COMSATS Institute of Information Technology
Vehari
Department of Computer Science

Final Examination – Spring 2018

Class: BSSE-B10
Subject: Electric Circuit Analysis
Time Allowed: 180 min.
Name: AHMER IQBAL

Date: 05-06-2018
Instructor: M. Rehan Ashraf
Max Marks: 50
Registration #SP18-BSE-002.

Q#01: a) Discuss the working principle of a Super heterodyne receiver. (5)
b) Define the selectivity and quality factor of a series RLC circuit. (2)
c) Sketch the inductive reactance and capacitive reactance as a function of frequency. (5)
d) What is the main difference between apparent power and true power? (2)
e) Why a crow sitting on a live wire is not electrocuted? (1)
f) A man holding 11KV in his hand, under all circumstances is he feel any shock. (2)
g) Discuss the working principle of a tuned amplifier in detail. (3)

Q#02: Find the voltage drop and current through each resistor in the figure given below (8).

Q#03: Find the current through the R_4 resistor in the figure given below. (8)

Fig for Q#02

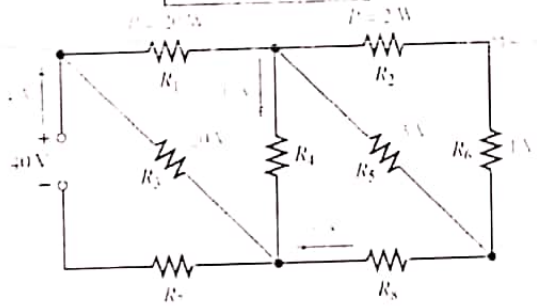
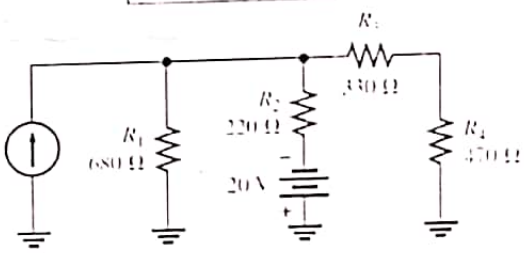


Fig for Q#03



Q#04: Determine the Thevenin equivalent as seen from terminals A and B. (7)

Q#05: In the circuit given below find the total impedance, total current and voltage across each component. (7)

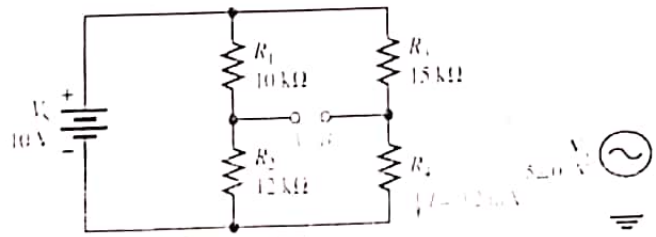


Fig. for Q#4

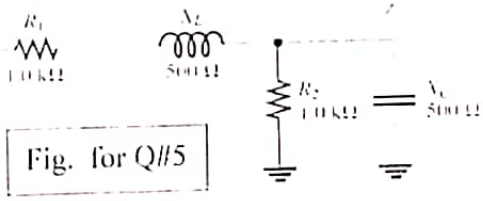


Fig. for Q#5

17-05-18 GOODLUCK Raymond

Head of Department
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