



UNIVERSITI KUALA LUMPUR
Malaysia France Institute

FINAL EXAMINATION
JANUARY 2011 SESSION

SUBJECT CODE : FEB 10102
SUBJECT TITLE : ELECTRICAL FUNDAMENTAL
LEVEL : BACHELOR
TIME / DURATION : 8.00pm – 10.30pm
(2.5 HOURS)
DATE : 09 MAY 2011

INSTRUCTIONS TO CANDIDATES

1. Please read the instructions given in the question paper **CAREFULLY**.
2. This question paper is printed on both sides of the paper.
3. Please write your answers on the answer booklet provided.
4. Answers should be written in blue or black ink except for sketching, graphic and illustration.
5. This question paper consists of **TWO (2)** sections. Section A and B. Answer all questions in Section A. For Section B, answer three (3) question only.
6. Answer all questions in English.

THERE ARE 4 PAGES OF QUESTIONS AND 1 PAGE OF APPENDIX, EXCLUDING THIS PAGE.

SECTION A (Total: 40 marks)

INSTRUCTION: Answer all questions.

Please use the answer booklet provided.

Question 1

- (a) States Kirchoff's Voltage and Current Law

(2 marks)

- (b) Using Kirchoff's Current Law, prove that the summation of resistance in parallel

is
$$\frac{1}{R_T} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} + \dots + \frac{1}{R_n}$$

(4 marks)

- (c) Determine total equivalent resistance R_{eq} , total current drawn from the supply i_o , current through 80 Ω and 15 Ω resistor and power dissipated at 60 Ω resistor in **Figure 1**.

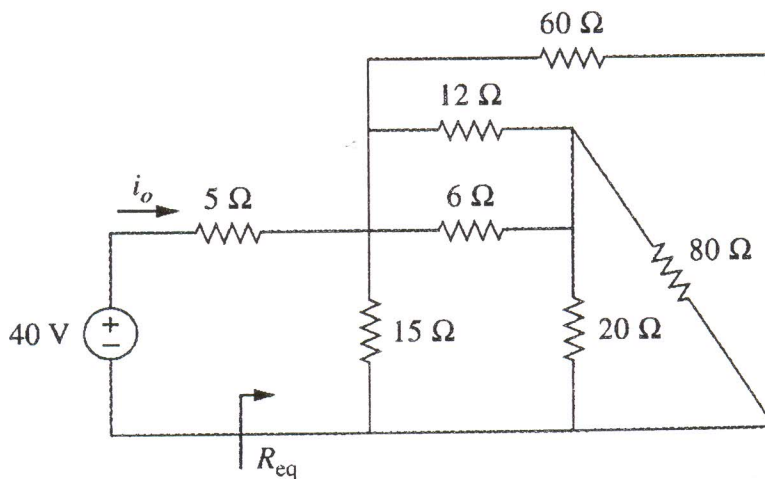


Figure 1

(14 marks)

