







# TEXTILE WET PROCESSING



**ASSESSMENT PACKAGE** 

National Vocational Certificate Level 3

Version 1 - November, 2019





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**Document Version** November, 2019 **Islamabad, Pakistan** 

# TEXTILE WET PROCESSING



ASSESSMENT PACKAGE
National Vocational Certificate Level 3

Version 1 - November, 2019

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Candidate Details	Name:
	Registration/Roll Number:
Guidance for Candidate	To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):  1. Assessment Task 1: Follow Dyeing Plan for woven fabric dyeing by exhaust process specified by your assessor correctly  2. Assessment Task 2: Prepare and ensure woven fabric dyeing parameters for exhaust dyeing specified by your assessor correctly using appropriate methods  3. Assessment Task 3: Identify shade by using shade matching method for woven fabrics  4. Assessment Task 4: Perform Dyeing specified by your assessor correctly using appropriate methods  5. Assessment Task 5: Verify quality of woven fabric dyeing by exhaust process  6. Assessment Task 6: Prepare production report for woven fabric dyeing by exhaust process
	And complete: 7. Knowledge assessment test (Written) 8. Portfolios at the time of assessment
	During a practical assessment, under observation by an assessor, you will complete:
	Assessment Task 1
Minimum Evidence	<b>Performance Criteria 1:</b> Receive RFD (Ready for Dyeing) fabric for exhaust dyeing according to program sheet.
Required	Performance Criteria 2: Receive shade standards for shade matching
	<b>Performance Criteria 3:</b> Arrange material for dyeing process as program sheet.
	Performance Criteria 4: Interpret specs for exhaust dyeing process.

**Performance Criteria 1:** Instruct exhaust dyeing machine operators for dyeing process according to given parameters.

**Performance Criteria 2:** Calculate amount of dyes and chemicals as per given in recipe for production as per dyeing plan.

**Performance Criteria 3:** Execute dyes and chemical preparation for exhaust dyeing at production level.

**Performance Criteria 4:** Set machine parameters for exhaust dyeing process.

**Performance Criteria 5:** Verify process parameters for dyeing as per dyeing plan.

**Performance Criteria 6:** Supervise safety precautions as per job requirement.

# **Assessment Task 3**

**Performance Criteria 1:** Verify shade standards for shade matching.

**Performance Criteria 2:** Match shade as per standards and make corrections if required.

# **Assessment Task 4**

**Performance Criteria 1:** Arrange material for dyeing process as program sheet.

**Performance Criteria 2:** Execute production on set parameters according to program.

## **Assessment Task 5**

**Performance Criteria 1:** Verify quality parameters during production for matching with standards.

**Performance Criteria 2:** Inspect physically dyeing process to maintain quality & in-time production

**Performance Criteria 3:** Take corrective actions for any issues concerned with quality according to requirement.

#### **Assessment Task 6**

**Performance Criteria 1:** Verify production register maintain by machine operators shift-wise.

**Performance Criteria 2:** Calculate and Record efficiency of every machine for evaluating machine production progress.

Performance Criteria 3: Prepare shift production report.

Performance Criteria 4: Prepare reports for faults occur during shift.

#### Portfolios required at the time of assessment (if any) for

<u>Performance criteria 1 for the evaluation of portfolio:</u> Diary log of practical work for calculating amount of dyes and chemicals as per given recipe at production scale during training.

<u>Performance criteria 2 for the evaluation of portfolio:</u> Diary log of practical work for setting machine parameters for exhaust dyeing machines dyeing during training.

<u>Performance criteria 3 for the evaluation of portfolio:</u> Diary log of practical work for pictures each performance criteria.

Candid Details		Name:  Candidate Signature:								
		COMPETENT	COMPETENT II				NOT YET COMPETENT □			
Asses	emont	Name of the A		or:						
Outco		Signature of the Assessor:	he							
Г										
	A a 4 !:	Assessme	nt Sur		-		by the	asse	-	14
	Activ	/ity			Metho	<b>u</b>				sult #
Nature of Activity		у	Written	Oral	Observation	Portfolio	Role Play		Competent	Not Yet Competent
Practio	cal Skill D	emonstration			<b>✓</b>					
Knowl	edge Ass	essment	✓	✓						
Other	Requirem	ent				✓				
Each	Assessm	ent Task (with	perfo	rmano	e crite	ria)				
Asses	Assessment Task 1  Description of assessment task 1  Follow Dyeing Plan for woven fabric dyeing by exhaust process					ing by exhaust				
_		tical assessmer ne following:	nt, can	didate			Yes	No	Remarks	3
1	Dyeing) f	formance Criteria 1: Receive Ring) fabric for exhaust dyeing according sheet.				dy for				
2		ormance Criteria 2: Receive sards for shade matching			ade					
3		ormance Criteria 3: Arrange manger of process as program sheet.			aterial fo	r				
4		rmance Criteria 4: Interpret s			ecs for					
Comp	Competent □ Not Yet Cor				Comp	etent				

Asses	sment Task 2	Description Prepare and e for exhaust dy	ensure		ent task 2 fabric dyeing parameters
	the practical assessment, candidate strated the following:	e	Yes	No	Remarks
1	Performance Criteria 1: Instruct ex machine operators for dyeing process given parameters.				
2	Performance Criteria 2: Calculate dyes and chemicals as per given in reconduction as per dyeing plan.				
3	Performance Criteria 3: Execute de chemical preparation for exhaust dyeir production level.				
4	Performance Criteria 4: Set machine parameters for exhaust dyeing process.				
5	Performance Criteria 5: Verify process parameters for dyeing as per dyeing plan.				
6	Performance Criteria 6: Supervise safety precautions as per job requirement.				
Competent □ Not Yet 0			etent I		
Asses	sment Task 3	Description Identify shade woven fabrics	by us		ent task 3 ade matching method for
	the practical assessment, candidate strated the following:	е	Yes	No	Remarks
1	<b>Performance Criteria 1:</b> Verify shade standards for shade matching.				
2	Performance Criteria 2: Match shade as per standards and make corrections if required.				
Competent □ Not Yet Com			etent I		

Asses	ssment Task 4	Description Perform Dyeir		essme	ent task 4	
During the practical assessment, candidate demonstrated the following:			Yes	No	Remarks	
1	Performance Criteria 1: Arrange m dyeing process as program sheet.	naterial for				
2	<b>Performance Criteria 2:</b> Execute p set parameters according to program.	roduction on				
Comp	etent 🗆	Not Yet Comp	etent l			
Asses	ssment Task 5	Description Verify quality process			ent task 5 ric dyeing by exhaust	
•	the practical assessment, candidate strated the following:	е	Yes	No	Remarks	
1	<b>Performance Criteria 1:</b> Verify quality parameters during production for matching with standards.					
2	Performance Criteria 2: Inspect pherocess to maintain quality & in-time p					
3	Performance Criteria 3: Take corrective actions					
Comp	etent 🗆	Not Yet Comp	etent l			
Asses	ssment Task 6	Description Prepare produ by exhaust pr	uction		ent task 6 for woven fabric dyeing	
_	g the practical assessment, candidatenstrated the following:	е	Yes	No	Remarks	
1	<b>Performance Criteria 1:</b> Verify production register maintain by machine operators shift-wise.					
2	Performance Criteria 2: Calculate and Record efficiency of every machine for evaluating machine production progress.					
3	Performance Criteria 3: Prepare shift production					

Not Yet Competent □

**Performance Criteria 4:** Prepare reports for faults occur during shift.

Competent □

Portfol	lio(if any)	Description o Diary log of p	•		
Currer	nt □ Sufficient □ Authent				Reliable □
Portfol	lio meet the following performance s	tandards:	Yes	No	Remarks
1	Performance criteria 1: Diary log of practical work for calculating amount of dyes and chemicals as per given recipe at production scale during training.				
2	Performance criteria 2: Diary log of work for setting machine paramete dyeing machines dyeing during tra				
3	Performance criteria 3: Diary log of work for pictures each performance				
Competent □ Not Yet Cor					

CS Code: 0723001100	Level:	Version: 1
Assessment D	Date (DD/MM/YY	·):
00/00/0000		
	0723001100 Assessment E	O723001100 3  Assessment Date (DD/MM/YY

Guidance for	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
Candidate	

Candidate Details		:Registration/Roll Number:date Signature:				
Written Assessment Outcome	COMPETENT  Name of the Assessor:  Signature of the Assessor:	NOT YET COMPETENT□ . Assessor's code:				

Title of Qualification:	CS Code:	Level:	Version:
National Vocational Certificate Level 3 in Textile Wet Processing (Dyeing Technologist)		3	1
Competency Standard Title:	Assessment Date (DD/MM/YY):		
Carry out Exhaust Dyeing for Woven Fabrics.			

