Assignment-5

Due on 2019-03-04, 22:55 IST.

1. The LTI filter made in its realization of

\[ \text{F}(s) = \frac{s^2 + 4s + 5}{s^2 + 3s + 2} \]

the filter transfer function is given as

\[ h(t) = 2 \delta(t) - 4 \delta(t-1) \]

Assumed Answers:

\[ 0, 4, 2 \]

2. A filter of length 20 has been designed using second order IIR filter. The transfer function is given as

\[ H(z) = \frac{1}{2} \left( 1 + z^{-20} \right) \]

Assumed Answers:

\[ 0, 0.5, 1 \]

3. A filter of length 20 has been designed using 4th order IIR filter. The transfer function is given as

\[ H(z) = \frac{1}{2} \left( 1 + z^{-20} \right) \]

Assumed Answers:

\[ 0, 0.5, 1 \]

4. A filter of length 20 has been designed using 8th order IIR filter. The transfer function is given as

\[ H(z) = \frac{1}{2} \left( 1 + z^{-20} \right) \]

Assumed Answers:

\[ 0, 0.5, 1 \]

5. A filter of length 20 has been designed using 16th order IIR filter. The transfer function is given as

\[ H(z) = \frac{1}{2} \left( 1 + z^{-20} \right) \]

Assumed Answers:

\[ 0, 0.5, 1 \]

6. A filter of length 20 has been designed using 4th order IIR filter. The transfer function is given as

\[ H(z) = \frac{1}{2} \left( 1 + z^{-20} \right) \]

Assumed Answers:

\[ 0, 0.5, 1 \]

7. A filter of length 20 has been designed using 8th order IIR filter. The transfer function is given as

\[ H(z) = \frac{1}{2} \left( 1 + z^{-20} \right) \]

Assumed Answers:

\[ 0, 0.5, 1 \]

8. A filter of length 20 has been designed using 16th order IIR filter. The transfer function is given as

\[ H(z) = \frac{1}{2} \left( 1 + z^{-20} \right) \]

Assumed Answers:

\[ 0, 0.5, 1 \]