



**UNIVERSITI KUALA LUMPUR  
Malaysia France Institute**

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**FINAL EXAMINATION  
JANUARY 2011 SESSION**

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**SUBJECT CODE** : FEB16103  
**SUBJECT TITLE** : ELECTRICAL AND ELECTRONICS FUNDAMENTALS  
**LEVEL** : BACHELOR  
**DURATION** : 9.00am – 11.00am  
(2.0 HOURS)  
**DATE / TIME** : 10 May 2011

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**INSTRUCTIONS TO CANDIDATES**

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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. Answer should be written in blue or black ink except for sketching, graphic and illustration.
5. Answer all questions.
6. Answer all questions in English.

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**THERE ARE 4 PAGES OF QUESTIONS, EXCLUDING THIS PAGE.**

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**INSTRUCTION: Answer ALL questions.**  
**Please use the answer booklet provided.**

**Question 1**

- a) In the circuit shown in figure 1.0, determine
  - i. The total resistances for the circuit (5 marks)
  - ii. The total current flow in the circuit (5 marks)
  - iii. Voltage drop at point A and B (5 marks)

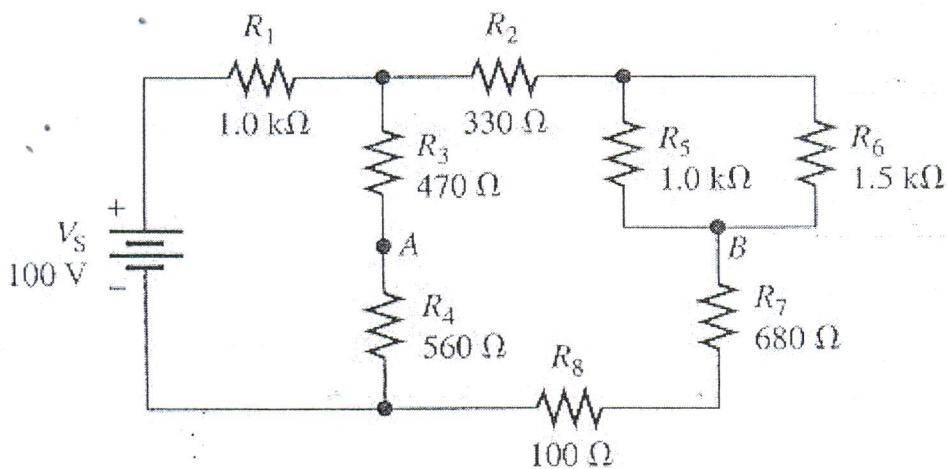


Figure 1.0

**Question 2**

- a) From the Figure 2.0, determine the thevenin equivalent circuit as seen by  $R_L$ .
  - i. The Thevenin equivalent resistances,  $R_{TH}$  (5 marks)
  - ii. The Thevenin voltage,  $V_{TH}$  (5 marks)
  - iii. The current flowing inside the circuit,  $I_{TH}$  (5 marks)

