



THE REPUBLIC OF UGANDA
Ministry of Education and Sports

**Business, Technical, Vocational Education and Training [BTVET] Sub sector
Reform**



**Assessment and Training
Package**

For

TILER

Qualification level: 1
**Occupational Cluster: PHYSICS, TECHNOLOGY
AND DESIGN**

January 2022

Developed by:

**Qualifications Standards Department
Directorate Of Industrial Training**

Funded by:

Government of Uganda

DIRECTORATE OF INDUSTRIAL TRAINING

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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:

- 4.1 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.
- 4.2 The Certificates and Diplomas to be awarded shall be in the form prescribed by the Minister on the recommendation of the Industrial Training Council.
- 4.3 The Certificates and Diplomas awarded under the Act shall be recognized 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) Harmonizing 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 organizes 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.

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Word from Permanent Secretary

The Ministry of Education and Sports (MoES) through the Directorate of Industrial Training Conducts Competence Based Assessment.

The advantages of CBET include improved access, equity and relevance of BTVET, reduced unit costs of training, and recognition of Prior Learning (or on-the-job- training), among others.

As the Ministry executes its obligation of ensuring quality in training standards, the public-private partnership is being strengthened to improve occupational competence of the country's workforce without gender bias.

Further, efforts to link Education and Training to the real world of work, the Ministry through the BTVET department set up the Uganda Vocational Qualification Framework (UVQF) Secretariat in 2004 which was main-streamed into DIT in 2008 as the Qualifications Standards Department.

To achieve the set-out targets in the reform process, the Directorate embarked on the anticipated UVQF design and development piloting its instruments and mechanisms in order to effectively enhance Competence-Based Education and Training (CBET) in Uganda.

To date, the Qualifications Standards Department of DIT has produced Assessment and Training Packages (ATP) for various occupations. Each ATP contains 3 parts namely:

1. Occupational/job Profile
2. Training modules and
3. Assessment instruments Banks

The ATP 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 & Training Package (ATP)" for training, assessment and certification of **ATILER- QUALIFICATION LEVEL I**

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

Ketty Lamaro
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 TILER.** This Occupational Profile, which was developed by Tilers practicing in the world of work mirrors the duties, and tasks Tilers are expected to perform.
- 0.2. **PART II: “Training Modules”** in the form of guidelines to train **TILER** both on the job as well as in training centers (or combinations of both venues of learning). The Training Modules herein have been developed 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 **TILER**. These assessment-based instruments were developed by Job practitioners (Tilers) 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 of time 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 centers as well as companies can accommodate more students 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 developed as follows:

- i Part 1: Occupational Profile: **January 2022**
- ii Part 2: Training Modules: **January 2022**
- iii Part 3: Assessment Instruments: **January 2022**

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

Patrick Byakatonda
Ag. Director DIT

Acknowledgement

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

- 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;
- Art and Design Curriculum Specialists from NCDC
- Examination Specialists from UNEB
- Art and Design Secondary school teachers
- 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 & Certification
ATP	Assessment & Training Packages
BTVET	Business, Technical and Vocational Education and Training
CBA	Competence Based Assessment
CBET	Competency Based Education and Training
DACUM	Develop a Curriculum
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 and 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 to a set standard.
CBET	Competence-based education and training means that programmes: <ol style="list-style-type: none"> 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 LWA 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/behaviour, 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. <i>(see also: Duty)</i>

1.0 ATP-PART I

Occupational Profile for TILER

- 1.1 The OCCUPATIONAL PROFILE (OP) for “TILER” below defines the **Duties** and **Tasks** a competent TILER 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 7 to 12 competent job practitioners guided by trained and experienced facilitators. During a five-day workshop the panellists define 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 panellists, facilitators and coordinators who participated in developing this Occupational Profile for a TILER are listed on the following page.

