higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE

INTRODUCTORY FACTORY ORGANISATION N4

15 October 2020

This marking guideline consists of 9 pages.

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SECTION A

QUESTION 1

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

(10 × 2) **[20]**

QUESTION 2

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

(10 × 2) **[20]**

QUESTION 3

3.1 Safety officer
3.2 Employer
3.3 Organisation
3.4 Staffing
3.5 Vertical communication
3.6 Economic benefit
3.7 Security benefit
3.8 Noise
3.9 Workstation
3.10 Coolness

(10 × 2) **[20]**

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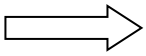
QUESTION 4

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

(10 × 2) **[20]**

QUESTION 5

SYMBOL	DESCRIPTION	MEANING
5.1 	5.2 Circle	Process or work activity
	5.3 Transport	5.4 Movement of workers' materials or products
5.5 	Permanent storage	5.6 Products or materials in storage
	5.7 Inspection	5.8 Components or parts are being inspected for identification, quality or quantity
5.9 	Combined activity	5.10 Two actions are being carried out simultaneously.

(10 × 2) **[20]**

TOTAL SECTION A: 100

SECTION B

QUESTION 6

6.1 Fusing is the process of bonding fabric layers✓ with an adhesive✓ by applying heat✓ and pressure✓ for a specific amount of time.✓ (5)

6.2
- Each machine has one function only.
- The machine is heavier and larger than a domestic machine.
- The speed is much faster than a domestic machine.
- It is mounted on a heavy, sturdy table.
- The table is very heavy and the table top is thick and smooth and not easy to move.
- The machine is fitted to the stand with a heavy one-horsepower motor.

(Any 5 × 2) (10)

6.3 6.3.1 There are two kinds, namely straight-stitch machines✓ where the needle moves in a straight line forward or backward✓ and zigzag machines✓ where the needle swings left and right from the stitching line.✓ A lock stitch is formed with a needle and a bobbin thread.✓ The stitch is locked in the centre of the fabric pile.✓ (6)

6.3.2 Single-thread chain-stitch machines are used for decorative stitching such as saddle stitching.✓ Double-thread chain-stitch machines are used for the seams of ladies' and men's trousers,✓ more stretchable/ elastic✓ and stronger.✓ (4)

6.3.3 Multineedle machines operate with dual needles✓ and could have two bobbins✓ (lock stitch) or two loopers/spreaders✓ (chain stitch). Chain-stitch double needles are usually used on denim wear.✓ Multineedle machines used for elasticising shorts✓ operate with a roller feed and folder✓ which passes the elastic through the hem or casing of the garment.✓ (7)

6.4 Button-sewing machines operate with a chain stitch✓ and functions with one needle thread and spreader.✓ The button is held with a spring clamp✓ and able to hold different sizes.✓ Two- or four-hole buttons✓ can be sewn with adjustment or can be attached hooks and eyes,✓ press studs✓ and buttons with shanks.✓ (8)

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6.5

METHOD	PACKAGE	EXAMPLES OF TEXTILE FABRICS
Rolls	6.5.1 Open fabric rolled as a single ply directly onto a disposable, tubular cardboard core	6.5.6 Thin lightweight fabrics and satins
	6.5.2 Tubular knitted fabric rolled	6.5.7 Knits for sport shirts of T-shirts
Cuttles	6.5.3 Double-folded fabric folded accurately backwards and forwards 80 – 90 cm) with the end of the piece being wrapped around the pile of folds or cuttles	6.5.8 Check fabrics, bed linen and T-shirt (tubular knits) material
Bolts	6.5.4 Folded fabric rolled onto a disposable, flat board approximately a centimetre thick	6.5.9 For lace, medium to heavyweight fabrics, woollens, unbleached calico and lining fabrics
Hanging	6.5.5 Some velvets may be delivered wound on specially constructed frames to prevent the pile becoming crushed	6.5.10 Velvets

