

# **Communications Report**

## **Coherent and non-coherent demodulation**

**SEM Third Year** 

Fall 2017

#### **Team Members**

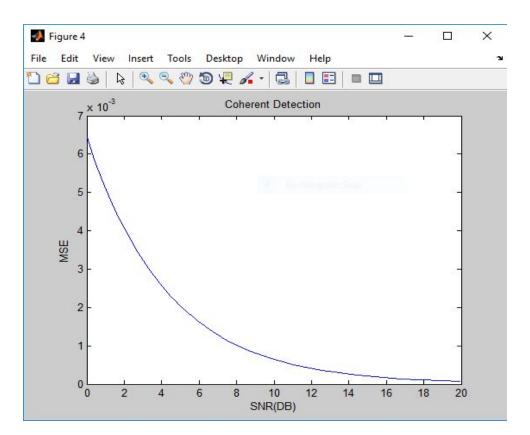
- Reem Amr Mohamed Refaat Gody
- Reem Omar Mohamed ElSayed

### Introduction

This report demonstrated the conclusion that we have reached by applying coherent and non-coherent demodulation by using matlab.

#### **Coherent Demodulation**

The following figure shows the plot of MSE on y-axis versus SNR on x-axis for coherent demodulation.



## **Non-coherent Demodulation**

DC -Bias added (A)=

Power efficency=(AverageSignalPower)/(AverageSignalPower+(A\*A))=

The following figure shows the plot of MSE on y-axis versus SNR on x-axis for non-coherent demodulation

