## INDIAN SCHOOL MUSCAT FIRST PERIODIC ASSESSMENT

## MATHEMATICS

CLASS: X
Sub. Code:041

## Time Allotted:50mts

14-04-2019
Max. Marks: 20

## GENERAL INSTRUCTIONS:

1. All questions are compulsory.
2. The question paper consists of $\mathbf{7}$ questions divided into two sections $\mathbf{A}$ and $\mathbf{B}$.
3. Section A comprises of $\mathbf{4}$ questions of $\mathbf{2}$ marks each and Section B comprises of $\mathbf{3}$ questions of $\mathbf{4}$ marks each.

## SECTION: A

1. The difference between two numbers is 26 . If one number is thrice the other, find the numbers.
2. Solve for $x$ and $y$ algebraically: $2 x-3 y=-4,5 x+y=7$
3. Name the type of lines, the following pair of linear equations represents. Justify your answer:
i. $2 x+3 y=4 ; 2 x-3 y=4$
ii. $x-2 y=1 ; 3 x-6 y=5$
4. For what values of $k$, do the following pair of linear equations have infinitely many solutions? $k x+3 y=k-3$ and $12 x+k y=k$

## SECTION :B

5. The sum of a two digit number and the number obtained by reversing the digits is 66 . If the digits of the number differ by 2 , find the number. How many such numbers are there?
6. Solve the following pair of equations by reducing them to a pair of linear equations:
$\frac{11}{x}-\frac{7}{y}=1$ and $\frac{9}{x}-\frac{4}{y}=6$, where $\mathrm{x} \neq 0$ and $\mathrm{y} \neq 0$.
7. Solve the following pair of linear equations graphically:
$x+3 y=6$ and $2 x-3 y=12$
Hence find the area of the region bounded by $x=0, y=0$ and $2 x-3 y=12$.
