



THE REPUBLIC OF UGANDA
Ministry of Education and Sports

Directorate of Industrial Training



**Assessment and Training
Package
For a
Sewing Machine Mechanic**

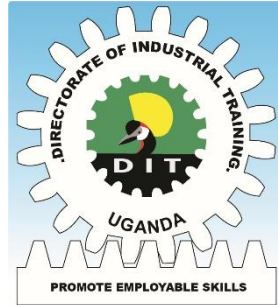
Qualification Level: 1

Occupational Cluster: Technology and Design

September 2020

Reviewed by :
Qualifications Standards Department
Directorate of Industrial Training

Funded by:
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Assessment and Training Package

For a

SEWING MACHINE MECHANIC

Qualification Level: 1

Occupational Cluster: Technology and Design

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Under BTVET Act, 2008, the functions of the Directorate of Industrial Training are:

- (a) To identify the needs of the labour market for occupational competencies that fall under the UVQF.
- (b) To regulate apprenticeship schemes.
- (c) To foster and promote entrepreneurial values and skills, as an integral part of the UVQF.
- (d) To secure adequate and sustainable financing for the efficient operations of the Directorate.
- (e) To accredit training institutions or companies as assessment centres.
- (f) To determine fees payable under the Act.
- (g) To develop, apply, expand and improve the purposeful application of Uganda vocational qualifications defined in the UVQF.
- (h) To assess and award Uganda Vocational Qualifications.
- (i) To promote on-the-job training in industry for apprenticeship, traineeship and indenture training and for other training such as further skills training and upgrading.
- (j) To prescribe the procedure for the making of training schemes.

Further to the above provisions, there is an established Uganda Vocational Qualifications Framework (UVQF), under part V of the BTVET Act, 2008. It is stated that:

The purpose of the UVQF is to;

- (a) Define occupational standards in the world of work.
- (b) Define assessment standards.
- (c) Award vocational qualifications of learners who meet the set standards of different studies.
- (d) Provide guidelines for modular training.

The UVQF shall follow principles of Competence Based Education and Training (CBET) which include:

- (a) Flexible training or learning modules.
- (b) Positive assessment and certification.
- (c) Assessment of prior learning.
- (d) Recognition of formal and non-formal training.
- (e) Self-paced or individual learning.
- (f) Work place learning.

For award and recognition of certificates, the BTVET Act, 2008 provides that:

- (1) The Directorate and other examination boards established under the Act shall award certificates and diplomas for Business, Technical or Vocational Education and Training under the UVQF.
- (2) The Certificates and Diplomas to be awarded shall be in the form prescribed by the Minister on the recommendation of the Industrial Training Council.
- (3) The Certificates and Diplomas awarded under the Act shall be recognised in the Uganda education system and by the labour market.

Under the TVET Implementation Standards 2020, the proposed new mandate of the Directorate of Industrial Training shall be restricted to promoting the highest standards in the quality and efficiency of industrial training in the country and ensuring an adequate supply of properly trained manpower at all levels in the industry and the world of work.

The functions shall include:

- (a) Regulating Industrial Training and Trainers.
- (b) Developing Industrial Training Curricula.
- (c) Harmonising Curricula and Certificates of competence.
- (d) Assessing Industrial Training.
- (e) Development of Occupational Standards and Assessment and Training Packages (ATPs) for Trade Testing for the industry and world of work.
- (f) Awarding certificates in that respect.

At operational level in the Directorate, the Qualification Standards Department performs development tasks related to concepts, procedures and instruments for establishment of the UVQF in close collaboration with both public and private stakeholders in vocational training.

In particular, the Department organises and coordinates the development of Assessment and Training Packages for use in competence-based vocational training as well as standards-based assessment and certification.

The Directorate has therefore produced this Assessment and Training Package for use in implementing Competence-Based Education and Training mechanisms.

Table of Contents

Word from Permanent Secretary	iv
Executive Summary.....	vi
Acknowledgement	viii
Key Definitions	x
1.0 ATP-PART I.....	1
Occupational Profile for a Sewing Machine Mechanic.....	1
2.0 ATP-PART II.....	8
Training Modules for a Sewing Machine Mechanic.....	8
3.0 ATP-PART III.....	19
Assessment Instruments for a Sewing Machine Mechanic	19
Overview of Test Item Samples Included:	20
Written Test Items (Samples).....	21
Performance Test Items (Samples)	32
4.0 ATP-PART IV.....	36
Information on Development Process.....	36

Word from Permanent Secretary

The Kajubi Report (1989) and the Uganda Government White Paper on Education Review (1992) emphasised that the Uganda Secondary School Education should be vocationalised.

The World Bank Report on education in Uganda 2007 observed that although Uganda was experiencing steady economic growth on one hand, the secondary education curriculum was inadequately addressing the social and economic needs of the country on the other. The Report further noted that it is not the very top academic cadres that contribute most to the growth of the GDP but rather the competent middle level technicians that are flexible and technologically literate that the economy needs in the labour market at all levels.

Correspondingly, the NDP III 2020/21- 2024/5 highlights (i) low labour productivity (ii) high youth unemployment (38%) (iii) low transition rates from training to employment (35%) as some of the key challenges to Human Capital Development in Uganda.

In order to overcome these challenges, NDP III 2020/21- 2024/5, under objective 2 peaks the need to train the learners for the urgently needed skills and mainstream a dual education and training system. This paved way for the development of the lower secondary school vocational curriculum which supports both academic and vocational training.

The afore is in line with the Uganda Vision 2040. Under section 261, it emphasises that learners will be accorded opportunities to excel in the skills areas they are placed into. These will range from sports and cut to technical and vocational training. Hitherto, section 262 clearly states that the entire education system will be changed to emphasise practical skills, attitude and moral values.

Government of Uganda through the Ministry of Education and Sports rolled out the New Lower Secondary Curriculum in secondary schools countrywide during the first term of the academic year 2020. The overall goal of this curriculum is to produce graduates with employable skills and who are competitive in the labour market. It should be emphasised that vocational training will produce graduates who are employable. In the New curriculum, emphasis will be on equipping learners with employable skills and competencies. This will enable learners perform the requisite duties of the specified occupations. This is the reason why the lower secondary school vocational curriculum was tailored to the assessment requirements of the world of work.

Reading from the Curriculum Framework page 12, it is stated that the learners will be assessed by DIT. Upon assessment and certification, the graduates will be employable and competitive in the labour market. It's against this background that DIT, within its mandate vested in the BTVET Act, 2008 comes on board to take the lead in the development of the requisite Assessment and Training Packages (ATPs) for the various occupations that will be assessed under the Lower Secondary Curriculum.

The ATPs can be used by any training provider and/or those who wish to present themselves for Occupational Assessment and Certification.

Herewith, the Directorate of Industrial Training presents the Assessment and Training Package for training, assessment and certification of a **SEWING MACHINE MECHANIC QUALIFICATION LEVEL 1**.

Finally, I thank all individuals, organisations and review partners who have contributed and/or participated in the review of this noble document.



