higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE

INTRODUCTORY FACTORY ORGANISATION N4

10 November 2022

This marking guideline consists of 10 pages.

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QUESTION 1

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

(2 × 10) **[20]**

QUESTION 2

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

(2 × 10) **[20]**

QUESTION 3

3.1 Marker
3.2 Grading
3.3 Spreading
3.4 Straight knife
3.5 Binders
3.6 Pilling
3.7 Stitching class
3.8 Rolled hem
3.9 Pressing/ironing
3.10 Verbal communication

(2 × 10) **[20]**

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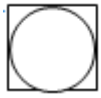
QUESTION 4

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

(2 × 10) **[20]**

QUESTION 5

	SYMBOL	DESCRIPTION	MEANING
5.1		Circle✓	Process or work activity✓
5.2		Transport✓	Movement of workers, materials or products✓
5.3		Permanent storage✓	Indicates products or materials in storage✓
5.4		Combined activity✓	Used when two actions are being carried out simultaneously✓
5.5		Inspection✓	Used when components or parts are being inspected for identification, quality or quantity✓
5.6		Delay✓	A delay in the procedure✓

(2 × 6) **[12]**

QUESTION 6

6.1
- Must be adequate and comfortable
- Machinery and equipment must be well kept and serviced
- Modern and up-to-date machines and attachments in use
- All machines to be handled according to the manufacturer's specifications

(Any 2 × 2) (4)

6.2
- Keep aisles and alleys clear. Remove all loose objects lying 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 on marked off alley or conveyer belt. (Any 2 × 2) (4)

[8]

TOTAL SECTION A: 100

SECTION B

QUESTION 7

7.1 **Advantages:**
- Labour saving: Only one attendant is 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
- Less accurate than manual when laying up with striped and checked fabrics (Any 2 × 3)

(4 + 6) (10)

7.2

Types	Cutting action of blade	Advantages	Disadvantages
Straight knife✓	Straight vertical blade moving up and down✓	Variable speed button for different types of fibre,✓ a versatile machine,✓ portable,✓ cheaper than a band knife,✓ easy to maintain✓ (Any TWO)	The bigger the motor, the heavier the machine✓
Round knife✓	Circular blade, circular action✓	Portable,✓ easy to maintain✓ very fast on straight lines✓ (Any TWO)	Can't cut high lays as the blade does not strike all the plies simultaneously at the same point as the vertical blade✓

(5)

(5)

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

7.4
- Feeders✓ – used for feeding elastic, lace and bias strips from large rolls onto the presser foot of the machine.✓
- Folders✓ – these attachments have grooves for folding waistbands for skirts and pants, and neck bands and cuffs for t-shirts.✓
- Binders✓ – used for folding and attaching of bias strips.✓
- Hemming feet✓ – for hemming of 3–5 mm and rolled hems up to 6 cm. This gives an even and neat fold for stitching.✓
- Rufflers or gathering feet✓ – retard the feeding action, thus gathering the fabric.✓
- Point and belt turners✓ – to turn belts and push out collar points.✓
- Stitching and edge guides✓ – straight and curved machine guides to stitch accordingly.✓
- Knee lifter✓ – attachment to the machine for lifting the machine pressure foot using the lifter at knee position whilst both hands are guiding, folding and aligning fabric.✓ (Any 2 × 5) (10)

7.5 7.5.1
- Knitted fabric
- Fur fabrics
- One way designs (Any ONE)

7.5.2 Leather

7.5.3
- Simple striped fabrics
- Plain fabrics (Any ONE)

7.5.4 Wide fabrics

7.5.5
- Narrow fabrics
- Asymmetrical stripes or checks
- Pile fabrics
- Leather fabrics (Any ONE)

(5 × 1) (5)

7.6
- Importers✓ – materials not locally available can be obtained if the quantity required is large.✓ Importers usually redistribute pieces cut from the large bulk to manufacturers and wholesalers.✓
- Wholesalers✓ – buy large import lots or production bulk from local fashion fabric manufacturers and break it up into smaller lots for resale.✓ Shops and retailers buy from wholesalers.✓
- Manufacturers✓ – clothing manufacturers can buy fabric directly from textile manufacturers✓ (3 × 3) (9)

7.7
- Month end
- End of the financial year (Any ONE) (1)

[50]

QUESTION 8

8.1
- The size must be appropriate to the thickness and weight of the fabric.
- Use buttons without defects (smooth appearance).
- Buttons must be durable and must 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 and nylon buttons must not fade, melt or lose their gloss in laundering. (6)

8.2
8.2.1 3–5 mm
8.2.2 3–5 cm
8.2.3 2–5 cm

(2 × 3) (6)

8.3
- Must be sturdy
- Suited to type of seam and the position in the construction process
- Stitching type must be suitable for the fabric
- Stitching must be straight and equidistant to the seam edge
- Thread must be suitable to the colour, fabric weight and fibre content
- Stitching must be secure at beginning and end
- Tension must be correct (2 × 7) (14)

8.4
- Class SS (superimposed)
- Class LS (lapped seam)
- Class BS (bound seam)
- Class FS (flat seam) (4)

8.5 8.5.1
- Make sure electrical cables or wires never run across walkways.
- Never handle electrical plugs with wet hands.
- Never use faulty or damaged electrical equipment.
- Equipment not in working condition should be marked 'out of order'.
- Do not overload electrical sockets.

