ASSIGNMENT NO.3

SUB-PADC   **S.E.I.T. – A and B**

SEM-III   **LDS - 12-10-15**

CO1

Q.1 State types of channel? List applications of different frequency ranges?

CO2

Q.2 Explain the different types of noise in detail?

CO3

Q.3 Explain the working of foster seeley discriminator and ratio detector with neat circuit diagram and phaser diagram? An amplitude modulated wave has a form

$$Xc(t) = 10(1 + 0.6\cos(2000\pi t) + 0.4\cos(400\pi t)\cos(2000\pi t))$$

(i)   Sketch the amplitude spectrum of X(t)
(ii)   Find the power content of each spectral component including carrier.
(iii) Find total power and sideband power
(iv)   Find modulation index.

CO4

Q.4 State and explain the sampling theorem for low pass and limited signal? Explain aliasing error?

CO5

Q.5 Explain Principle of TDM and FDM also state its applications?

CO6

Q.6 Draw and explain the generation and degeneration and power spectral density of QPSK signals? Also explain eye pattern and inter symbol interference?