Let $A(1,1,1), B(2,3,5), C(-1,0,2)$ be three points, then equation of a plane parallel to the plane ABC which is at a distance 2 from origin, is

(1) $2x - 3y + z + 2\sqrt{14} = 0$

(2) $2x - 3y + z - \sqrt{14} = 0$

(3) $2x - 3y + z + 2 = 0$

(4) $2x - 3y + z - 2 = 0$

$A(1,1,1)$ $B(2,3,5)$ $C(-1,0,2)$

$\overrightarrow{AB} = (1, 2, 4)$ $\overrightarrow{AC} = (-2, -1, 1)$

direction ratio's of plane ABC

is along $\overrightarrow{AB} \times \overrightarrow{AC}$

$$= \begin{vmatrix} \hat{i} & \hat{j} & \hat{k} \\ 1 & 2 & 4 \\ -2 & -1 & 1 \end{vmatrix}$$

$\hat{i}(6) - \hat{j}(9) + \hat{k}(3)$

$\Rightarrow (6, -9, 3)$ or $(2, -3, 1)$

From options only option (1) has distance of 2 from origin and having direction ratio same.