EE240 Circuits I
Quiz 01 - Section 1

Name: _____

Campus ID: _____

Total Marks: 10
Time Duration: 15 minutes

Question 1 (10 marks)

(a) [7 marks] The current $i_c(t)$ through the capacitor of capacitance $\frac{1}{3}F$ is shown in Figure 1 below. Determine the voltage across the capacitor. Also plot the capacitor voltage for $0 \leq t \leq 5$.
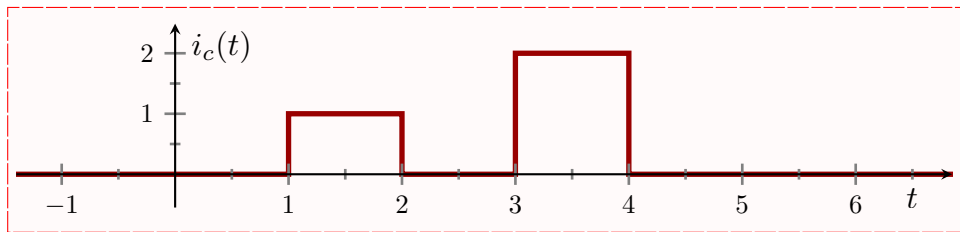

Figure 1: Current through the Capacitor.

(b) [3 marks] Determine the equivalent resistance across terminals A and B.