



**UNIVERSITI KUALA LUMPUR
Malaysia France Institute**

**FINAL EXAMINATION
JANUARY 2014 SESSION**

SUBJECT CODE : FVB 20203
SUBJECT TITLE : ADVANCE AUTOTRONIC
LEVEL : BACHELOR
TIME / DURATION : 2.5 HOURS 9.00 am - 11.30 am
DATE : 29 MAY 2014

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. Answer should be written in blue or black ink except for sketching, graphic and illustration.
5. This question paper consists of **TWO (2) section only**. Answer **ALL** questions in section A and section B answer **THREE(3)** question only.
6. Answer all questions in English.

THERE ARE 3 PAGES OF QUESTIONS, EXCLUDING THIS PAGE.

SECTION A (Total: 40 marks)**ANSWER ALL QUESTION****ANSWER IN THE BOOKLET PROVIDED****Question 1**

- a. What are the advantages of Transistorized ignition Breaker (TI-B) compare to the conventional ignition system. List **five (5)** of them.

(5 marks)

- b. With the sketch of (TI-B) diagram, explain the operation of the system.

(5 marks)

Question 2

- a. What are the differences between Transistorized Ignition Hall effect (TI-H) and (TI-B) system? List **five (5)** of them.

(5 marks)

- b. With the sketch of (TI-H) diagram, explain the operation of the system.

(5 marks)

Question 3

- a. What are the advantages of Transistorized Ignition Inductive (TI-I) compare to (TIH) system?. List **five (5)** of them.

(5 marks)

- b. With the sketch of (TI-I) diagram, explain the operation of the system

(5 marks)

Question 4

- a. List down **Five (5)** sensors which used in the normal semiconductor ignition system.

(5 marks)

- b. Name **Two (2)** type of sensors and its function which is used in the semiconductor ignition system.

(5 marks)

SECTION B : (60 MARKS)**INSTRUCTION: Answer 3 questions only.****Please use the answer booklet provided.****Question 4**

Based on vehicle Peugeot 407, answer the questions below regarding the Locking Control function;

- (a) How many methods can be used to control the locking/unlocking function?
List down **three (3)** of them. (6 marks)
- (b) What is the 'deadlocking' function? How can we utilize this function? (7 marks)
- (c) Why does the vehicle speed information is required by the locking control function?
Where does the speed sensor information can be obtained? (7 marks)

Question 6

Based on vehicle Peugeot 407, answer the questions below regarding the Cruise Control function;

- (a) What is the function of cruise control system? (8 marks)
- (b) How to activate the cruise control function for Peugeot 407 model? (6 marks)
- (c) Where does the memorized Cruise Speed is stored? (6 marks)

Question 7

1. What is the definition of multiplexing?
(4 marks)
2. List all of the networks exist in the multiplexing system
(10 marks)
3. What will happen if one of the wire networks of the multiplexing in VAN network is disconnected or broken?
(6 marks)

Question 8

Based on vehicle Peugeot 407, answer the question below regarding the Airbag and Passenger Restraint function;

- (a) What is the first level of occupant protection in the event of vehicle accident?
(4 marks)
- (b) How many types of airbag do they have? List down all of them.
(6 marks)
- (c) List down **FOUR(4)** functions of the Airbag ECU.
(8 marks)
- (d) What is the function of side-impact sensor?
(2 marks)

END OF QUESTION