8.5.2
- All machines must be handled according to the manufacturer's specifications.
- All moving parts such as needles and blades must be shielded.
- Report faulty machinery.
- Equipment not in working condition should be marked 'out of order'.
- Do not wear loose hanging clothing or hair, which can be caught in belts or flywheels.

8.5.3
- Report broken/damaged or open floors, which may be a safety risk.
- Watch out for damaged floor coverings or torn carpets as it is easy to trip over them.
- Clean up spills as soon as they occur.
- Wipe oil off floors or cover with sawdust (salt or sand), which absorbs the oil, before cleaning the area.
- Use wet floor signs to warn people of danger.

8.5.4
- Keep aisles and alleys clear of obstructions.
- Remove all loose objects lying around.
- Do not walk or stand on marked off alley or conveyer belt.

8.5.5
- Keep your own workstations clear and tidy.
- Keep your hands away from all moving parts.
- Ensure that all equipment at workstation is serviced regularly.

(Any 2 × 5) (10)

8.6
- Employees must take care of their own safety.
- They should 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 that is unusual.

(2 × 5) (10)

[50]

QUESTION 9

9.1
- Write neatly and clearly in your own handwriting when filling in a job application form.
- 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. (2 × 5) (10)

9.2 **Advantages:**
- Attract newcomers (recruits)
- Provide for succession
- Introduction of new techniques, new machines
- Save time on completing construction processes
- Higher production for the company
- High-quality product delivered (Any FIVE)

Disadvantages:
- Time and money spent on training
- Material spend and equipment used during training
- Extra staff used for training
- Trained staff leave the company after being trained, which is a loss to the company
- Low productivity
- High absenteeism
- High staff turn-over (Any FIVE)

(5 + 5) (10)

9.3
- Self-actualisation needs✓ – personal development✓/involves the need to utilise one's talent, abilities and potential✓
- Esteem needs✓ – the need of personal success, achievement, status and self-respect✓
- Social needs✓ – the need for friendship, love and to be accepted and identified with a specific group✓
- Security needs✓ – the need for stability and order, protection against danger and losses and freedom from fear✓
- Physiological needs✓ – relate to the biological survival of the human being✓ (2 × 5) (10)

9.4

FUNCTION	DESCRIPTION
Planning✓	Deciding in advance how to allocate available and potential resources in order to fulfil objectives that have been set✓
Organising✓	A structure that makes it possible to attain the planned objectives of the business✓
Staffing✓	Human resources to ensure that the right person is in the right job✓
Leading✓	Both activities are aimed at achieving the organisation's goals✓
Organising✓	A structure that makes it possible to attain the planned objectives of the business✓

(2 × 5) (10)

9.5
- Ensure adequate feedback facilities exist
- Reduce status differentials within the organisation
- Ensure 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 (6)

9.6
- Vertical communication
- Horizontal communication
- Diagonal communication
- Grapevine (4)

[50]

QUESTION 10

10.1 To develop and check production standards,✓✓ the time required to complete each element,✓✓ and the rate the operator is working✓✓ (2 × 3) (6)

10.2
- Easier supervision
- Less handling of materials
- Inspection simplified
- Minimal through time
- Maximum use of semi-skilled labour (2 × 5) (10)

10.3
- Intensive pre-planning
- Supervision and control more difficult
- Higher expenditure on raw materials
- Buffer stock required (2 × 2) (4)

10.4 Sight✓ – useful for warnings and alarm purposes.✓ Blinking lights display the warning signal visually✓ to inform operator of danger of malfunction.✓ Using diagrams on notice boards.✓
Sound✓ – Operators are forced to listen✓ and immediately give their attention.✓ Verbal messages by means of intercom system.✓ Sound signals command in a stronger way than sight signals.✓
Touch✓ – used to communicate the information by the operator's✓ touching✓ the controls✓ on the machine.✓ (5 × 3) (15)

10.5 Neatness assures that everything is on a specific place.✓ This will prevent✓ unnecessary accidents.✓ Hygiene assures that areas are clean✓ and safe to work✓ in or with. It is the responsibility of the management✓ to ensure that the factory as a whole is cleaned.✓ It is also the responsibility of the workers✓ to keep the standard of hygiene high✓ and to keep the transportation alleys clear.✓ (10)

10.6
- Keep aisles and alleys clear and remove all loose objects lying 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)

[50]

TOTAL SECTION B: 200
GRAND TOTAL: 300

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