Alex Kakooza
Permanent Secretary

Executive Summary

This Assessment and Training Package is a Competence-Based Education and Training (CBET) tool and consists of three major parts:

- 0.1 **PART I: The Occupational Profile (OP) of a SEWING MACHINE MECHANIC.** This Occupational Profile which was reviewed by Sewing Machine Mechanics practicing in the world of work mirrors the duties and tasks that Sewing Machine Mechanics are expected to perform.
- 0.2 **PART II: Training Modules** in the form of guidelines to train Sewing Machine Mechanics both on the job as well as in training centres (or combinations of both venues of learning). The Training Modules herein have been reviewed basing on the Occupational Profile and hence are directly relevant for employment.
- 0.3 **PART III: Assessment Instruments** in the form of performance (Practical) and written (theory) test items that can and should be used to assess whether a person complies with the requirements of employment as a SEWING MACHINE MECHANIC. These assessment instruments were reviewed jointly by job practitioners (Sewing Machine Mechanics) and instructors based on the occupational profile and training modules.
- 0.4 While the Occupational Profile (OP) contained in PART I of this document provides the information on **WHAT a person is expected to do** competently in the world of work, the test items, - including performance criteria- of PART III qualify the **HOW and/or HOW WELL a person must do the job.**
- 0.5 The modular format of the curriculum (PART II) allows learners to acquire job specific skills and knowledge (i.e. competencies) module by module. A single module can be accomplished within a relatively short duration allowing flexibility for learners to move directly into an entry level job, go for further modules or advance to higher levels of training. Modular courses allow more learners to access the training system because training centres as well as companies can accommodate more learners in a given period of time.
- 0.6 In addition to improved access, equity and relevance of BTVET, the UVQF will also enable people who are convinced to have acquired competencies laid down in this ATP through prior training and on-the-job experience to access assessment and certification directly; be it on the basis of a single module, a group of modules or all modules pertaining to the occupation at once. This achievement will facilitate Recognition of Prior Learning (RPL).

0.7 The parts of this Assessment and Training Package were sequentially reviewed as follows:

- i Part 1: Occupational Profile: **August 2020**
- ii Part 2: Training Modules: **August 2020**
- iii Part 3: Assessment Instruments (initial bank): **August 2020**

This ATP (or parts of it) may be periodically revised to match the dynamic trends in the occupation and hence issued in different versions.

DIT takes responsibility of any shortcomings that might be identified in this publication and welcomes suggestions for effectively addressing the inadequacies. The suggestion can be communicated to DIT through P.O. Box 20050, Kampala or through email uvaf.dit@gmail.com.



Patrick Byakatonda
Ag Director

Acknowledgement

The Qualifications Standards Department of DIT wishes to sincerely acknowledge the valuable contributions to the review of this Assessment and Training Package by the following persons, Institutions and organisations:

- Members of the DIT Industrial Training Council,
- The Director and staff of DIT,
- Ministry of Education and Sports,
- The practitioners from the world of work,
- Teachers of Technology and Design from various Secondary Schools,
- Curriculum Specialists from NCDC,
- Examination Specialists from UNEB,
- The facilitators involved in guiding the review panel in their activities,
- The Government of Uganda for financing the review of this ATP.

Abbreviations and Acronyms

A&C	Assessment and Certification
ATP	Assessment and Training Packages
CBET	Competency Based Education and Training
DIT	Directorate of Industrial Training
ITC	Industrial Training Council
GoU	Government of Uganda
LWA	Learning-Working Assignment
MC	Modular Curriculum
MoES	Ministry of Education and Sports
OP	Occupational Profile
PEX	Practical Exercise
PTI	Performance (Practical) Test Item
QS	Qualification Standards
RPL	Recognition of Prior Learning
TIB	Test Item Bank
TVET	Technical, Vocational, Education and Training
UVQ	Uganda Vocational Qualification
UVQF	Uganda Vocational Qualifications Framework
WTI	Written (Theory) Test Item

Key Definitions

Assessment	Assessment is the means by which evidence is gathered and judged to decide if an individual has met the stipulated assessment standards or not. Testing is a form of formal assessment.
Certification	Certification is a formal procedure to issue a certificate (qualification) to an individual that has demonstrated during formal assessment that he/she is competent to perform the tasks specified in the occupational profile.
Competence	Integration of skills, knowledge, attitudes, attributes and expertise in doing/ performing tasks in the world of work to a set standard.
Competency	(Occupational) competence is understood as the ability to perform tasks common to an occupation at an acceptable level.
CBET	Competence-based education and training means that programmes: <ol style="list-style-type: none">1. Have content directly related to work2. Focus is on 'doing something well'3. Assessment is based upon industry work standards, and4. Curricula are developed in modular form
Duty	A Duty describes a large area of work in performance terms. A duty serves as a title for a cluster of related Tasks (see also: TASK).
Learning-Working Assignment (LWA)	LWAs are simulated or real job situations / assignments that are suitable for learning in a training environment (e.g. "small projects"). In a working environment LWAs are real work situations/assignments.
Modules	Modules are part(s) of a whole curriculum. Modules can be considered as "self-contained" partial qualifications which are described by learning outcomes or competencies and which can be assessed and certified individually.
Occupational Profile (OP)	An Occupational Profile is an overview of the duties and tasks a job incumbent is expected to perform competently in employment. Occupational Profiles developed by practitioners from the world of work enhance the relevance of training and learning to the requirements of the world of work.

Occupational Profiles define what a person is supposed to do in performance terms. It also contains generic information regarding related knowledge and skills, attitudes/behavior, tools, materials and equipment required to perform as well as trends/ concerns in the occupation.

Occupational profiles are the reference points for developing modular curricular and assessment standards.

Qualification

A qualification is a formal reward for demonstrating competence, based on formal assessment against set standards and provided to the individual in the form of a certificate specifying the nature of the competence.

Task

Job tasks represent the smallest unit of job activities with a meaningful outcome. Tasks result in a product, service, or decision. They represent an assignable unit of work and have a definite beginning and ending point. Tasks can be observed and measured. *(Also see: Duty)*

1.0 ATP-PART I

Occupational Profile for a SEWING MACHINE MECHANIC

- 1.1 The OCCUPATIONAL PROFILE (OP) for “a SEWING MACHINE MECHANIC” below defines the **Duties** and **Tasks** a competent SEWING MACHINE MECHANIC is expected to perform in the world of work (on the job) in Uganda and the East African region today.
- 1.2 Since it reflects the skill requirements of work life, the Occupational Profile is the reference document for the subsequent development of training modules and assessment instruments (test items) which are directly relevant to employment in Ugandan and the East African businesses and industries.
- 1.3 To ensure that the Occupational Profile is relevant for employment in Uganda and East Africa, the DIT used the method of “occupational/job profiling.”¹

This approach involves the brainstorming of a panel of 8 to 12 competent job practitioners guided by trained and experienced facilitators. During a two-day workshop the panelists defined the duties and tasks performed in employment, as well as the prerequisite skills, knowledge, attitudes, tools and equipment, and the future trends and concerns in the occupation/job.

- 1.4 The panelists, facilitators and coordinators who participated in developing this Occupational Profile.

¹ The DACUM-method was used. DACUM is an acronym for ‘Develop A Curriculum’

Job Expert Panel

OmondiThosmas
Tomitech Engineers

Ndimukika Julius
Kamengo Technical Institute

Namakula Christine
Ms.Engineers

Agondua David Munduni
Tomitech Engineers

Mwanga Emmanuel Cleisey
Kyeizooba Girls SS

Kajjora Kenneth
YMCA Comprehensive
Institute Wandegeya

Malinza Edrisa
Ivunamba Twegaite
Widows and Orphans
Association

Mukongotse Jack Thembo
Cacemro Machine Centre.

