higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE

INTRODUCTORY FACTORY ORGANISATION N4

28 MAY 2019

This marking guideline consists of 12 pages.

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SECTION A

QUESTION 1

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

(10 × 2) **[20]**

QUESTION 2

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

(10 × 1) **[10]**

QUESTION 3

3.1 Under pressing
3.2 Top/Final pressing
3.3 Ruffler/Gathering feet
3.4 Workflow
3.5 Binders
3.6 Final selection
3.7 Delegating
3.8 Training
3.9 On-the-job training
3.10 Selection

TWO marks per answer; where there is more than ONE option for an answer, any ONE of the answers is acceptable. (10 × 2) **[20]**

QUESTION 4

4.1 K
4.2 E
4.3 A
4.4 J
4.5 B
4.6 L
4.7 N
4.8 D
4.9 H
4.10 G
4.11 O
4.12 Q
4.13 F
4.14 I
4.15 M

(15 × 2) **[30]**

QUESTION 5

	FUNCTION	DESCRIPTION
5.1	Planning	Deciding in advance how to allocate available and potential resources✓ in order to fulfil objectives which have been set.✓
5.2	Organising	A structure which makes it possible to attain✓ the planned objectives of the business.✓
5.3	Staffing	Human resources to ensure that the right person✓ is in the right job.✓
5.4	Leading	Activities are aimed✓ at achieving the organisation's goals.✓
5.5	Controlling	Measurement and correction of performance, monitoring activities,✓ in order to ensure that the company's goals are accomplished as planned.✓

(5 × 4) **[20]**

TOTAL SECTION A: 100

SECTION B

QUESTION 6

6.1 A marker is a diagram✓of a precise arrangement of pattern pieces✓ for the sizes of a specific style ✓that are to be cut out at once.✓ The pattern set has been corrected✓ and perfected and contains every pattern piece✓ required to complete the garment.✓ (7)

6.2 Advantages:

- Labour saving.✓ Only one attendant needed for these automatic machines✓
- Accurate laying-up of the machine✓ if correctly mounted and programmed✓

Disadvantages:

- Expensive✓✓
- Requires special tables for laying-up✓✓
- Mechanical machines to be pushed manually are heavy.✓ Two well-trained workers are often more effective and faster.✓
- Fabric is more stretched than in manual laying-up.✓ Thus, a longer relaxed period is needed for knits and loosely woven fabric.✓
- Less accurate than manual laying-up✓ with striped and checked fabrics.✓

(Any TWO disadvantages 4 × 2) (8)

6.3

TYPE OF FABRIC	HINT
One-way designs	• All patterns must be laid in the same direction.✓ Necessary to ensure the direction is the same; must lay face up.✓ • Percentage of waste will be much higher.✓ The direction in which the pile is to be laid must be clearly marked on the lay.✓ • The direction of the pile should always be from top to bottom,✓ except for pile fabrics, which are always from bottom to top.✓ (Any TWO)
Velvet	• Only 4–6 layers are open laying✓ and face up✓
Leather	• Single layer,✓ cut on the wrong side with a rotary blade✓ • Open lay,✓ back up✓ (Any TWO)
Checks	• Normally planned directly onto the cloth✓ in order to match the checks across the garment✓ • The forepart and back laying side by side✓ at the end of the ply in order for the checks to match across the body of the garment✓ • Open lay,✓ face up✓ (Any TWO)
Stripes	• Necessary to start the lay on the same stripe/colour.✓ Check spikes are pushed through the fabric to keep it in position.✓ • Cloth clamps are also used.✓ The simplest way is to plan open lays✓ • with double patterns✓ directly on the cloth✓ (Any TWO)
Fur fabrics	• Fabric lay only one or two layers.✓ Ensure nap is in one direction.✓ If not, it will cause a difference in shading.✓ Fur is mostly a narrow fabric and requires open laying✓ and faced up✓ because it will slip during cutting.✓ (Any TWO)

