THE REPUBLIC OF UGANDA
Ministry of Education and Sports

Directorate of Industrial Training

Assessment and Training Package For a CARPENTER

Qualification Level: 1

Occupational Cluster: Technology and Design

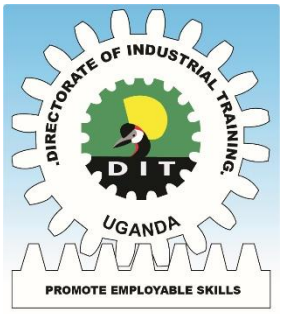
September 2020

Developed by:

Directorate of Industrial Training
Qualifications Standards Department

Funded by:

Government of Uganda



Assessment and Training Package

For a

CARPENTER

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

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.

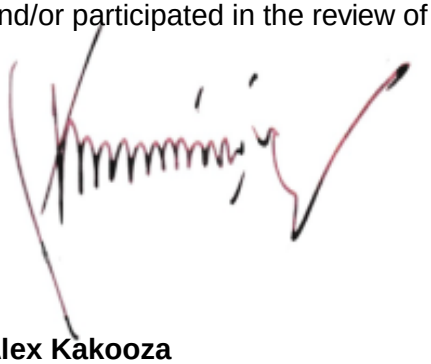
Government of Uganda through the Ministry of Education and Sports rolled out the New Lower Secondary Curriculum in secondary schools countrywide during the first term of the academic year 2020. The overall goal of this curriculum is to produce graduates with employable skills and who are competitive 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 **CARPENTER 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 CARPENTER.** This Occupational Profile which was reviewed by Carpenters practicing in the world of work mirrors the duties and tasks that Carpenters are expected to perform.

0.2 **PART II: Training Modules** in the form of guidelines to train Carpenters 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 CARPENTER. These assessment instruments were reviewed jointly by job practitioners (Carpenters) 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 carpentry from various Secondary Schools
- Carpenter 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) competency is understood as the ability to perform tasks common to an occupation at an acceptable level.

CBET Competence-based education and training means that programs:

1. have content directly related to work
2. focus is on 'doing something well'
3. assessment is based upon industry work standards, and
4. 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) LWA 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 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 recognition for demonstrating competence, based on formal assessment against set standards. A qualification is provided to the individual in 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 Carpenter

1.1 The OCCUPATIONAL PROFILE (OP) for "Carpenter" below defines the ***Duties*** and ***Tasks*** a competent Carpenter 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.

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 reviewing this Occupational Profile are listed on the following page.

Expert Panel

Nabbaya E Robert
Jinja Vocational Training Institute

Baryakira Park
St. Joseph Technical school, Kisubi

Mauko Levi Wafula
Bishop's Senior School, Mukono

Ntege Deo Ivan
Omulangira Ssemakokiro Investments

Olwa Tom
Nakawa Vocational Technical Institute

Nyanzi Flavia
NCDC

Asiimwe Edward Tarsis
Mbarara High School

Erau Daniel
Kibuli Secondary School

Mitsagharu Eric
Mengo Senior School

Bekunda Livingstone
Kako Senior Secondary School

Oketch Lewis Quinto
Lugogo Vocational Training Institute

Co-ordinator
Mukyala.E Ruth
Directorate of Industrial Training

Facilitators
Nakimuli Patra
Directorate of Industrial Training

Asiimwe Janet
Directorate of Industrial Training

Acayo Judith
Directorate of Industrial Training

Funded by
The Government of Uganda

THE REPUBLIC OF UGANDA
Ministry of Education and Sports

Directorate of Industrial Training

Occupational Profile
For a
"Carpenter"

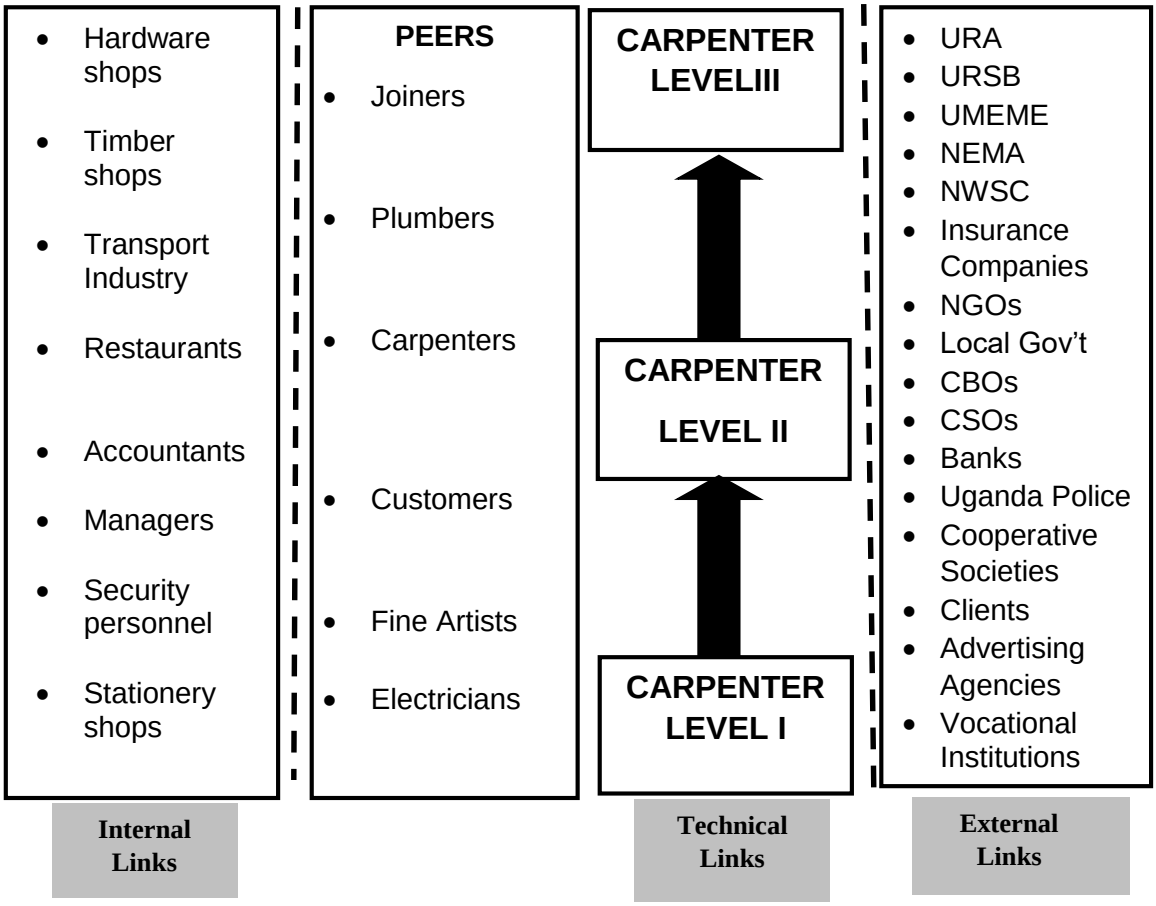
Reviewed by: Qualifications Standards Department of the Directorate of Industrial Training

