Gate Assignment

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Download latex code from

https://github.com/ArunSiddardha/EE900/tree/main/Gate_assignment/Gate_Assignment.tex

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The dirac-delta function $\delta(t)$ is defines as

1) $\delta(t) = \begin{cases} 1, & t = 0 \\ 0, & otherwise \end{cases}$

2) $\delta(t) = \begin{cases} \infty, & t = 0 \\ 0, & otherwise \end{cases}$

3) $\delta(t) = \begin{cases} 1, & t = 0 \\ 0, & otherwise \end{cases}$ and $\int_{-\infty}^{\infty} \delta(t)dt = 1$

4) $\delta(t) = \begin{cases} \infty, & t = 0 \\ 0, & otherwise \end{cases}$ and $\int_{-\infty}^{\infty} \delta(t)dt = 1$

Solution

The Dirac delta function (δ function), also known as the unit impulse symbol,is a generalized function or distribution over the real numbers, whose value is zero everywhere except at zero, and whose integral over the entire real line is equal to one.
At t=0 dirac function is ∞.
So the answer is **4**