St.Joseph's College Of Engineering
Department of ECE
CS6304 ANALOG AND DIGITAL COMMUNICATION
Assignment -I
UNIT I: ANALOG COMMUNICATION
PART-A

1. **Define noise** and **Give the classification of noise.**
2. **Define noise figure**.
3. **What is the need for modulation?**
4. **An unmodulated carrier is modulated simultaneously by three modulating signals with coefficients of modulation m1 = 0.2, m2 = 0.4, m3 = 0.5. Determine the total coefficient of modulation.**
5. **Define amplitude Modulation,frequency modulation.**
6. **Define Modulation index and percent modulation for an AM and FM wave.**
7. **What is over,under,critical modulation?**
8. **Distinguish between narrow band FM and wide band FM.**

PART-B

1.Obtain AM wave equation and explain each term with the help of frequency spectrum and also obtain an expression for its power.

2. Expalin the mathematical analysis of angle modulated wave.

3.Compare AM, FM and PM systems.

4.i)Describe suitable mechanism that can produce PM from FM Modulator.

ii) Explain in detail about representation of Phase modulation.