

**EE224 TERM EXAM**

**Q1)** Consider a function

$$f(t) = 1 - 3\cos 0.8\pi t + 2\sin 1.6\pi t + \cos 2.8\pi t$$

Find the complex Fourier series of  $f(t)$ .

**Q2)** Find the Fourier transform of  $h(t)$ .

$$h(t) = \begin{cases} A & 0 < t < 2T_0 \\ \frac{A}{2} & t = 0; t = 2T_0 \\ 0 & \text{otherwise} \end{cases}$$