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

Expert Panel

Kafero Adnan

Curriculum
Specialist NCDC

Bafundizeki Robert Deus

UNEB Representative

Kaddu Mukasa Samuel

St. Peters' Bukalagi

Kyasanga Joad

Open World Contractors

Adong Evelyn

Kampala Tile Market

Nsubuga Francis

Mikigan Investments(U) Ltd

Mosinghi Jackson

Nakawa VTI

Facilitators

Komugisha Noeline

Directorate of Industrial
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Asiimwe Mashaija Sarah

Directorate of Industrial
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Elizabeth Ruth Mukyala

Directorate of Industrial
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Funded by

Government of Uganda



THE REPUBLIC OF UGANDA
Ministry of Education and Sports

**Business, Technical, Vocational Education and
Training (BTJET) Sub sector Reform**

Occupational Profile

For a

“TILER”

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

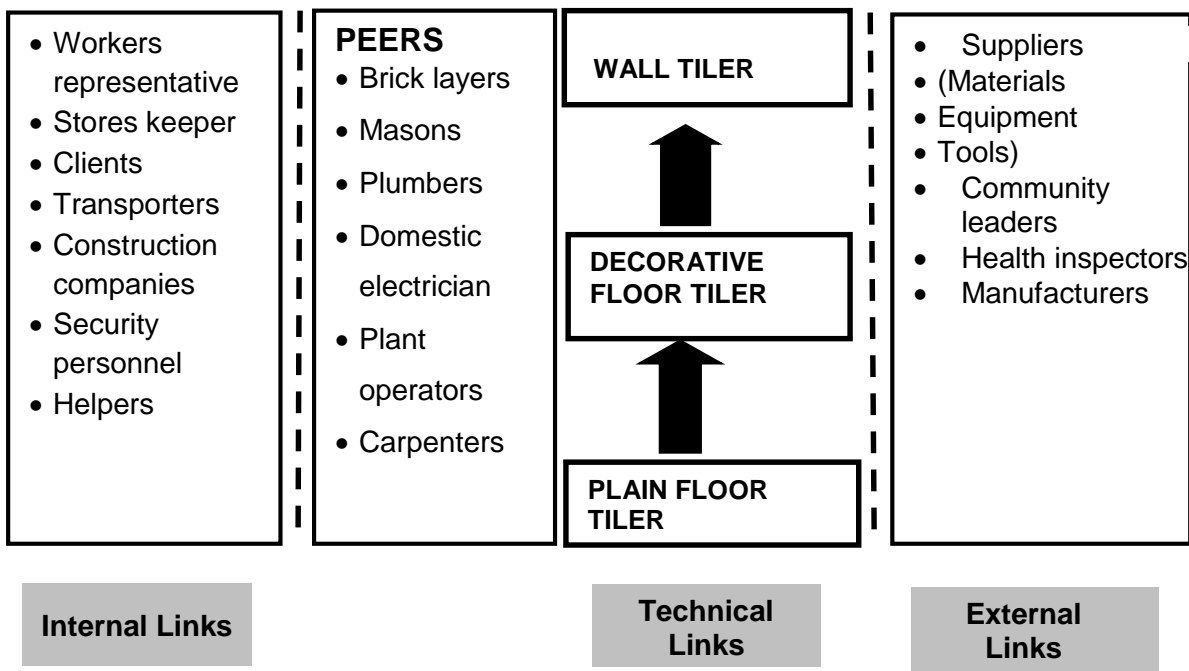
Dates of workshop: 3rd to 7th January 2022

NOMENCLATURE FOR THE OCCUPATION OF A TILER

Definition of a Tiler

A tiler is a person who installs, repairs and replaces tiles on floors, walls and ceilings.

JOB ORGANISATION CHART FOR A TILER



Descriptions for the levels in the occupation of a 'Tiler'

UVQ Level 1 Plain Floor Tiler: Installs plain tiled floors and maintains them in good, safe condition.

UVQ Level 2 Decorative Floor Tiler: Installs different designs of floor tiles to create decorated tiled floors with different patterns as well as maintaining them in good and safe condition.

UVQ Level 3 Wall Tiler: Installs both decorative and plain wall tiles and maintains them in good, safe condition.

