

Assignment 2

Beeram Sandya cs21btech11006

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Outline

1 Question

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Question

ICSE 12 2019 Q17(b)

Find the equation of the line passing through the point $(2, 1, 3)$ and perpendicular to the lines $\frac{x-1}{1} = \frac{y-2}{2} = \frac{z-3}{3}$ and $\frac{x}{-3} = \frac{y}{2} = \frac{z}{5}$

Solution

The direction ratios of the required line = $\langle 2, -7, 4 \rangle$

And the point $(2, 1, 3)$ lies on the line.

Therefore equation of line is given by

$$\frac{x-2}{2} = \frac{y-1}{-7} = \frac{z-3}{4}$$