higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE

INTRODUCTORY FACTORY ORGANISATION N4

14 NOVEMBER 2018

This marking guideline consists of 10 pages.

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SECTION A

QUESTION 1

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

(10 × 2) **[20]**

QUESTION 2

2.1 False
2.2 True
2.3 False
2.4 False
2.5 False
2.6 True
2.7 True
2.8 True
2.9 False
2.10 False

(10 × 2) **[20]**

QUESTION 3

3.1 Hand shears/powered scissors
3.2 Cloth drill/ drill marker
3.3 Lockstitch machine
3.4 Safety officer
3.5 First aid box
3.6 Supervisor
3.7 Glare
3.8 Circle/◯
3.9 Straight knife cutting machine
3.10 Overlocker/serger

(10 × 2) **[20]**

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QUESTION 4

4.1 D
4.2 E
4.3 B
4.4 C
4.5 A
4.6 K
4.7 M
4.8 F
4.9 L
4.10 N

(10 × 2) **[20]**

QUESTION 5

MASLOW HIERARCHY	DESCRIPTION
5.1 Self-actualisation needs	5.1.1 Involves the need to utilise one's talent, abilities and potential (personal development, differs from person to person).
5.2 Esteem needs	5.1.2 The individual's need to evaluate himself positively,✓ the feeling that he has earned the respect of others and is appreciated by others. This involves the need for personal success, achievement, status and self-respect. (Any TWO)
5.3 Social needs	5.1.3 To give and receive love. The need for friendship, love and to be accepted/identified with a specific group.
5.4 Security needs	5.1.4 The need for stability and order, protection against danger and losses and freedom from fear. Eg. Children feel safe in a structured, orderly environment where set rules are maintained and parents act consistently.
5.5 Physiological needs	5.1.5 Relates to the biological survival of the human being. This includes food, water, oxygen and sleep, housing, clothing.

[20]

TOTAL SECTION A: 100

SECTION B

QUESTION 6

6.1 6.1.1

- Cutting tables should be strong and sturdy
- Smooth durable finish
- Correct height for standing operator who lay up fabric or cut out fabrics.
- The need of the factory determines the length of the cutting table or the length of the marker.
- The width of the table is determined by the laying up technique used. (Any 4 × 1) (4)

6.1.2

- Hand shears or powered scissors are normally used when cutting only single or double plies.
- Round knife is used only for straight lines or gradual curves and lower lays of relatively few plies.
- Straight knife used in most cutting rooms which cut garments in bulk. (Any 3 × 1) (3)

6.1.3 Tickets are used to identify each bundle and in themselves play an important role in production planning✓ and control for sewing and finishing sections.✓ (2)

6.1.4 Various marking machines are used to transferring pattern marks√ such as pocket positions,✓ darts✓ and notches✓ to align pattern pieces. (4)

6.2 6.2.1 Hot drill is used to drill a hole in looser woven fabrics, woollens and jerseys✓ which slightly fuse the edges of the hole to keep it open.✓ (2)

6.2.2 Hot notcher make use of a heating element✓ in order that the blade may slightly scorch the fibres both sides to the notch in order to prevent it fraying and disappearing.✓ (2)

6.3

- Face up
- Back up
- Face to face
- Back to back (4)

6.4

- Width of marker same width as the fabric to be cut.
- First place larger pattern pieces, then fit smaller pieces into the gaps.
- Align long straight edges to separate two garment pieces with one cut.
- Pattern parts may touch but not overlap.
- Correct labelling of cut garment parts is essential in sorting and bundling. for operators to identify parts correctly. (5 × 1) (5)

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6.5
- Each machine has one function only
- The machine is bigger and heavier than domestic machines
- The speed is much faster than domestic machines
- Are mounted on a heavy sturdy stand
- Very heavy table, not easy to move
- Thick and smooth table top
- The machine is fitted to the stand with a one horse power motor (single or three phase) (7 × 1) (7)

6.6
- Buttonhole machines
- Bar tacking machines
- Finishing machines (overlockers/serging)
- Blind-hemming machines (4)

6.7 Button sewing machines function with a chain stitch✓ and functions with one needle thread✓ and a spreader.✓ (3)

6.8 Colourfastness of any material is the resistance of its colour✓ to the different agencies to which it may be exposed✓ during manufacturing and use.✓ Colourfastness is assessed in terms of change of shade✓ in the item itself and staining of material closest to it.✓ (5)

6.9
- The size must be appropriate to the number of thickness and weight of the fabric
- Use buttons without defects (smooth appearance)
- Buttons must be durable and not crack or fade (synthetic) or rust (metal)
- High level of colour matching is required
- Detail must be colour fast, not fading in colour or staining adjacent fabric
- Plastic or nylon buttons must not fade, melt or lose its gloss in laundering

(Any 5 × 1) (5)
[50]

QUESTION 7

7.1 Pilling is the formation of tiny balls✓ by the fibre✓ caused by friction.✓ Pilling appears on surfaces where there is friction e.g. sleeves, tummy and bust.✓ Pulling occurs when the fibre catches✓ and the yarn pulls easily.✓ (6)

7.2 7.2.1 Colour fastness – a test fabric sample is stretched over an embroidery hoop✓ and rubbed with a clean, dry white cotton swab.✓ If a faint stain is visible on the swab,✓ the fabric is not colour fast.✓ (4)

7.2.2 Resistance to sunlight – it is tested in a dark cupboard√ where a very strong ultra violet light is burning.✓ The time calculated with the intensity to a certain amount of sunlight hour's exposure.✓ (3)

7.2.3 Resistance to heat – test the influence of damp heat with a steam iron✓ or damp pressing cloth.✓ Compare the test sample with the control sample for any colour changes.✓ (3)