# WRITTEN ASSESSMENT

Quest	tion	Candidate's answer
1.	The term RFD (Ready for dyeing) means?	A RFD fabric refers to a white fabric that was processed through scouring and bleaching to remove starches, sizing or finishes applied to the fabric which could interfere with the dyeing. Scouring is done to improve dye uptake and absorption into the fabric and improve evenness in dyeing throughout the fabric length.
2.	Choose right sequence of steps for exhaust dyeing method for woven fabrics?	<ul> <li>a. Dissolving and dispersion of dye –Diffusion – Migration - Adsorption</li> <li>b. Dissolving and dispersion of dye – Adsorption – Diffusion – Migration</li> <li>c. Dissolving and dispersion of dye – Adsorption – Migration - Diffusion</li> <li>d. Dissolving and dispersion of dye – Diffusion – Migration Adsorption</li> </ul>
3.	Write down any FIVE dyeing auxiliaries used for exhaust dyeing?	<ol> <li>Sequestering agent</li> <li>Lubricants / Anti-creasing.</li> <li>Pretreatment Chemicals</li> <li>Peroxide killer</li> <li>Leveling Agent.</li> <li>Sequestering, Dispersing and Leveling Agent for Reactive dyeing.</li> <li>Antifoam.</li> <li>Salt/Electrolyte</li> <li>Carrier</li> </ol>

Question		Candidate's answer
	shing fastness of fabric dyed with ct dyes is?	a) Poor b) Good c) Very Good d) Excellent
	nperature must be maintain at for dyeing of fabric with ct dyes through exhaust method?	a) 10°C b) 20°C c) 30°C <mark>d) 40°C</mark>
	ntone Book is used for?	<ul> <li>a) Dye preparation</li> <li>b) Shade matching</li> <li>c) Samples of dyes</li> <li>d) Fastness results</li> </ul>
seq	e main auxiliaries in dyeing uestering agents are used to love	a) Dust b) Neps c) Hardness of water d) Starch from fabric
8. Hov	v many classes of direct dyes?	a) 2 b) 3 c) 4 d) 5
	persing agent help to increaseof disperse dye in er.	a. Solubility b. Bright color c. Hardness d. quality

Question	Candidate's answer
10 is an organic compound which helps to take up dye at lower temperature and pressure over the textile material.	<ul> <li>a) Lubricant</li> <li>b) Hydrogen peroxide</li> <li>c) Sulphuric Acid</li> <li>d) Carrier</li> </ul>

CS Code:	Level:	Version:
0723001102	3	01
Assessment	Date (DD/MM/	YY):
00/00/0000		
	0723001102 Assessment	O723001102 3 Assessment Date (DD/MM/

Candidate Details	Name:
	Registration/Roll Number:
Guidance for Candidate	To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):  1. Assessment Task 1: Follow Dyeing Plan for knitted fabric dyeing by exhaust process specified by your assessor correctly  2. Assessment Task 2: Prepare and ensure knitted fabric dyeing parameters for exhaust dyeing specified by your assessor correctly using appropriate methods  3. Assessment Task 3: Identify shade by using shade matching method for knitted fabrics  4. Assessment Task 4: Perform Dyeing specified by your assessor correctly using appropriate methods  5. Assessment Task 5: Verify quality of knitted fabric dyeing by exhaust process  6. Assessment Task 6: Prepare production report for knitted fabric dyeing by exhaust process  And complete:  7. Knowledge assessment test (Written)  8. Portfolios at the time of assessment
	During a practical assessment, under observation by an assessor, you will complete: <u>Assessment Task 1</u>
Minimum Evidence	Performance Criteria 1: Receive RFD (Ready for Dyeing) fabric for exhaust dyeing according to program sheet.
Required	Performance Criteria 2: Receive shade standards for shade matching
	<b>Performance Criteria 3:</b> Arrange material for dyeing process as program sheet.
	Performance Criteria 4: Interpret specs for exhaust dyeing process.

**Performance Criteria 1:** Instruct exhaust dyeing machine operators for dyeing process according to given parameters.

**Performance Criteria 2:** Calculate amount of dyes and chemicals as per given in recipe for production as per dyeing plan.

**Performance Criteria 3:** Execute dyes and chemical preparation for exhaust dyeing at production level.

**Performance Criteria 4:** Set machine parameters for exhaust dyeing process.

**Performance Criteria 5:** Verify process parameters for dyeing as per dyeing plan.

**Performance Criteria 6:** Supervise safety precautions as per job requirement.

# **Assessment Task 3**

**Performance Criteria 1:** Verify shade standards for shade matching.

**Performance Criteria 2:** Match shade as per standards and make corrections if required.

# **Assessment Task 4**

**Performance Criteria 1:** Arrange material for dyeing process as program sheet

**Performance Criteria 2:** Execute production on set parameters according to program.

## **Assessment Task 5**

**Performance Criteria 1:** Verify quality parameters during production for matching with standards.

**Performance Criteria 2:** Inspect physically dyeing process to maintain quality & in-time production

**Performance Criteria 3:** Take corrective actions for any issues concerned with quality according to requirement.

#### **Assessment Task 6**

**Performance Criteria 1:** Verify production register maintain by machine operators shift-wise.

**Performance Criteria 2:** Calculate and Record efficiency of every machine for evaluating machine production progress.

Performance Criteria 3: Prepare shift production report.

Performance Criteria 4: Prepare reports for faults occur during shift.

#### Portfolios required at the time of assessment (if any) for

<u>Performance criteria 1 for the evaluation of portfolio:</u> Diary log of practical work for calculating amount of dyes and chemicals as per given recipe at production scale during training.

<u>Performance criteria 2 for the evaluation of portfolio:</u> Diary log of practical work for setting machine parameters for exhaust dyeing machines dyeing during training.

<u>Performance criteria 3 for the evaluation of portfolio:</u> Diary log of practical work for pictures each performance criteria.

Candio Details		Name:  Candidate Signature:								
	Garialdate Cigriatare.									
		COMPETENT					NOT	YET C	OMPETE	NT 🗆
Asses		Name of the A	Assess	or:			. Asse	ssor's	code:	
Outco	me	Signature of the Assessor:			•••••					
	A - 1:-	Assessme	nt Sur	nmary	-		by the	asse	-	14
	Activ	/ity		1	Metho	<b>a</b>			Res	
Nature	Nature of Activity		Written	Oral	Observation	Portfolio	Role Play		Competent	Not Yet Competent
Practio	cal Skill D	emonstration			✓					
Knowledge Assessment		✓	✓							
Other	Requirem	ent				✓				
Each A	Assessm	ent Task (with	perfo	rman	ce crite	ria)				
Asses	Assessment Task 1  Description of assessment task 1  Follow Dyeing Plan for knitted fabric dyeing by exhaust process									
_		tical assessmer ne following:	nt, can	didate			Yes	No	Remarks	3
1		mance Criteria 1: Receive RFD (Ready for fabric for exhaust dyeing according to a sheet.				dy for				
2		mance Criteria 2: Receive shaded shaded shaded matching			ade					
3		mance Criteria 3: Arrange material for process as program sheet.			or					
4		mance Criteria 4: Interpret specs for t dyeing process.								
Competent □ Not Yet Comp			etent							

