higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE (VOCATIONAL)

WORKSHOP PRACTICE
NQF LEVEL 2

(12041012)

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13:00–16:00

This question paper consists of 6 pages.

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE (VOCATIONAL)
WORKSHOP PRACTICE
NQF LEVEL 2
TIME: 3 HOURS
MARKS: 100

INSTRUCTIONS AND INFORMATION

1. Answer all the questions.
2. Read all the questions carefully.
3. Number the answers according to the numbering system used in this question paper.
4. Use only a blue or black pen.
5. Write neatly and legibly.

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QUESTION 1

1.1 Indicate whether the following statements are TRUE or FALSE by writing only 'True' or 'False' next to the question number (1.1.1–1.1.6) in the ANSWER BOOK.

1.1.1 An accident can be defined as a planned event caused by unsafe acts or conditions.

1.1.2 Using an uninsulated screwdriver when replacing a circuit breaker in a live distribution board is considered to be a safe condition.

1.1.3 We must always ensure that there is adequate ventilation and lighting in the workplace.

1.1.4 Chemicals are an example of a source of hazard.

1.1.5 Scaffolding is exposed to internal fall, external fall and climbing fall.

1.1.6 When a 2,5 A current flows in the human body, it may cause heart failure or even death to a person.

(6 × 1) (6)

1.2 State FIVE duties of employees regarding health and safety in the working environment. (5 × 2) (10)

1.3 List FOUR different types of injuries that may be suffered by a person as a result of electricity. (4)

[20]

QUESTION 2

Choose a/an word/item from COLUMN B that matches a description in COLUMN A. Write only the letter (A–F) next to the question number (2.1.1–2.1.5) in the ANSWER BOOK.

2.1

COLUMN A		COLUMN B	
2.1.1	Providing temporary assistance or treatment until medical help arrives	A	bleeding
2.1.2	The severity depends on the level of current which passes through the body and the length of time of contact	B	first aid
2.1.3	The escape of blood from any of the blood vessels	C	electric shock
2.1.4	A broken or cracked bone	D	burn
2.1.5	Injuries to the skin caused by heat	E	artificial respiration
		F	fracture

(5 × 1) (5)

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2.2 Answer the following questions regarding a person who is in shock and has suffered burns with blisters as a result of electric shock.

2.2.1 Describe the treatment of a person in shock. (3)

2.2.2 Explain how you would treat this person, who has suffered burns as a result of electric shock by stating both what needs to be done and what should not be done to the injured person. (5)

2.3 List any TWO symptoms of shock. (2)
[15]

QUESTION 3

3.1 Various options are given as possible answers to the following questions. Choose the answer and write only the letter (A–D) next to the question number (3.1.1–3.1.5) in the ANSWER BOOK.

3.1.1 The type of saw used to cut steel.

A Tip-saw
B Hack-saw
C Cross-cut saw
D Tenon-saw

3.1.2 The smooth broad part of the file without teeth.

A Tip
B Face
C Shoulder
D Heel

3.1.3 A type of clamp used to fasten, hold, or secure objects tightly together using pressure, thus preventing movement or separation.

A Bar-clamp
B Handy-clamp
C G-clamp
D Deep-throated G-clamp

3.1.4 Has one open end and a ring of the same size at the other end.

A Combination spanner
B Open-ended spanner
C Ring spanner
D Ratcheting ring spanner

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3.1.5 The type of pliers used to twist wires can fit where other pliers are incapable and unable to reach.

A Side cutter
B Combination pliers
C Long-nose pliers
D Wire stripper

(5 × 1) (5)

3.2 Explain what a cable knife is used for. (2)

3.3 State THREE precautions when using draw tapes. (3 × 2) (6)

3.4 Name TWO things that could be done when a screwdriver is damaged in such a way that it does not fit a screw slot. (2)

[15]

QUESTION 4

4.1 Explain FIVE steps you will follow when using a bench grinder to sharpen a flat chisel (5 × 2) (10)

4.2 When using an angle grinder one should always ensure that the grinding wheel does not break.

Name the THREE parts of an angle grinder that when damaged, will cause the grinding wheel to break. (3)

4.3 Name TWO parts of electric power tools that will generally require lubrication. (2)

[15]

QUESTION 5

5.1 A laser measuring tape is an instrument used to measure distance accurately but could be dangerous to use if you do not follow the manufacturer's instructions.

State at least FIVE precautions when using a laser measuring tape and also give a reason for every statement. (5 × 2) (10)

5.2 State FIVE factors you would consider while or after using, as well as caring for a spirit level, to ensure it stays in good condition for a long time. (5)

[15]

QUESTION 6

6.1 Explain FIVE main reasons why you need to plan for a task or a project. (5)

6.2 Explain what a permit to work is used for. (3 × 1) (3)

6.3 List TWO different types of fire extinguishers. (2)
[10]

QUESTION 7

7.1 Explain why solvents are used during the soldering process. (2)

7.2 Name the type of joint in which the solder does not make good contact with the component lead or PC board. (1)

7.3 Name THREE common reasons that cause oxidation in soldering. (3)

7.4 List FOUR tools or resources you will need when preparing for any soldering task. (4)
[10]

TOTAL: 100

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