Examination Feedback for EEE340 – Analogue and Switching Circuits Autumn Semester 2012-13

# Feedback for EEE340 Session: 2012-2013

<u>Feedback:</u> Please write simple statements about how well students addressed the exam paper in general and each individual question in particular including common problems/mistakes and areas of concern in the boxes provided below. Increase row height if necessary.

## **General Comments:**

The majority of student made a reasonable attempt at the paper. All questions were attempted and the spread of marks for these questions range from very poor to full marks. Overall I am happy with the marks given the very low turnout at the tutorials (<25%) and less than 70% attendance at lectures.

#### Question 1:

Part c) Silly mistakes like not labeling graphs or forgetting that v is a unipolar signal

Part e) Several students struggled with  $R_1$ =3 $R_2$ =1k and read it as  $R_1$ =3,  $R_2$ =1k. This is standard notation in EEE and it means  $R_1$ =1k and 3 $R_2$ =1k.

### Question 2:

Part a) Some students confused the BTJ characteristics with MOSFET.

Part d) Speed up capacitor. Some students recalculated a value for lb based on -3V, which is incorrect during the reverse recovery process.

Part e) Diode connected incorrectly, facing wrong way or anode connection in the wrong place.

### Question 3:

Part a) There are two conditions Gain=1 Phase=0 and Gain=-1 Phase=-180

Part d) Some students forgot that w=2πf, others got incorrect gain for non-inverting amplifier

## Question 4:

Part b) The question states that the diode forward voltage drop is 1V NOT 0.7V

Part c) Many students did not describe the purpose of Rb.