

HOMEWORK-4

Note: All figures title must be your Name & ID. Example: Student_Name_ID:1234567890

1. Write MATLAB code for Phase modulation using phase deviation. Here message signal is **$M(t)=1+\text{square}(2*\pi*f_m*t)$** , and Carrier Signal is **$C(t)=\cos(2*\pi*f_c*t)$** . Phase Deviation $k_p=\pi/2$. **$F_m = 1$ and $F_c = 5$.**
2. Write MATLAB code for Phase modulation using phase deviation. Here message signal is **$M(t)=1+\text{square}(2*\pi*f_m*t)$** , and Carrier Signal is **$C(t)=\cos(2*\pi*f_c*t)$** . Phase Deviation $k_p=\pi/2$. **$F_m = 1$ and $F_c = 5$, $f_s=1500$.**
3. Write MATLAB code for **PAM**. Here message signal is **$m(t)=\sin(2*\pi*f_m*t)$** , where **$f_m = 3$** and Pulse train **frequency $f_p=50$ & Duty Cycle is $d_c=10$** .
4. Write MATLAB code for **PCM**. Here message signal is **$m(t)=\sin(2*\pi*f_m*t)$** , where **$f_m = 3$** and Bit Depth is **$n=4$ and Partition= -1: .3: .8**