Asses	ssment Task 2	Description Prepare and e	nsure	knitted	fabric dyeing
_	the practical assessment, candidatenstrated the following:	е	Yes	No	Remarks
1	Performance Criteria 1: Instruct ex machine operators for dyeing process given parameters.				
2	Performance Criteria 2: Calculate dyes and chemicals as per given in reproduction as per dyeing plan.				
3	Performance Criteria 3: Execute de chemical preparation for exhaust dyeir production level.				
4	<b>Performance Criteria 4:</b> Set machine parameters for exhaust dyeing process.				
5	Performance Criteria 5: Verify process parameters for dyeing as per dyeing plan.				
6	Performance Criteria 6: Supervise safety precautions as per job requirement.				
Comp	etent □	Not Yet Comp	etent I	]	
Assessment Task 3		Description Identify shade knitted fabrics			ent task 3 e matching method for
During the practical assessment, candidate demonstrated the following:		e	Yes	No	Remarks
1	<b>Performance Criteria 1:</b> Verify shade standards for shade matching.				
2	Performance Criteria 2: Match shade as per standards and make corrections if required.				
Competent □ Not Yet Com			etent I		

Assessment Task 4 Description of Perform Dyeing				essme	ent task 4
During the practical assessment, candidate demonstrated the following:			Yes	No	Remarks
1	Performance Criteria 1: Arrange m dyeing process as program sheet.	naterial for			
2	<b>Performance Criteria 2:</b> Execute p set parameters according to program.	roduction on			
Com	petent □	Not Yet Comp	etent l		
Ass	essment Task 5	<b>Description</b> Verify quality of			ent task 5 dyeing by exhaust process
	ng the practical assessment, candidate onstrated the following:	е	Yes	No	Remarks
Performance Criteria 1: Verify quality parameters during production for matching with standards.					
2	Performance Criteria 2: Inspect physically dyeing process to maintain quality & in-time production				
3	Performance Criteria 3: Take corrective actions for any issues concerned with quality according to requirement.				
Com	petent 🗆	Not Yet Comp	etent		
Ass	essment Task 6	Description	of ass	essme	ent task 6
		Prepare production report for knitted fabric dyeing exhaust process		knitted fabric dyeing by	
During the practical assessment, candidate demonstrated the following:		e	Yes	No	Remarks
1	Performance Criteria 1: Verify production register maintain by machine operators shift-wise.				
2	Performance Criteria 2: Calculate and Record efficiency of every machine for evaluating machine production progress.				
3	Performance Criteria 3: Prepare shift production report.				
4	Performance Criteria 4: Prepare reports for faults occur during shift.				

Not Yet Competent □

Competent  $\square$ 

` ''			of portfooractica		
Currer	nt □ Sufficient □ Authent	tic □ Vali	d 🗆		Reliable □
Portfo	lio meet the following performance s	tandards:	Yes	No	Remarks
1	Performance criteria 1: Diary log of practical work for calculating amount of dyes and chemicals as per given recipe at production scale during training.				
2	Performance criteria 2: Diary log of practical work for setting machine parameters for exhaust dyeing machines dyeing during training.				
3	<u>Performance criteria 3:</u> Diary log of practical work for pictures each performance criteria.				
Competent ☐ Not Yet Com			petent		

Title of Qualification:  National vocational certificate level 3 in Textile  Wet Processing – Dyeing Technologist	CS Code: 0723001101	Level:	Version: 1
Competency Standard Title: Carry out Exhaust Dyeing for Knitted Fabrics.	<b>Assessment D</b> 00/00/0000	Pate (DD/MM/YY	():

Guidance	To complete your assessment for this Competency Standard, you need to
for	answer the questions on the following pages successfully.
Candidate	

Candidate Details	Name:Registration/Roll Number:Candidate Signature:			
Written Assessment Outcome	COMPETENT  Name of the Assessor:  Signature of the Assessor:	NOT YET COMPETENT□ . Assessor's code:		

Title of Qualification: National Vocational Certificate Level 3 in Textile Wet Processing (Dyeing Technologist)	CS Code:	Level:	Version:
Competency Standard Title: Carry out Exhaust Dyeing for Knitted Fabrics.	Assessment D	│ Date (DD/MM/YY	):

# WRITTEN ASSESSMENT

Question	Candidate's answer
1. What is running shade?	Running shade is more specifically meter to meter variation of shade in fabric. So, basically when dyes cannot migrate properly in the whole fabric thus exhaustion of dyes in fabric becomes uneven which leads to running shade or uneven dyeing.
Write down any THREE knit fabric problems during preparation, dyeing and after treatment?	<ol> <li>edge mark</li> <li>crease mark</li> <li>pin hole</li> <li>loss of fabric strength</li> <li>shade variation of batch-to-batch</li> <li>uneven dyeing</li> <li>patchy,</li> <li>colour spot</li> <li>white spot</li> <li>meter to meter shade variation</li> <li>hand feel problem</li> <li>fastness problems</li> </ol>

Quest	ion	Candidate's answer
3.	Write down any FIVE causes of running shade?	<ol> <li>Lack of proper combination of dyes</li> <li>Not maintaining exact dyeing process</li> <li>Lack of proper amount of salt and alkali dosing</li> <li>Lack of quality products and proper products in the bath</li> <li>Lack of proper alkali dosing</li> <li>Lack of proper pretreatment</li> <li>Not selecting good leveling agent</li> <li>Lack of awareness for water quality</li> <li>Not maintaining proper machine and material operation by the operator</li> <li>Lack of proper after treatment</li> </ol>
4.	Washing fastness of fabric dyed with reactive dyes is?	a) Very Poor b) Poor c) Good d) Very Good
5.	Knit fabric is prepared through?	a) Projectile b) Knitting machine c) Weaving machine d) Embroidery machine
6.	Pantone Book is used for?	a) Dye preparation b) Shade matching c) Samples of dyes d) Fastness results
7.	What are meaning of dyeing auxiliaries?	Dyeing auxiliaries mean a chemical or formulated chemical product which enables a processing operation in preparation, dyeing, printing or finishing to be carried out more effectively, or which is essential if a given effect is to be obtained. Main functions of dyeing auxiliaries to prepare the substrate for coloration, to stabilize the application medium, to increase the fastness properties of dyeing, to modify the substrates etc.

Question	Candidate's answer
8. RFD (Ready for Dyeing) fabrics are created by processingfabrics?	a) finished b) Greige c) dyed d) printed
9. Define theory of Dyeing?	The dyeing process is a chemical reaction occurring between the dye molecule and the fibre molecule:
10. Plain, twill, rib, fleece, interlock, pique are types of	a) fibre b) cotton yarn c) polyester yarn d) Fabric

Title of Qualification:	CS Code:	Level:	Version:	
National Vocational Certificate Level 3 in Textile Wet Processing	evel 3 in 0723001103		01	
(Textile Dyeing Technologist)				
Competency Standard Title:	Assessment	Date (DD/MM/	YY):	
Competency Standard Title: Carry out Semi-Continuous Dyeing	<b>Assessment</b> 00/00/0000	Date (DD/MM/	YY):	
Competency Standard Title	Assessment	Date (DD/MM/	ΥΥ)·	

Candidate Details	Name:
	Registration/Roll Number:
	To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):
	<ol> <li>Assessment Task 1: Follow Dyeing Plan for semi-continuous dyeing process specified by your assessor correctly</li> </ol>
	Assessment Task 2: Prepare and ensure semi-continuous dyeing parameters specified by your assessor correctly using appropriate methods
Guidance	<ol> <li>Assessment Task 3: Identify shade by using shade matching method for semi-continuous dyed fabrics.</li> </ol>
for Candidate	<ol> <li>Assessment Task 4: Perform Dyeing specified by your assessor correctly using appropriate semi-continuous dyeing machine.</li> </ol>
Carialadio	<ul> <li>5. Assessment Task 5: Verify quality of semi-continuous dyeing process.</li> <li>6. Assessment Task 6: Prepare production report for semi-continuous dyeing process.</li> </ul>
	And complete:
	<ul><li>7. Knowledge assessment test (Written)</li><li>8. Portfolios at the time of assessment</li></ul>
	During a practical assessment, under observation by an assessor, you will complete:
	Assessment Task 1
Minimum Evidence	<b>Performance Criteria 1:</b> Receive RFD (Ready for Dyeing) fabric for semi- continuous dyeing according to program sheet.
Required	Performance Criteria 2: Receive shade standards for shade matching
	Performance Criteria 3: Arrange material for dyeing process as per program sheet.
	Performance Criteria 4: Interpret specs for semi-continuous dyeing process.