Dates of workshop: 14th -18th September 2020

NOMENCLATURE FOR THE OCCUPATION OF CARPENTER

Definition: **A CARPENTER** is a person who interprets working drawings and constructs wooden structures for income generation.

JOB ORGANIsATION CHART FOR A CARPENTER



1. **UVQ Level I Carpenter:** Is a person who is able to construct furniture, formwork and single roof structures for income generation.

2. **UVQ level II Carpenter:** Is a person who is able to preserve timber, construct shoring to bungalows, in-situ formwork and temporary timber structures for income generation.

3. **UVQ Level III Carpenter:** Is an artisan who can construct framed timber roofs and floors, gantry, centers and permanent timber houses for income generation.

Duties and Tasks

A. PLAN CARPENTRY BUSINESS	**A1**. Select site	**A2**. Carryout feasibility study	**A3**. Prepare budgets
	A4. Source funds	**A5**. Mobilise tools & equipment	**A6**. Prepare production plan
	A7. Legalise business		

B. STOCK CARPENTRY MATERIALS	**B1.** Identify materials	**B2**. Purchase materials	**B3**. Transport materials
	B4. Arrange/sort materials	**B5**. Record materials	**B6**. Grade materials

C. SEASON TIMBER	**C1**. Select timber	**C2**. Prepare seasoning yard	**C3** Sort timber
	C4. Protect timber ends	**C5**. Prepare stickers	**C6**. Stack timber
	C7. Test moisture content	**C8**. Cure materials	**C9.** Issue materials

D. PRESERVE TIMBER	**D1**. Prepare preservatives	**D2**. Prepare materials, tools and equipment	**D3**. Clean preserving site
	D4. Dip timber	**D5**. Spray timber	**D6**. Brush timber
	D7. Steep timber	**D8**. Apply hot and cold treatment	**D9**. Apply pressure impregnation
	D10. Perform diffusion		

E. CONSTRUCT TEMPORARY STRUCTURES	**E1**. Construct formwork	**E2**. Erect site hoardings	**E3**. Erect shoring
	E4. Construct scaffolds	**E5**. Erect centres	**E6**. Construct timbering to excavations
	E7. Construct packaging boxes	**E8**. Construct pallets	**E9.** Construct gantry

F. CONSTRUCT PERMANENT STRUCTURES	**F1**. Interpret drawings	**F2**. Construct roofs	**F3**. Construct ceilings
	F4. Construct wooden floors	**F5**. Construct wooden stairs	**F6**. Fix door and wooden frames
	F7. Hang door and window shutters	**F8**. Erect timber partitions	**F9**. Construct timber bridges
	F10. Erect timber houses	**F11.** Erect wooden fences	**F12**. Renovate wooden structures

G. MACHINES, TOOLS AND EQUIPMENT MAINTAIN	**G1**. Isolate machines	**G2**. Clean machines	**G3**. Sharpen cutting tools
	G4. Replace parts	**G5**. Lubricate moving parts	**G6**. Test run machines
	G7. Develop service schedule.	**G8**. Fix safety accessories	

H. APPLY SAFETY AND HEALTH PRECAUTIONS	**H1**. Sensitise workers on prevailing health issues	**H2**. Wear protective personnel equipment	**H3**. Clean workplace
	H4. Display safety signs	**H5**. Carryout first aid	**H6**. Operate firefighting equipment
	H7. Inspect machine condition	**H8**. Store tools & equipment	**H9**. Secure machine guards
	H10. Observe personal hygiene	**H11.** Manage waste	

I. PERFORM ADMINISTRATIVE TASKS	**I1**. Conduct meetings	**I2**. Assign duties	**I3**. Prepare reports
	I4. Attend to clients	**I5**. Market products	**I6**. Recruit workers
	I7. Train workers	**I8**. Motivate workers	**I9**. Keep records
	I10. Apply legal procedures	**I11.** Counsel workers	**I12.** Pay wages and salaries
	I13. Network with clients	**I14** Supervise workers	

Additional Information

Generic Knowledge and Skills

1. Use of machines, tools and equipment
2. Knowledge of materials
3. Measuring equipment
4. Planning skills
5. Communication skills
6. Knowledge of safety precautions
7. Time management
8. Planning skills
9. Seasoning of timber
10. Preserving timber
11. Construction materials and methods
12. Interpreting machine/equipment manuals
13. Craftsmanship

