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SET A

UNIVERSITI KUALA LUMPUR Malaysia France Institute

FINAL EXAMINATION SEPTEMBER 2014 SESSION

SUBJECT CODE : FVB20203

SUBJECT TITLE : ADVANCE AUTOTRONIC

LEVEL : BACHELOR

TIME / DURATION : 9.00 AM – 11.30 AM

(2.5 HOURS)

DATE : 2 JANUARY 2015

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) sections only. Answer ALL questions in section A and section B answer THREE (3) question only.
- 6. Answer all questions in English.

THERE ARE 4 PAGES OF QUESTIONS, EXCLUDING THIS PAGE.

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SECTION A (Total: 40 marks)
ANSWER ALL QUESTION

Question 1

a. List **Five (5)** advantages of Transistorized Ignition Breaker (TI-B) compared to the conventional ignition system.

(5 marks)

b. Explain the operation of the (TI-B) system. Support the answer with a sketch of (TIB) diagram.

(5 marks)

Question 2

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

(5 marks)

b. State **Two (2)** type of sensors and their functions which are used in the semiconductor ignition system.

(5 marks)

Question 3

a. When the Peugeot 407 is locked with the **HF Remote Control**, state the other component that is activated?

(5 marks)

b. For Peugeot 407 vehicles with full specified function, explain other activity will involve when a <u>First Press</u> of the <u>Locking Button</u> on the **HF Remote Control** is activated?

(5 marks)

Question 4

a. The Peugeot 407 Steering Column Control Module (CV00) application may consist several function, list **Five (5)** of them.

(5 marks)

b. The Peugeot 407 Front Seats may feature the following function, explain Five(5) of the function.

(5 marks)

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SECTION B: (60 MARKS)

INSTRUCTION: Answer 3 questions only.

Please use the answer booklet provided.

Question 5

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

(a) Explain THREE (3) methods that can be used to control the locking/unlocking function?

(6 marks)

(b) Explain the term of 'deadlocking' function and how can we utilize this function.

(7 marks)

(c) Explain why does the vehicle speed information is required by the locking control function?

State where can the speed sensor information be obtained?

(7 marks)

Question 6

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

(a) Explain the function of cruise control system?

(8 marks)

(b) Explain the procedure to activate the cruise control function for Peugeot 407 model?

(6 marks)

(c) Explain where does the memorized Cruise Speed is stored?

(6 marks)

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Question 7

1. Definition the term of multiplexing?

(4 marks)

2. List all the networks that exist in the multiplexing system.

(10 marks)

3. Explain 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 questions below regarding to the Airbag and Passenger Restraint function.

(a) State the first level of occupant protection in the event of vehicle accident.

(4 marks)

(b) State how many types of airbag equipped in the Peugeot 407 have and list down all of them.

(6 marks)

(c) List down FOUR (4) functions of the Airbag ECU.

(8 marks)

(d) Describe the function of side-impact sensor.

(2 marks)

END OF QUESTION