

Easy

Assistant Engineer (Electrical), Class 2025

Building Department

Which of the following waves has the highest value of peak factor?

A

Square wave

B

Sine wave

C

Half wave rectified sine wave

Correct

D

Triangular wave

Correct Answer: C

Full Detailed Explanation

Concept & Reasoning Compare waveforms using the same definition rather than intuition about shape. A waveform with a relatively small rms value for a given peak has a larger crest factor.

The half-wave rectified sine spends half the cycle at zero, lowering its rms relative to its peak.

How to Solve It in the Exam Memorize crest factors: square 1, sine 1.414, triangle 1.732, half-wave sine 2.

Important Exam Point Use rms definitions over the full waveform period.

Related Revision Path This question sits in the revision path Signals and Systems Waveform Parameters

Peak Factor .

Open live question on website:

<https://sarkariresultout.com/pyq/question/gpsc-ae-electrical-q185-crest-factor-of-common-waveforms/>