

LAHORE UNIVERSITY OF MANAGEMENT SCIENCES
Department of Electrical Engineering

EE240 Circuits I
Quiz 06

Name: _____

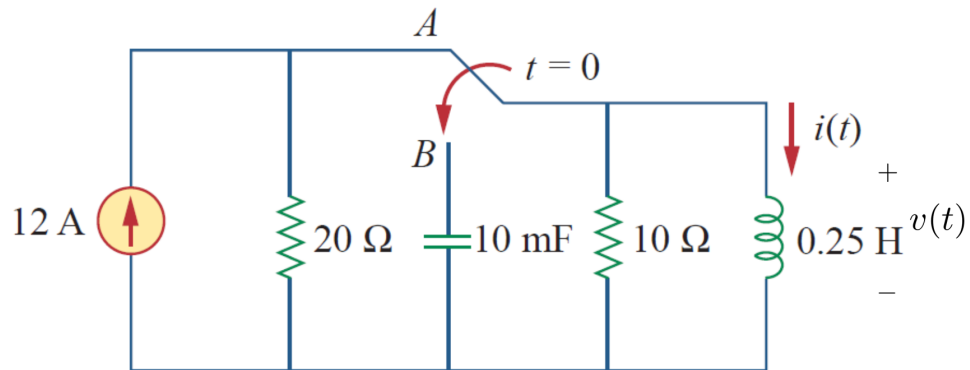
Campus ID: _____

Total Marks: 10

Time Duration: 20 minutes

Question 1 (10 marks)

In the circuit given below, the switch has been at position A for a long time before it is moved from A to B at $t = 0$.



- (a) [2 marks] Determine $i(t)$ and $v(t)$ at $t = 0^+$.
- (b) [4 marks] Determine $\frac{di}{dt}$ and $\frac{dv}{dt}$ at $t = 0^+$.
- (c) [4 marks] Determine $\frac{d^2i}{dt^2}$ and $\frac{d^2v}{dt^2}$ at $t = 0^+$.