**Performance Criteria 1:** Instruct semi-continuous dyeing machine operators for dyeing process according to given parameters.

**Performance Criteria 2:** Calculate amount of dyes and chemicals as per given in recipe for production as per dyeing plan.

**Performance Criteria 3:** Execute dyes and chemical preparation for semi-continuous dyeing at production level.

**Performance Criteria 4:** Set machine parameters for semi-continuous dyeing process.

**Performance Criteria 5:** Verify process parameters for dyeing as per dyeing plan.

**Performance Criteria 6:** Supervise safety precautions as per job requirement.

# **Assessment Task 3**

**Performance Criteria 1:** Verify shade standards for shade matching.

**Performance Criteria 2:** Match shade as per standards and make corrections if required.

# **Assessment Task 4**

**Performance Criteria 1:** Arrange material for dyeing process as program sheet.

**Performance Criteria 2:** Execute production on set parameters according to program.

#### **Assessment Task 5**

**Performance Criteria 1:** Verify quality parameters during production for matching with standards.

**Performance Criteria 2:** Inspect physically dyeing process to maintain quality & in-time production

**Performance Criteria 3:** Take corrective actions for any issues concerned with quality according to requirement.

#### **Assessment Task 6**

**Performance Criteria 1:** Verify production register maintain by machine operators shift-wise.

**Performance Criteria 2:** Calculate and Record efficiency of every machine for evaluating machine production progress.

Performance Criteria 3: Prepare shift production report.

Performance Criteria 4: Prepare reports for faults occur during shift.

#### Portfolios required at the time of assessment (if any) for

<u>Performance criteria 1 for the evaluation of portfolio:</u> Diary log of practical work for calculating amount of dyes and chemicals as per given recipe at production scale during training.

<u>Performance criteria 2 for the evaluation of portfolio:</u> Diary log of practical work for setting machine parameters for semi-continuous dyeing machines dyeing during training.

<u>Performance criteria 3 for the evaluation of portfolio:</u> Diary log of practical work for pictures each performance criteria.

Candidate Details  Name:						·				
		Candidate Signature:								
		COMPETENT					NOT	YET C	OMPETE	NT 🗆
Asses	sment	Name of the A	Assess	or:			. Asse	ssor's	code:	
Outco	me	Signature of the Assessor:								
		Assessme	nt Sur				by the	asse	-	
	Activ	rity			Metho	d				sult
Nature of Activity		Written	Oral	Observation	Portfolio	Role Play		Competent	Not Yet Competent	
Praction	cal Skill De	emonstration			<b>✓</b>	_				
Knowl	edge Asse	essment	✓	✓						
Other	Requirem	ent				✓				
Each A	Assessm	ent Task (with	perfo	rman	ce crite	ria)				
Asses	ssment Ta	nsk 1				Dyeing	Plan fo	r semi-		dyeing process
_		ical assessmer e following:	nt, cand	didate			Yes	No	Remarks	3
1	Performance Criteria 1: Receive RFD (Real Dyeing) fabric for semi-continuous dyeing account to program sheet.									
2	Performance Criteria 2: Receive shade standards for shade matching			ade						
Performance Criteria 3: Arrange materia dyeing process as program sheet.			aterial fo	r						
4		ance Criteria 4 us dyeing process		pret sp	ecs for	semi-				
Comp	Competent □ Not Yet Competent □									

		1			
Asses	ssment Task 2	Description of assessment task 2 Prepare and ensure semi-continuous dyeing parameters specified by your assessor correctly using appropriate methods			
	the practical assessment, candidate strated the following:	е	Yes	No	Remarks
1	Performance Criteria 1: Instruct set dyeing machine operators for dyeing paccording to given parameters.				
2	Performance Criteria 2: Calculate dyes and chemicals as per given in reconstruction as per dyeing plan.				
3	Performance Criteria 3: Execute dyes and chemical preparation for semi-continuous dyeing at production level.				
4	Performance Criteria 4: Set machi for semi-continuous dyeing process.	ne parameters			
5	Performance Criteria 5: Verify proparameters for dyeing as per dyeing p				
6	Performance Criteria 6: Supervise precautions as per job requirement.	safety			
Comp	etent □	Not Yet Competent □			
Assessment Task 3		Description of assessment task 3 Identify shade by using shade matching method for semi-continuous dyed fabrics.			e matching method for
During the practical assessment, candidate demonstrated the following:		e	Yes	No	Remarks
1	Performance Criteria 1: Verify shade standards for shade matching.				
2	Performance Criteria 2: Match sha standards and make corrections if requ				
Comp	etent []	Not Yet Comp	etent l	$\neg$	

Λ	annout Tools 4	December (1)	-£ -		unt to all. A	
Perform Dyeing			of assessment task 4 g specified by your assessor correctly ate semi-continuous dyeing machine.			
During the practical assessment, candidate demonstrated the following:			Yes	No	Remarks	
1	Performance Criteria 1: Arrange n dyeing process as program sheet.	naterial for				
2	Performance Criteria 2: Execute p set parameters according to program.					
Comp	petent 🗆	Not Yet Comp	etent l			
Asse	ssment Task 5	<b>Description</b> Overify quality o			ent task 5 ous dyeing process.	
	g the practical assessment, candidat nstrated the following:	е	Yes	No	Remarks	
1	<b>Performance Criteria 1:</b> Verify quality parameters during production for matching with standards.					
2	Performance Criteria 2: Inspect pherocess to maintain quality & in-time p					
3	Performance Criteria 3: Take corresponding to any issues concerned with quality a requirement.					
Comp	petent □	Not Yet Comp	etent l			
Asse	ssment Task 6	Description	of assessment task 6			
		Prepare production process.	ction re	port for	semi-continuous dyeing	
	g the practical assessment, candidat nstrated the following:	e	Yes	No	Remarks	
1	Performance Criteria 1: Verify production register maintain by machine operators shift-wise.					
2	Performance Criteria 2: Calculate and Record efficiency of every machine for evaluating machine production progress.					
3	Performance Criteria 3: Prepare shift production report.					
4	Performance Criteria 4: Prepare re occur during shift.	eports for faults				
Comp	petent 🗆	Not Yet Comp	etent l			

Portfo	lio(if any)	Description of portfolio Diary log of practical work			
Currer	nt □ Sufficient □ Authent	ic □ Valid			Reliable □
Portfo	lio meet the following performance s	tandards:	Yes	No	Remarks
1	Performance criteria 1: Diary log of practical work for calculating amount of dyes and chemicals as per given recipe at production scale during training.				
2	Performance criteria 2: Diary log of practical work for setting machine parameters for semicontinuous dyeing machines dyeing during training.				
3	Performance criteria 3: Diary log of practical work for pictures each performance criteria.				
Comp	etent □	Not Yet Com	petent		

Title of Qualification:  National vocational certificate level 3 in Textile  Wet Processing – Dyeing Technologist	CS Code: 0723001102	Level: 3	Version: 1
Competency Standard Title: Carry out semi-continuous dyeing	Assessment D 00/00/0000	Pate (DD/MM/YY	):

Guidance for	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
Candidate	

Candidate Details	Name:Registration/Roll Number:Candidate Signature:				
Written Assessment Outcome	COMPETENT  Name of the Assessor:  Signature of the Assessor:	NOT YET COMPETENT□ . Assessor's code:			

Title of Qualification:	CS Code:	Level:	Version:
National Vocational Certificate Level 3 in Textile Wet Processing (Dyeing Technologist)		3	1
Competency Standard Title:	Assessment [	Date (DD/MM/YY	<b>')</b> :
Carry out semi-continuous dyeing			

# WRITTEN ASSESSMENT

Question	Candidate's answer					
1. Define Pad Batch process?	Pad Batch Dyeing is one of the widely used technique for semi-continuous dyeing process. It is mainly used in the dyeing of cellulosic fibre like cotton or viscose (knit and woven fabric) with reactive dyes.					
2. Disperse dyes may be applied onfibres?	a) Natural b) Animal c) Vegetable d) Synthetic					
Vat, Sulphur, Reactive, Disperse and Acid are the types of	<ol> <li>Dyes</li> <li>Chemicals</li> <li>Auxiliaries</li> <li>Quality Tests</li> </ol>					
4 dyes may be applied on wool, silk, paper, synthetic fibre sans leather materials / substrates?	a) Direct b) Acid c) Azoic d) pigment					