Duties and Tasks

A. PLAN TILING WORKS	A1. Survey site	A2. Interpret building plans	A3. Determine pattern/ layout
	A4. Prepare working drawings	A5. Determine, tools, equipment and materials	A6. Determine labour force requirements
	A7. Prepare budget	A8. Prepare bill of quantities	A9. Schedule work

B. MANAGE TOOLS EQUIPMENT AND MATERIALS	B1. Test tools equipment and materials for quality	B2. Purchase tools equipment and materials	B3. Transport tools, equipment and materials
	B4. Mark tools and equipment	B5. Store tools, equipment and materials	B6. Prepare Inventory
	B7. Allocate tools, equipment and materials	B8. Operate tools, equipment	B9. Service tools and equipment
	B10. Repair/ replace worn out tools.		

C. PREPARE SURFACE	C1. Hack surface	C2. Fill cracks	C3. Fill holes
	C4. Level surface	C5. Reinforce surface	C6. Clean surface
	C7. Wet surface		

D. INSTALL TILES	D1. Soak tiles	D2. Prepare bonding material	D3. Spread bonding material
	D4. Set tiles	D5. Shape tiles	D6. Install tiles
	D7. Align tiles	D8. Level tiles	D9. Dress and finish joints
	D10. Clean work	D11. Polish tiles	D12. Strip edges
	D13. Install fixtures		
E. MAINTAIN TILED FLOORS	E1. Clean tiles	E2. Replace damaged tiles	E3. Refill joints
	E4. Replace edge strips	E5. Refill cracks	E6. Re-fix loose tiles
F. PERFORM ADMINISTRATIVE TASKS	F1. Contract work	F2. Recruit workers	F3. Assign work
	F4. Supervise workers	F5. Evaluate work	F6. Prepare payment schedules
	F7. Motivate workers	F8. Schedule meetings	F9. Manage conflicts
	F10. Manage site records	F11. Communicate with stakeholders	F12. Market tiling services
	F13. Provide technical advice to clients	F14. Appraise workers	F15. Hand over work

G. PERFORM OCCUPATIONAL HEALTH, SAFETY AND ENVIRONMENTAL PROTECTION PRACTICES	G1. Wear protective gear	G2. Gazette working area	G3. Display safety signs
	G4. Observe safety regulations	G5. Prepare first aid kit	G6. Administer first aid
	G7. Re-use materials	G8. Re-cycle materials	G9. Dispose waste
	G10. Perform safety inspections		

H. PERSUE PROFESSIONAL DEVELOPMENT	H1. Network with peers on technical matters	H2. Network with technical agencies	H3. Attend technical workshops
	H4. Train interns/workers	H5. Identify workers training needs	H6. Participate in trade shows/fares
	H7. Attend professional training	H8. Carry out research	

Additional Information

Generic knowledge & skills

- | | | |
|---|--|--|
| 1. Costing | 17. Sensory evaluation | 30. Counselling and guidance of staff |
| 2. Measurements | 18. Motivational tools | 31. Public relations |
| 3. Basic mathematics | 19. Staff training and mentoring | 32. Interpersonal relations |
| 4. Material types and properties | 20. Analytical skills | 33. Marketing skills |
| 5. Time management | 21. Assessment and evaluation of work | 34. Teamwork and cooperation |
| 6. Accountability | 22. Tools and equipment selection, usage and storage | 35. Negotiation skills |
| 7. Designing | 23. Waste disposal and management | 36. Entrepreneurship skills |
| 8. Communication skills | 24. Safety, health and environment awareness | 37. Resource mobilization and management |
| 9. Information and communication technology | 25. Financial literacy | 38. Driving |
| 10. Literacy skills | 26. Coordination | 39. Problem solving |
| 11. Customer and personal service | 27. Handling of materials | 40. Manual dexterity |
| 12. Active listening | 28. Oral comprehension | 41. Speaking |
| 13. Building and construction | 29. Records keeping and management | 42. Precision |
| 14. Critical thinking | | 43. Eye-arm steadiness |
| 15. Decision making | | |
| 16. Research skills | | |

