

VITEEE 2021 Memory Based Questions and Answers for 31 May Slot 3

Q: If the lines $\frac{x-1}{1} = \frac{y-1}{2} = \frac{z-\alpha}{3}$ and $\frac{x-4}{2} = \frac{y-6}{3} = \frac{z-\beta}{4}$ intersect at point (a, b, c) then a+b+c equal

1. $\beta - 1$
2. $\alpha + 1$
3. $\alpha - 1$
4. $\beta + 1$

Q: A person is trying to move a 500 N crate across the level floor. To start the crate moving he has to pull it with a 230 N horizontal force. Once the crate starts to move it will move with constant velocity presence of an applied horizontal force. What is the coefficient of static friction.

1. 1.78
2. 17.90
3. 0.48
4. 1.80

Q: The probability that both the pairs of twins are boys equals 0.32 and the probability of them being girls equals 0.32. Given one of them is a boy, the conditional probability that both twins are boys is given by:

Q: $\varphi(x) = \varphi'(x)$ and $\varphi(1) = 2$, then $\varphi(\log_e x)$ equals to:

1. $2/e$
2. $1/e$
3. x/e
4. $2x/e$

Q: A photoelectric cell using cesium as the photosensitive element is illuminated with light of wavelength 4.2×10^{-7} m. The stopping potential is:

1. 1.61 V
2. 1.23 V
3. 1.06 V
4. 2.82 V