

## **Homework #4 ( Computer simulation using MATLAB)**

**Write a computer program to simulate a baseband transmission system including transmitter , AWGN channel and receiver.**

**The system should include :**

- . Random binary sequence as input**
- .error correcting code, e.g. (2,1,2) convolutional code**
- . Pulse-shaping filter**
- . OFDM with QAM modulation**

**The report ( including some simulation result) should not exceed 10 pages (A4 paper)**