

**CLASS: X      SUB: MATHEMATICS      TIME: 30 MIN**  
**CHAPTER 3: PAIR OF LINEAR EQUATIONS IN TWO**  
**VARIABLES**

**NAME : - \_\_\_\_\_ SEC \_\_\_\_\_ ROLL NO \_\_\_\_\_**

<b>SECTION – A (MCQ – 1 MARK EACH)</b>	
Q.1	The pair of linear equations $2x = 5y + 6$ and $15y = 6x - 8$ represents two lines which are (a) Intersecting                                  (b) Parallel (c) coincident                                  (d) either Intersecting or Parallel
Q.2	If the pair of linear equations $x - y = 1$ , $x + ky = 5$ has a unique solution $x = 2$ , $y = 1$ then the value of k is (a) -2                  (b) -3                  (c) 3                  (d) 4
Q.3	The pair of linear equations $3x + 5y = 3$ and $6x + ky = 8$ do not have a solution if k (a) = 5                  (b) = 10                  (c) $\neq 10$ (d) $\neq 5$
Q.4	If the system of equations $3x + y = 1$ and $(2k - 1)x + (k - 1)y = 2k + 1$ is inconsistent, then k is (a) -1                  (b) 0                  (c) 1                  (d) 2
Q.5	The pair of the equations $x = a$ as well as $y = b$ graphically shows lines that are (a) parallel                                  (b) intersecting at (b, a) (c) coincident                                  (d) intersecting at (a, b)
<b>SECTION – B (2 MARKS EACH)</b>	

Q.6	Find the solutions of the pair of linear equations $5x + 10y - 50 = 0$ and $x + 8y = 10$ , hence find the value of m if $y = mx + 5$ .
Q.7	₹ 2450 were divided among 65 children. If each girl gets ₹ 50 and each boy gets ₹ 30 then find the number of girls.

**SECTION – C (3 MARKS EACH)**

Q.8    4 chairs and 3 tables cost ₹ 2100 and 5 chairs and 2 tables cost ₹ 1750.  
Find the cost of one chair and one table separately.

Q.9    Find the value of k for which the equations  
 $3x + y = 1$  and  $(2k - 1)x + (k - 1)y = 2k + 1$  has no solution.

**SECTION – D (4 MARKS EACH)**

Q.10 Two schools  $P$  and  $Q$  decided to award prizes to their students for two games of Hockey ₹ $x$  per student and cricket ₹ $y$  per student. School  $P$  decided to award a total of ₹ 9500 for two games to 5 and 4 students respectively; while school  $Q$  decided to award ₹ 7370 for the two games to 4 and 3 students respectively.

Based on the above information answer the following questions:

i) Represent the above information algebraically (in terms of  $x$  and  $y$ ) ii) What is the prize amount for hockey? iii) Prize amount on which game is more and by how much?

iv) What will be the total prize amount if there are 2 students each from two games?

Rough Work