Eseza Bagabo
Mengo Senior School (Clothing and
textile Science)

Lusiba Raymond
Musaayi Sewing Machine
Technicians

Funded by
Government of Uganda



THE REPUBLIC OF UGANDA
Ministry of Education and Sports

Directorate of Industrial Training

Occupational Profile

For a

"SEWING MACHINE MECHANIC"

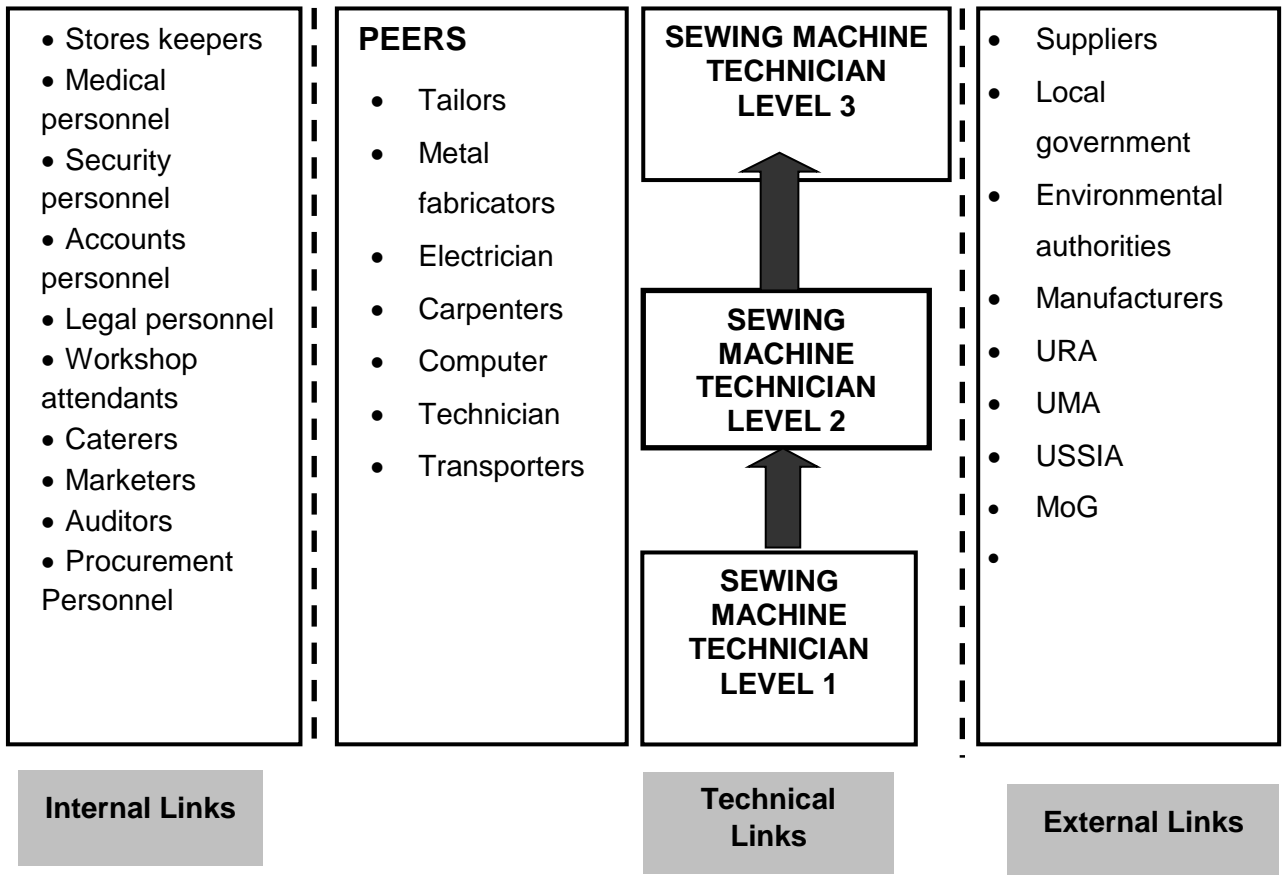
**Developed by: Directorate of Industrial Training
(Qualifications Standards)**

Dates of workshop: 21st- 25th September, 2020

NOMENCLATURE FOR THE OCCUPATION OF A SEWING MACHINE MECHANIC

Definition: A SEWING MACHINE MECHANIC is a person who maintains, diagnoses faults and repairs a sewing machine.

JOB ORGANISATION CHART FOR A SEWING MACHINE MECHANIC



UVQ Level I Sewing Machine Mechanic: Is a person, who can maintain, repairs, threads, assemble do timing and treadle domestic straight stitch machines.

UVQ Level II Sewing Machine Mechanic: Is a person who is able to maintain, repair semi industrial single needle sewing machines e.g. 188k, zigzag, 31k, 20U.

UVQ Level III Sewing Machine Mechanic: Is a person who is able to maintain and repair industrial sewing machines e.g. over lock, flat lock and double lock etc.

Duties and Tasks

A. PLAN SEWING MACHINE REPAIR WORK	A1. Determine workshop location	A2. Determine tools, equipment and materials	A3. Prepare budgets
	A4. Secure tools, equipment and materials.	A5. Cost works	A6. Prepare work schedule.
	A7. Establish workshop	A8. Determine human resource	A9. Determine source of capital
	A10. Demarcate the workshop	A11. Secure the workshop	A12. Prepare maintenance schedules

B. PERFORM ADMINISTRATIVE TASKS	B1. Set rules and regulations	B2. Secure legal documents (e.g. licences)	B3. Recruit human resource
	B4. Assign work	B5. Mobilise financial resources	B6. Supervise Works
	B7. Store tools and equipment	B8. Consult stakeholders	B9. Participate in meetings
	B10. Manage conflicts at work	B11. Prepare job cards	B12. Appraise workers
	B13. Prepare payment schedules		

C. PERFORM OCCUPATIONAL HEALTH, SAFETY AND ENVIRONMENTAL PROTECTION PRACTICES	C1. Manage waste	C2. Administer first aid	C3. Perform firefighting
	C4. Conduct health and safety training.	C5. Sensitive workers on environmental protection issues	C6. Wear personnel protective equipment
	C7. Sensitise workers on diseases of public concern e.g. HIV/AIDS, COVID 19		

D. SERVICE SEWING MACHINE	D1. Clean machine	D2. Clean jam	D3. Replace
	D4. Assemble machine	D5. Set machine	D6. Lubricate
	D7. Test run	D8. Check the quality of parts	

E. REPAIR SEWING MACHINE	E1. Set work station	E2. Diagnose machine	E3. Dismantle machine
	E4. Perform drilling	E5. Fit parts	E6. Cut threads
	E7. Set timing	E8. Perform reassembling	E9. Fabricate parts
	E10. Modify machine	E11. Remove rust	E12. Adjust machine parts
	E13. Install machine parts	E14. Paint machine	