Tools, Equipment and Materials

1. Tape measure
2. Hand saw
3. Circular saw
4. Planers/planes
5. Braces / hand drills and bits
6. Files/rasps
7. F & G-Cramps
8. Hammer
9. Chisel
10. Hacksaw
11. Vice
12. Screw driver
13. Pliers
14. Spirit level
15. Spoke shave
16. Square
17. PPEs
18. Marking gauge
19. Pencil
20. Sliding bevel
21. Sharpening stone
22. Grinding stone
23. Band saw
24. Cramping belt
25. Adjustable protractor
26. Claw bar
27. Metre block and board
28. Sniper
29. Carpenters axe
30. Building line
31. Portable electric drill
32. Spray gun
33. Nails
34. Screws
35. Bolts
36. Water level
37. Jig saw
38. Rooter
39. Circular saw machine
40. Manufactured boards
41. Working bench
42. Bench vice
43. Bench hook
44. Bench hold fast
45. Sash cramps
46. Shooting board
47. Meter box
48. Corner cramps

Future Trends & concerns	Attitudes/Traits/Behaviour
1. Computer Illiteracy 2. Negative attitude towards carpentry 3. Unethical issues in the carpentry industry 4. Lack of standards for carpentry work 5. Seminars for skills improvement 6. Upgrading new software that may come into existence 7. Flexibility to new modifications that may arise 8. Establishment of carpenters Association 9. rapid technological trends 10. Timber policy is not implemented 11. Poverty	1. Honest 2. Smart 3. Punctual 4. Obedient 5. Hard working 6. Accurate 7. Cooperative 8. Safety conscious 9. Responsible 10. Environmental awareness 11. Creative 12. Open minded 13. Self-driven 14. Organised 15. Innovative 16. Ability to work in a team 17. Patriotic 18. Trustworthy 19. Hospitable 20. Caring 21. Advisable 22. Disciplined 23. Time conscious

2.0 ATP-PART II

TRAINING MODULES FOR A CARPENTER

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 the occupation of CARPENTER 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 centres, as well as companies can accommodate more learners in a given period of time.

2.3 The modules were developed 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 CARPENTER QUALIFICATION LEVEL 1?

A **Carpenter Level 1** is a person who is able to construct furniture, formwork and single roofed structures for income generation.

TRAINING MODULES FOR A CARPENTER UVQ LEVEL 1

Code	Module Title	Average Time	
		Contact hours	Weeks
UE/CA/M1.1	Construct Furniture	240	6
UE/CA/M1.2	Construct Temporary Structures	160	4
UE/CA/M1.3	Construct Single Wooden Roofs	240	6
UE/CA/M1.4	Season Timber and Maintain Timber Structures	240	6
UE/CA/M1.5	Maintain Carpentry Tools, Equipment and Machines	320	8
UE/CA/M1.6	Perform Entrepreneurial Tasks	120	3
Summary	**6 Training Modules**	**1320 hours**	**33 weeks**

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 160hours 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 recognised 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/CA/M1.1**
Module title	**M1.1: Construct Furniture**
Related Qualification	Part of Uganda Vocational Qualification (Carpenter UVQ1)
Qualification Level	1
Module purpose	At the end of this module, a trainee shall be to make furniture.
Learning-Working Assignments (LWAs)	**LWA 1/1: Make a Bench** **LWA 1/2: Make Pallet and Packing Boxes** **LWA 1/3: Make Wall Shelves** **LWA 1/4: Make Garden Chair** **LWA 1/5: Make Foldable Chair** **LWA 1/6: Perform Occupational Health, Safety and Environmental Practices** **Note:** 1. *The learning exercises may be repeated until the trainee acquires targeted competence;* 2. *The trainer/ instructor is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.*
Related Practical Exercises (PEXs)	**LWA 1/1: Make a Bench** PEX1.1: Prepare working drawing PEX1.2: Prepare material list PEX1.3: Measure timber to sizes PEX1.4: Cut timber to sizes PEX1.5: Plane timber to sizes PEX1.6: Cut out notches on legs PEX1.7: Assemble members
	LWA 1/2: Make Pallet and Packing Boxes PEX 2.1: Prepare working drawing PEX 2.2: Prepare material list PEX 2.3: Measure timber sizes PEX 2.4: Cut timber to sizes PEX 2.5: Assemble members

	LWA 1/3: Make Wall Shelves PEX 3.1: Prepare working drawing PEX 3.2: Prepare material list PEX 3.3: Measure timber to sizes PEX 3.4: Cut timber to sizes PEX 3.5: Assemble members
	LWA 1/4: Make Garden Chair PEX 4.1: Prepare working drawing PEX 4.2: Prepare material list PEX 4.3: Measure timber to sizes PEX 4.4: Plane timber to sizes PEX 4.5: Sandpaper members PEX 4.6: Assemble members
	LWA 1/5: Make Foldable Chair PEX 5.1: Prepare working drawing PEX 5.2: Prepare material list PEX 5.3: Measure timber to sizes PEX 5.4: Cut timber to sizes PEX 5.5: Plane timber to sizes PEX 5.6: Sandpaper members PEX 5.7: Pre-bore holes PEX 5.8: Assemble members
	LWA 1/6: Perform Occupational Health, Safety and Environmental Practices PEX 6.1: Wear PPE PEX 6.2: Observe personal hygiene PEX 6.3: Clean tools, equipment and machines PEX 6.4: Manage waste PEX 6.5: Administer first aid PEX 6.6: Perform firefighting PEX 6.7: Practice prevention of prevailing health issues
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	*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:* • Importance of working drawing • Knowledge of joints and making joints • Use of materials list • Steps involved in material selection • Procedure of making different types of furniture • Safety precautions
Average duration of learning	240 hours (30 days) of nominal learning suggested to include: • *05 days of occupational theory and* • *25 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 established regulations by a recognised assessment body using related practical and written test items from item bank
Minimum required tools/ equipment/ implements or equivalent	try square, tape measure, claw hammer, chisel, a mallet, hand saw, brace and bits, marking gauge, working bench
Minimum required materials and consumables or equivalent	timber, nails, sand paper, screws, pencil, rubber
Special notes	Dimensions of the finished item must match the cutting list and the working drawing.

