



**UNIVERSITI KUALA LUMPUR
Malaysia France Institute**

**FINAL EXAMINATION
JANUARY 2009 SESSION**

SUBJECT CODE : FVB10702
SUBJECT TITLE : AUTOTRONIC 1
LEVEL : BACHELOR
TIME / DURATION : 9.00am – 11.00am
(2 HOURS)
DATE : 06 MAY 2011

INSTRUCTIONS TO CANDIDATES

1. Please read the instructions given in the question paper CAREFULLY.
 2. This question paper is printed on one sides of the paper.
 3. Please write your answers in the answer booklet provided.
 4. Answer 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 and Section B.
 6. Answer all questions in English.
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THERE ARE 3 PAGES OF QUESTIONS, EXCLUDING THIS PAGE.

SECTION A: (Total: 40 Marks)**INSTRUCTION: Answer ALL questions.****Please use the objective answer sheet provided.****Question 1**

Draw a functional diagram for breaker triggered transistorized ignition system and name all the major parts.

(10 marks)

Question 2

What are the advantages of Transistorized Breaker Triggered Ignition system.

(5 mark)

Question 3

What are the differences between Transistorized Breaker Triggered Ignition and Conventional Ignition system?

(5 mark)

Question 4

What are the differences between T.I.B and T.I.I, list **THREE (3)** of them.

(6 marks)

Question 5

Write down **THREE (3)** advantages of T.I.I

(6 marks)

Question 6

Explain the operation of T.I.I system with the circuit diagram.

(18 marks)

Question 7

What is the multiplexing?.

(2 mark)

Question 8

Name the type of network in the multiplexing system.

(3 mark)

Question 9

What is the meaning of BSI and name 3 of its function.

(7 mark)

Question 10`

Name **THREE** (3) components for each of the VAN and CAN network system.

(6 mark)

Question 11

List **THREE** (3) characteristics for each CAN and VAN system.

(12 mark)

SECTION B (Total: 60 Marks)**INSTRUCTION: Answer ALL questions.****Please use the answer booklet provided.**

1. With an aid of a diagram, explain the operation of the conventional ignition system which use the contact point.
(15 marks)

2. Explain with and aid of diagram the chemical reaction inside the battery during the discharging process.
(15 marks)

3. How are you going to use a digital multimeter to check the voltage, current and resistance? Explain in detail the procedures, connection and safety.
(15 marks)

4.
 - a) Explain how do you check the alternator if you don't have the tester.
(5 marks)

 - b) What are the consequences of testing the alternator without using the proper tools?
(5 marks)

 - c) Explain also the advantage and disadvantage of doing shortcut.
(5 marks)



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END OF QUESTION