F. MARKET SEWING MACHINE REPAIR WORKS	F1. Advertise service	F2. Mobilise services	F3. Provide technical advice to stakeholders
	F4. Participate in exhibitions	F5. Receive feedback from clients	F6. Advise clients
	F7. Obtain feed back	F8. Follow up clients	

G. MAINTAIN RECORDS	G1. Prepare invoices	G2. Prepare service agreements	G3. Record machine detail
	G4. Prepare delivery notes	G5. Prepare inventory records	G6. Prepare personal records
	G7. Store records	G8. Prepare receipts and payment methods	G9. Prepare reports

H. PURSUE PROFESSIONAL DEVELOPMENT	H1. Network with peers on technical issues	H2. Participate in apprenticeship trainings	H3. Train workers/interns
	H4. Obtain membership in professional associations	H5. Participate in seminars/workshops	H6. Conduct research
	H7. Mentor workers.	H8. Attain further education levels	

Additional Information

Generic Knowledge & Skills

1. Literacy
2. Numeracy
3. Tools and equipment
4. Negotiation skills
5. Interpersonal relations
6. Analytical skills
7. Marketing skills
8. Customer care
9. Waste disposal and management
10. Communication skills
11. Training skills
12. First aid administration
13. Good with the hands
14. Computer skills
15. Problem solving skills
16. Record keeping
17. Entrepreneurship skills
18. Safety, health and environment issues
19. Public relations
20. Time management
21. Human resource management
22. Good hand-eye co-ordination
23. An eye for detail
24. Planning skills
25. Sewing skills
26. Knowledge of electricity
27. Knowledge of fabrication
28. Painting skills

Tools, Equipment and Materials

1. Pliers
2. Screw drivers
3. Spanners
4. Allen key sets
5. Grinders
6. Drillers
7. Bits
8. Tweezers
9. Punch
10. Anvil
11. Hammer
12. Pair of scissors
13. Cutters
14. Hack saw
15. Furniture (e.g. chairs, stools, working bench)
16. Lubricating oil
17. Grease
18. Water
19. Detergents
20. Wires
21. Pieces of testing cloth
22. Sand paper
23. Blower
24. Glue (wood and metallic)
25. Telephone
26. Set of files
27. Clamp
28. Masking tape
29. Brushes
30. Stationery
31. Vice
32. Thread taping screws
33. Dyes
34. Callipers
35. Sewing threads
36. Sewing needles
37. Grinding stone
38. Overalls
39. Gloves
40. Torch
41. Soldering gun
42. Soldering pump
43. Computer

Attitudes/Traits/Behaviour	Future Trends and Concerns
<ol style="list-style-type: none">1. Self-motivated2. Trust worthy3. Honest4. Tolerant5. Hard working6. Customer care7. Disciplined8. Good time management9. Committed10. Good listener11. Flexible12. Result oriented13. Curious14. Competitive15. Innovative16. Responsible17. Physically fit18. Knowledgeable19. Patient20. Polite21. Social22. Resilient23. Good hand-eye coordination24. Respectful25. Confident26. Intelligent27. Logical28. Trainable29. Tidy30. Cooperative	<ol style="list-style-type: none">1. Inadequate networking with peers2. Formation of associations3. Computer literacy4. Benchmarking with others in other countries5. Counterfeit spare parts and machines6. Inclusion of occupation to be offered in training institutions7. Recognition of occupation by government.8. High costs of spares9. ICT

2.0 ATP – PART II

Training Modules for a SEWING MACHINE MECHANIC

- 2.1 A curriculum is a “guide /plan for teaching and learning” which provides a guide to teachers, instructors and learners. In the envisaged system of competence-based or outcome-oriented education and training (CBET), Curricula are no longer the benchmark against which assessment is conducted. It is rather the Occupational Profile that provides the benchmark for Curriculum development as well as assessment.
- 2.2 This modular format of the curriculum allows learners of SEWING MACHINE MECHANIC to acquire job specific skills and knowledge (i.e. competencies) module by module. A single module can be accomplished within a relatively short duration allowing learners to move directly into an entry level job, do further modules and advance to higher levels of training. Modular courses allow more learners to access the training system because training centers, as well as companies can accommodate more learners in a given period of time.
- 2.3 The modules were reviewed jointly by both instructors and job practitioners. They were reviewed using the Occupational Profile as a reference point and taking into account the specifications of training and learning outcomes.
- 2.4 The modules contain “Learning-Working Assignments” (LWAs) and related “Practical Exercises” (PEXs) as key elements.
- LWAs are simulated or real job situations/assignments that are suitable for learning in a training environment (e.g. “small projects”). In a working environment, LWAs are real work situations.
- PEXs are therefore sub-sets of a LWA.
- 2.5 In principle, and following the philosophy of Competence-Based Education and Training (CBET), the modules can be used as a guide for learning in a training Centre, at the workplace; or a combination of both.

WHO IS A SEWING MACHINE MECHANIC QUALIFICATION LEVEL 1

A **Sewing Machine Mechanic** is a person who maintains, diagnoses faults and repairs a sewing machine for commercial purposes.

TRAINING MODULES FOR SEWING MACHINE MECHANIC

Code	Module Title	Average duration	
		Contact hours	Weeks
UE/SMM/M1.1	Establish Sewing Machine Repair Business	280	7
UE/SMM/M1.2	Manage a Sewing Machine Repair Business	40	1
UE/SMM/M1.3	Service Sewing Machines	720	16
UE/SMM/M1.4	Repair Sewing Machines	960	24
Summary	4 modules	2000 hours	48weeks

Note: Average duration is contact time but NOT calendar duration.

It is assumed that:

- 1 day is equivalent to 8 hours of nominal learning and
- 1 month is equivalent to 240hours of nominal learning

Information given on the average duration of training should be understood as a guideline. Quick learners may need less time than indicated or vice versa.

At completion of a module, the learner should be able to satisfactorily perform the included Learning Working Assignments, their Practical exercises and attached theoretical instructions, as the minimum exposure.

Prior to summative assessment by recognized Agencies, the users of these Modules Guides are encouraged to carefully consider continuous assessment using samples of (or similar) performance (practical) and written test items available in part 3 of this ATP.

Code	UE/SMM/M1.1
Module title	M1.1: Establish a Sewing Machine Repair Business
Related Qualification	<u>Part of</u> Uganda Vocational Qualification (SEWING MACHINE MECHANICUVQ 1)
Qualification Level	1
Module purpose	By the end of this module, a trainee should be able to establish a sewing machine repair business.
Learning-Working Assignments (LWAs)	<p>LWA 1/1: Prepare a Business Plan. LWA 1/2: Setup the Business Structure³ LWA 1/3: Procure Tools and Equipment LWA 1/4: Perform Occupational Health, Safety and Environmental Protection Practices</p> <p><u>Note:</u></p> <ol style="list-style-type: none"> <i>The learning exercises may be repeated until the trainee acquires targeted competence.</i> <i>The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning assignment</i>
Related Practical Exercises (PEXs)	<p>LWA 1: Prepare a Business Plan PEX 1.1: Identify the location PEX 1.2: Determine the required resource PEX 1.3: Identify source of resources PEX 1.4: Determine the market PEX 1.5: Obtain enterprise related training PEX 1.5: Procure tools and equipment PEX 1.6: Prepare budget PEX 1.7: Schedule work activities PEX 1.8: Register with enterprise related association</p> <p>LWA 2/2: Set-up Business Structure PEX 2.1: Acquire land PEX 2.2: Erect the structure PEX 2.3: Equip the structure PEX 2.4: Demarcate structure PEX 2.5: Recruit workers PEX 2,6: Comply to legal requirement</p>