Code	**UE/CA/M1.2**
Module title	**M1.2: Construct Temporary Structures**
Related Qualification	Part of Uganda Vocational Qualification (Carpenter UVQ1)
Qualification Level	1
Module purpose	At the end of this module, the trainee shall be able to construct temporary structures.
Learning-Working Assignments (LWAs)	**LWA 2/1: Construct Ladder** **LWA 2/2: Construct Hoarding** **LWA 2/3: Construct Trestle** **LWA 2/4: Construct Scaffold** **LWA 2/5: Construct Formwork** **LWA 2/6: Perform Occupational Health, Safety and Environmental Protection Practices** **Note:** 1. *The learning exercises may be repeated until the trainee acquires targeted competence;* 2. *The trainer/instructor is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment*.
Related Practical Exercises (PEXs)	**LWA 2/1: Construct Ladder** PEX 1.1: Prepare working drawing PEX 1.2: Prepare material list PEX 1.3: Cut materials PEX 1.4: Assemble materials
	LWA 2/2: Construct Hoarding PEX 2.1: Prepare working drawing PEX 2.2: Prepare material list PEX 2.3: Cut materials PEX 2.4: Assemble frame PEX 2.5: Fix covering material
	LWA 2/3: Construct Trestle PEX 3.1: Prepare working drawing PEX 3.2: Prepare material list PEX 3.3: Cut materials

	PEX 3.4: Assemble materials PEX 3.5: Level stands
	LWA 2/4: Construct Scaffold PEX 4.1: Prepare working drawing PEX 4.2: Prepare material list PEX 4.3: Cut materials PEX 4.4: Dig holes PEX 4.5: Assemble framework PEX 4.6: Lay platform board PEX 4.7: Fix access ladder PEX 4.8: Fix guard rail PEX 4.9: Fix toe board
	LWA 2/5: Construct Formwork PEX 5.1: Interpret working drawing PEX 5.2: Prepare material list PEX 5.3: Cut materials PEX 5.4: Assemble box PEX 5.5: Apply mould oil PEX 5.6: Level box
	LWA 2/6: Perform Occupational Health, Safety and Environmental Protection Practices PEX 6.1: Wear PPE PEX 6.2: Observe personal hygiene PEX 6.3: Clean tools, equipment and machines PEX 6.4: Manage waste PEX 6.5: Administer first aid PEX 6.6: Perform firefighting PEX 6.7: Practice prevention of prevailing health issues
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	*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 recognized reference materials as appropriate:* • Measuring skills • Cutting skills • Site hoarding, ladder and scaffold • Sketching skills • Drawing skills • Safety rules and regulations • Materials used to construct temporary structures • Tools, machines and equipment • Sequence of operation
Average duration of learning	160 hours (20 days) of nominal learning suggested to include: • *05 days of occupational theory and* • *15 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 established regulations by a recognised assessment body using related practical and written test items from item bank.
Minimum required tools/ equipment/ implements or equivalent	pencil, measuring tape, square, chisel, claw hammer, mansion chisel, hand saw, log saw, claw bar, sliding bevel, hand drill, circular saw, portable hand planer, router machine, compressor, surface planner/thickness, spindle molder.
Minimum required materials and consumables or equivalent	timber, PPE, nails, screw, hoop wire, poles, hand brush, manufactured boards, bolts, iron sheets, mold oil.
Special notes	

Code	UE/CA/M1.3
Module title	**M1.3: Construct Single Wooden Roofs**
Related Qualification	Part of Uganda Vocational Qualification (Carpenter UVQ1)
Qualification Level	1
Module purpose	At the end of this module, a trainee shall be able to interpret roof working drawings and construct single roofs
Learning-Working Assignments (LWAs)	**LWA 3/1: Construct Flat Roof** **LWA 3/2: Construct Lean to Roof** **LWA 3/3: Construct Close Couple Roof** **LWA 3/4: Perform Occupational Health, Safety and Environmental Protection Practices** **Note:** 1. *The learning exercises may be repeated until the trainee acquires targeted competence;* 2. *The trainer/instructor is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.*
Related Practical Exercises (PEXs)	**LWA 3/1: Construct Flat Roof** PEX 1.1: Interpret working drawing PEX 1.2: Prepare material list PEX 1.3: Measure size of the building PEX 1.4: Cut timber to size PEX 1.5: Frame roof PEX 1.6: Space rafters PEX 1.7: Trim projections PEX 1.8: Fix fascia boards PEX 1.9: Fix roof covering materials

	LWA 3/2: Construct Lean to Roof PEX 2.1: Interpret working drawing PEX 2.2: Prepare material list PEX 2.3: Measure size of building PEX 2.4: Cut timber to size PEX 2.5: Frame trusses PEX 2.6: Space purlins PEX 2.7: Level purlins PEX 2.8: Trim off projections PEX 2.9: Fix fascia boards PEX 3.0: Fix roof covering material
	LWA 3/3: Construct Close Couple Roof PEX 3.1: Interpret working drawing PEX 3.2: Prepare material list PEX 3.3: Measure size of the building PEX 3.4: Cut timber to size PEX 3.5: Frame trusses with tie beam PEX 3.6: Space purlins PEX 3.7: Level purlins PEX 3.8: Trim off projections PEX 3.9: Fix fascia boards PEX 4.0: Fix roof covering materials
	LWA 3/4: Perform Occupational Health, Safety and Environmental Protection Practices PEX 4.1: Wear PPE PEX 4.2: Observe personal hygiene PEX 4.3: Clean tools, equipment and machines PEX 4.4: Manage waste PEX 4.5: Observe first aid PEX 4.6: Perform firefighting PEX 4.7: Practice prevention of prevailing health issues
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	*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:* • Measuring • Timber materials • Covering materials • Grading timber • Use of tools, machines and equipment • Roofing • Safety precautions • Types of joints
Average duration of learning	240 hours (30 days) of nominal learning suggested to include: • *05 days of occupational theory and* • *25 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 established regulations by a recognised assessment body using related practical and written test items from item bank
Minimum required tools/ equipment/ implements or equivalent	tape measure, log saw, try square, hand saw, sliding bevel, water level, building line, claw hammer, hand saw, sawing trestle, hand drill, circular saw, jig saw, portable hand planer, claw bar, snipper, plumb bob
Minimum required materials and consumables or equivalent	pencil, PPE, timber, hoop iron, wire nails, corrugated nails, manufactured boards, roofing screws.
Special notes	Always measure twice, cut once

