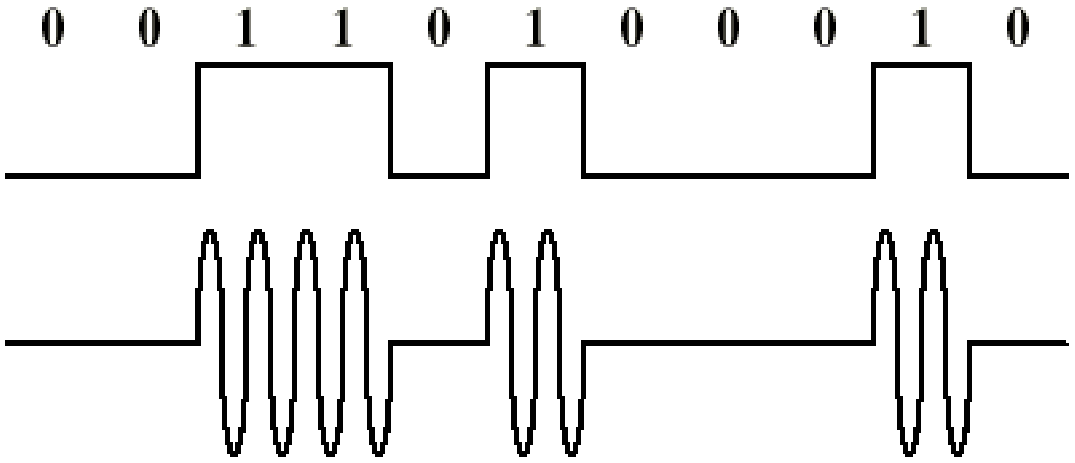
Assignment on Digital Carrier Modulation

1) Generate the waveform of BASK signal for T=bit duration=1 ms and amplitude 1 unit while sinusoidal carrier of frequency fc=1MHz and amplitude 1 unit.

Output is as follows

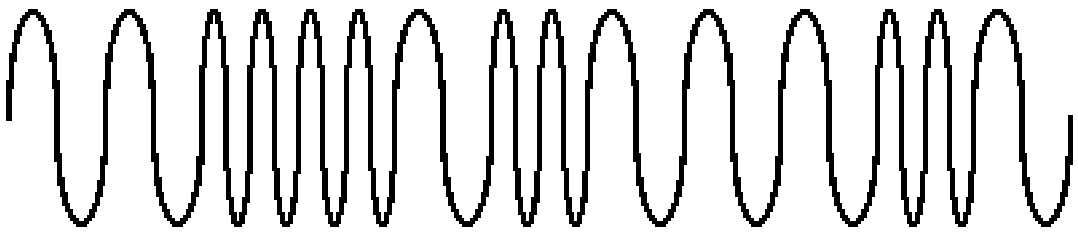


(a) Amplitude-shift keying

2) Generate the waveform of BFSK signal for for T=bit duration=1 ms and amplitude 1 unit and while sinusoidal carrier of frequency fc=1MHz and amplitude 1 unit with frequency deviation =100 Hz

BFSK, f1=Cos (2*pi*fc+1000)*t
f2=Cos(2*pi*fc-1000)t

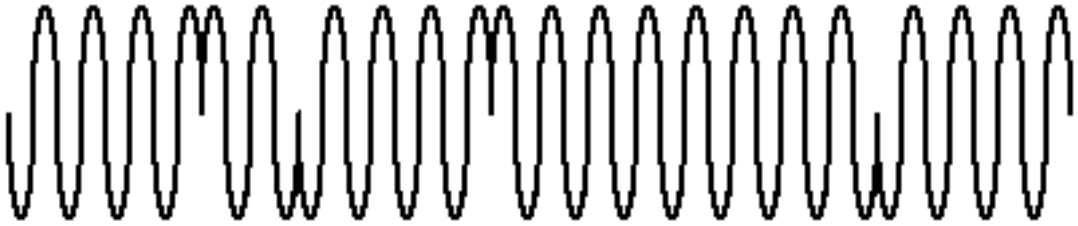
Output is as follows



(b) Frequency-shift keying

3) Generate BPSK signal for for T=bit duration=1 ms and amplitude 1 unit while sinusoidal carrier of frequency fc=1MHz and amplitude 1 unit. For transition of bit 0 to 1, cos(2*pi*fc*t+180)

Output is as follows



(c) Phase-shift keying