

**Question 5:** Consider a trained linear classifier represented by the equations Eq.1 and Eq.2. Given the following test data, do the following, [10 Marks]

$$z = 2x_1 + x_2 - 4 \dots \dots \dots (\text{Eq.1})$$

$$y = \begin{cases} 1 & \text{if } z \geq 1 \\ 0 & \text{if } z < 1 \end{cases} \dots \dots \dots (\text{Eq.2})$$

- a) Evaluate labels for all the instances given in test data.
- b) Calculate accuracy and precision.

*Test data:*

<i>Sr. No.</i>	<i>x1</i>	<i>x2</i>	<i>Labels</i>
1	1	2	A
2	2	6	B
3	1	3	A
4	3	4	B

**Time: 20 Min**