Question		Candidate's answer					
5.	Polyester fabric can be dyed with?	a) Disperse dyes b) Reactive dyes c) Basic dyes d) Vat dyes					
6.	Dyeing Technologist uses and refer for shade preparation?	a) Greige scale b) Blue scale c) AATCC manual d) Pantone Book					
7.	Thiourea dioxide , sodium bisulfite, sodium formaldehyde sulfoxylate, sodium hydrosulfite are the types ofagents.	<ul> <li>a) Anti-foaming</li> <li>b) Anti-creasing</li> <li>c) Dispersing</li> <li>d) Reducing</li> </ul>					
8.	Define Salt and its main use for dyeing?	An ionic compound that is formed by a neutralization reaction (reaction of an acid with a base). The best known salt, common salt, or sodium chloride (NaCl) is extensively used as an electrolyte in dyeing.					
9.	Abbreviation of pH is power of?	a) Hydrogen b) Hydrogen peroxide c) Helium d) Hydro sulphite					
10	. Tick the right sequence of semicontinuous dyeing process?	<ul> <li>a) Padding-batching-washing</li> <li>b) Batching-padding- washing</li> <li>c) washing -batching-padding</li> <li>d) Padding- washing-batching</li> </ul>					

Title of Qualification: National Vocational Certificate Level 3 in	CS Code: 0723001104	Level:	Version: 01		
Textile Wet Processing					
(Textile Dyeing Technologist)					
Competency Standard Title:	Assessment Date (DD/MM/YY):				
Carry out Continuous Dyeing	00/00/0000				

Candidate Details	Name:							
	Registration/Roll Number:							
Guidance for Candidate	To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):  1. Assessment Task 1: Follow Dyeing Plan for continuous dyeing process specified by your assessor correctly  2. Assessment Task 2: Prepare and ensure continuous dyeing parameters specified by your assessor correctly using appropriate methods  3. Assessment Task 3: Identify shade by using shade matching method for continuous dyed fabrics.  4. Assessment Task 4: Perform Dyeing specified by your assessor correctly using appropriate continuous dyeing machine.  5. Assessment Task 5: Verify quality of continuous dyeing process.  6. Assessment Task 6: Prepare production report for continuous dyeing process.  And complete:							
	<ul><li>7. Knowledge assessment test (Written)</li><li>8. Portfolios at the time of assessment</li></ul>							
	During a practical assessment, under observation by an assessor, you will complete:							
Minimum Evidence Required	Assessment Task 1							
	Performance Criteria 1: Receive RFD (Ready for Dyeing) fabric for continuous dyeing according to program sheet.							
	Performance Criteria 2: Receive shade standards for shade matching							
	Performance Criteria 3: Arrange material for dyeing process as per program sheet.							
	Performance Criteria 4: Interpret specs for continuous dyeing process.							

**Performance Criteria 1:** Instruct continuous dyeing machine operators for dyeing process according to given parameters.

**Performance Criteria 2:** Calculate amount of dyes and chemicals as per given in recipe for production as per dyeing plan.

**Performance Criteria 3:** Execute dyes and chemical preparation for continuous dyeing at production level.

**Performance Criteria 4:** Set machine parameters for continuous dyeing process.

**Performance Criteria 5:** Verify process parameters for dyeing as per dyeing plan.

**Performance Criteria 6:** Supervise safety precautions as per job requirement.

# **Assessment Task 3**

**Performance Criteria 1:** Verify shade standards for shade matching.

**Performance Criteria 2:** Match shade as per standards and make corrections if required.

# **Assessment Task 4**

**Performance Criteria 1:** Arrange material for dyeing process as program sheet.

**Performance Criteria 2:** Execute production on set parameters according to program.

## **Assessment Task 5**

**Performance Criteria 1:** Verify quality parameters during production for matching with standards.

**Performance Criteria 2:** Inspect physically dyeing process to maintain quality & in-time production

**Performance Criteria 3:** Take corrective actions for any issues concerned with quality according to requirement.

#### **Assessment Task 6**

**Performance Criteria 1:** Verify production register maintain by machine operators shift-wise.

**Performance Criteria 2:** Calculate and Record efficiency of every machine for evaluating machine production progress.

Performance Criteria 3: Prepare shift production report.

Performance Criteria 4: Prepare reports for faults occur during shift.

#### Portfolios required at the time of assessment (if any) for

<u>Performance criteria 1 for the evaluation of portfolio:</u> Diary log of practical work for calculating amount of dyes and chemicals as per given recipe at production scale during training.

<u>Performance criteria 2 for the evaluation of portfolio:</u> Diary log of practical work for setting machine parameters for continuous dyeing machines dyeing during training.

<u>Performance criteria 3 for the evaluation of portfolio:</u> Diary log of practical work for pictures each performance criteria.

		•									
Candid Details		Name:									
		COMPETENT 🗆					NOT YET COMPETENT □				
Asses	sment	Name of the A	∖ssess	or:			. Asse	ssor's	code:		
Outco	me	Signature of the Assessor:									
<u> </u>											
		Assessme	nt Sun	nmar			by the	asse	_	•	
	Activ	/ity		I	Metho	d I		Result			
Nature of Activity		Written	Oral	Observation	Portfolio	Role Play	Competent		Not Yet Competent		
Practical Skill Demonstration				<b>✓</b>							
Knowl	edge Asse	essment	✓	✓							
Other	Requirem	ent				✓					
Each	Assessm	ent Task (with	perfo	rman	ce crite	ria)					
Assessment Task 1  Description of assessment task 1  Follow Dyeing Plan for continuous dyeing process specified by your assessor correctly						ng process					
During the practical assessment, candidate demonstrated the following:					Yes	No	Remarks	6			
1		rmance Criteria 1: Receive RFD (Ready for g) fabric for continuous dyeing according to m sheet.									
2		mance Criteria 2: Receive shade ds for shade matching									
3		nance Criteria 3: Arrange material for rocess as program sheet.									
4		nance Criteria 4: Interpret specs for ous dyeing process.									
Competent □ Not Yet Comp					etent l						

Asses	ssment Task 2	Description of assessment task 2 Prepare and ensure continuous dyeing parameters specified by your assessor correctly using appropriate methods					
During the practical assessment, candidate demonstrated the following:			Yes	No	Remarks		
1	Performance Criteria 1: Instruct co dyeing machine operators for dyeing p according to given parameters.						
2	Performance Criteria 2: Calculate dyes and chemicals as per given in reproduction as per dyeing plan.						
3	Performance Criteria 3: Execute dyes and chemical preparation for continuous dyeing at production level.						
4	Performance Criteria 4: Set machi for continuous dyeing process.						
5	Performance Criteria 5: Verify process parameters for dyeing as per dyeing plan.						
6	Performance Criteria 6: Supervise safety precautions as per job requirement.						
Comp	etent	Not Yet Comp	Not Yet Competent □				
Assessment Task 3		Description of assessment task 3 Identify shade by using shade matching method for continuous dyed fabrics.					
During the practical assessment, candidate demonstrated the following:			Yes	No	Remarks		
1	<b>Performance Criteria 1:</b> Verify shade standards for shade matching.						
2	Performance Criteria 2: Match shade as per standards and make corrections if required.						
Competent □ Not Yet Comp			etent l				

