higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE

INTRODUCTORY FACTORY ORGANISATION N4

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE
INTRODUCTORY FACTORY ORGANISATION 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. Start each section on a new page.
5. Use only a black or a blue pen.
6. Write neatly and legibly.

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SECTION A

QUESTION 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 (1.1–1.15) in the ANSWER BOOK.

1.1 The straight knife cutting machine consists of a/an …

A electric motor.
B hand control handle.
C drill needle.
D None of the above.

1.2 Top management takes …

A manufacturing decisions.
B operational decisions.
C strategic decisions.
D tactical decisions.

1.3 Under pressing is pressing …

A pockets only.
B during garment construction.
C the hemline only.
D after completion of the garment.

1.4 A laboratory test using a dark cupboard and ultraviolet light is done to test …

A heat resistance.
B pilling.
C flaws and defects.
D colourfastness.

1.5 Materials that are not locally manufactured are called … materials.

A sold
B imported
C exported
D bought

1.6 Press studs can be sewn on by a …

A bar-tacking machine.
B overlocker.
C serging machine.
D button-sewing machine.

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1.7 The process undertaken by a firm to develop certain skills, concepts and attitude of employees is called …

A testing.
B interviewing.
C training.
D recruitment.

1.8 The work flow symbol representing a circle indicates …

A work activity.
B transport.
C storage.
D inspection.

1.9 The person who must ensure that all the necessary trims are provided when assembly commences is the …

A manager.
B machine operator.
C supervisor.
D bundle handler.

1.10 The cloth drill marker mainly …

A does pattern marking on the edges of garment parts.
B does pattern marking away from the edge of garment parts.
C does the fusing of the garment parts.
D ensures the placement of garment parts.

1.11 The formation of small balls on fabric caused by friction is …

A colourfast.
B pilling.
C bubbles.
D defects.

1.12 The psychological environment in the workplace refers to …

A work stress.
B noise.
C equipment.
D ventilation.

1.13 One security benefit is …

A an annual bonus.
B a housing subsidy.
C food parcels.
D a holiday bonus.

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1.14 The most common cause of fire in a clothing factory is …

A ironing.
B lightning.
C faulty electrical equipment.
D smoking.

1.15 A production-centred supervisor's greatest concern is …

A to make employees work harder.
B to ensure that everyone work for themselves.
C urging employees to produce more.
D keeping the production line straight.

(15 × 1) **[15]**

QUESTION 2

Indicate whether the following statements are TRUE or FALSE by writing only 'True' or 'False' next to the question number (2.1–2.10) in the ANSWER BOOK.

2.1 Pattern grading is a process in which garments of the same colour and style are produced at the same time.

2.2 The operational manager is responsible for the general safety in the factory.

2.3 A lock stitch industrial sewing machine uses a needle and bobbin thread.

2.4 A bar-tacking machine is used to attach belt carriers.

2.5 Delegating means assigning authority and accountability to others.

2.6 Circular blade machines are the most suitable for cutting around corners on thick plies of fabrics.

2.7 A marker can be made of fabric or paper.

2.8 Feeders are used for the hemming of rolled hems in fabrics such as chiffons and stretch nets.

2.9 To prevent slippery floors, one can cover a spillage with newspaper or soil.

2.10 Plastic crates are used to transport work from one operator or operation to another.

(10 × 1) **[10]**

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QUESTION 3

Complete the following sentences by filling in the missing word(s). Write only the word(s) next to the question number (3.1–3.5) in the ANSWER BOOK.

3.1 Workflow is the movement of … and garment parts through the conversion process.

3.2 … is the process of bonding fabric layers with an adhesive and applying heat and pressure for specific amounts of time.

3.3 The … is responsible for general safety and control in the factory.

3.4 … occurs when the fabric is too thin, the temperature is and pressure are too high and the timing is too long.

3.5 The arrangement of departments, workstations and equipment used in the conversion process is called…

(5 × 1) **[5]**

QUESTION 4

Choose a term from COLUMN B that matches a description in COLUMN A. Write only the letter (A–L) next to the question number (4.1–4.10) in the ANSWER BOOK.

COLUMN A		COLUMN B	
4.1	Movement of workers, materials or products	A	wholesaler
4.2	Measured in decibels	B	productivity
4.3	Actual garment parts are joined	C	under pressing
4.4	Movement of materials through the conversion process	D	production
4.5	Buy large import lots	E	workflow
4.6	Making of goods to be sold to customers	F	workstation
4.7	Process or work activity	G	permanent storage
4.8	Indicate whether the firm is performing as expected	H	noise
4.9	Working space per worker	I	production
4.10	Pressing done during the assembly of the garment	J	work delay
		K	circle
		L	transport

(10 × 2) **[20]**

TOTAL SECTION A: 50

SECTION B

QUESTION 5

5.1 Pretend that you are the new quality assurer (QA) in a clothing factory. Study the image of the skirt below and answer the questions.



5.1.1 Define the term *quality*. (3)

5.1.2 Name the TWO distinct types of inspection. (2)

5.1.3 Give FIVE quality standards for stitching. (5 × 2) (10)

5.1.4 Give EIGHT quality standards to bear in mind when sewing the fasteners on a garment. (8 × 2) (16)

5.1.5 Name and briefly describe TWO stitch classes. (2 × 2) (4)

5.2 Briefly discuss the quality standards of the following fasteners:

5.2.1 Buckles

5.2.2 Zippers

5.2.3 Press studs, poppers, hooks and eyes

(3 × 3) (9)

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5.3 Discuss the following special function and finishing machines, and indicate where they were used on the skirt above:

5.3.1 Bar-tacking machine (3)

5.3.2 Blind-hemming machine (3)

[50]

QUESTION 6

6.1 Discuss the equipment used in a factory cutting room under the following headings:

6.1.1 Cutting table (10)

6.1.2 Round knife (2)

6.1.3 Straight knife (2)

6.1.4 Band knife (2)

6.1.5 Die press cutting (4)

6.2 Distinguish between THREE basic types of pressing machines. (12)

6.3 Discuss the advantages of a spreading machine (travelling machine). (4)

6.4 State FOUR requirements of marker planning. (8)

6.5 Differentiate between the following terms to illustrate their meaning:

6.5.1 Strike through

6.5.2 Strike back

(2 × 2) (4)

6.6 What does the term *pilling* mean? (2)

[50]

QUESTION 7

7.1 Explain how the tests regarding the following would be conducted in a laboratory:

7.1.1 Colourfastness

7.1.2 Resistance to sunlight

(2 × 2) (4)

7.2 Explain the meaning of the term *workstation* as it applies to a factory. (3)

7.3 State FIVE ways in which a supervisor can motivate staff members. (5 × 2) (10)

7.4 Name FIVE tasks or activities common to all managers. (5 × 1) (5)

7.5 Working conditions in the workplace area must form part of planning. Briefly discuss each of the following conditions:

7.5.1 Lighting

7.5.2 Noise

7.5.3 Colour

(3 × 3) (9)

7.6 7.6.1 Define the term *communication*. (3)

7.6.2 List EIGHT factors that hamper communication in a workplace. (8)

7.7 List SIX shortcomings of and errors made by leaders. (6)

7.8 Define the term *leadership*. (2)

[50]

TOTAL SECTION B: 150
GRAND TOTAL: 200

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