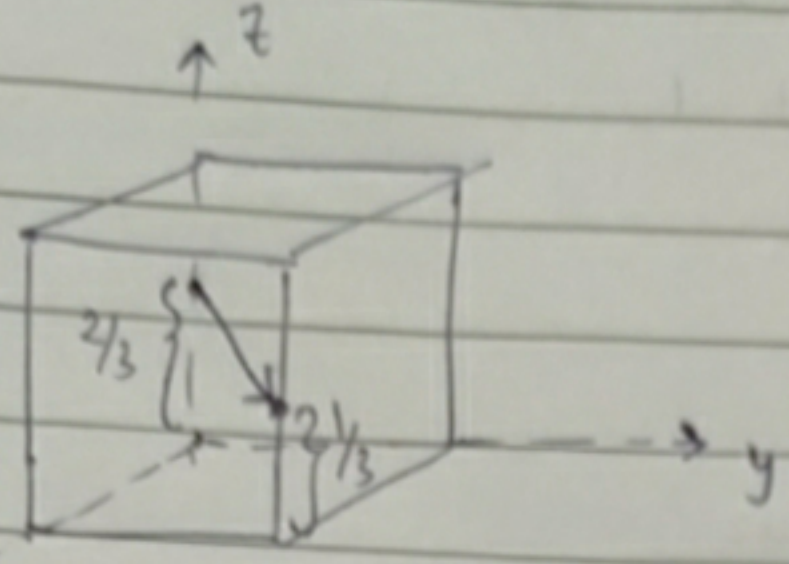
19010059 - Saptarshi Y Jashi

Assignment 6 - ME 221 S2

1. A]



Projections on x, y, z axes are

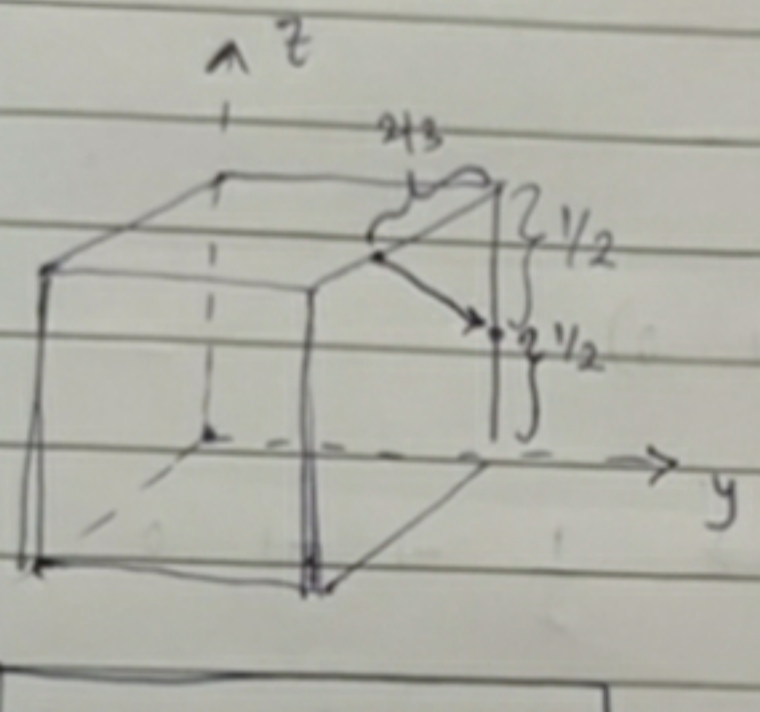
$a, b, -\frac{c}{3}$

$\Rightarrow 1, 1, -\frac{1}{3}$

$\Rightarrow [3, 3, -1]$

$$\boxed{A \equiv [3\ 3\ \bar{1}]}$$

B]