**Tools, Equipment
and Materials**

- | | | |
|---|---|--------------------------------|
| 1. Trowels (pointing, jointing, laying) | 22. Oxides/pigments | 44. Chalk line |
| 2. Tile cutter (Manual and powered) | 23. Power source | 45. Gauge box |
| 3. Chisels | 24. Reinforcements | 46. Computers |
| 4. Mallets | 25. Phones | 47. Wheel barrow |
| 5. Spirit level | 26. Grinder | 48. Spade |
| 6. Plumb bob | 27. Drilling machine | 49. Mortar pans |
| 7. Builder's string | 28. Rubber float | 50. Hoes |
| 8. Hammers (crab, brick and claw) | 29. Notched trowel/notched steel float | 51. Adhesives |
| 9. Sponges | 30. Axes (Mason axe, Pick axe) | 52. Cement |
| 10. Scrapers e.g. Steel wool | 31. Protective gear (nose/mouth mask, goggles, gumboots, coat, gloves, head gear) | 53. Corner strips/ tile strips |
| 11. Masonry saws | 32. Grout | 54. Spacers |
| 12. Forklifts | 33. Serrated spreader | 55. Shears |
| 13. Brooms | 34. Cement/concrete mixers | 56. Tape measure |
| 14. Brushes (wire, soft, hard) | 35. Aggregates | 57. Squares |
| 15. Buckets | 36. Mortar boards | 58. Tiles |
| 16. Caulking guns and caulks | 37. Nippers (Pincers, Pliers) | 59. Stationery |
| 17. Cement sheet cutters | 38. Pointed grouters | 60. Dumpy levels |
| 18. Hose water sprays | 39. Cutting discs (powered, manual) | 61. Wooden floats |
| 19. Ladders | 40. Rags | 62. Masonry drill bits |
| 20. Sieving mesh | 41. Wedges | 63. Timber/Steel (scaffolds) |
| 21. Hack saw | 42. Spatulas | 64. Squeezers |
| | 43. Water level | 65. Straight edges |
| | | 66. Operation manuals |
| | | 67. Hawk |

Attitudes / Traits / Behaviour

- | | |
|------------------------|-----------------------------|
| 1. Extent flexibility | 16. Social and Cooperative |
| 2. Imaginative | 17. Ambitious |
| 3. Problem sensitivity | 18. Organised |
| 4. Near vision | 19. Innovative and creative |
| 5. Patient | 20. Result oriented |
| 6. Honest | 21. Team player |
| 7. Knowledgeable | 22. Tolerant |
| 8. Active | 23. Respectful |
| 9. Trustworthy | 24. Confident |
| 10. Trainable | 25. Intelligent |
| 11. Open minded | 26. Physically fit |
| 12. Self-motivated | 27. Flexible |
| 13. Polite | 28. Committed |
| 14. Punctual | 29. Determined |
| 15. Hard working | |

Future Trends and Concerns

1. Technological advancements
2. Formation of professional body
3. Recognition of professional tiler
4. Expansion of market
5. Review of curricular
6. Refresher courses/ seminars/ workshops and study tours
7. Salary standard setting
8. Standardize training curricular
9. Staff motivation through awards and medals
10. Benchmarking with tilers in other economies
11. Attract investors to set up tile factories in Uganda

ATP – PART II

Training Modules for TILER

- 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 a TILER to acquire job specific skills and knowledge (i.e., competencies) module by module. A single module can be accomplished within a relatively short duration of time 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 students in a given period of time.
- 2.3 The modules were developed jointly by both instructors and job practitioners. They were developed 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 an 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 TILER QUALIFICATION LEVEL 1?

A **level 1 TILER** is a person who installs, repairs and replaces tiles on floors, walls and ceilings.

TRAINING MODULES FOR TILER UVQ LEVEL 1

Code	Module Title	Average duration	
		Contact hours	Weeks
UE/TI/M1.1	Establish and manage tiling business	240hrs	5weeks
UE/TI/M1.2	Install plain floor tiles	160hrs	4weeks
UE/TI/M1.3	Maintain plain tiled floor	80hrs	2weeks
UE/TI/M1.4	Manage tiling tools and equipment	40hrs	1week
Summary	4 Training Modules	520 hrs	12 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 160 hours 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 instruction, as the minimum exposure.

Prior to summative assessment by recognised Agencies, the users of these Module 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 for **TILER**.

