higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE (VOCATIONAL)

DRAWING OFFICE PROCEDURES AND TECHNIQUES

(First Paper)

NQF LEVEL 3

(12050713)

9 March 2018 (X-Paper)
09:00–12:00

CLOSED-BOOK EXAMINATION

Calculators may be used.

This question paper consists of 5 pages.

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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. All drawings must be large, clear, neat and in good proportion.
5. Keep questions and subsections of questions together.
6. Write neatly and legibly.

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QUESTION 1

Define the following drawing office terminology:

1.1 What is *draughting* in a drawing office context? (2)

1.2 Define the *metric system.* (3)

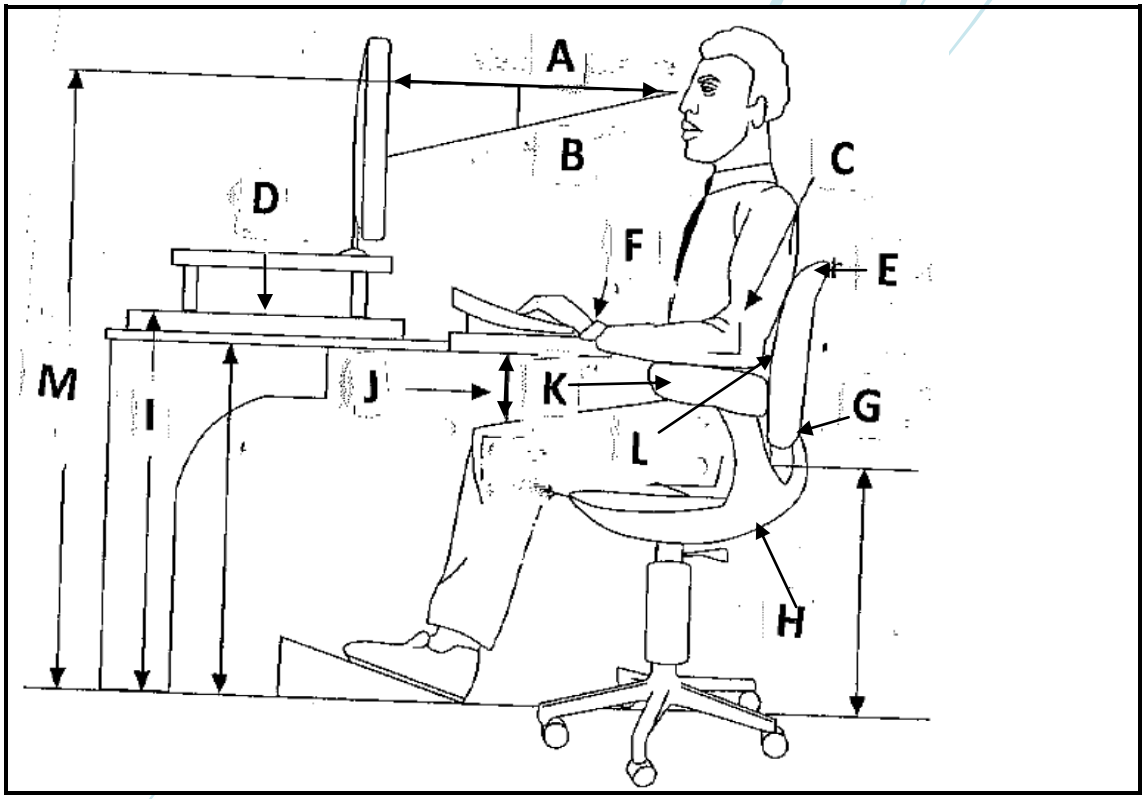
1.3 Define a *catalogue* in a drawing office setting. (2)

1.4 Define *hypothermia* in relation to health and safety perameters (3)

[10]

QUESTION 2

2.1 The figure below shows ergonomic principles, applied to an office worker sitting at a desk doing computer work. Give the answers next to the letters A–M in the ANSWER BOOK.



(13)

2.2 State FIVE primary obstacles for wheelchairs in an office environment. (5 × 2) (10)

[23]

QUESTION 3

3.1 State SIX of a drawing office manager's responsibilities in the drawing office.
(6 × 2) (12)

3.2 In a drawing office a drawing needs to go through several checks before being issued for construction.

State FOUR functions of a person who checks if a drawing can be issued for construction, in other words what needs to be done and looked for? (8)
[20]

QUESTION 4

4.1 Define *housekeeping* in a drawing office environment. (2)

4.2 Draw neat, freehand drawings of the following signs:

4.2.1 First-aid equipment sign

4.2.2 Sign indicating the position of a fire hose

4.2.3 Sign showing that alcohol is prohibited in the area

4.2.4 Sign prohibiting access beyond that point
(4 × 2) (8)

4.3 Give the class of fire of the following types of extinguishers:

4.3.1 Water

4.3.2 Foam

4.3.3 Dry chemical
(3 × 1) (3)

4.4 As a draughtsperson you are required to go to site to check the quality of work. You will be required to wear protective equipment.

Give THREE examples of personal protective equipment (PPE). (3)
[16]

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QUESTION 5

5.1 Make a drawing of a vernier heights gauge and clearly label all the parts. (12)

5.2 Make a neat drawings of the following outside micrometre readings, and show the reading of the main scale, thimble and mark exposed

5.2.1 16,93 mm

5.2.2 4,01 mm

5.2.3 8,49 mm

(3 × 3) (9)

5.3 In a drawing office it is very important to take good care of sensitive equipment.

State FIVE points to be considered when caring for and maintaining vernier callipers. (5 × 2) (10)

[31]

TOTAL: 100

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