18-01-2018

MECE347 Make-up for Final Exam

Name: Surname: Number:

Q1) Draw the circuit diagram of Frequency Shift Keying (FSK) decoder and explain its functionality. **(40 points)**

Q2)Draw the circuit diagram of the Sallan- Key Low-Pass filter and obtain its transfer function. **(40 points)**

Q3) Draw the circuit diagram of FET (field effect transistor) Phase-Shift Oscillator and find and mathematically calculate the frequency that will result with undamped oscillations when the gain of FET is adjusted suitably. Your phase shift oscillator should contain 3 RC stages. **(20 points)**