	<p>LWA 2/3: Perform Occupational Safety, Health and Environmental Protection Practices</p> <p>PEX 3.1: Manage waste PEX 3.2: Administer first aid PEX 3.3: Wear protective gear PEX 3.4: Practise personal hygiene PEX 3.5: Sensitise workers on health issues PEX 3.6: Ensure bio-security PEX 3.7: Perform firefighting</p>
Occupational health and safety	Precautions, rules and regulations on occupational health safety and environmental protection included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs
Pre-requisite modules	None
Related knowledge/ theory	<p><i>For occupational theory suggested for instruction/ demonstration, the trainer is not limited to the outline below. In any case related knowledge/ theory may be obtained from various recognised reference materials as appropriate:</i></p> <ul style="list-style-type: none"> • Entrepreneurship skill • Communication skill • Computer literacy • Waste management • Hygiene skill • First aid skill • Monitoring skill
Average duration of learning	<p>7 weeks of nominal learning suggested to include:</p> <ul style="list-style-type: none"> • 4 weeks of occupational theory and • 3 weeks of occupational practice
Suggestions on organisation of learning	The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided all equipment and materials required for training are in place.
Assessment	Assessment to be conducted according to the established regulations by a recognised assessment body using related practical and written test items from item bank
Minimum required tools/ equipment/ implements or equivalent	vacuum cleaner, anvil, pressure compressor, blower, rushes, grinders, alien key, tape measure, spray guns, noise consultation head sets
Minimum required materials and consumables or equivalent	oil, papers, masking tape, water, soap, petro, kerosene, grease
Special notes	

Code	UE/SMM/M1.2
Module title	M1.2: Manage Sewing Machine Repair Business
Related Qualification	Part of Uganda Vocational Qualification (SEWING MACHINE MECHANICUVQ1)
Qualification Level	1
Module purpose	By the end of this module, a trainee shall be able to Manage sewing machine repair business
Learning-Working Assignments (LWAs)	<p>LWA 2/1: Market Repair Business LWA 2/2: Perform Administrative Tasks LWA 2/3: Prepare Records LWA 2/4: Perform Occupational Health Safety and Environmental Protection Practises</p> <p>Note:</p> <ol style="list-style-type: none"> 1) <i>The learning exercises may be repeated until the trainee acquires targeted competence.</i> 2) <i>The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning assignment</i>
Related Practical Exercises (PEXs)	<p>LWA 2/1: Market Repair Business PEX 2.1: Carryout market survey PEX 2.2: Carryout sales promotions PEX 2.3: Distribute brochures PEX 2.4: Embrace ICT</p> <p>LWA 2/2: Perform Administrative Tasks PEX 2.1: Determine Human resource PEX 2.2: Supervise work PEX 2.3: Set rules and regulations PEX 2.4: Assign work PEX 2.4: Keep records PEX 2.5: Secure legal document PEX 2.6: Appraise workers PEX 2.7: Motivate workers</p>

	<p>LWA 2/3: Prepare Records PEX 3.1: Prepare invoices PEX 3.2: Prepare Receipts PEX 3.3: Prepare delivery notes PEX 3.4: Prepare attendance records PEX 3.5: Prepare payment vouchers PEX 3.6: Prepare bio data records</p> <p>LWA 2/4: Perform Occupational Health, Safety and Environmental Protection Practices PEX 4.1: Manage waste PEX 4.2: Administer first aid PEX 4.3: Wear protective gear PEX 4.4: Practise personal hygiene PEX 4.5: Sensitise workers on health issues PEX 4.6: Ensure bio-security PEX 4.7: Perform firefighting</p>
Occupational Health and Safety	Precautions, rules and regulations on occupational health safety and environmental protection included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs
Pre-Requisite Modules	None
Related Knowledge/ Theory	<p><i>For occupational theory suggested for instruction/ demonstration, the trainer is not limited to the outline below. In any case related knowledge/ theory may be obtained from various recognised reference materials as appropriate:</i></p> <ul style="list-style-type: none"> • Entrepreneurship skill • Communication skill • Computer literacy • Waste management • Hygiene skill • First aid skill • Monitoring skill
Average Duration of Learning	40 hours (5days) of nominal learning suggested to include: <ul style="list-style-type: none"> • 1 day of occupational theory and • 4 days of occupational practice
Suggestions on Organisation of learning	The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided all equipment and materials required for training are in place.
Assessment	Assessment to be conducted according to the established regulations by a recognised assessment body using related practical and written test items from item bank

Minimum Required Tools/ Equipment/ Implements or Equivalent	vacuum cleaner, anvil, pressure compressor, blower, rushes, grinders, alien key, tape measure, spray guns, noise consultation head sets
Minimum Required Materials and Consumables or Equivalent	oil, papers, masking tape, water, soap, petro, kerosene, grease
Special Notes	

Code	UE/SMM/M1.3
Module title	M1.3: Service Sewing Machine
Related Qualification	<u>Part of</u> Uganda Vocational Qualification (SEWING MACHINE MECHANICUVQ 1)
Qualification Level	1
Module purpose	By the end of this module, a trainee shall be able to service sewing Machine.
Learning-Working Assignments (LWAs)	<p>LWA 3/1: Clean Machine Parts</p> <p>LWA 3/2: Lubricate Sewing Machine</p> <p>LWA 3/3: Replace Parts</p> <p>LWA 3/4: Perform Occupational Safety, Health, and Environmental Protection Practices</p> <p>Note:</p> <ol style="list-style-type: none"> 1. The learning exercises may be repeated until the trainee acquires targeted competence. 2. The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning assignment
Related Practical Exercises (PEXs)	<p>LWA 3/1: Clean Machine Parts</p> <p>PEX 1.1: Prepare tools & materials used for cleaning</p> <p>PEX 1.2: Dismantle machine parts</p> <p>PEX 1.3: Remove dust, rust, entangle threads, spillage</p> <p>PEX 1.4: Re-assemble machine parts</p> <p>PEX 1.5: Test the machine</p> <p>LWA 3/2: Lubricate Sewing Machine</p> <p>PEX 2.1: Prepare tools & materials</p> <p>PEX 2.2: Oil moving parts</p> <p>PEX 2.3: Re-assemble machine parts</p> <p>PEX 2.4: Test the machine</p> <p>PEX 2.5: Align parts</p> <p>LWA 3/4: Perform Occupational Health Safety and Environmental Protection Practices</p> <p>PEX 4.1: Administer first aid</p> <p>PEX 4.2: Train other workers on health and safety issues</p> <p>PEX 4.3: Wear protective gear</p> <p>PEX 4.4: Observe health and safety regulations</p> <p>PEX 4.5: Manage waste</p> <p>PEX 4.6: Store tools and equipment</p>