(10 × 1) (10)
[50]

QUESTION 7

7.1
- Decide exactly what must be conveyed.✓
- Formulate the message carefully.✓
- Keep the message simple✓ and to the point.✓
- Get feedback✓ to ensure that the message was received.✓
- Try to formulate positive messages.✓
- Remember that people have different values.✓
- Maintain eye contact.✓
- Listen attentively.✓ (10)

7.2
- Democratic leader:✓ Accepts group decisions,✓ seeks the opinion of subordinates and strives for mutual understanding,✓ shares decision making with members of the group,✓ allows the group to make practical decisions but retain authority to make major decisions,✓ usually presents the problem, asks for advice (or suggestions/consult his members) and then makes a decision✓ (1 + any TWO)

- Autocratic leader:✓ Usually makes a decision and announces it, showing little concern for the opinions of subordinates regarding issues,✓ task-orientated✓ (concentrate on the task to be completed rather than on the feelings and needs of their subordinates),✓ one-way communication with little or no scope for feedback,✓ work group becomes very depended upon the leader and will be unable to act independently✓ (1 + any TWO)

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- Dictator:✓ Manages by the rule book without exceptions,✓ subordinates are permitted little freedom or scope for initiative,✓ advantages in terms of consistency with each person knowing exactly where they stand,✓ leader tends to be inflexible and creates resentment in the workforce✓
  (1 + any TWO)

- Free-rein/laissez-faire leader:✓ Most informal type of leadership style,✓ sets goals for subordinates and clears parameters (leads the way/sets goals) within which they should work,✓ once objectives are established, the reins of control are dropped and the subordinate is left alone to achieve the objects✓ (1 + any TWO)

(4 × 3) (12)

7.3 Job specification refers to a specific job and includes the name of the position e.g. cutter, marker or machinist,✓ the qualification necessary for the job,✓ salary or wages,✓ the age group if relevant✓ and benefits to the job,✓ while job description refers to the series of activities concerning the specific job✓ or a clear statement of what is expected of the worker in that specific job.✓
(3 + 3) (6)

7.4 Motivation refers to a group of factors✓ which determine and direct the behaviour of an organisation.✓ It impels or drives the individual to action✓ in an attempt to achieve a particular goal.✓ (4)

7.5 The aim is to reduce the local effects of heat;✓ to relieve pain;✓ to prevent infection of the affected area;✓ to replace fluid loss;✓ to lessen shock;✓ and to remove severely burned casualty to hospital as quickly as possible.✓ (6)

7.6
- Hazardous workstation
- Clutter and untidiness (fire/fall)
- Dangerous processes (machines)
- Work at high speed (fitted with shields for the needle/blade/flywheel)
- Surfaces (slippery floor, tables with notches out)
- Snagged cables (6)

7.7
- Arrange safety programmes for employees.
- Contribute posters and notices of awareness (safety signs).
- Motivate staff through competitions and rewards.
- Monitor safety standards regularly to improve the safety standards.
- Ensure clear exit routes from all areas.
- Ensure that an efficient emergency plan is in place. (6)

[50]

QUESTION 8

8.1
- Ensure that adequate feedback facilities exist.
- Reduce status differentials within the organisation.
- Ensure that all are aware of the importance of good communication.
- Employ more than one communication network.
- Minimise chains of communication.
- Use various media. (6)

8.2 An employee is a person recruited,✓ selected✓ and appointed✓ to do a specific job✓ or set of operations✓ in exchange for a predicated remuneration.✓ (6)

8.3

BENEFIT	EXAMPLE OF BENEFIT
Economic✓	Holiday bonus, profit bonus /dividend sharing, travel allowance, transport to/from work (Any TWO)
Security✓	Medical fund, housing subsidy, group insurance policy (Any TWO)
Social✓	Recreation clubs, tea club, canteen facilities, subsidised meals (Any TWO)

(3 × 3) (9)

