**Name-ANNU,ROLL\_NO-EE21RESCH01010**

**Pseudo code for BER analysis of OFDM Systems**

for Eb/N0 = 0:10 dB

Es/N0\_BPSK = ?

sd\_BPSK = ?

Es/N0\_QPSK = ?

sd\_QPSK = ?

N=1000 %No. of iterations

for iter = 1:N

1. Bit generation

2. Mapping to symbol

1.BPSK

2.QPSK

3. Serial to Parallel Conversion

4.Subcarriers formation

5. IFFT(256 points)

6. Cyclic Prefix Addition(Cyclic prefix of length 32 and append it to beginning of sequence)

7. Parallel to Serial Conversion

8. AWGN Noise

9. Serial to Parallel Conversion

10. Cyclic Prefix Removal

11. FFT

12.subcarriers Removal

13. Parallel to Serial Conversion

14. ML detector /Demodulation

15. Estimate bits

16.Number of symbols in error

17. No. of bits in error

end%end of N loop

BER(Eb/N0) = no. of bits in error/total no. of bits

end%end of Eb/N0 loop

Plot BER vs SNR(Eb/N0)