higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE

MOTOR BODYWORK THEORY N2

1 December 2023

This marking guideline consists of 5 pages.

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SECTION A

QUESTION 1

1.1 D
1.2 C
1.3 C
1.4 B
1.5 C
1.6 A
1.7 B
1.8 A
1.9 A
1.10 C

(10 × 1) **[10]**

QUESTION 2

2.1 True
2.2 True
2.3 True
2.4 False
2.5 True

(5 × 1) **[5]**

QUESTION 3

3.1 C
3.2 F
3.3 B
3.4 H
3.5 A
3.6 E
3.7 J
3.8 G
3.9 I
3.10 D

(10 × 1) **[10]**

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QUESTION 4

4.1 worn
4.2 orange
4.3 battery
4.4 metal
4.5 creeper

(5 × 1) **[5]**

TOTAL SECTION A: 30

SECTION B

QUESTION 5

- First ascertain the extent of the damage.
- Select all the required tools, e.g. electric cutter, sanding machine, etc.
- The cutting line must be marked off.
- The panel should be cut off neatly because that makes it easy to join the new panel neatly.
- An electric cutter can be used.
- The edge of the section to be removed must be bent back.
- The spot welded joints must be drilled out using a drill of about 5 mm diameter.
- If the panel will not be re-used it can be around off along the edge.
- The lap joint or sunken lap joint should be used.
- Remember to make allowance for the folded edges.
- The new panel is placed under the edge of the old panel.
- The fixing of the joint can be done by spot welding or riveting.
- To prevent the heat from spreading towards the outer side, wet asbestos pulp can put on the outside of the panel.
- To finish off, the edge of the panel is folded around the frame and spot-welded.
- On the outer side of the panel the seam must now be filled with body solder.
- To do the filling with success, the job should be cleaned properly.
- The surface must be tinned first.
- The heat must be kept to a minimum to avoid warpage.
- The body solder is now filed with file.
- A final finishing is done with a sanding machine.

(20 × 1) **[20]**

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QUESTION 6

6.1
- The paint must not be too thick
- The spray gun must not be too far away from the job.
- The air pressure must be correctly adjusted – not too high or too low.
- The surface should not be too cold.
- The surface should not be too hot. (5)

6.2
- The surface around the portion to be sprayed should be covered by masking tape.
- This applies in particular to chrome strips; paper may be used to cover large surfaces.
- The primer is mixed with equal parts of thinners and stirred well.
- The first coast should be very thin and when thoroughly dry, a thicker second coast is applied to cover the fine scratches.
- Leave the surface to dry for about 30 minutes. (5)

6.3
- The correct handling of the spray gun is very important.
- The spray gun should be held 150 mm to 250 mm from the surface to be painted.
- The spray gun should always be held at right angle to the work.
- The spray gun should be moved parallel to the surface.
- The movement must not be interrupted in the middle of a stroke. (5)

6.4
- Too much paint has been applied.
- Painted is too thin.
- Spray gun was held too close to the surface.
- Chilly atmosphere retards the drying of point.
- Spray adjustment is screwed in too far. (5)

[20]

TOTAL SECTION B: 40

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SECTION C

QUESTION 7

7.1
- Partial panel replacement
- Complete panel replacement (2)

7.2
- Butt joint
- Lap joint
- Sunken lap joint
- Flange joint (4)

7.3
- It supports the roof
- It supports the front and rear doors
- It separates the front and the rear door (3)

7.4
- Doors
- Boot lids
- Roof panel
- Mudguards (4)

7.5 Drill the spot welded joint with a drill about 5 mm in a diameter.✓✓ (2)

7.6
- Rolling or pressing grooves
- Supporting clamps or plates
- Curved surface
- The U-shaped
- Two U-shaped welding together (5)

7.7
- The spray gun was held too far from the job
- The air pressure was adjusted too high
- Paint was too thin
- Low grade thinner was used
- Incorrect spray technique was used
- Liquid control valve set incorrectly (Any 5 × 1) (5)

7.8
- The compressor must be level on the floor with the flywheel on the wall side.
- If at all possible, the compressor should be in a separate building.
- It must be placed far enough (about 300 mm) from the wall to allow air to circulate around it.
- The compressor must be as close to the spray-painting booth as possible.
- The distance between the inlet and the compressor must be as short as possible.
- The compressor should be placed in a position where the maximum clean, dry and cool air will be available. (Any 5 × 1) (5)

[30]

TOTAL SECTION C: 30
GRAND TOTAL: 100

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