	PEX 4.7: Clean work area PEX 4.8: Practice firefighting PEX 4.9: Sensitise workers on occupational hazards
Occupational health and safety	Precautions, rules and regulations on occupational health safety and environmental protection included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs.
Pre-requisite modules	None
Related knowledge/ theory	<p><i>For occupational theory suggested for instruction/demonstration, the trainer is not limited to the outline below. In any case related knowledge/ theory may be obtained from various recognised reference materials as appropriate:</i></p> <ul style="list-style-type: none"> • Knowledge of marketing • Time management skills • Marketing skills • Painting and spraying skills • Record keeping • Hygiene skills • First aid skills • Customer care skills • Waste disposal management skills • Communication skills • Financial literacy • Management skills • Leadership skills
Average duration of learning	720hours (16weeks) of nominal learning suggested to include: <ul style="list-style-type: none"> • 5days of occupational theory and • 11days of occupational practice
Suggestions on organisation of learning	The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided all equipment and materials required for training are in place.
Assessment	Assessment to be conducted according to the established regulations by a recognised assessment body using related practical and written test items from item bank
Minimum required tools/ equipment/ implements or equivalent	vacuum cleaner, anvil, pressure compressor, blower, rushes, grinders, alien key, tape measure, spray guns, noise consultation head sets
Minimum required materials and consumables or equivalent	Oil, papers, masking tape, water, soap, petro, kerosene, grease
Special notes	

Code	UE/SM/M1.4
Module title	M1.4: Repair Sewing Machines
Related Qualification	Part of Uganda Vocational Qualification (SEWING MACHINE MECHANICUVQ 1)
Qualification Level	1
Module purpose	By the end of this module, a trainee shall be able to repair Sewing machines
Learning-Working Assignments (LWAs)	<p>LWA 4/1: Diagnose Machine Faults</p> <p>LWA 4/2: Rectify Faults</p> <p>LWA 4/3: Perform Occupational Safety, Health and Environmental Protection Practices</p> <p>Note:</p> <ol style="list-style-type: none"> 1. The learning exercises may be repeated until the trainee acquires targeted competence. 2. The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning assignment
Related Practical Exercises (PEXs)	<p>LWA 4/1: Diagnose Machine Faults</p> <p>PEX 1.1: Take machine history</p> <p>PEX 1.2: Verify machine history</p> <p>PEX 1.3: Dismantle machine</p> <p>PEX 1.4: Replace parts</p> <p>LWA 4/2: Rectify faults</p> <p>PEX 2.1: Set timing</p> <p>PEX 2.2: Set feeding</p> <p>PEX 2.3: Adjust tension</p> <p>PEX 2.4: Polish machine parts</p> <p>PEX 2.5: Replace parts</p> <p>PEX 2.6: Re-assemble machine</p> <p>PEX 2.7: Align machine</p> <p>LWA 4/3: Perform Occupational Health Safety and Environmental Protection Practices</p> <p>PEX 4.1: Administer first aid</p> <p>PEX 4.2: Train other workers on health and safety issues</p> <p>PEX 4.3: Wear protective gear</p> <p>PEX 4.4: Observe health and safety regulations</p>

	PEX 4.5: Manage waste PEX 4.6: Store tools and equipment PEX 4.7: Clean work area PEX 4.8: Practice firefighting PEX 4.9: Sensitise workers on occupational hazards
Occupational health and safety	Precautions, rules and regulations on occupational health safety and environmental protection included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs.
Pre-requisite modules	None
Related knowledge/ theory	<p><i>For occupational theory suggested for instruction/demonstration, the trainer is not limited to the outline below. In any case related knowledge/ theory may be obtained from various recognised reference materials as appropriate:</i></p> <ul style="list-style-type: none"> • Training skills • First aid skills • Problem solving skills • Marketing skills • Spraying machine • Entrepreneurship skills • Monitoring skills
Average duration of learning	6months (24 weeks) of nominal learning suggested to include: <ul style="list-style-type: none"> • 7 days of occupational theory and • 17days of occupational practice
Suggestions on organisation of learning	Learning activities are in the training centre nearby legume gardens, exhibitions etc.
Assessment	Assessment to be conducted according to the established regulations by a recognised assessment body using related practical and written test items from item bank
Minimum required tools/ equipment/ implements or equivalent	scissors, brushes, overalls, torch, filter, magnet, blower, vacuum cleaner, table, glasses, chi, soldering gun, gloves, towel sewing needle, trimmer, sand paper, screw drivers, spray gun, puller, drilling machine, harmer, power source, biometric machine, grease, piece of cloth, camera, pairs of scissors, alien key set, spanners, cutters, grinder, gas, chisel, compressor machine, Vanier clipper, anvil, stand
Minimum required materials and consumables or equivalent	oil, papers, masking tape, water, soap, petro, kerosene, grease
Special notes	

3.0 ATP- PART III

Assessment Instruments for a SEWING MACHINE MECHANIC

- 3.1 **Assessment** of occupational competence is the procedure by which evidence is gathered and judged to decide if an individual (candidate) has met the stipulated assessment standards or not. In this ATP the **standards** to assess occupational competences are reflected in the form of the Occupational Profile and related Test Items.
- 3.2 Assessment of occupational competence should comprise both practical (performance) testing and written (theory/knowledge) testing.
- 3.3 Based on the Occupational Profile, a combined panel of job practitioners and Instructors developed a substantial number of test items for assessing (practical) performance as well as items for assessing occupational knowledge (theory) all stored in an electronic Test Item Bank (TIB) at Directorate of Industrial Training.
- 3.4 Performance (Practical) Test Items (PTI) are closely related to typical work situations in Ugandan business and manufacturing enterprises. They comprise a test assignment for candidates and assessment criteria and/or scoring guides for assessors' use.
- 3.5 Written Test items (WTI) for written testing of occupational theory, (knowledge) are presented in different forms which include:
- Short answer test items.
 - Multiple choice test items and,
 - Matching test items, These WTIs herein focus on functional understanding as well as trouble-shooting typically synonymous with the world of work.
- 3.6 Composition of assessment / test papers will always require good choices of different types of WTI in order to ensure the assessment of relevant occupational knowledge required of candidates to exhibit competence.
- 3.7 The test items contained in the Test Item Bank may be used for continuous / formative assessment during the process of training as well as for summative assessment of candidates who have acquired their competences non-formally/or informally.
- 3.8 In this document, samples of test items for assessing both performance (practical) and occupational knowledge (theory) of **SEWING MACHINE MECHANIC** are included.

