



UNIVERSITI KUALA LUMPUR
Malaysia France Institute

FINAL EXAMINATION

JANUARY 2014 SESSION

SUBJECT CODE	:	FVB 30503
SUBJECT TITLE	:	COLLISION TECHNOLOGY
LEVEL	:	BACHELOR
TIME / DURATION	:	2.5 HOURS
DATE	:	

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. Answer ALL questions in Section A. For Section B, answer any THREE (3) questions only.**
- 6. Answer all questions in English.**

THERE ARE 3 PAGES OF QUESTIONS, EXCLUDING THIS PAGE.

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

- a) Describe what happens to a vehicle during a collision.
(5 marks)
- b) Explain the basic steps needed to repair a vehicle that is damaged in an accident.
(5 marks)

Question 2

Explain the differences between a body-over-frame construction and unibody construction? Sketch a diagram to justify your answer.
(10 marks)

Question 3

- a) Describe **THREE (3)** body sections of a vehicle.
(6 marks)
- b) Explain by the term “First damage in, last damage out,” in metal straitening technique?
(4 marks)

Question 4

- a) Explain the problems to look at the car in doing an estimation repair cost?
(7 marks)
- b) Describe the effects if your estimation is too low or too high?
(3 marks)

SECTION B (Total: 60 marks)**INSTRUCTION: Answer any THREE (3) questions only****Question 5**

Based on the diagram in **Figure 1**, you are required to:

- a) Draw a complete flow chart for the door repair procedures

(10 marks)

- b) Explain all the furnishing work to be carried out.

(10 marks)

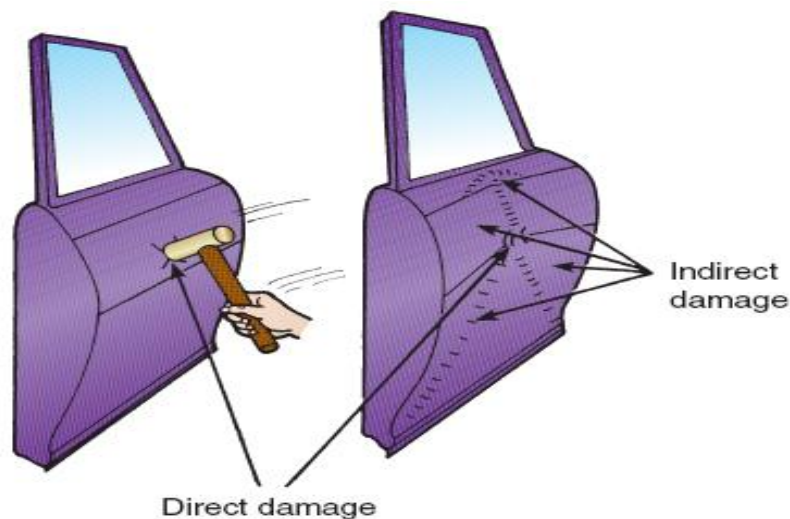


Figure 1

Question 6

- a) List down **TWO (2)** functions of a vehicle's paint or finish?

(2 marks)

- b) List and explain **THREE (3)** basic types of automotive paints.

(8 marks)

- c) Explain the differences between thinner, reducer, and premix?

(5 marks)

- d) In details, explain about the sandpaper grit numbering system and how it is used.

(5 marks)

Question 7

- a) Summarize the MIG welding process.
(6 marks)
- b) Describe the basic guidelines to follow when performing MIG welding
(8 marks)
- c) Describe that can be done to prevent heat build-up during welding?
(6 marks)

Question 8

Based on the given photo in **Figure 2**, you are required to determine the:

- a) Estimation sequence in details.
(8 marks)
- b) Suggested work and parts replacement
(8 marks)
- c). Time taken to complete the body repair and finishing process
(4 marks)



Figure 2

END OF QUESTION