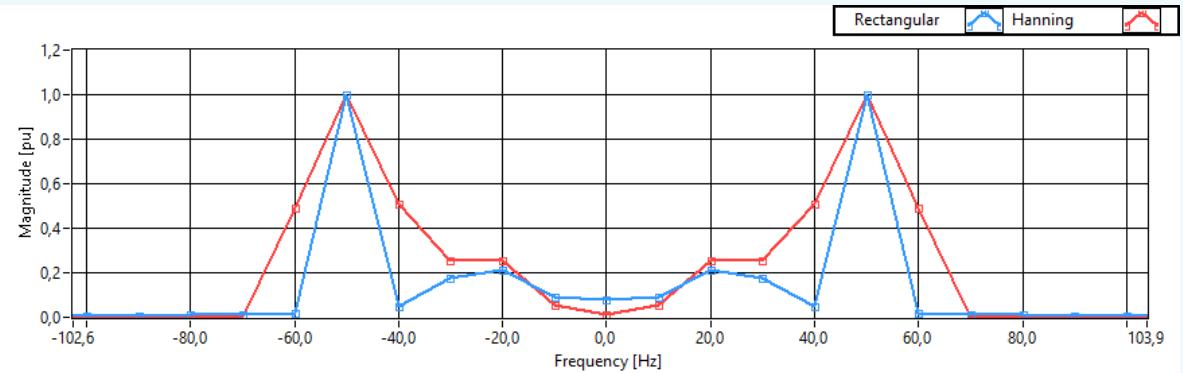


**Question 1**

Select the correct statement.

- a. The signal is not coherently sampled, no spectral leakage is present.
- b. The Hanning window outperforms the rectangular window in distinguishing between the two tones.
- c. Due to spectral leakage and the proximity to the DC component, the two tones are difficult to detect accurately for both windows.
- d. The fact that the tones are close to the DC component and are incoherently sampled means that the influence of the negative spectrum from long-range leakage is negligible.

**Question 2**

What is the motivation for using IpDFT?

Select one:

- a. It mitigates aliasing.
- b. It makes the frequency resolution ( $\Delta_f$ ) larger.
- c. It allows to address the effects of short range leakage.
- d. It reduces the side lobe level.