Overview of Test Item Samples Included:

No	Type of test Items	Numbers included
1	Written (Theory)- short answer	3
2.	Written (Theory)- multiple choice	3
3.	Written (Theory)- matching with generic	2
4.	Written (Theory)- matching with cause effect	2
5	Written(theory)-matching with work-sequence	1
6.	Performance (Practical) test items	2
Total		13

WRITTEN TEST ITEMS (SAMPLES)

DIT/ QS	Test Item Database Written (Theory) Test Item- No. 1			
Occupational Title:	Sewing Machine Mechanic			
Competence level:	1			
Code no.				
Test Item type:	Short answer	√		
	Multiple choice			
	Matching item	Generic	Cause- Effect	Work-sequence
Complexity level:	C2			
Date of OP:	September 2020			
Related modules:	M:4			
Time allocation:	2 minutes			

Test Item	List down any two types of timing on sewing machine
Answer spaces	(i)
Answer spaces	(ii)
Expected Key (answers)	(i) Needle timing (ii) Feeding timing (iii) Pick up river timing

DIT/ QS	Test Item Database Written (Theory) Test Item- No. 02			
Occupational Title:	Sewing Machine Mechanic			
Competence level:	1			
Code no.				
Test Item type:	Short answer	√		
	Multiple choice			
	Matching Item	Generic	Cause- Effect	Work- sequence
Complexity level:	C1			
Date of OP:	September2020			
Related modules:	M.4			
Time allocation:	2 minutes			

Test Item	Give one use of stitch regulator		
Answer spaces	(iii)		
Expected Key (answers)	(i)	Used to forward fabric	
	(ii)	Used to reverse	
	(iii)	Used to set SP1	

DIT/ QS	Test Item Database Written (Theory) Test Item- No. 03			
Occupational Title:	Sewing Machine Mechanic			
Competence level:	1			
Code no.				
Test Item type:	Short answer	√		
	Multiple choice			
	Matching item	Generic	Cause-Effect	Work-sequence
Complexity level:	C3			
Date of OP:	September2020			
Related modules:	M:4			
Time allocation:	10 minutes			

Test Item	Mention any four (4) causes of skipping stitches in a sewing machine			
Answer spaces	(i)		
	(ii)		
	(iii)		
	(iv)		
Expected key (answers)	(i)	Blunt needle		
	(ii)	Incorrect tension		
	(iii)	Incorrect needle used		
	(iv)	Quality of the thread		
	(v)	Bent needle		
	(vi)	Worn out stitch case		
	(vii)	Blunt shuttle hook		
	(viii)	Loose needle bar		

DIT/ QS	Test Item Database Written (Theory) Test Item- No. 04			
Occupational Title:	Sewing Machine Mechanic			
Competence level:	1			
Code no.				
Test Item type:	Short answer			
	Multiple choice	√		
	Matching item	Generic	Cause-Effect	Work-sequence
Complexity level:	C1			
Date of OP:	September2020			
Related Module:	M:4			
Time allocation:	2minutes			

Test Item	Which of the following tools can be used for adjusting needle bar timing on a single line sewing machine
Distracters and correct answer	<ul style="list-style-type: none"> A. Flat screw driver B. Star screw driver C. Fix spanner D. Ring spanner

Key (answer)	A
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DIT/QS	Test Item Database Written (Theory) Test Item- No. 05			
Occupational Title:	Sewing Machine Mechanic			
Competence level:	1			
Code no.				
Test Item type:	Short answer			
	Multiple choice	√		
	Matching item	Generic	Cause-Effect	Work-sequence
Complexity level:	C1			
Date of OP:	September2020			
Related Module:	M:3			
Time allocation:	3minutes			

Test Item	The following are oiling points on the sewing machine except?
Distractersand correct answer	A. Needle bar B. Shuttle case C. Balance wheel D. Bed plate

Key (answer)	D
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DIT/ QS	Test Item Database Written (Theory) Test Item- No. 6			
Occupational Title:	Sewing Machine Mechanic			
Competence level:	1			
Code no.				
Test Item type:	Short answer			
	Multiple choice	√		
	Matching item	Generic	Cause-Effect	Work-sequence
Complexity level:	C2			
Date of OP:	September2020			
Related Module:	M:4			
Time allocation:	5minutes			

Test Item	The following sets are common sewing machine problems except?
Distracters and correct answer	A. Thread skipping, needle breaking & noisy machine B. Thread skipping, running stitches noisy machine C. Noisy machine, thread skipping & needle breaking D. Needle breaking, trending& noisy machine

Key (answer)	D
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DIT/ QS	Test Item Database Written (Theory) Test Item- No. 7			
Occupational Title:	Sewing Machine Mechanic			
Competence level:	1			
Code no.				
Test Item type:	Short answer			
	Multiple choice			
	Matching item	Generic	Cause- Effect	Work-Sequence
			√	
Complexity level:	C2			
Date of OP:	September2020			
Related Module:	M1.4			
Time allocation:	5minutes			

Test Item	March the problems with their causes effect on 15k sewing machine
------------------	---

Column (A)[Problem]	
1	Dickering fabrics
2	Loops on top of fabric
3	Loop under the fabric
4	Skipping stitches

Column (B)[causes]	
A	Loose bobbin case tension
B	Blunt needle
C	Tension disk is loose
D	Tension disk tight
E	Poor timing
F	Rough needle plate

Key (answer)	1B: 2A: 3C: 4E
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DIT/ QS	Test Item Database Written (Theory) Test Item- No. 8			
Occupational Title:	Sewing Machine Mechanic			
Competence level:	1			
Code no.				
Test Item type:	Short answer			
	Multiple choice			
	Matching item	Generic	Cause- Effect	Work-Sequence
			√	
Complexity level:	C2			
Date of OP:	September2020			
Related Module:	M.3 M.4			
Time allocation:	5minutes			

Test Item	Match the following problems in column A to their causes in column B
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Column (A)[Problems]	
1	Noise during operation
2	Not pushing materials
3	Heavy to run
4	Backward running

Column (B)[Causes]	
A	Loose parts
B	Threads entangled in the balance wheel
C	Incorrect feeding system
D	Loose feed dog
E	Poor timing
F	Breaking of threads

Key (answer)	1:A , 2.D , 3:B, 4:C
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DIT/ QS	Test Item Database Written (Theory) Test Item- No. 9			
Occupational Title:	Sewing Machine Mechanic			
Qualification level:	1			
Code no.				
Test Item type:	Short answer			
	Multiple choice			
	Matching item	Generic	Cause- Effect	Work-sequence
		√		
Complexity level:	C1			
Date of OP:	September2020			
Related tasks:	M1.1			
Time allocation:	8minutes			

Test Item	Match the part of the sewing machine with their uses
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Column (A) (Part)	
1	Needle champ
2	Tension disc
3	Stitch length regulator
4	Slide plat

Column (B) (Uses)	
A	Regulating stitch
B	Helps to access bobbin
C	Tightening the needle
D	Regulating SPI

Key (answer)	1-C, 2-A, 3-D, 4-E
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DIT/ QS	Test Item Database Written (Theory) Test Item- No. 10			
Occupational Title:	Sewing Machine Mechanic			
Qualification level:	1			
Code no.				
Test Item type:	Short answer			
	Multiple choice			
	Matching item	Generic	Cause- Effect	Work-sequence
		√		
Complexity level:	C2			
Date of OP:	September2020			
Related tasks:				
Time allocation:	4 minutes			

Test Item	Match the tools below to their functions in a sewing machine mechanic workshop
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Column (A) (Tools)	
1	Screw driver
2	Pliers
3	Spanners
4	Dyers

Column (B) (Functions)	
A	Dying cloths
B	Fix press buttons
C	Holding firm
D	Needle bar timing
E	Open the nuts
F	Cutting woods
G	Create holes in woods

Key (answer)	1-D; 2-C; 3-E; 4-B
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DIT/ QS	Test Item Database Written (Theory) Test Item- No. 11			
Occupational Title:	Sewing Machine Mechanic			
Competence level:	1			
Code no.				
Test Item type:	Short answer			
	Multiple choice			
	Matching item	Generic	Cause- Effect	Work-Sequence √
Complexity level:	C3			
Date of OP:	September2020			
Related Module:	M4			
Time allocation:	5 minutes			