Code	UE/CA/M1.4
Module title	**M1.4: Season Timber and Maintain Timber Structures**
Related Qualification	Part of Uganda Vocational Qualification (Carpenter UVQ1)
Qualification Level	1
Module purpose	At the end of this module, a trainee shall able to season timber and maintain timber structures.
Learning-Working Assignments (LWAs)	**LWA 4/1: Erect Seasoning Shade** **LWA 4/2: Arrange Timber** **LWA 4/3: Stack Timber** **LWA 4/4: Replace Damaged Parts of Timber Structure** **LWA 4/5: Reinforce Structure** **LWA 4/6: Perform Occupational Health, Safety and Environmental Practices** **Note:** 1. *The learning exercises may be repeated until the trainee acquires targeted competence;* 2. *The trainer/instructor is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.*
Related Practical Exercises (PEXs)	**LWA 4/1: Erect Seasoning Shade** PEX 1.1: Interpret working drawing PEX 1.2: Measure size of site PEX 1.3: Erect poles PEX 1.4: Construct roof PEX 1.5: Position bearers
	LWA 4/2: Arrange Timber PEX 2.1: Sort timber PEX 2.2: Grade timber PEX 2.3: Protect timber end grains
	LWA 4/3: Stack Timber PEX 3.1: Prepare stickers/skids PEX 3.2: Pile timber according to sizes PEX 3.3: Test moisture content

	LWA 4/4: Replace Damaged Parts of Timber Structure PEX 4.1: Identify level of damage PEX 4.2: Remove damaged part PEX 4.3: Prepare material list PEX 4.4: Prepare materials PEX 4.5: Fix materials
	LWA 4/5: Reinforce Timber Structures PEX 5.1: Identify weak parts PEX 5.2: Prepare material list PEX 5.3: Prepare materials PEX 5.4: Align structure PEX 5.5: Check strength of structure
	LWA 4/6: Perform Occupational Health, Safety and Environmental Protection Practices PEX 6.1: Wear PPE PEX 6.2: Observe personal hygiene PEX 6.3: Clean tools, equipment and machines PEX 6.4: Manage waste PEX 6.5: Administer first aid PEX 6.6: Perform firefighting PEX 6.7: Practice prevention of prevailing health issues
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	*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 recognized reference materials as appropriate:* • Timber seasoning and defects • Sorting timber • Yard preparation • Stacking timber • Natural air seasoning • Determining moisture content of timber at different intervals

	• Measuring skills and wood structures • Identification of weak/damaged areas/parts • Costing materials • Safety rules and regulations • Classification of timber
Average duration of learning	240 hours (30 days) of nominal learning suggested to include: • *05 days of occupational theory and* • *25 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 established regulations by a recognised assessment body using related practical and written test items from item bank
Minimum required tools/ equipment/ implements or equivalent	moisture metre, stickers, shovel, spade, wheelbarrow, trowel, weighing scale, claw bar, claw hammer, snippers, tape measure, log saw, hand saw, try square, sliding bevel, water level, sawing trestle, hand drill, portable circular saw, jigsaw, portable hand planer, router machine, building line.
Minimum required materials and consumables or equivalent	timber, screws, nails, pencil, burnt bricks, poles, nails, iron sheets, cement, aggregates, sand and water.
Special notes	Differentiate between natural and artificial seasoning

Code	UE/CA/M1.5
Module title	**M1.5: Maintain Carpentry Tools, Equipment and Machines**
Related Qualification	Part of Uganda Vocational Qualification (Carpenter UVQ1)
Qualification Level	1
Module purpose	At the end of this module, the trainee shall be able to maintain carpentry hand tools, equipment, powered tools and wood working machines.
Learning-Working Assignments (LWAs)	**LWA 5/1: Maintain Hand Tools** **LWA 5/2: Maintain Carpentry Equipment** **LWA 5/3: Maintain Power Portable Tools** **LWA 5/4: Maintain Woodworking Machines** **LWA 5/5: Perform Occupational Health, Safety and Environmental Protection Practices** **Note:** 1. *The learning exercises may be repeated until the trainee acquires targeted competence;* 2. *The trainer/instructor is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.*
Related Practical Exercises (PEXs)	**LWA 5/1: Maintain Hand Tools** PEX 1.1: Sharpen cutting tools PEX 1.2: Replace damaged parts PEX 1.3: Tighten loose nuts, screws and bolts PEX 1.4: Clean parts of hand tools PEX 1.5: Lubricate parts of hand tools
	LWA 5/2: Maintain Carpentry Equipment PEX 2.1: Fix loose parts PEX 2.2: Replace broken parts PEX 2.3: Clean equipment parts PEX 2.4: Lubricate equipment parts
	LWA 5/3: Maintain Power Portable Tools PEX 3.1: Fix loose parts PEX 3.2: Replace broken parts PEX 3.3: Clean parts PEX 3.4: Lubricate parts PEX 3.5: Adjust and set cutters, guides and fences

