(21.09.2024)

Q1. Differentiate between (i) analog and digital signals (ii) periodic and non-periodic signals (iii) power and energy signals.

(2×3)

Q2. (i) What do you understand by the term Modulation? (ii) Draw the block diagram of a communication system.

(2+2)

Q3. (i) Provide the names of analog to digital conversion schemes. (ii) Draw the block diagrams of PCM, DM and ADM (iii) Draw the frequency spectrum of $s(t) = 24\sin(2\pi \times 75t)\sin(2\pi \times 1025t)$. (iv) Draw a block diagram to recover the low frequency signal from the signal $s(t) = 12\cos(2\pi \times 500t)\cos(2\pi \times 7000t)$

(1+4+2.5+2.5)