(6 × 2) (12)

6.4

- Temperature.✓ The applied heat generated by the machine.✓
- Time.✓ This is the time between closing and opening the bucks press.✓
- Pressure.✓ It is necessary to apply equal pressure all over the component.✓
- Peel strength.✓ This test checks the strength of the bond between the top cloth and the interlining;✓ the force to pull them apart.✓ (Any ONE)
- Dry-clean and/or wash.✓ It is recommended that production garments should be subjected to the appropriate cleaning methods on a regular basis.✓ (5 × 2) (10)

6.5
- Face up
- Back up
- Face to face
- On the fold
- Open laying up (Any 3 × 1) (3)

6.6A Rolls
- Open fabric rolled as a single ply directly onto a disposable, tubular cardboard core
- Tubular knitted fabric rolled
- Thin lightweight fabrics and satins
- Knits for sport shirts or T-shirts. (Any ONE type of fabric for only ONE mark.)

Cuttles
- Double-folded fabric is folded accurately backwards and forwards (80–90 cm). The end of the piece is wrapped around the pile of folds or cuttles.
- Check fabrics, bed linen and T-shirt (tubular knits) material.
(Any ONE type of fabric for only ONE mark.)

Bolts
- Folded fabric is rolled onto a disposable, flat board, approximately a centimetre thick.
- For lace, medium to heavyweight fabrics, woollens, unbleached calico and lining fabrics. (Any ONE type of fabric for only ONE mark.)

Hanging
- Some velvets may be wound on specially constructed frames to prevent the pile becoming crushed.
- Velvets. (10)

USE EITHER 6.6A OR 6.6B WHEN MARKING 6.6.

6.6B

METHOD	PACKAGE	EXAMPLES OF TEXTILE FABRICS
Rolls	6.6.1 Open fabric rolled as a single ply directly onto a disposable, tubular cardboard core✓	6.6.3 Thin lightweight fabrics and satins✓
	6.6.2 Tubular knitted fabric rolled✓	6.6.4. Knits for sport shirts T-shirts✓
Cuttles	6.6.5 Double-folded fabric is folded accurately backwards and forwards (80–90 cm). The end of the piece is wrapped around the pile of folds or cuttles.✓	6.6.6 Check fabrics, bed linen and T-shirt (tubular knits) material✓
Bolts	6.6.7 Folded fabric is rolled onto a disposable, flat board, approximately a centimetre thick✓	6.6.8 For lace, medium to heavyweight fabrics, woollens, unbleached calico and lining fabrics✓
Hanging	6.6.9 Some velvets may be wound on specially constructed frames to prevent the pile becoming crushed.✓	6.6.10 Velvets✓

(10)
[50]

QUESTION 7

7.1
- Misunderstanding.✓
  The individual understanding differently to what was meant.✓✓
- Status and learning.✓
  The sender could be a person who is much superior in education, experience and background compared with the receiver.✓✓
- Distance.✓
  The closer to the receiver the sender is, the better the receiver will understand. Receiver will hear the information.✓✓
- Noise.✓
  Causing the message to come through badly. If there is too much noise, parts of the important message being conveyed could be lost.✓✓
- Attitude.✓
  The attitude adopted by the receiver to the sender.✓✓
- Language.✓
  The receiver does not quite understand the language used by the sender.✓✓
- Cultural barriers.✓
  These occur often. In the Zulu culture, for instance, it is seen as a sign of respect to avoid eye contact, but in the Western culture it may indicate dishonesty.✓✓
- Emotional state.✓
  Moods are going to influence the way in which people receive messages. If people are under stress, their objective judgement could be impaired.✓✓

(Any 6 × 3) (18)

7.2 It is the art or process of influencing people✓ so that they perform assigned tasks willingly and in an efficient and effective manner.✓ Leadership therefore inspires and motivates✓ the workforce. (3)