	LWA 5/4: Maintain Woodworking Machines PEX 4.1: Fix loose parts PEX 4.2: Sharpen cutters PEX 4.3: Lubricate parts PEX 4.4: Adjust and set cutters and fences PEX 4.5: Clean parts PEX 4.6: Replace belts
	LWA 5/5: Perform Occupational Health, Safety and Environmental Protection Practices PEX 5.1: Wear PPE PEX 5.2: Observe personal hygiene PEX 5.3: Clean tools, equipment and machines PEX 5.4: Manage waste PEX 5.5: Administer first aid PEX 5.6: Perform firefighting PEX 5.7: Practice prevention of prevailing health issues PEX 5.8: Prepare service schedules
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	*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:* • Sequence of sharpening and reconditioning hand tools • Usage of hand tools • Types of hand tools • Safety precautions • Lubricating knowledge • Types of machines
Average duration of learning	320 hours (40 days) of nominal learning suggested to include: • *5 days of occupational theory and* • *35 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 established regulations by a recognised assessment body using related practical and written test items from item bank
Minimum required tools/ equipment/ implements or equivalent	files, screw drivers, oilstones, grind stones, grease gun, oil can, allen keys, spanners, saw sets, slip stone, pliers
Minimum required materials and consumables or equivalent	water, grease, oil, rug, timber, sand paper, cutters, DW-40
Special notes	

Code	UE/CA/M1.6
Module title	**Perform Entrepreneurial Tasks**
Related Qualification	Part of Uganda Vocational Qualification (Carpenter UVQ1)
Qualification Level	1
Module purpose	At the end of this module, the trainee shall be able to start a carpentry business for income generation.
Learning-Working Assignments (LWAs)	**LWA 6/1: Perform Administrative Tasks** **LWA 6/2: Perform Legal Procedures** **LWA 6/3: Market Products** **LWA 6/4: Keep Records** **LWA 6/5: Perform Occupational Health, Safety and Environmental Protection Practices** **Note:** 1. *The learning exercises may be repeated until the trainee acquires targeted competence;* 2. *The trainer/instructor is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.*
Related Practical Exercises (PEXs)	**LWA 6/1: Perform Administrative Tasks** PEX 1.1: Organise resources PEX 1.2: Make budget PEX 1.3: Source material, tools and equipment PEX 1.4: Recruit workers
	LWA 6/2: Perform Legal Procedures PEX 2.1: Secure business premises PEX 2.2: Develop business name PEX 2.3: Register business PEX 2.4: Pay tax PEX 2.5: Launch business
	LWA 6/3: Market Products PEX 3.1: Grade products PEX 3.2: Brand products PEX 3.3: Price products PEX 3.4: Advertise products PEX 3.5: Store products

	LWA 6/4: Generate Records PEX 4.1: Prepare production records PEX 4.2: Prepare material records PEX 4.3: Prepare stock records PEX 4.4: Prepare sales records PEX 4.5: Prepare administrative reports
	LWA 6/5: Perform Occupational Health, Safety and Environmental Protection Practices PEX 5.1: Wear PPE PEX 5.2: Observe personal hygiene PEX 5.3: Clean tools, equipment and machines PEX 5.4: Manage waste PEX 5.5: Administer first aid PEX 5.6: Perform firefighting PEX 5.7: Practice prevention of prevailing health issues
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	*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:* • Feasibility study • Customer care • Marketing • Financial literacy • Numeracy • Legal procedures • Communication
Average duration of learning	120 hours (15 days) of nominal learning suggested to include: • *5 days of occupational theory and* • *10 days of occupational practice*
Suggestions on organization 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 established regulations by a recognised assessment body using related practical and written test items from item bank
Minimum required tools/ equipment/ implements or equivalent	computers, calculators, phones, camera
Minimum required materials and consumables or equivalent	stationery, office furniture
Special notes	

3.0 ATP- PART III

Assessment Instruments for a CARPENTER

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.

3.2 Assessment of occupational competence should comprise of both practical (Performance) testing and written (theory/knowledge) testing.

3.3 Based on the Occupational Profile and Training Modules, 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 the Directorate of Industrial Training.

3.4 Performance (Practical) Test Items (PTI) are closely related to typical work situations in Ugandan business enterprises. They comprise of 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, 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 a CARPENTER are included.

3.9 Overview of Test Item Samples Included

No	Type of test Items	Numbers included
1	Written (Theory)- short answer	2
2.	Written (Theory)- multiple choice	3
3.	Written (Theory)- matching with generic	2
4.	Written (Theory)- matching work sequence	2
5.	Performance (Practical) test items	1
Total		**10**

WRITTEN TEST ITEMS (SAMPLES)

<table>
<tr><td>DIT/ QS</td><td colspan="4">Test Item Database
Written (Theory) Test Item- No. 1</td></tr>
<tr><td>Occupational Title:</td><td colspan="4">Carpenter</td></tr>
<tr><td>Competence level:</td><td colspan="4">1</td></tr>
<tr><td>Code no.</td><td colspan="4"></td></tr>
<tr><td>Test Item type:</td><td colspan="4"><table>
<tr><td>Short answer</td><td colspan="3">✓</td></tr>
<tr><td>Multiple choice</td><td colspan="3"></td></tr>
<tr><td rowspan="2">Matching item</td><td>Generic</td><td>Cause- Effect</td><td>Work-sequence</td></tr>
<tr><td></td><td></td><td></td></tr>
</table></td></tr>
<tr><td>Complexity level:</td><td colspan="4">C1</td></tr>
<tr><td>Date of OP:</td><td colspan="4">September, 2020</td></tr>
<tr><td>Related modules:</td><td colspan="4">M1.2</td></tr>
<tr><td>Time allocation:</td><td colspan="4">1 minute</td></tr>
</table>

Test Item	What are the two distinct forms of formwork
Answer spaces	(i) …… (ii) ……
Expected Key (answers)	(i) Pre-cast (ii) Cast-in-situ