Ass	essment Task 4	Perform Dyein	n of assessment task 4 eing specified by your assessor correctly priate continuous dyeing machine.			
	ng the practical assessment, candidate onstrated the following:		Yes	No	Remarks	
1	Performance Criteria 1: Arrange m dyeing process as program sheet.					
2	Performance Criteria 2: Execute p set parameters according to program.					
Com	petent □	Not Yet Comp	etent			
Ass	essment Task 5	<b>Description</b> Verify quality o				
	ng the practical assessment, candidate onstrated the following:	е	Yes	No	Remarks	
1	Performance Criteria 1: Verify qua during production for matching with sta					
2	Performance Criteria 2: Inspect ph process to maintain quality & in-time p					
3	Performance Criteria 3: Take correfor any issues concerned with quality a requirement.					
Com	petent □	Not Yet Comp	etent			
		,				
Ass	essment Task 6	Description of Prepare production process.			ent task 6 r continuous dyeing	
	ng the practical assessment, candidate onstrated the following:	e	Yes	No	Remarks	
1	Performance Criteria 1: Verify production register maintain by machine operators shift-wise.					
2	Performance Criteria 2: Calculate and Record efficiency of every machine for evaluating machine production progress.					
3	Performance Criteria 3: Prepare shift production report.					
4	Performance Criteria 4: Prepare re occur during shift.					
Com	Competent □ Not Yet Compe				•	

Portfo	lio(if any)	Description of portfolio Diary log of practical work			
Currer	nt □ Sufficient □ Authent	ic □ Vali	□ Valid □ Reliable □		
Portfo	lio meet the following performance s	tandards:	Yes	No	Remarks
1	Performance criteria 1: Diary log of practical work for calculating amount of dyes and chemicals as per given recipe at production scale during training.				
2	Performance criteria 2: Diary log of work for setting machine paramete continuous dyeing machines dyeing training.				
3	Performance criteria 3: Diary log of work for pictures each performance				
Comp	etent □	Not Yet Com	petent		

Title of Qualification:  National vocational certificate level 3 in Textile  Wet Processing – Dyeing Technologist	CS Code: 0723001103	Level: 3	Version: 1		
Competency Standard Title: Carry out continuous dyeing	Assessment Date (DD/MM/YY): 00/00/0000				

Guidance	To complete your assessment for this Competency Standard, you need to
for	answer the questions on the following pages successfully.
Candidate	

**Assessors Guide** (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name:Registration/Roll Number:Candidate Signature:					
Written Assessment Outcome	COMPETENT  Name of the Assessor:  Signature of the Assessor:	NOT YET COMPETENT□ . Assessor's code:				

Title of Qualification:	CS Code:	Level:	Version:	
National Vocational Certificate Level 3 in Textile Wet Processing (Dyeing Technologist)		3	1	
Competency Standard Title:	Assessment Date (DD/MM/YY):			
Carry out continuous dyeing				

#### WRITTEN ASSESSMENT

Question	Candidate's answer
is the type of continuous dyeing machine.	<ul> <li>a) Pad Batch</li> <li>b) Pa Steam</li> <li>c) Jigger</li> <li>d) Winch</li> </ul>
Reactive dyes may be applied onfibres?	a) Cotton b) Nylon c) Polyester d) Synthetic
3. Alkali, Acid, Salt, Carries, are types of	a) Dyes b) Fibres c) Auxiliaries d) Quality Tests

Quest	ion	Candidate's answer					
4.	Enlist any THREE properties of good fixing agents for fixation of dyes on substrates?	<ol> <li>good capability with cross linking agents without promoting yellowing effect</li> <li>good leveling</li> <li>good migration</li> <li>does not affect the shade</li> <li>good affinity for the fiber</li> <li>stable to steaming and dry heat</li> <li>improved all round fastness</li> </ol>					
5.	The dispersing agent is used to assist the disperse dye to solubilize in water so that the dye molecule can be transferred from the dye bath to the	<ul><li>a) Water</li><li>b) Chemicals</li><li>c) Dyes</li><li>d) Textile substrate</li></ul>					
6.	Dyeing Technologist uses and refer for shade matching?	<ul> <li>a) Greige scale</li> <li>b) Blue scale</li> <li>c) J- Box</li> <li>d) Light Box</li> </ul>					
7.	In continuous and semi-continuous dyeing methods the term "wet pick-up %age" does means?	In continuous and semi-continuous processes the liquor ratio is not of practical importance and it is not used as a parameter. In these processes the factors to be taken into account are the wet pick-up %, i.e. grams of liquor picked up by 100 grams of substrate, and the concentration of the dye.					
8.	agents prevent diand tri-valentmetal ions from interfering with the chemical processing of the textile material?	a) Sequestering b) Leveling c) Reducing d) Dispersing					

Question	Candidate's answer						
9. Sodium hydroxide and Potassium hydroxide are types of	a) Carries b) Salt c) Alkalis d) Leveling agents						
10. Why continuous dyeing is most popular?	Continuous dyeing is the most popular method of dyeing woven fabrics. The characteristics of this dyeing method are the numerous rollers which grey fabrics go in and come out dyed.						

Title of Qualification:	CS Code:	Level:	Version:	
National Vocational Certificate Level 3 in Textile Wet Processing	0723001105	3	01	
(Textile Dyeing Technologist)				
Competency Standard Title:	Assessment	Date (DD/MM/	YY):	
Carry out laboratory testing of dyeing process	00/00/0000			
(Textile Dyeing Technologist)  Competency Standard Title:		Date (DD/MM/	YY):	

Candidate Details	Name:
	Registration/Roll Number:
	To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):
Guidance for Candidate	<ol> <li>Assessment Task 1: Select textile substrate sample specified by your assessor correctly</li> <li>Assessment Task 2: Perform Physical lab testing specified by your assessor correctly using appropriate methods</li> <li>Assessment Task 3: Perform Chemical Testing specified by your assessor correctly using appropriate methods.</li> <li>Assessment Task 4: Verify final results of tests performed.</li> <li>Assessment Task 5: Maintain Quality Records</li> </ol> And complete: <ol> <li>Knowledge assessment test (Written)</li> <li>Portfolios at the time of assessment</li> </ol>
	During a practical assessment, under observation by an assessor, you will complete:
Minimum	Assessment Task 1
Evidence Required	Performance Criteria 1: Select sample from marketing department for quality tests.
	Performance Criteria 2: Select sample during production for testing purpose.

#### **Assessment Task 2**

Performance Criteria 1: Calculate count of yarn as per given standard.

**Performance Criteria 2:** Identify construction of fabric according to required parameters.

**Performance Criteria 3:** Perform physical testing according to customers' requirement as follows:

- pH of the fabric
- Tear and tensile test of woven fabric
- Seam slippage
- Abrasion and Pilling test.
- Snagging test
- Sinking test (Absorbency)
- Color fastness (light, water, perspiration, chlorine, rubbing, washing, saliva, PVC, )
- Perform shrinkage test.
- Perform shade matching
- Fabric GSM testing
- Perform Berger whiteness test
- Perform Barium activity number test

#### **Assessment Task 3**

**Performance Criteria 1:** Perform chemical testing as per standard.

**Performance Criteria 2:** Check Water hardness through water hardness test

**Performance Criteria 3:** Perform sizing chemical test (TEGWA test)

**Performance Criteria 4:** Perform dyestuff testing as per standard (dyes identification testing)

Performance Criteria 5: Test dyes and chemicals batch-wise.

#### **Assessment Task 4**

**Performance Criteria 1:** Determine the evaluation criteria of the tests.

**Performance Criteria 2:** Evaluate the testing result according to the defined quality standards

**Performance Criteria 3:** Settle machine and dyeing parameters according to quality testing results

#### **Assessment Task 5**

**Performance Criteria 1:** Record batch-wise testing reports (dyes and chemical) on daily basis.

**Performance Criteria 2:** Coordinate with concerned person regarding production batches.

Performance Criteria 3: Maintain record on daily basis.

#### Portfolios required at the time of assessment (if any) for

<u>Performance criteria 1 for the evaluation of portfolio:</u> Diary log of practical work for conducting physical tests during training.

<u>Performance criteria 2 for the evaluation of portfolio:</u> Diary log of practical work for chemical tests during training.

<u>Performance criteria 3 for the evaluation of portfolio:</u> Diary log of practical work for pictures each performance criteria.

