



**UNIVERSITI KUALA LUMPUR  
Malaysia France Institute**

---

**FINAL EXAMINATION  
JANUARY 2011 SESSION**

---

**SUBJECT CODE** : FVB 30503  
**SUBJECT TITLE** : COLLISION TECHNOLOGY  
**LEVEL** : BACHELOR  
**TIME / DURATION** : 9.00am – 12.00pm  
( 3 HOURS )  
**DATE** : 14 MAY 2011

---

**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 only **THREE (3)** questions.
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 motor vehicle during a collision.  
(3 marks)
- b) Summarize the basic steps needed to repair a vehicle that is damaged in an accident.  
(12 marks)
- c) Describe the differences between panel straightening and panel replacement.  
(5 marks)

**Question 2**

- a) What is the difference between body-over-frame construction and unibody construction?  
(6 marks)
- b) Describe **THREE (3)** body sections of a vehicle.  
(10 marks)
- c) What are anticorrosion materials?  
(4 marks)

**SECTION B (Total: 60 marks)**

**INSTRUCTION: Answer THREE questions.**  
**Please use the answer booklet provided.**

**Question 3**

- a) What is the difference between a spreader and a squeegee?  
(7 marks)
- b) How would you continue rough straightening if you have rough filed a large area of body filler and the material is hard?  
(5 marks)
- c) What could happen if you use a body file excessively on an aluminium body panel?  
(3 marks)
- d) What can happen to air tools if they are not oiled periodically?  
(5 marks)

**Question 4**

- a) What are **TWO (2)** functions of a vehicle's paint or finish?  
(2 marks)
- b) List and explain **THREE (3)** basic types of automotive paints.  
(4 marks)
- c) What are the differences between thinner, reducer, and premix?  
(6 marks)
- d) Explain about the sandpaper grit numbering system and how it is used.  
(8 marks)

**Question 5**

- a) List the advantages of a resident data system.  
(5 marks)
- b) What are the problems faced in writing an estimation cost?  
(10 marks)
- c) What is the clue if doors are out of alignment and cracked stationary glass is often solid?  
(2 marks)
- d) How could it effect the shop operation if your estimaion is too low or too high?  
(3 marks)

**Question 6**

- a) How and why do you remove paint before using body filler?  
(5 marks)
- b) Describe how to mix and apply body filler.  
(5 marks)
- c) What will happen if you use spot putty to fill a large dent on bare metal?  
(5 marks)
- d) Describe some of the problems that can occur if body filler is not stirred up thoroughly to a smooth and uniform consistency.  
(5 marks)

**END OF QUESTION**