

Easy

Assistant Engineer (Electrical), Class 2025

Building Department

When is $x(t)$ said to be non-periodic signal?

A

If the equation $x(t) = x(t + T)$ is satisfied for all values

B

If the equation $x(t) = x(t + T)$ is satisfied for only one value

C

If the equation $x(t) = x(t + T)$ is satisfied for no values of

Correct

D

If the equation $x(t) = x(t + T)$ is satisfied for only odd values

Correct Answer: C

Full Detailed Explanation

Concept & Reasoning The period condition must hold for every time t , but only one positive fundamental period needs to exist; integer multiples of it are also periods. Therefore the phrase 'no values of T ' should be interpreted as no non-zero finite positive period. How to Solve It in the Exam Existence of one positive period is enough. Important Exam Point Do not mistake 'for all t ' (time variable) with 'for all T ' (candidate period). Related Revision Path This question sits in the revision path Signals and Systems → Signal Classification → Periodic and Aperiodic Signals .

Open live question on website:

<https://sarkariresultout.com/pyq/question/gpsc-ae-electrical-q178-aperiodic-signal-definition/>