Projections on x, y, z axes are

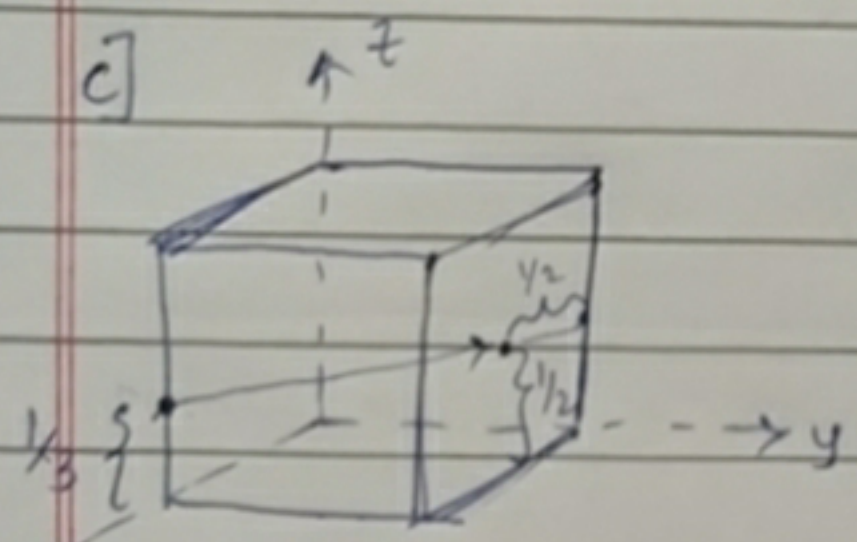
$\frac{-2a}{3}, 0, -\frac{c}{2}$

$\Rightarrow -\frac{2}{3}, 0, -\frac{1}{2}$

$\Rightarrow -4, 0, -3$

$$\boxed{B \equiv [\bar{4}\ 0\ \bar{3}]}$$

C]



Projections on x, y, z axes are

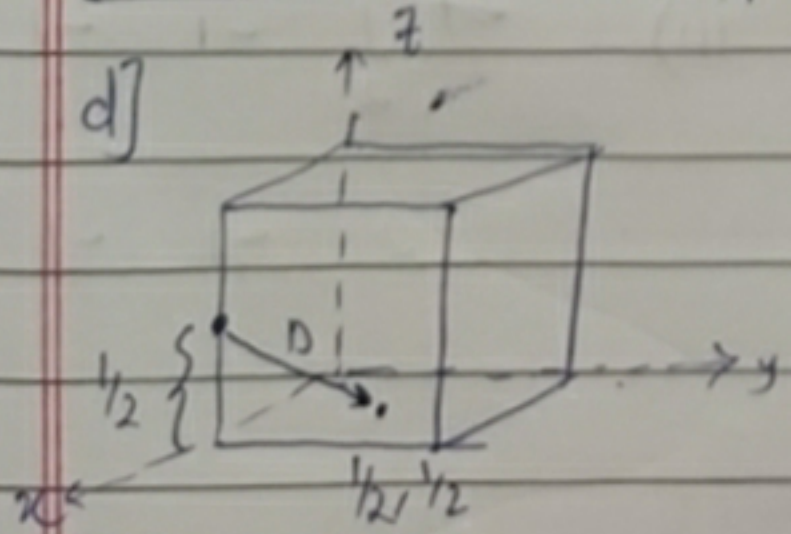
$-\frac{a}{2}, b, c\left(\frac{1}{2} - \frac{1}{3}\right) = \frac{c}{6}$

$\Rightarrow -\frac{1}{2}, 1, \frac{1}{6}$

$\Rightarrow -3\ \ 6\ \ 1$

$$\boxed{C \equiv [\bar{3}\ \ 6\ \ 1]}$$

d]



Projections on x, y, z axes are

$\frac{-a}{2}, \frac{b}{2}, \frac{-c}{2}$

$\Rightarrow \frac{-1}{2}, \frac{1}{2}, \frac{-1}{2} \Rightarrow -1, 1, -1$

6 $$\boxed{D \equiv [\bar{1}\ \ 1\ \ \bar{1}]}$$