

EE424 DSP Homework-2 (MATLAB)

- (1) Generate and plot the following sequence over the interval  $-5 \leq n \leq 15$  using MATLAB *stem* command. (pb201)

$$x[n] = 3\delta[n+2] + 2\delta[n] - \delta[n-3] + 5\delta[n-7]$$

- (2) Generate and plot the following sequence over the interval  $0 \leq n \leq 20$  using MATLAB *stem* command. (pb201)

$$x[n] = e^{0.1n} \{u[n+20] - u[n-10]\}$$

- (3) Generate and plot the following sequence over the interval  $-200 \leq n \leq 200$  using MATLAB *stem* function. (pb201)

$$x[n] = 5\{\cos[0.49\pi n] - \cos[0.51\pi n]\}$$