Assignment 2
CEN 352, Digital Signal Processing
Department of Computer Engineering
College of Computer and Information Sciences
King Saud University

Problem 1. (10 points.) Design a second-order digital bandpass Butterworth filter with a lower cutoff frequency of 1900 Hz, an upper cutoff frequency of 2100 Hz and a passband ripple of 3 dB at a sampling frequency of 8000 Hz. Determine the transfer function and difference equation.