<table>
<tr><td>DIT/ QS</td><td colspan="4">Test Item Database
Written (Theory) Test Item- No.2</td></tr>
<tr><td>Occupational Title:</td><td colspan="4">Carpenter</td></tr>
<tr><td>Competence level:</td><td colspan="4">1</td></tr>
<tr><td>Code no.</td><td colspan="4"></td></tr>
<tr><td>Test Item type:</td><td colspan="4"><table>
<tr><td>Short answer</td><td colspan="3">✓</td></tr>
<tr><td>Multiple choice</td><td colspan="3"></td></tr>
<tr><td rowspan="2">Matching item</td><td>Generic</td><td>Cause-Effect</td><td>Work-sequence</td></tr>
<tr><td></td><td></td><td></td></tr>
</table></td></tr>
<tr><td>Complexity level:</td><td colspan="4">C2</td></tr>
<tr><td>Date of OP:</td><td colspan="4">September, 2020</td></tr>
<tr><td>Related modules:</td><td colspan="4">M1.5</td></tr>
<tr><td>Time allocation:</td><td colspan="4">1 minute</td></tr>
</table>

Test Item	Topping, shaping are operations carried out during re-conditioning of a damaged cross-cut saw. Write down the other three operations that can be used.
Answer spaces	(i) ……..…….. (ii) ……..…. (iii) ……..
Expected Key (answers)	(i) Setting (ii) Sharpening (iii) Side dressing

<table>
<tr><td>DIT/ QS</td><td colspan="4">Test Item Database
Written (Theory) Test Item- No.3</td></tr>
<tr><td>Occupational Title:</td><td colspan="4">Carpenter</td></tr>
<tr><td>Competence level:</td><td colspan="4">1</td></tr>
<tr><td>Code no.</td><td colspan="4"></td></tr>
<tr><td>Test Item type:</td><td colspan="4"><table>
<tr><td>Short answer</td><td colspan="3"></td></tr>
<tr><td>Multiple choice</td><td colspan="3">✓</td></tr>
<tr><td rowspan="2">Matching item</td><td>Generic</td><td>Cause-Effect</td><td>Work-sequence</td></tr>
<tr><td></td><td></td><td></td></tr>
</table></td></tr>
<tr><td>Complexity level:</td><td colspan="4">C1</td></tr>
<tr><td>Date of OP:</td><td colspan="4">September, 2020</td></tr>
<tr><td>Related modules:</td><td colspan="4">M1.3</td></tr>
<tr><td>Time allocation:</td><td colspan="4">1 minute</td></tr>
</table>

Test Item	What item is used by a carpenter to access the top of the roof?
Distractors and correct answer	A. Shore B. Scaffold C. Ladder D. Formwork

Key (answer)	C

DIT/ QS	Test Item Database Written (Theory) Test Item- No.4
Occupational Title:	Carpenter
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:	September, 2020
Related modules:	M1.3
Time allocation:	1 minute

Test Item	What type of single roof has a tie beam?
Distractors and correct answers	A. Flat roof B. Close couple roof C. Lean to roof D. Couple roof

Key (answer)	B

DIT/ QS	Test Item Database Written (Theory) Test Item- No.5
Occupational Title:	Carpenter
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:	September, 2020
Related modules:	M1.2
Time allocation:	1 minute

Test Item	Which of the listed tools is used to dismantle formwork?
Distractors and correct answers	A. Hand saw B. Screw driver C. Plier D. Claw bar

Key (answer)	D

DIT/ QS	Test Item Database Written (Theory) Test Item- No.6
Occupational Title:	Carpenter
Competence level:	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 module:	
Time allocation:	4 minutes

Test Item	Match the following tools with their functions

Column A (Tools)	
1	Saw set
2	Flat file
3	Slip stone
4	Triangular file

Column B (Functions)	
A	Side dressing
B	Shaping
C	Topping
D	Setting
E	Backing off
F	Grinding

Key (answer)	1:D, 2:C, 3:A, 4:B

DIT/ QS	Test Item Database Written (Theory) Test Item- No.7
Occupational Title:	Carpenter
Competence level:	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 module:	
Time allocation:	4 minutes

Test Item	Match the following machines and tools with their functions

Column A (Functions)	
A	Boring holes
B	Furniture finishes
C	Wood shaping and designing
D	Ripping timber

Column B (Tools and machines)	
1	Hand brace
2	Band saw
3	Surface machine
4	Grinding machine
5	Spraying gun
6	Circular saw

Key (answer)	A-1, B-5, C-2, D-6

DIT/ QS	Test Item Database Written (Theory) Test Item- No.8
Occupational Title:	Carpenter
Competence level:	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 module:	M1.1
Time allocation:	4 minutes

Test Item	Arrange the following procedure for constructing a bench in chronological order.

Column A (chronology)	**Column B (work steps) in wrong chronological order**	
1st	A	Cut notches
2nd	B	Cut timber to size
3rd	C	Assemble members
4th	D	Prepare working drawing
5th	E	Plane timber to size
6th	F	Measure timber

Key (answer)	1:D, 2:F, 3:B, 4:E, 5:A, 6:C

DIT/ QS	Test Item Database Written (Theory) Test Item- No.9
Occupational Title:	Carpenter
Competence level:	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 module:	M1.3
Time allocation:	4 minutes

Test Item	Indicate the correct job sequence in constructing a roof

Column A (chronology)	**Column B (work steps) in wrong chronological order**	
1st	A	Nail the iron sheet
2nd	B	Fix the wall plate
3rd	C	Fix the purlins
4th	D	Cut the joints
5th	E	Maintain plumb ness
6th	F	Set the structures
7th	G	Erect trusses
8th	H	Fix the fascia board
9th	I	Align the structures
10th	J	Trim projections
11th	K	Take measurements

Key (answer)	1:K, 2:D, 3:B, 4:F, 5:G, G:E, 7:1, 8:C, 9:J, 10:H, 11:A

PERFORMANCE TEST ITEMS (Samples)