Continued on following page

**Assessors Judgment Guide** (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candi Detail											
Asses Outco	ssment me	COMPETENT   NOT YET COMPETENT   Name of the Assessor: Assessor's code:   Signature of the Assessor:									
		Assessme	nt Sur	nmar	ry (to be	filled	by the	e asse	ssor)		
	Activ				Metho				Res	sult	
Nature of Activity			Written	Oral	Observation	Portfolio	Role Play		Competent	Not Yet Competent	
Practi	cal Skill De	emonstration			<b>✓</b>						
Knowl	ledge Asse	essment	✓	✓							
Other	Requirem	ent				✓	✓				
		. =									
		ent Task (with	perfo	rman	I						
Assessment Task 1  Description of Select textile subsessor correct				ubstrat			l by your				
During the practical assessment, candidate demonstrated the following:				Yes	No	Remarks					
1	Performance Criteria 1: Select sam marketing department for quality tests.				•	1					
Performance Criteria 2: Select sample during production for testing purpose.				ng							
Comp	Competent □ Not Yet Com					t Comp	etent	etent 🗆			

Assessment Task 2 Description			of assessment task 2			
				cal lab testing specified by your assessor appropriate methods		
	g the practical assessment, candidat	, ,	Yes	No	Remarks	
1	Performance Criteria 1: Calculate as per given standard.	count of yarn				
2	Performance Criteria 2: Identify co fabric according to required parameter					
3	Performance Criteria 3: Perform paccording to customers' requirement a					
a)	pH of the fabric					
b)	Tear and tensile test of woven fabric					
c)	Seam slippage					
d)	Abrasion test					
e)	Pilling test.					
f)	Sinking test (Absorbency)					
g)	Snagging test					
h)	Color fastness to light					
i)	Color fastness to water					
j)	Color fastness to perspiration					
k)	Color fastness to chlorine					
I)	Color fastness to rubbing					
m)	) Perform shrinkage test.					
n)	Perform shade matching					
0)	Fabric GSM testing					
p)	Perform Berger whiteness test					
q)						
Competent □ Not Yet Comp		etent l				

Assessment Task 3 Do		Description (	Description of assessment task 3			
		ical Testing specified by your assessor appropriate methods.				
_	the practical assessment, candidate strated the following:	е	Yes	No	Remarks	
1	Performance Criteria 1: Perform cas per standard.	hemical testing				
2	Performance Criteria 2: Check Wathrough water hardness test	ater hardness				
3	Performance Criteria 3: Perform s test (TEGWA test)	izing chemical				
4	Performance Criteria 4: Perform dyestuff testing as per standard (dyes identification testing)					
5	Performance Criteria 5: Test dyes and chemicals batch-wise.					
Compe	etent □	Not Yet Comp	petent □			
Asses	ssment Task 4	Description	of assessment task 4			
		Verify final res	sults of tests performed.			
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks		
1	<b>Performance Criteria 1:</b> Determine the evaluation criteria of the tests.					
2	<b>Performance Criteria 2:</b> Evaluate the testing result according to the defined quality standards					
3	Performance Criteria 3: Settle machine and dyeing parameters according to quality testing results					
Competent □ Not Yet Comp		etent				

			Description of assessment task 5 Maintain Quality Records			
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks		
1	Performance Criteria 1: Record batch-wise testing reports (dyes and chemical) on daily basis.					
2	Performance Criteria 2: Coordinate with concerned person regarding production batches.					
3	Performance Criteria 3: Maintain record on daily basis.					
Competent □ Not Yet Comp		etent I	]			

Portfolio(if any)  Description Diary log of				•		
Currer	nt □ Sufficient □ Authen	tic 🗆 🛝	√alid			Reliable □
Portfol	io meet the following performance s	standards:		Yes	No	Remarks
1	Performance criteria 1: Diary log of practical work for conducting physical tests during training.					
2	Performance criteria 2: Diary log of practical work for chemical tests during training.					
3	Performance criteria 3: Diary log of practical work for pictures each performance criteria.					
Competent □ Not Yet Comp		etent				

Title of Qualification: National Vocational Certificate Level 3 in Textile Wet Processing (Dyeing Technologist)	CS Code:	Level: 3	Version: 1
Integrated Assessment B for Textile Wet Processing (Dyeing Technologist) Level-2:	<b>Assessment D</b> 00/00/0000	Pate (DD/MM/YY	<b>'</b> ):
Perform dyeing on PC woven fabric by two bath two stage continuous process.			
Perform garment dyeing on 100% cotton garment by exhaust process.			

Candidate Details	Name:					
	Registration/Roll Number:					
	To meet this standard you are required to complete the following tasks within six hours (2 hours for 1 <sup>st</sup> and 4 hours for 2 <sup>nd</sup> part) timeframe (for practical demonstration & assessment):					
Guidance for Candidate	<ol> <li>Assessment Task 1: Prepare workstation for pad thermosol dyeing.</li> <li>Assessment Task 2: Operate pad thermosol dyeing machine for Polyester Portion dyeing of fabric.</li> <li>Assessment Task 3: Perform RC (Reduction Clearing) on pad steam</li> <li>Assessment Task 4: Prepare workstation for pad-steam dyeing.</li> <li>Assessment Task 5: Operate pad steam dyeing machine for cotton portion dyeing of fabric.</li> <li>Assessment Task 6: Prepare workstation for garment dyeing.</li> <li>Assessment Task 7: Operate garment dyeing machine for 100% cotton Garment.</li> <li>Assessment Task 8: Maintain production Register for Pad Thermosol, Pad Steam and Garment dyeing machine.</li> </ol>					
	And complete:					
	<ol> <li>Knowledge assessment test (Written</li> <li>Portfolios at the time of assessment</li> </ol>					
	During a practical assessment, under observation by an assessor, you will complete:					
Minimum Evidence Required	Assessment Task 1: Prepare workstation for pad thermosol dyeing.  Performance Criteria 1: Follow safety precautions as per job requirement.  Performance Criteria 2: Clean and clear pad thermosol dyeing machine as per check list.					
	Performance Criteria 3: Arrange material for dyeing process as per program sheet.					
	Performance Criteria 4: Check and verify material and parameters according to program sheet.					

# Assessment Task 2: Operate pad thermosol dyeing machine for Polyester

#### Portion dyeing of fabric.

Performance Criteria 1: Follow safety precautions as per job requirement.

Performance Criteria 2: Apply Threading of feeding cloth as per requirement.

Performance Criteria 3: Stitch RFD (ready for dyeing) fabric with feeding cloth on pad thermosol machine for dyeing as per program sheet.

Performance Criteria 4: Set machine parameters as per dyeing process requirement / program sheet.

Performance Criteria 5: Run pad thermosol dyeing machine to start the dyeing process as per program sheet..

Performance Criteria 6: Maintain quality parameters during process according to program sheet / protocol.

Performance Criteria 7: Clean workstation after closing the job

#### Assessment Task 3: Perform RC (Reduction Clearing) on pad steam.

Performance Criteria 1: Arrange material for RC as per recipe.

Performance Criteria 2: Ensure L:R and pH for RC as per recipe.

Performance Criteria 3: Set temperature and time for RC on machine.

Performance Criteria 4: Run machine to start the RC process as per program sheet.

Performance Criteria 5: Perform washing and neutralizing dyed fabric

#### Assessment Task 4: Prepare workstation for pad-steam dyeing

Performance Criteria 1: Interpret program sheet for operating Pad steam dyeing machine.

Performance Criteria 2: Clean and clear Pad steam dyeing machine as per check list.

Performance Criteria 3: Arrange material for dyeing process as per program sheet.

Performance Criteria 4: Check and verify material and parameters according to program sheet.

# Assessment Task 5: Operate pad steam dyeing machine for cotton portion dyeing of fabric.

Performance Criteria 1: Follow safety precautions as per job requirement.

Performance Criteria 2: Apply Threading of feeding cloth as per requirement.

Performance Criteria 3: Stitch RFD (ready for dyeing / development) fabric with feeding cloth on pad steam dyeing machine for dyeing as per program sheet.

Performance Criteria 4: Set machine parameters as per dyeing process requirement / program sheet.

Performance Criteria 5: Run pad steam dyeing machine to start the dyeing process as per program sheet.

Performance Criteria 6: Maintain quality parameters during process according to program sheet / protocol.

Performance Criteria 7: Wash-off & Neutralize dyed fabric as per program sheet.

Performance Criteria 8: Clean workstation after closing the job

#### Assessment Task 6: Prepare workstation for garment dyeing.

Performance Criteria 1: Interpret program sheet for operating garment dyeing machine.

Performance Criteria 2: Clean and clear garment dyeing machine as per check list.

