

<b>MOTOR BODY REPAIRING SG</b> 706-2/0 K	<b>2</b>
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**GAUTENG DEPARTMENT OF EDUCATION**  
**SENIOR CERTIFICATE EXAMINATION**

**OCTOBER / NOVEMBER 2005**  
**OKTOBER / NOVEMBER 2005**

**MOTOR BODY REPAIRING SG**

**TIME: 3 hours**

**MARKS: 200**

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**REQUIREMENTS:**

- Calculator
- Drawing instruments

**INSTRUCTIONS:**

- Question 1 is **COMPULSORY**.
  - Answer Question 1 and any **SIX** other questions.
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**QUESTION 1A**

Answer **TRUE** or **FALSE**. Write down only the **question numbers** (1.1 – 1.10) and the correct answer next to the appropriate question number.

- 1.1 A powder is used when brazing. (1)
- 1.2 The acetylene cylinder has a left-hand thread. (1)
- 1.3 Thinners must be left in the spray gun after use. (1)
- 1.4 The distance between the spray gun and the surface must be 400 mm. (1)
- 1.5 A hardener is used with fibre glass. (1)
- 1.6 Bolts and nuts are used in conventional types of chassis. (1)
- 1.7 Cold shrinking is done by first heating and then cooling off. (1)
- 1.8 When cutting with gas, the flame must be moved away from the operator. (1)
- 1.9 Toe-in is usually done with the wheels turned slightly inwards. (1)
- 1.10 All the old paint must first be removed before a panel can be resprayed. (1)
- (10)**

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**QUESTION 1B**

- 1.11 What is good housekeeping? (5)
  - 1.12 Name FIVE safety measures in the workplace. (5)
  - 1.13 Name FIVE safety measures when working with gaswelding equipment. (5)
  - 1.14 Name FIVE safety measures when using portable electrical devices. (5)
  - 1.15 Name FIVE safety measures to be adhered to in the spray booth. (5)
- (25)**

**QUESTION 1C**

- 1.16 Name FOUR tools used for motor body repairing. (4)
  - 1.17 Name FOUR tools used for fibreglass work. (4)
  - 1.18 What is meant by **dry-spraying**? (3)
  - 1.19 Name FOUR precautions to be taken before wheel alignment can be done. (4)
- (15)**
- [50]**

**QUESTION 2**

Make line sketches of the following:

- 2.1 Positive camber (5)
  - 2.2 Ackerman principle (5)
  - 2.3 Toe-out on turns (5)
  - 2.4 Toe-in (5)
  - 2.5 Caster (5)
- [25]**

**QUESTION 3**

A door has been placed and must be resprayed. Describe step by step the procedures which must be followed.

**[25]**

**QUESTION 4**

The windscreen of a car must be replaced. The broken windscreen has already been removed. Explain step by step the process of fitting the new windscreen.

**[25]**

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### QUESTION 5

A car was involved in a minor accident. The only damage is a dent in the body below the boot lid. Describe the repairing of the dent. [25]

### QUESTION 6

The door of a sports car with a fibreglass body sustained a deep scratch. The scratch is about 200 mm long and approximately 1 mm deep. The scratch is not right through the body. Describe the repair and spray of the panel. [25]

### QUESTION 7

- 7.1 Why must the battery be disconnected before arc welding can be done on the car? (2)
  - 7.2 Name TWO methods of measuring a door opening. (2)
  - 7.3 Name TWO methods of measuring a conventional chassis after repairing. (2)
  - 7.4 Why is synthetic body putty more popular than body lead filler? (2)
  - 7.5 Why do front wheels waggle? (2)
  - 7.6 Make a simple sketch to illustrate the neutral flame after setting the flame of the oxyacetylene gas welding torch. (8)
  - 7.7 Explain how hot shrinking is done. (5)
  - 7.8 How does the cutting nozzle differ from the welding nozzle in gas-welding equipment? (2)
- [25]**

### QUESTION 8

- 8.1 What is the purpose of a hardener with fibreglass? (5)
  - 8.2 Where is spot welding done on a car? (5)
  - 8.3 How would you remove a dent of about 70 mm in diameter on a body panel? (5)
  - 8.4 What causes the orange peel effect after spraying? (5)
  - 8.5 Why does the clear coat sometimes peel off from the base coat? (5)
- [25]**

**TOTAL: 200**

**END**