DIT/ QS	Test Item Database Performance Test Item 1
Occupational Title:	Carpenter
Competence level:	1
Code no.	
Test Item:	Using air drying/natural methods, season ten(10) pieces of timber for formwork of 2100*300*25mm
Complexity level:	P2
Date of OP:	September 2020
Related modules:	M1.4
Related skills and knowledge:	Types of timber, Properties of timber, measuring, moisture content, protecting ends of timber, stacking skills, grading timber, Safety working environment
Required tools, Materials and Equipment:	Brush, timber, nails, moisture metre, black polythene, stackers, hammer, bearers, handsaw.
Time allocation:	4 hours
Preferred venue:	Carpentry timber shade
Remarks for candidates	▪ Observe rules and regulations
Remarks for assessors	▪ Provide all the required tools, equipment and materials for assessment

#	Assessment criteria	Scoring guide	Max. Score	
			Process	Result
1	Preparation for work	Wore PPE		
		Helmet		1
		Overcoat		1
		Eye goggles		1
		Gloves		1
		Safety boots		1
		Nose mask		1

#	Assessment criteria	Scoring guide	Max. Score	
			Process	Result
		Dirt free timber seasoning site observed		2
2	Position bearers	Placed bearer on support	2	
		Bearer placed horizontally to the depth observed		1
		Bearer placed at height of 600mm above the ground(+/- 10mm)		2
		Placed bearers at the centre	2	
		Bearer placed at 1m apart observed		1
3	Prepare stickers	**Cutting of stickers** Learner held the saw with the fore finger out of the saw handle and the left hand gripping the sticker on the bench hook	2	
		Learner held the saw in a stable position	2	
		Stickers cut of the same species of the timber observed		1
		Stickers cut at $25mm^2$ (+/- $1mm^{2)}$ observed		3
		Measuring of moisture content Measured moisture content of stickers	3	
		Moisture content of stickers at 30%-36% observed		4
4	Sort timber	Measured timber sizes	1	
		Timber size of 2100*300*25mm observed		3
		Measured timber moisture content	2	
		Moisture content of timber at 30-36% observed		4
5	Grade timber	Graded timber	3	
		Graded timber of 1^{st}, 2^{nd} and 3^{rd} classes observed		4
6	Protect timber ends	Protected timber ends	2	
		Timber ends covered evenly with paint observed		2
7	Stack timber	Piled timber	3	

#	Assessment criteria	Scoring guide	Max. Score	
			Process	Result
		Piled timber according to class from 1st -3rd observed		2
		Arranged stickers	3	
		Stickers spaced at 1m apart observed		1
		No sagging of piled timber observed		2
8	Finishing	Covered timber	2	
		Piled timber covered with black polythene membrane observed		2
		Checked moisture content	2	
		Moisture content of 18-21% observed		4
Total			**29**	**44**
Maximum Score (Y)		**(X/Y)x100**	**73**	

4.0 ATP- PART IV

INFORMATION ON REVIEW PROCESS

4.1 Occupational Profile Review (September 2020)

The Occupational Profile was exclusively reviewed by job practitioners who were working in the Carpenter occupation. 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 Review (September 2020)

Based on the Occupational Profile for Carpenter of September 2020, training modules were reviewed by job practitioners, guided by UVQF Facilitators.

4.3 Test Item Review (September 2020)

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

4.4 Methodology

The rationale for the Assessment and Training Package review 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 Review panel

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

Review Panel		
No.	**Name**	**Institution/ Organisation**
1.	Baryakira Park	St. Joseph's Technical school, Kisubi
2.	Mauko Levi Wafula	Bishop's Senior secondary school, Mukono
3.	Ntege Deo Ivan	Omulangira Ssemakokiro Investments
4.	Olwa Tom	Nakawa Vocational Training Institute
5.	Nyanzi Flavia	NCDC
6.	Nabbaya E Robert	Jinja Vocational Training Institute
7.	Asiimwe Edward Tarsis	Mbarara High School
8.	Erau Daniel	Kibuli Secondary School
9.	Mitsagharu Eric	Mengo Senior School
10.	Bekunda Livingstone	Kako Senior Secondary school
11.	Oketch Lewis Quinto	Lugogo Vocational Training Institute

4.6 Facilitator team

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

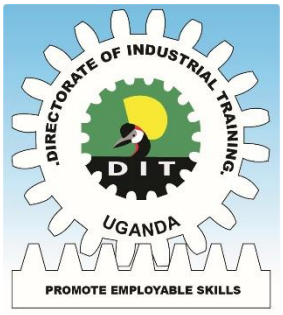
1. **Team Leader**: Ms. Mukyala Ruth Ag Deputy Director/ QS Dept, DIT
2. **Facilitators**: Ms. Nakimuli Patra, DIT, Ms. Acayo Judith, DIT, and Ms. Asiimwe Janet, DIT
3. **DIT Data Entrants**: Mr. Turyasingura Yusuf and Mr. Balyejusa Simon
4. **Compiled by**: Mr. Turyasingura Yusuf, DIT
5. **Edited by:** Ms. Mukyala Ruth Ag Deputy Director, DIT
6. **Coordinated by**: Mr. Byakatonda Patrick Ag. Director, DIT; and Ms. Mukyala Ruth Ag. DD Qualification Standards Dept. DIT

4.7 Reference time

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

References

1. Woodwork by GN Green
2. Woodwork by David Willacy Book 1 and 2
3. Woodwork by Frank Hilton
4. Craft Woodwork by Macky
5. Building Construction by Motivate
6. Woodwork Practice by PF Lge
7. Carpentry and Joinery 1 (3rd Edition) by Brian Porter and Reg Rose
8. Carpentry and Joinery 2 (3rd Edition) by Brian Porter and Reg Rose
9. Woodwork by George Love
10. Carpentry and Joinery by R.B. Bates (Book 1 and 2)
11. Advanced Carpentry and Joinery by Mckay



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