Code	UE/TI/M1.1
Module title	M1.1: Establish and Manage a tiling business
Related Qualification	Part of: Uganda Vocational Qualification (TILER UVQ 1)
Qualification Level	1
Module purpose	By the end of this module, the trainee should be able to establish and successfully run the tiling business.
Learning-Working Assignments (LWAs)	<p>LWA1/1: Establish tiling business</p> <p>LWA1/2: Source for resources</p> <p>LWA1/3: Market tile business</p> <p>LWA1/4: Determine tile demand</p> <p>LWA1/5: Perform occupational health, safety and environmental protection practices</p>
Related Practical Exercises (PEXs)	<p>LWA1/1: Establish tiling business</p> <p>PEX 1.1: Make business plan</p> <p>PEX 1.2: Prepare budget</p> <p>PEX 1.3: Register company</p> <p>PEX 1.4: Obtain legal operating documents</p> <p>PEX 1.5: Determine location</p> <p>PEX 1.6: Set up working space</p> <p>PEX 1.7: Adhere to SOPS</p> <p>LWA1/2: Source for resources</p> <p>PEX 2.1: Source for capital</p> <p>PEX 2.2: Recruit workers</p> <p>PEX 2.3: Source for material suppliers</p> <p>PEX 2.4: Procure tools, materials and equipment</p> <p>LWA1/3: Market tile business</p> <p>PEX 3.1: Carry out market survey</p> <p>PEX 3.2: Consult stakeholders</p> <p>PEX 3.3: Determine market research area</p> <p>PEX 3.4: Determine costs</p> <p>PEX 3.5: Advertise business</p> <p>PEX 3.6: Provide customer care</p> <p>PEX 3.7: Offer tile handling care</p> <p>PEX 3.8: Prepare company profile</p>

	<p>LWA 1/4: Search for area of tile demand</p> <p>PEX 4.1: Determine area of specialization</p> <p>PEX 4.2: Procure tiles on demand</p> <p>PEX 4.3: Bid for work</p> <p>LWA 1/5: Perform occupational health and environmental safety practices</p> <p>PEX 5.1: Establish environmental worker's plan</p> <p>PEX 5.2: Display safety signs</p> <p>PEX 5.3: Procure safety equipment for worker</p> <p>PEX 5.4: Wear protective gear</p> <p>PEX 5.5: Manage waste</p>
Pre-requisite modules	
Related knowledge/ theory	<ul style="list-style-type: none"> • Project management • Business management • Marketing techniques • Interpersonal values • Literacy • Numeracy • Accounting • Customer care • Ability to lead others • Environmental factors • Waste management methods • Computer usage • Ability to communicate • Tiles and tile installation
Average duration of learning	<p>240 hours (30 days) of nominal learning suggested to include:</p> <ul style="list-style-type: none"> • <i>5 days of occupational theory and</i> • <i>25 days of occupational practice</i>
Suggestions on organization of learning	<p>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.</p>

Assessment	Assessment to be conducted according to established regulations by recognised assessment body using related practical and written test items from Item bank
Minimum required tools/ equipment/ implements or equivalent	Laptop, internet, transport means, furniture, printers, calculator, phone, data storage device, file cabins, cameras, photocopier
Minimum required materials and consumables or equivalent	Stationery, toner, media (magazines, journals, catalogues), fuel, company seal, company stamps, business cards, flyers and brochures
Special notes	The theory must be integrated into the practice during delivery.

Code	UE/TI/M1.2
Module title	Install plain floor tiles
Related Qualification	<u>Part of:</u> Uganda Vocational Qualification (TILER UVQ 1)
Qualification Level	1
Module purpose	By the end of the module the trainee should be able to install floor tiles of different patterns.
Learning-Working Assignments (LWAs)	<p>LWA 2/1: Conduct site survey</p> <p>LWA 2/2: Make a work plan</p> <p>LWA 2/3: Prepare surface to receive tiles</p> <p>LWA 2/4: Lay tiles</p> <p>LWA 2/5: Perform occupational health, safety and environmental protection practices</p>
Related Practical Exercises (PEXs)	<p>LWA 2/1: Conduct site survey</p> <p>PEX 1.1: Meet clients</p> <p>PEX 1.2: Tour/inspect site</p> <p>PEX 1.3: Do necessary measurements</p> <p>PEX 1.4: Prepare survey report</p> <p>LWA 2/2: Make a work plan</p> <p>PEX 2.1: Prepare BOQs/estimate of materials</p> <p>PEX 2.2: Make a work schedule</p> <p>PEX 2.3: Mobilize equipment, materials and personnel.</p> <p>LWA 2/3: Prepare surface to receive tiles</p> <p>PEX 3.1: Clean working area</p> <p>PEX 3.2: Screed surface</p> <p>PEX 3.3: Determine slope level and direction.</p>