8.4
- Lack of stock delivered in time
- Upset staff due to uncertain, unsafe and poor working conditions
- Poor communication between management and staff or amongst staff
- Emotional effects of workers
- Poor motivation of workers
- Poor trained staff
- Poor planning in plant layout
- Poor transferring of information
- Unsafe machinery and equipment not in proper working order
- Lack in workflow, work-study or time-study (Any 5 × 2) (10)

8.5
- Plant layout
- Material handling
- Production system
- Operator skills training (4)

8.6
- The flow must progress without breaks because the machinist should not sit idle and wait for work.
- Bottlenecks must not be formed.
- Crossing of bundles must not be formed as the flow must be in a straight line.
- Operations must follow each other without time lost by unnecessary handling.
- Bundling must be done correctly for easy flow.
- The transportation system must be efficient. (Any 3 × 2) (6)

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8.7 Motion economy means to develop the best method to increase efficiency and workflow by making each operation faster to complete,✓ reduce fatigue factors and stress on body parts,✓ utilise new work aids and equipment,✓ improve quality✓ and reduce the training time required for a specific operation.✓ (5)

8.8
- Height of the work surface
- Placement and reach required
- Forced posture
- Design and relationship of all parts (4)

[50]

QUESTION 9

9.1
- It must be easily accessible by the operator.
- It must be easy to handle.
- Displays like dials or scales should be located near the controlling device.
- It must be colour-coded for easy recognition and association.
- Delicate devices should be used for delicate fine adjustments and stronger devices for heavier work.
- The operator should not bend, stretch or get up to reach the control. (6)

9.2 The employee will be able to work faster,✓ cut down on accidents and spoiled work✓ and the employer will benefit by less time loss,✓ higher production✓ and better quality products.✓ (5)

9.3
- Colour can create a feeling of coolness and warmth.
- Colours in red to yellow spectrum are warm colours.
- Colours in blue to green spectrum are cool colours.
- A factory with a hot atmosphere can be painted in cool mat colours e.g. light green or blue.
- Colours also create different moods: grey and purple will create a sombre feeling and lead to depression.
- Lemon and pink will create a softer lighter mood. (Any 3 × 2) (6)

9.4 Hot stuffy conditions are conducive to strain and fatigue✓ which lead to loss of productivity✓ and quality.✓ (3)

9.5
- Superimposed class SS: Superimposing the edge of one piece of material to another
- Lapped seam class LS: Lapping two pieces of material to join interfacing fabrics
- Bound seam class BS: Formed by a narrow strip of fabric encompassing the cut edge of one or more plies/an edge of material bound by another
- Flat seam class FS: Two pieces of fabric abutted together with stitched/fabric edges not overlapping (4 × 2) (8)

9.6
- Sturdy
- Suited to the type of garment and position on the garment
- Seam width suitable for fabric, garment and seam type
- Stitching straight and equidistant to the seam edge
- Thread suitable for the colour, fabric weight and fibre content
- All applicable seam and stitching quality standards such as distortion, skipped stitches, thread breakage, slippage and yarn severance

(Any 4 × 2) (8)

9.7
- Hem width must be even.
- All stitch and stitching quality standards must be applied.
- The hem must be flat, not wrinkled.
- Stitching must not be visible on the right side.
- It must be correctly and well pressed.
- Stitching must be secure at the beginning and end.
- The hem must hang evenly. (Any 3 × 2) (6)

9.8
- Subjected to the same laundry-care process
- Colourfast – colour and yarn must match that of the garment
- Attached securely with all applicable stitch and stitching quality standards
- Neat appearance, no snagging or shrinkage
- In proportion and harmony with the garment
- Suitable for the type of opening, type of garment and position on the garment
- All stitching and stitch quality standards applicable
- Buttons sliding through buttonholes. (Any 4 × 2) (8)

[50]

TOTAL SECTION B: 200
GRAND TOTAL: 300

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