



SET A

UNIVERSITI KUALA LUMPUR
MALAYSIA FRANCE INSTITUTE

FINAL EXAMINATION
JANUARY 2011 SEMESTER

SUBJECT CODE : FVB 10302
SUBJECT TITLE : CHASIS TECHNOLOGY 1
LEVEL : BACHELOR
DURATION : 9.00am – 12.00pm
(3 HOURS)
DATE / TIME : 09 MAY 2011

INSTRUCTIONS TO CANDIDATES

1. Please read the instructions given in the question paper CAREFULLY.
 2. This question paper is printed on one side 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. Section A and B. Answer all questions in Section A. For Section B, answer THREE (3) question only.
 6. Answer all questions in English.
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THERE ARE 3 PRINTED PAGES OF QUESTIONS, EXCLUDING THIS PAGE.

SECTION A (Total: 60 marks)**INSTRUCTION: Answer ALL questions.****Please use the answer booklet provided.****Question 1**

- (a) What are the differences of mechanical and hydraulic braking system? List **FIVE (5)** of them. (5 marks)
- (b) What are the functions of brake booster? Explain the operation of brake booster. (10 marks)
- (c) What are the advantages of ABS system? List **FIVE (5)** of them. (5 marks)

Question 2

- (a) With a simple sketch of power steering, list all of the power steering component. (10 mark)
- (b) List **FIVE (5)** effect of poor alignment on a vehicle (5 mark)
- (c) Explain in details the procedures of wheel alignment (5 mark)

Question 3

- (a) What are the famous types of suspension that are commonly used on a vehicle? (6 marks)
- (b) What are the advantages of air suspension system? List **FIVE (5)** of them. (5 marks)
- (c) What are the functions of shock absorber? What happened is the shock absorber is too soft? (9 mark)

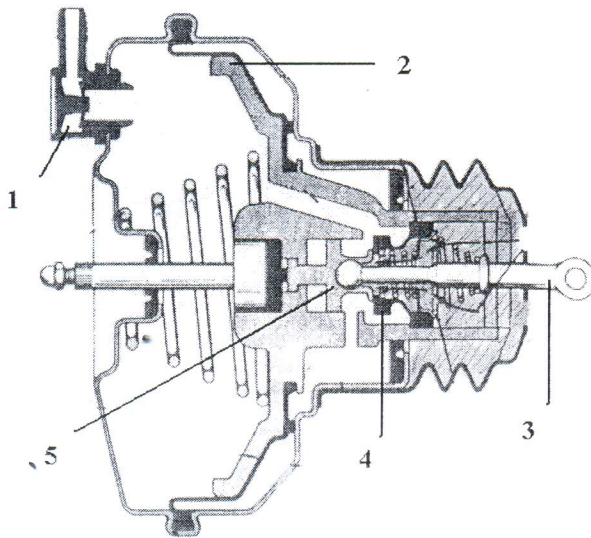
SECTION B (Total: 40 marks)

INSTRUCTION: Answer TWO (2) question only

Please use the answer booklet provided.

Question 1

Answer the questions below by referring to the diagram below.



- a. What is the braking position as indicated in the diagram above (5 marks)
- b. Explain the operation of the above braking position (10 marks)
- c. Name the numbered components (5 marks)

Question 2

- a. State the differences between integral type power steering and linkage type power steering system. (5 marks)
- b. Give four advantages four-wheel steering system over conventional 2-wheel steering system (10 mark)
- c. What do you understand by terms 'tire slip angle' (5 marks)

Question 3

- a. Explain the difference between integral type power steering and linkage type power steering system.
(5 marks)
- b. Based on your understanding; make a comparison between Electronic Controlled suspension and Conventional Suspension system.
(10 marks)
- c. What do you understand by terms 'Brake Feel'.
(5 marks)

Question 4

- a. Explain in details of all indication labeled at the tire wall
(10 mark)
- b. What are the effect of miss alignment to the tire? List Five (5) of them.
(5 mark)
- c. What are the effects to the tire when the tire pressure is over inflated?
(5 mark)

END OF QUESTION