7.3 A series of stitches✓ form a stitching✓ and is used to join layers ✓ or for decorative purposes.✓ (4)

7.4 Appointment refers to the act of installing✓ a person into a certain job/position.✓ (2)

7.5
- The full registered name of the recipient
- Date of birth or ID number
- Dates applicable to time of study, training and employment
- Achievements: academic or technical, cultural, promotion
- Positive characteristics: statements or on a scale
- Done on a letterhead of the institution or firm
- Signed and dated and the authority of the signee (7)

7.6
- Different work areas can be separated.
- The drone of sewing machines can be softened by music over loudspeakers.
- Music must be selected to have a calming effect.
- Rather use noise-diminishing measures than pressers or packers.
- Place offices and areas of confidential information away in enclosed offices where they will be out of the noise created by running machinery. (5)

7.7

ADVANTAGES	**DISADVANTAGES**
• Enrich employees • Improve morale and confidence of employees • Pride in work leads to job satisfaction	• Extra workload on supervisor or foreman. • Employees often leave the firm after being trained. • Employee feels insecure.

(6)

7.8
- Check the stock against the requisition or invoice/delivery note or form available.
- Check to verify that the correct materials had been issued or bought.
- Control omissions by counting items e.g. rolls of fabric, boxes of threads, grosses of buttons.
- Check thoroughly for shortages on metered fabrics, units in trims and other items.
- Enter stock onto sheets or registers to provide necessary documentation for insurance claims. (5 × 2) (10)

[50]

QUESTION 8

8.1
- Write neatly, clearly in own handwriting, preferably in capital letters
- Take care to fill in only relevant information
- Do not make mistakes and erase
- Remember to date and sign all applications
- Attach certified copies of all relevant documents (5)

8.2
- Internal or location advertising on bulletin boards
- External advertisements or news prints
- Recruitment officers at a regional basis and private employment agencies
- Education and training establishments
- On recommendation of other employees (5)

8.3 8.3.1
- Employees must take care of their own safety
- Employees must take care of other persons/employees who may be affected by their acts at work
- Organisational requirements must be followed
- Immediately report any signs of danger
- Be alert to anything which is unusual (5 × 2) (10)

8.3.2
- The safety officer must inspect factory to make sure standards apply to the authorities and safety principles of the organisation
- Must keep an eye on purchases, installation and testing of protective equipment and fire extinguishers
- General safety and control
- Must see to frequent safety inspections and reports
- Analysing of accidents and study of accident and injury reports

(5 × 2) (10)

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8.4 8.4.1



(5)

8.4.2

Planning	Deciding in advance how to allocate available and potential resources in order to fulfil objectives which have been set.
Organising	Assigning tasks, grouping tasks together within sub sections in the organisation.
Directing	Aimed at achieving the organisation goals.
Staffing	Refers to the human resources to ensure that the right person is in the right job.
Controlling	Measurement and correction of performance, monitoring activities, in order to ensure that the company's goals (objectives) are accomplished as planned.

(5)

8.5 Poor communication result in mistakes,✓ anxiety,✓ low morale,✓ inadequate control✓ and aggression.✓ (5)

8.6
- Ensure adequate feedback facilities exist
- Reducing status differentials within the organisation
- Ensuring that all are aware of the importance of good communication
- Employing more than one communications network
- Minimising chains of communication
- Using a variety of media (Any 5 × 1) (5)

[50]

QUESTON 9

9.1 9.1.1 Productivity is based on the relationship between inputs and outputs,✓ is a measure toward and established goal.✓ It is an indicator whether a firm is performing as expected.✓ (3)

9.1.2 Production includes processes required to actually make the products✓ and deliver them to the customer✓ such as production planning,✓ assembly/finishing,✓ and packaging/distribution.✓ (5)

9.2
- Progressive bundle system✓ – bundles of garment parts that are moved from one operation the another operation.✓
- Unit production system✓ – an overhead transporter system is used to move individual units from work station to work station for assembly.✓ (4)

9.3 Work flow is the movement✓✓ of materials and garment parts✓✓ through the conversion process.✓✓ (6)

9.4

SYMBOL	NAME	MEANING
	Circle✓	Process or work activity✓
	Transport✓	Indicates movement of workers, materials or products✓
	Permanent storage✓	Indicates products or materials in storage in a store or warehouse✓
	Temporary storage/delay✓	A delay in the procedure✓
	Inspection✓	Used when comp0onents or products are being inspected for identification, quality or quantity✓
	Combined activity✓	Used when two actions are being carried out simultaneously (at the same time)✓

(12)

9.5 'Work space' are determined by factory laws✓ and they lay down a minimum work space per worker.✓ 'Workstation' consist of equipment and the operator will take the garment through the required operations,✓ including pressing, before it is transported to the next work station.✓ (4)

9.6 Climate consist of room temperature,✓ ventilation✓ and humidity.✓ Temperature - hot stuffy climate conditions are conducive to strain and fatigue✓ and leads to loss of production and quality.✓ Air movement – fans should be installed for air circulation.✓ Adequate fresh air must be supplied either naturally or by air conditions.✓ Temperature should be comfortable and regulated to remain even throughout the day.✓ Relative humidity – air conditions regulate the humidity✓ and should be controlled as far as possible for comfort ability in summer and winter.✓ Humidity is the percentage of moisture in the air.✓.High humidity = hot and dry air,✓ relative humidity = normal/comfortable air✓ and low humidity = wet and moist air.✓ (14)

9.7	9.7.1	Noise – decibel	(1)
	9.7.2	Light intensity – lux	(1)
			[50]

TOTAL SECTION B: 200
GRAND TOTAL: 300

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