	<p>LWA 2/4: Lay tiles</p> <p>PEX 4.1: Prepare tiling materials</p> <p>PEX 4.2: Soak tiles</p> <p>PEX 4.3: Space tiles</p> <p>PEX 4.4: Determine pattern or lay out</p> <p>PEX 4.5: Fix tiles</p> <p>PEX 4.6: Finish edges</p> <p>PEX 4.7: Fix skirting</p> <p>PEX 4.8: Finish joints/ apply grout</p> <p>PEX 4.9: Clean work/tiles</p> <p>LWA 2/5: Perform occupational health, safety and environmental practices</p> <p>PEX 5.1: Train people on safe tools and equipment usage</p> <p>PEX 5.2: Manage waste</p> <p>PEX 5.3: Wear protective gear</p> <p>PEX 5.4: Store tools materials and equipment</p> <p>PEX 5.5: Administer first aid</p> <p>PEX 5.6: Display safety sign posts</p>
Occupational health and safety	Precautions, rules and regulations on occupational health, safety and environmental protection, included in the related knowledge listings as well as in test items 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 about adhesives and their uses • Tools and equipment usage • Tile spacer sizes • Borders and skirtings • Appropriate storage of tools and materials • Tile selection • Tile handling • Determining gradient

	<ul style="list-style-type: none"> • Background preparation procedures • Mixing ratios ratios/proportioning • Project planning and management • Plan interpretation
Average duration of learning	160 hours (20 days) of nominal learning suggested to include: <ul style="list-style-type: none"> • <i>4 days of occupational theory and</i> • <i>16 days of occupational practice</i>
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 recognised assessment body using related practical and written test items from Item bank
Minimum required tools/ equipment/ implements or equivalent	Rubber mullet, cutter, chisel, hoe, drum, tiles, grinder extension cable, power outlet, tape measure, tile cutter ,spirit level, spade, wheel barrow, pointed plaster trowel
Minimum required materials and consumables or equivalent	Steel wool, sand, grout remover, tile cleaner, adhesive cement, skirting and borders, tiles, strips, spacers, tile grout, tile adhesive.
Special notes	The theory must be integrated into the practice during delivery.

Code	UE/TI/M1.3
Module title	M1.3 Maintain plain tiled floors
Related Qualification	Part of: Uganda Vocational Qualification (TILER UVQ 1)
Qualification Level	1
Module purpose	The trainee should be able to safely replace broken tiles, repair and clean tiled floors
Learning-Working Assignments (LWAs)	LWA 3/1: Prepare maintenance work plan LWA 3/2: Prepare sub floor LWA 3/3: Maintain tiled floor LWA 3/4: Perform occupational health, safety and environmental protection practices
Related Practical Exercises (PEXs)	<p>LWA 3/1: Prepare maintenance work plan PEX 1.1: Prepare bill of quantities PEX 1.2: Negotiate payments PEX 1.3: Prepare maintenance schedule PEX 1.4: Allocate resources</p> <p>LWA 3/2: Prepare sub-floor PEX 3.1: Mark area PEX 3.2: Remove broken tiles PEX 3.3: Clean area</p> <p>LWA 3/3: Maintain tiled floor PEX 4.1: Examine floor for damages PEX 4.2: Replace broken tiles PEX 4.3: Allocate resources PEX 4.4: Clean tiled surface PEX 4.5: Replace worn out strips</p> <p>LWA 3/4: Perform Occupational Health, Safety and Environmental protection practices PEX 5.1: Wear protective gear PEX 5.2: Manage waste PEX 5.3: Administer first aid PEX 5.4: Train workers on health and safety</p>