Performance Criteria 3: Arrange material for dyeing process as per program sheet.

Performance Criteria 4: Check and verify material and parameters according with program sheet.

# Assessment Task 7: Operate garment dyeing machine for 100% cotton garment.

Performance Criteria 1: Follow safety precautions as per job requirement.

Performance Criteria 2: Load ready for dyeing (RFD) garment on garment dyeing machine for dyeing as per program sheet.

Performance Criteria 3: Set machine parameters according to garment dyeing process requirement / program sheet.

Performance Criteria 4: Run garment dyeing machine to start the dyeing process as per program sheet.

Performance Criteria 5: Maintain quality during process according to program sheet.

Performance Criteria 6: Wash-off & Neutralize dyed garment as per program sheet.

Performance Criteria 7: Apply mechanical drying through hydro extractor as per process requirement.

Performance Criteria 8: Dry processed garment through Tumble dryer as per process requirement.

Performance Criteria 9: Clean workstation after closing the job

## Assessment Task 8: Maintain production Register for Pad Thermosol, Pad

#### Steam and Garment dyeing machine.

Performance Criteria 1: .Record all parameters of dyeing process on production Register for Pad Thermosol, Pad Steam and Garment dyeing

Performance Criteria 2: Record all machine parameters on production register for Pad Thermosol, Pad Steam and Garment dyeing machine.

Performance Criteria 3: Record any faults occurring during dyeing process.

Performance Criteria 4: Rectify faults occurs during process or contact with supervisor.

#### Portfolios required at the time of assessment (if any) for

<u>Performance criteria 1 for the evaluation of portfolio:</u> Diary log of practical work for the 100% cotton knitted fabric dyeing by Winch dyeing machine.

<u>Performance criteria 2 for the evaluation of portfolio</u>: Diary log of practical work for the 100% polyester knitted fabric dyeing by Soft flow dyeing machine.

<u>Performance criteria 3 for the evaluation of portfolio</u>: Diary log of practical work for the 100% cotton woven fabric dyeing by Pad batch dyeing machine.

<u>Performance criteria 4 for the evaluation of portfolio:</u> Diary log of practical work for the 100% cotton woven fabric pigment dyeing by Stenter machine.

<u>Performance criteria 5 for the evaluation of portfolio</u>: Diary log of practical work for the 100% cotton yarn dyeing by Rope dyeing machine.

Continued on following page

**Assessors Judgment Guide** (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name:  Candidate Signature:	, and the second
Assessment Outcome	COMPETENT  Name of the Assessor:  Signature of the Assessor:	

Assessment Summary (to be filled by the assessor)								
Activity	Method			Res	sult			
Nature of Activity	Written	Oral	Observatio	Portfolio	Role Play	Competent	Not Yet Competent	
Practical Skill Demonstration			✓					
Knowledge Assessment	<b>✓</b>	<b>√</b>						
Other Requirement				<b>✓</b>				

Each	Each Assessment Task (with performance criteria)					
·			f assessment task 1:  kstation for pad thermosol dyeing.			
During the practical assessment, candidate demonstrated the following:			Yes	No	Remarks	
1	Follow safety precautions as per job requirement.					
2	Clean and clear pad thermosol dyeing machine as per check list.					
3	Arrange material for dyeing process as per program sheet.					
4	Check and verify material and parameters according to program sheet.					
Competent □ Not Yet Com		etent l				

Operate			on of assessment task 2  pad thermosol dyeing machine for  r Portion dyeing of fabric.		
-	g the practical assessment, candidatenstrated the following:	е	Yes	No	Remarks
1	Follow safety precautions as per job requirement.				
2	Apply Threading of feeding cloth as per requirement.				
3	Stitch RFD (ready for dyeing) fabric with feeding cloth on pad thermosol machine for dyeing as per program sheet.				
4	Set machine parameters as per dyeing process requirement / program sheet.				
5	Run pad thermosol dyeing machine to start the dyeing process as per program sheet.				
6	Maintain quality parameters during process				
7	Clean workstation after closing the job				
Comp	etent 🗆	Not Yet Comp	etent l		

		Description of assessment task 3  Perform RC (Reduction Clearing) on pad steam.				
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks		
1	Arrange material for RC as per recipe.					
2	Ensure L:R and pH for RC as per recipe.					
3	Set temperature and time for RC on machine.					
4	Run machine to start the RC process as per program sheet.					
5	Perform washing and neutralizing dyed fabric					
Competent□ Not Yet Comp		etent I				

· ·		f assessment task 4 kstation for pad-steam dyeing			
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks	
1	Interpret program sheet for operating Pad steam dyeing machine.				
2	Clean and clear Pad steam dyeing machine as per check list.				
3	Arrange material for dyeing process as per program sheet.				
4	Check and verify material and parameters according to program sheet.				
Competent □ Not Yet Comp		etent l	]		

Assessment Task 5		Operate pad	Description of assessment task 5			
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks		
1	Follow safety precautions as per job requirement.					
2	Apply Threading of feeding cloth as per requirement.					
3	Stitch RFD (ready for dyeing / development) fabric with feeding cloth on pad steam dyeing machine for dyeing as per program sheet.					
4	Set machine parameters as per dyeing process requirement / program sheet.					
5	Run pad steam dyeing machine to start the dyeing process as per program sheet.					
6	Maintain quality parameters during process according to program sheet / protocol.					
7	Wash-off & Neutralize dyed fabric as per program sheet.					
8	Clean workstation after closing the job					
Competent □ Not Yet		Not Yet Comp	petent □			

		•	f assessment task 6 kstation for garment dyeing.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks	
1	Interpret program sheet for operating garment dyeing machine.				
2	Clean and clear garment dyeing machine as per check list.				
3	Arrange material for dyeing process as per program sheet.				
4	Check and verify material and parameters according with program sheet.				
Competent □ Not Yet		Not Yet Comp	petent □		

Assessment Task 7		Description of assessment task 7  Operate garment dyeing machine for 100% cotton garment.				
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks		
1	Follow safety precautions as per job requirement.					
2	Load ready for dyeing (RFD) garment on garment dyeing machine for dyeing as per program sheet.					
3	Set machine parameters according to garment dyeing process requirement / program sheet.					
4	Run garment dyeing machine to start the dyeing process as per program sheet.					
5	Maintain quality during process according to program sheet.					
6	Wash-off & Neutralize dyed garment as per program sheet.					
7	Apply mechanical drying through hydro extractor as per process requirement.					
8	Dry processed garment through Tumble dryer as per process requirement.					
9	Clean workstation after closing the job					
Comp	Competent □ Not Yet Com		petent 🗆			

Assessment Task 8		Maintain pro	of assessment task 8 oduction Register for Pad Pad Steam and Garment dyeing		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks	
1	Record all parameters of dyeing process on production Register for Pad Thermosol, Pad Steam and Garment dyeing				
2	Record all machine parameters on production register for Pad Thermosol, Pad Steam and Garment dyeing machine.				
3	Record any faults occurring during dyeing process.				
4	Rectify faults occurs during process or contact with supervisor.				
Competent □ I		Not Yet Comp	Yet Competent □		

Portfolio(if any)		Description of portfolio Diary log of practical work				
Current□ Sufficient□ Authent		ic□ Valid			Reliable □	
Portfo	lio meet the following performance s	tandards:	Yes	No	Remarks	
1	Performance criteria 1 for the evaluation of portfolio: Diary log of practical work for the 100% cotton knitted fabric dyeing by Winch dyeing machine.					
2	Performance criteria 2 for the evaluation of portfolio: Diary log of practical work for the 100% polyester knitted fabric dyeing by Soft flow dyeing machine.					
3	Performance criteria 3 for the evaluation of portfolio: Diary log of practical work for the 100% cotton woven fabric dyeing by Pad batch dyeing machine.					
4	Performance criteria 4 for the evaluation of portfolio: Diary log of practical work for the 100% cotton woven fabric pigment dyeing by Stenter machine.					
5	Performance criteria 5 for the evaluation of portfolio: Diary log of practical work for the 100% cotton yarn dyeing by Rope dyeing machine.					
Comp	etent 🗆	Not Yet Comp	petent			

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