System.out.println("Hello Java"); }

```

Answer the following questions in brief based on the above code:

- i. Name the instance variable(s). [1] ii. How System.err.println() is different from System.out.println() with reference to the above code? [1] iii. Name the local variable(s). [1] iv. What is the access specifier of the function m1()? What is its significance? [1]

c. What is the output of the following program code? [4]

i. void test2(int a, int b)

```

{ while( a != b)
  { if ( a >
    b) a = a -
    b;
    else a = b - a;
  } System.out.println(a); }

```

if a=4 and b=17 are passed to the function.

ii. void test3(char c)

```

{ System.out.println( (int) c); }

```

if 'm' is passed to c.

Question 3 [10] Write a program to input a number, check and print whether it is a 'Pronic' number or not. Use a function int Pronic(int n) to accept a number.

The function returns 1, if the number is 'Pronic', otherwise returns zero (0). (Hint: Pronic number is the number which is the product of two consecutive integers)

Examples: $12 = 3 * 4$, $20 = 4 * 5$, $42 = 6 * 7$

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Question 4 [10] Write a menu driven program to do the following task:

i. $S = a - a^3 + a^5 - a^7 + \dots$ to n

ii. * * * * *

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(do not use nested loop to solve the problem and write necessary methods to achieve the objective)