	PEX 5.5: Display safety signs
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"> • General construction skills • Grout mixing • Adhesive usage • Different types of sub-floors/bases • Tile sizes and types • Spacer sizes • Measurements • Setting out • Cleaning methods for different floor surfaces • Laying tiles • Applying grout • Surface preparation • Tools and equipment usage • Cutting methods • Health and safety • Calculations on materials required • Waste management • Tile layout plan interpretation
Average duration of learning	<p>80 hours (14 days) of nominal learning suggested to include:</p> <ul style="list-style-type: none"> • <i>4 days of occupational theory and</i> • <i>10 days of occupational practice</i>
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 recognised assessment body using related practical and written test items from Item bank
Minimum required tools/ equipment/ implements or equivalent	Bucket, rubber mullet, notched trowel, grinder, tile pincer ,chalk line, tape measure, pencil, tile cutter, spirit level ,spade ,wheel barrow, pointed plasters trowel,carbonium paper, sponge, rubber gloves, nose mask, scraper.

Minimum required materials and consumables or equivalent	Pencil, carbonium paper, rubber gloves, nose mask, sponge, steel wool, sand, cement, adhesive, tiles, strips, spacers, rag/cotton waste, grout, soap/detergent, first aid kit
Special notes	The theory must be integrated into the practice during delivery.

Code	UE/TI/M1.4
Module title	M4: Manage Tiling Tools and Equipment
Related Qualification	<u>Part of</u> Uganda Vocational Qualification (TILER UVQ LEVEL 1)
Qualification Level	Level 1
Module purpose	After completing this module, a trainee should be able to select, operate and maintain different tiling tools and equipment.
Learning-Working Assignments (LWAs)	<p>LWA 4/1: Operate hand and electric powered tools and equipment</p> <p>LWA 4/2: Maintain tools and equipment</p> <p>LWA 4/3: Perform occupational safety, health and environmental protection practices</p> <p><u>Note:</u></p> <ol style="list-style-type: none"> 1. The learning exercises may be repeated till the Trainee acquires targeted competence; 2. The Trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.
Related Practical Exercises (PEXs)	<p>LWA 1/4: Operate electric powered and hand tools and equipment</p> <p>PEX 1.1: Procure tools and equipment</p> <p>PEX 1.2: Operate electric powered tools and equipment</p> <p>PEX 1.3: Operate hand tools</p> <p>LWA 2/4: Maintain tiling tools and equipment</p> <p>PEX 2.1: Grease machines</p> <p>PEX 2.2: Service tiling equipment and tools</p> <p>PEX 2.3: Clean tools and equipment</p> <p>PEX 2.4: Repair/replace faulty tools and equipment spares</p> <p>PEX 2.5: Test tools and equipment performance</p>
	<p>LWA 3/4: Perform occupational health, safety and environmental protection.</p> <p>PEX 3.1: Manage Waste</p> <p>PEX 3.2: Wear protective gears</p> <p>PEX 3.3: Organize work shop/store</p> <p>PEX 3.4: Administer First Aid</p>

Occupational health and safety	Practices, rules and regulations on occupational health, safety and environmental protection, included in the listed related knowledge should be Performed 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 recognized reference materials as appropriate:</i></p> <ul style="list-style-type: none"> • Tools and equipment handling • Classification of different types of tools and equipment. • Usage of different types of tools and equipment • Explain the common tools and equipment usage during tiling works and possible remedies • Explain the importance of cleaning tools and equipment
Average duration of learning	<p>40hours (5 days) of nominal learning suggested to include:</p> <ul style="list-style-type: none"> • 1 days of occupational theory and • 4 days of occupational practice
Suggestions on organization of learning	The acquisition of competencies (skills, knowledge, attitudes) described in this module will 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 recognized assessment body using related Practical and Written Test Items from Item bank.
Minimum required tools/ equipment/ implements or equivalent	Tile cutter, spirit level, water level, trowel, rubber mallet, Laptop, Internet, Transport means, Furniture, Printers, Calculator, Data storage device, Filing cabins, cameras
Minimum required materials and consumables or equivalent	Spanners, tool sharpener, detergent, water grease, screw driver, nuts screws and grinder
Special notes	None

ATP- PART III

Assessment Instruments for TILER

- 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 **TILER** are included. A larger selection of test items can be obtained as electronic or printed copies from designated outlets.

