

GC_{sc} &

9VP & m⁸

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$$m[n] = \delta[n] + r\delta[n+1]$$

(1) 10

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$$h[n] = r\delta[n+1] - \delta[n-r]$$

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$$m[n+1] * h[n-1] ?$$

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$$\rightarrow \text{ناتو} \rightarrow x[n+1] * h[n-1] =$$

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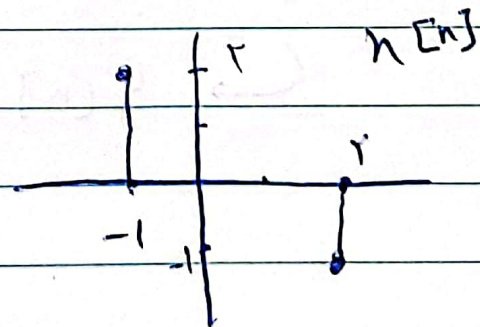
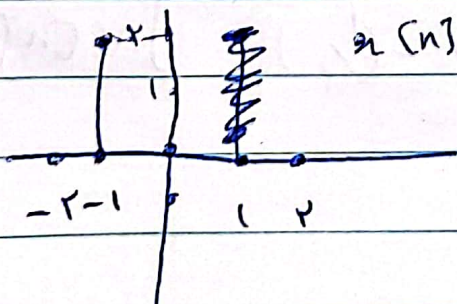
17

$$= \sum_{k=-\infty}^{\infty} h[n-k] x[n+1-k]$$

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$$\Rightarrow h[-1]x[n+1] + h[n]x[n-1] = r x[n+1] + x[n-1]$$

$$\rightarrow r\delta[n+1] + \delta[n] + r\delta[n-1] - r\delta[n-r] - \delta[n]$$

Subject:

Year: Month: Date:

علی سرمدی

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$$h[n] \leq r^n u[-n+r]$$

$$a[n] \leq (1/r)^{n-1} (u(n) - u(n-1))$$

پایین سطح LTI برابر خروجی گذشت است

$$y[n] \leq a[n] * h[n]$$

$$a_1[n] \leq (1/r)^n u[n]$$

$$h[n] \leq u[n]$$

$$\rightarrow a[n] \leq a_1[n-1]$$

$$h[n] \leq h_1[-n+r]$$

$$\hookrightarrow y[n] \leq a_1[n-1] * h[-n+r]$$

$$= \sum_{k=-\infty}^{\infty} a_1[k-2] h_1[n+k+r]$$

$$\hookrightarrow y[n] \leq r \left(1 - (1/r)^{n+1} \right) u[n]$$

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اساتذہ

انور علی

$$h(t) = e^{t+1} (u(t) - u(t-1))$$

$$m(t) = r e^{t-1} u(-t)$$

$$y(t) = \int_{-\infty}^{\infty} e^{t+1} u(\lambda) e^{-r(t-\lambda)} d\lambda$$

$$y(t) = \int_{-\infty}^{\infty} r e^{t-1} u(-\lambda) e^{(t-\lambda+1)} (u(t-\lambda) - u(t-\lambda-1)) d\lambda$$

$$s - \frac{du^r}{e^{\lambda^r}}$$