

Exemplar Problem

Three Dimensional Geometry

31. The distance of the plane $\underline{r} \cdot \left(\frac{2}{7}\hat{i} + \frac{3}{7}\hat{j} - \frac{6}{7}\hat{k} \right) = 1$ from the origin is.

(A) 1

(B) 7

(C) $\frac{1}{7}$

(D) None of these

Ans: Since we know the equation of a plane as $\underline{r} \cdot \underline{n} = d$ where d is the distance of the plane from origin. Now on comparing the given equation of plane with the general equation the distance is 1.

Hence option A is the correct answer.