7.3
- Slack when having to enforce discipline
- Not enough initiative
- Too little patience
- Become nervous and excited under pressure
- Overeager to argue
- Insufficient trade knowledge
- Cannot complete a task in the given time
- Provides insufficient training
- Adopts an attitude of favouritism (9)

7.4
- He/she must inspect factory to make sure standards in respect of the authorities and safety principles of the organisation are applied.
- He/she must keep an eye on purchases, installation and testing of protective equipment and fire extinguishers.
- General safety or control.
- He/she must see to frequent safety inspection and reports.
- He/she must analyse accidents and study accident and injury reports.
- Planning and administration of safety training.
- He/she must serve as a link between the organisation and private government bodies in respect of all injuries, accidents and physical disability of staff.
- All records must be up to date.
- Accident record keeping is important, not only to comply with the legal requirements, but also to ensure details are available for possible insurance claims.
- It can also be of assistance when identifying where a need for training exists. (Any 5 × 1) (5)

7.5
- Notify the trained first-aid staff.
- Evacuate onlookers.
- Assess whether the person will need to be taken to hospital and call for ambulance.
- Give exact details of the nature of the accident and the symptoms the patient is displaying.
- The address, name and phone number.
- If you are treating the person, do not move the patient unless he/she is in a dangerous situation.
- Remain calm.
- Make the patient as comfortable as possible and talk to him/her.
- If the accident is electrical in nature, make sure that the electricity is turned off. (Any 7 × 1) (7)

7.6 Rubbish – Accumulation of cartons and packing materials are potential starting points of fire.✓

Electricity – is a source of heat and if a fault develops in the wiring, it heaps up and this can start a fire.✓

Smoking – Wherever cigarettes and matches are used, there is a chance of fire.✓

Flammable goods – Be aware if items such as paint, adhesives, oil or chemicals are in storage or in use on the premises. (4 × 2) (8)

[50]

QUESTION 8

8.1

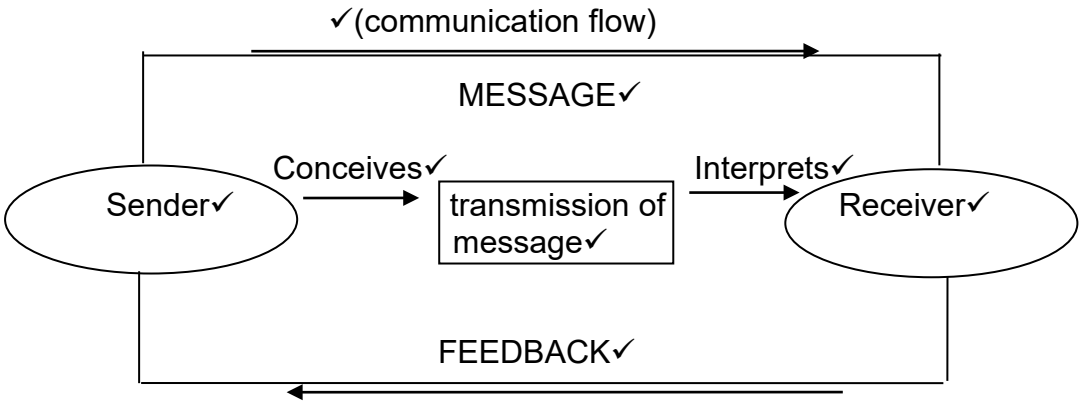
	PRODUCT LAYOUT	PROCESS LAYOUT
Advantages	• Easier supervision • Less handling of materials • Inspection simplified • Minimal through time • Maximum use of semiskilled labour (Any 4 × 1)	• Flexible system • Higher machine utility • Skilled workers necessary • Breakdowns don't immobilise whole production • Scope for specialised supervision (Any 4 × 1)
Disadvantages	• High volume of work required • Changes cannot be readily executed • Breakdown of one stops the whole flow	• Intensive pre-planning • Supervision and control more difficult • Higher expenditure on raw materials • Buffer stock required • Not possible in a CMT factory (Any 3 × 1)

