higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

N1510**(E)**(M31)H

NATIONAL CERTIFICATE

SURFACE ELEMENTS THEORY AND PRACTICAL N4

(10050314)

31 May 2019 (X-Paper)
09:00–12:00

This question paper consists of 8 pages.

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE
SURFACE ELEMENTS THEORY AND PRACTICAL N4
TIME: 3 HOURS
MARKS: 200

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. Write neatly and legibly.

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SECTION A

QUESTION 1

1.1 Choose a description from COLUMN B that matches a term in COLUMN A. Write only the letter (A–J) next to the question number (1.1.1–1.1.10) in the ANSWER BOOK.

COLUMN A		COLUMN B	
1.1.1	Dropped ceiling	A	cotton fiber with embossed design
1.1.2	Marble	B	simulate different textures to an otherwise plain surface
1.1.3	Suitable for paving	C	mainly for clinical reasons
1.1.4	Hessian	D	reflective and change the proportion of a room
1.1.5	Mirror tiles	E	has small wood chips and sawdust
1.1.6	Gypsum board	F	backed by foam paper or latex
1.1.7	Anaglypta	G	allow for recessed lighting
1.1.8	Stainless steel tiles	H	can be chemically dyed
1.1.9	Ingrain paper	I	bricks
1.1.10	Ceiling tiles	J	leaves joints to be concealed

(10 × 2) (20)

1.2 Indicate whether the following statements are TRUE or FALSE. Choose the answer and write only 'True' or 'False' next to the question number (1.2.1–1.2.10) in the ANSWER BOOK. Correct the statement if it is FALSE.

1.2.1 Ceramic tiles can be used on ceilings.

1.2.2 Slate is the largest sheet of quarry cut stone.

1.2.3 Wood can be chemically treated to make it fire resistant.

1.2.4 Satin paint finishes are specified for a shiny look and wash ability.

1.2.5 Load bearing walls can be composed of columns and beams.

1.2.6 Carpet underlay increases the durability of the carpet.

1.2.7 Manufactured fibres do not actually burn but tend to melt.

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1.2.8 Wool is not the best choice of fibre for carpets.

1.2.9 Most sheet vinyl has an inner core of foam to cushion them.

1.2.10 Bamboo is technically a grass plant.

(10 × 1) (10)

1.3 Various options are given as possible answers to the following statements. Choose the answer and write only the letter (A–C) next to the question number (1.3.1–1.3.10) in the ANSWER BOOK.

1.3.1 Parquet flooring is made up of…

A vinyl blocks.
B cork strips.
C wooden blocks.

1.3.2 Hard flooring…

A is used for structural support.
B tends to reflect sound, creating acoustical problems.
C are generally installed over a concrete subsurface.

1.3.3 Stone floor finishes…

A are usually more expensive than others.
B are specialised floor systems.
C can be cleaned with harsh chemicals.

1.3.4 Hand woven carpets are made by…

A punching into a backing.
B braided techniques.
C using spools of coloured yarn.

1.3.5 Water-based paints are used…

A are more applicable to commercial areas.
B if a scrub able finish is needed.
C for a matte finish.

1.3.6 Mirrors are glass…

A that have been used through the ages to cover walls.
B is used primarily for its light transmission
C with a back coating of silver or bronze alloys.

1.3.7 Typical ceiling heights in residential buildings are …

A 2 438 mm.
B 2 743 mm.
C 2 286 mm.

1.3.8 Plaster …

A is durable and rigid.
B can be moulded into many complex shapes.
C is less expensive and quicker to install.

1.3.9 Solid-core doors …

A are primarily used for residential interiors.
B are not expensive.
C offer fire protection, sound insulation, and weather resistance.

1.3.10 Double-hung windows …

A slide horisontally on top and bottom tracks mounted inside the frame.
B are a type of vertical sliding window.
C are hinged at the bottom and swing inward.

(10 × 2) (20)
[50]

QUESTION 2

2.1 Explain the difference between:

2.1.1 Veneers

2.1.2 Ply wood

(2 × 5) (10)

2.2 What should you keep in mind when using embossed wallpaper? (5)

2.3 Discuss the materials in everyday use below:

2.3.1 Natural materials

2.3.2 Composite materials

2.3.3 Synthetic materials

(3 × 5) (15)

2.4 Compare the properties of marble and granite. (15)

2.5 Why is it beneficial to use glass blocks as building material? (5)
[50]

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QUESTION 3

3.1 How would you advise a client to choose a quality carpet? (10)

3.2 Name FIVE types of manmade fibres. (5)

3.3 Describe the manufacturing method of tufted carpets. (5)

3.4 Explain why rubber is a good choice for flooring. (5)

3.5 Why would you recommend fabric as a wall surface? (5)

3.6 Name FIVE different countertops and explain where and why you would use each of them? (5 × 4) (20)

[50]

TOTAL SECTION A: 150

SECTION B

QUESTION 4

4.1 Identify traditional South African dwellings and discuss their construction of:

4.1.1 Walls

4.1.2 Roofs and Ceilings

4.1.3 Floors

4.1.4 Structural Appearance

(4 × 5) (20)

4.2 Study the images of the windows below labelled A–J. Write down the letter and the name of each window:

a)



Pintrest.co.uk

(b)



www/uswindow-door.com

c)



http://manolohome.*com*

d)



http://hitdis.com

e)



http://honestlywtf.com

f)



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g)



www.houzz.com

h)



http://www.worldtelecomsummit.com

i)



http://www.ecostardoubleglazing.com.au

j)



Pintrest.co.uk

(10 × 2) (20)

4.3 Explain the difference between Indian, Chinese and Persian rugs. (10)

[50]

TOTAL SECTION B: 50
GRAND TOTAL: 200

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