Test Item	Arrange the process of removing entangled threads from the housing of the sewing machine
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Column A (chronology)	Column B (work steps) in wrong chronological order	
1 st	A	Open clips
2 nd	B	Turn machine
3 rd	C	Remove bobbin case
4 th	D	Remove shuttle case
5 th	E	Remove shuttle
6 th	F	Remove entangled threads

Key (answer)	1:B 2-C, 3A, 4D, 5E, 6F
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PERFORMANCE TEST ITEMS (SAMPLES)

DIT/ QS	Test Item Database Performance Test Item- No. 12
Occupational Title:	Sewing Machine Mechanic
Competence level:	P2
Code no.	
Test Item:	Correct a lowered feed dog
Complexity level:	P2
Date of OP:	September 2020
Related Module:	M.4
Related skills and knowledge:	Oiling, Dusting, Unscrewing, Screwing
Required tools, materials and equipment:	PPES, Repairing, oiling, flat screw driver, oil, dusting cloth
Time allocation:	1 hour
Preferred venue:	Repairing area
Remarks for candidates	
Remarks for assessors	The candidate should collect the test tools for their own from the store.

#	Assessment criteria	Scoring guide	Max. Score	
			Process	Result
1	Preparation for the task	Wore protective equipment, overall, apron, head gear, safety boot, dust coat		3
		Collected tools and equipment	2	
		Collected only tools and equipment repaired		2
2	Dismantling the machine	Remove machine from table		1
		Turn the machine	2	
		Wheel free to rotate		2

		Unscrew the feeding dog crank		2
		Raise feed dog to required level and tighten the feed dog crank screw	4	
		Oiled the moving part		2
		No cracks on the feed dog crank		2
3	Re-assemble the machine	Put machine head in position	2	
		Fixing the belt	3	
		Belt fixed in its groove		2
		Tested the machine	2	
		Machine functionality restored		4
	TOTAL		15	20
	Maximum score	$\frac{x}{y} \times 100$	35	$\frac{x}{99} \times 100$

DIT/ QS	Test Item Database Performance Test Item- No. 13
Occupational Title:	Sewing Machine Mechanic
Competence level:	P2
Code no.	
Test Item:	Service 15k sewing machine
Complexity level:	P2
Date of OP:	September 2020
Related Module:	M.3
Related skills and knowledge:	Tools and equipment, first aid, lubricating, dismantle, time management, cleaning, assembling
Required tools, materials and equipment:	Brushed, Allen key sets, spray, screw drivers, dust cloth, gloves lubricating oil, pliers, mask, blower, spanner, cutter, working table
Time allocation:	3 hour
Preferred venue:	Sewing machine repair workshop.
Remarks for candidates	
Remarks for assessors	

#	Assessment criteria	Scoring guide	Max. Score	
			Process	Result
1	Preparation for the task	Wore protective equipment, overall, apron, head gear, safety boot, dust coat		4
		Arranged tools, materials and equipment to be used		3
2	Dismantling the machine parts	Removed needle plate, face cover, feed dog, presser foot, shuttle race	4	
		Removed entangled thread from moving parts.	2	
		Free and soft balanced wheel		3
		Cleaned with brush	2	
		No dust on the machine		2

#	Assessment criteria	Scoring guide	Max. Score	
			Process	Result
3	Lubricate machine parts	Oil moving parts	4	
		Machine easy to treadle		1
		No oil droplets observed		1
		Machine produces soft sound and treading		1
4	Reassemble the machine	Placed dismantled machine parts e.g. face cover, feed dog, shuttle case, pressure foot, needle plate	2	
		Parts firmly assemble		4
5	Test	Run the machine	2	
		Normal running of machine restored		2
6	Post service activities	Removed spillage	2	
		Cleaned work place	2	
TOTAL (Y)		Process + Results	20	21
Maximum score		$\frac{x}{y} \times 100$	41	$\frac{x}{99} \times 100$

4.0 ATP- PART IV

INFORMATION ON DEVELOPMENT PROCESS

4.1 Occupational Profile Developed (September 2020)

The Occupational Profile was exclusively developed by job practitioners who were working in the SEWING MACHINE MECHANIC occupation, Secondary school teachers who double as examiners of Technology and Design with the Uganda National Examination Board (UNEB) and Curriculum Development Specialists working with the National Curriculum Development Centre (NCDC).

The job expert panel, guided by UVQF Facilitators defined duties and tasks performed and provided additional generic information regarding the occupation.

4.2 Training Module Development (September 2020)

Based on the Occupational Profile for Sewing Machine Mechanic of September 2020, Training Modules were developed by job practitioners, guided by UVQF Facilitators.

4.3 Test Item Development (September 2020)

Based on the Occupational Profile for Sewing Machine Mechanic of September 2020, and Training Modules, Test Items were developed by combined panels of instructors and job practitioners, guided by UVQF Facilitators.

4.4 Methodology

The rationale for the Assessment and Training Package development was to link Vocational Education and Training to the real world of work by bridging Occupational Standards to Training Standards through industry-led Standards-Based Assessment.

Active participation of both instructors and job practitioners' panels consolidated the development philosophy.

The panelists worked as teams in workshop settings complemented by off-workshop field research and literature review activities including international benchmarking.

4.5 Development Panel

The participating panels of Job Practitioners required at different stages were constituted by members from the following organisations:

No.	Name	Institution/ Organisation
1.	Omondi Thosmas	Tomitech Engineers
2.	Ndimukika Julius	Kamengo Technical Institute
3.	Namakula Christine	Ms.Engineers
4.	Agondua David	Tomitech Engineers
5.	Mwanga Emmanuel	Kyeizooba Girls SS
6.	Kajjoba Kenneth	YMCA
7.	Malinza Edrisa	Face Contact Uganda Limited
8.	Mukongotse Jack	Kasemu Machine Centre Shop.
9.	Eseza Bagabo	Mengo Senior School (Clothing and textile Science)
10.	Lusiba Raymond	Sewing Engineer

4.6 Facilitator Team

This Assessment and Training Package was reviewed by a Facilitator Team listed below:

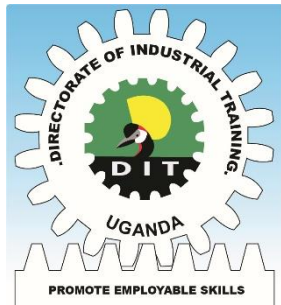
- Team Leader:** Mr. Byakatonda Patrick, Ag. Director, DIT
- Facilitators:** Mr. Ochwo Richard QO, Mr. Kirinya Steven QS.
- Facilitators:** Mr. Ochwo Richard QO, Mr. Kirinya Steven.
- Facilitators:** Mr. Ochwo Richard QO Mr. Kirinya Steven QS.
- Compiled by:** Ms. Kalimwine Sandra and Mr. Onyango Bernard - Data Entrant, DIT and edited by Ms. Mukyala Ruth Ag. DD, DIT, Qualification Standards Dept. DIT

4.7 Reference time:

The Assessment and Training Package was developed in September- 2020 and may be periodically revised to match the dynamic trends in the occupation and hence issued in different versions.

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