(14)

8.2 A production system is an integration of materials handling,✓ production processes,✓ personnel✓ and equipment✓ that directs workflow✓ and generates finished products.✓ (6)

8.3
- Preparation✓ – all the functions where garment parts are not yet assembled (after cutting), fused, marked, ticketed and bundled.✓ Gathering, pleating, darts, overlocking of open single seams, joining facing seams, completing small parts such as pockets.✓
- Assembly✓ – actual garment parts are joined.✓ Close centre back seam, insert zip, join side seams, close shoulder seams, insert sleeves, attach collars and waistbands, etc.✓
- Finishing✓ – actions of completing once the garment is assembled.✓ Buttonholes, sew buttons, hem, trimming of loose threads, final pressing, inspection and packing.✓ (3 × 3) (9)

8.4



(8)

8.5 Intelligence,✓ technical knowledge,✓ observation,✓ integrity✓ and patience.✓ He/she must be tactful and patient in dealing with the workers.✓ He/she must have a high degree of loyalty and integrity.✓ He/she must be interested in people.✓ (8)

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

[50]

QUESTION 9

9.1 9.1.1 Sound (hear)✓ – useful for warnings and alarm purposes.✓ The advantage of sound signals is that operators are forced to listen✓ and immediately give their attention if there is a breakdown or malfunction.✓ Sound signals command in a stronger way than signals.✓ Verbal messages/information by means of intercom systems.✓ (6)

9.1.2 Sight (see)✓ – (vision). Blinking lights display the warning signal visually✓ to inform the operator of danger or malfunction.✓ Sight signals are not as effective as sound,✓ because the operator may not see the light if he is busy.✓ Using diagrams on notice boards.✓ (6)

9.1.3 Touch (feel)✓ – used to communicate information by touching✓ the controls on the machine by the operator.✓ (3)

9.2
- Keep aisles and alleys clear; remove all loose objects laying around.
- Keep own workstation clean and tidy.
- Wipe oil off floors or cover with sawdust.
- Report broken/damaged or open floors, which may be a safety risk.
- Do not walk or stand on marked-off alley or conveyer belt.✓ (5)

9.3 9.3.1
- High level of colour matching is required.
- Weight of zipper must be compatible with that of garment fabric.
- If made from steel, no rusting must appear.
- Detail must be colour fast, not fading in colour or staining adjacent fabric. (3)

9.3.2
- Metal buckles must not rust or tarnish, metal must not peel off.
- Plastic and nylon buckles must not fade, melt or lose their gloss in laundering. (3)

9.3.3
- Can be made of plastic, steel or brass with a design on the cap.
- Use fasteners without defects.
- Parts of studs must fit into each other securely. (3)

9.4

Class 100✓	Chain-type stitches✓	
Class 200✓	Hand-formed stitches✓	
Class 300✓	Lock stitches✓	
Class 400✓	Multithread chain stitches/lock-chain stitches✓	
Class 500✓	Overedged chain stitches✓	
Class 600✓	Flat seam/covering stitches✓	(6 × 2) (12)

9.5

KINDS OF HEMS	WIDTH	USE OF HEM
Rolled hem✓	3–5 mm✓	• Soft, sheer fabrics, hem is sewn with a hemming foot. • Circular skirt, frills, lingerie (Any ONE)
Single hem✓	3–5 cm✓	• Medium and heavyweight fabric of A-line skirts. • Lightweight fabrics of blouses and dress. One fold only, often edge finish is required. (Any ONE)
Plain hem✓	2–5 cm✓	• 2 cm for flare skirts, 3–5 cm for straight skirts. • Hem has two folds, one or two stitching lines (Any ONE)

(3 × 3) (9)

[50]

TOTAL SECTION B: 200
GRAND TOTAL: 300

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