3.9 Overview of test item samples included:

No.	Type of Test Item	Numbers included
1	Written (Theory)- Short Answer	4
2.	Written (Theory)- Multiple Choice	4
3.	Written (Theory)- Matching item- Generic	1
4.	Written (Theory)- Matching item (Work sequence)	1
5.	Written (Theory)- Matching item- Cause effect	1
6	Performance (Practical) Test Items	1
	Total	12

WRITTEN TEST ITEMS (SAMPLES)

DIT/ QS	Test Item Database Written (Theory) Test Item- No. 1			
Occupational Title:	TILER			
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:	January, 2022			
Related module:	M1.4			
Time allocation:	3 minutes			
Marks allocation	3marks			

Test Item	Mention any three measuring tools used in tiling.
Answer spaces	1. 2. 3.
Expected key (answers)	1. Steel tape 2. Vanier calliper 3. Micrometre screw gauge 4. Tri-squares 5. Steel rule

DIT/ QS	Test Item Database Written (Theory) Test Item- No. 2			
Occupational Title:	TILER			
Competence level:	1			
Code no.	TI			
Test Item type:	Short answer	√		
	Multiple choice			
	Matching item	Generic	Cause-Effect	Work-sequence
Complexity level:	C1			
Date of OP:	January			
Related module:	M1.2			
Time allocation:	2minutes			
Marks allocation	2marks			

Test Item	The two common bases on which tiles are installed are
Answer spaces	I. II.
Expected key (answers)	A. Hollow base B. Solid base

DIT/ QS	Test Item Database Written (Theory) Test Item- No. 4			
Occupational Title:	TILER			
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:	January,2022			
Related module:	M1.3			
Time allocation:	2minutes			
Marks allocation	2marks			

Test Item	Which of the following materials is used to make ceramic tiles.
Answer spaces	<p>A. Plastic</p> <p>B. Clay</p> <p>C. Sand</p> <p>D. Stones</p>
Expected key (answers)	B

DIT/ QS	Test Item Database Written (Theory) Test Item- No. 3			
Occupational Title:	TILER			
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:	January,2022			
Related module:	M1.3			
Time allocation:	4minutes			
Marks allocation	6marks			

Test Item	List three materials and three tools used when cleaning tiles	
Answer spaces	Materials	Tools
	1.....	1.
	2.....	2.....
	3	3.....
Key (answer)	1. Broom 2. Detergent 3. Rag 4. Steel wire 5. Sponge 6. Bucket 7. Hosepipe 8. Gloves 9. Gumboots 10. Scrapers 11. water	

DIT/ QS	Test Item Database Written (Theory) Test Item- No. 4			
Occupational Title:	TILER			
Competence level:	1			
Code no.				
Test Item type:	Short answer			
	Multiple choice	√		
		Generic	Cause- Effect	Work-sequence
	Matching item			
Complexity level:	C1			
Date of OP:	January,2022			
Related module:	M1.3			
Time allocation:	2minutes			
Marks allocation	2marks			

Test Item	Which of the following materials is used to make ceramic tiles.			
Answer spaces	<p>A. Plastic</p> <p>B. Clay</p> <p>C. Sand</p> <p>D. Stones</p>			
Expected key (answers)	B			

DIT/ QS	Test Item Database Written (Theory) Test Item- No. 5			
Occupational Title:	TILER			
Competence level:	1			
Code no.	TI			

Test Item type:	Short answer			
	Multiple choice	√		
	Matching item	Generic	Cause-Effect	Work-sequence
Complexity level:	C2			
Date of OP:	January 2022			
Related modules:	M1			
Time allocation:	2 Minutes			
Marks allocation	2 marks			

Test Item	A tiler is
Distracters and correct answer	<p>A. A person who Installs and maintains tiles B. A Person who manufactures tiles C. A person who keeps tiles clean D. A person who cuts tiles</p>
Expected key (answer)	A

DIT/ QS	Test Item Database Written (Theory) Test Item- No. 6			
Occupational Title:	TILER			
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:	January, 2022			
Related module:	M1.3			
Time allocation:	2 mins			

Marks Allocated:	2 marks
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Test Item	Quarry tile is also called.....
Answer spaces	<p>A. Stone tile B. Workshop tile C. Granite tile D. Unglazed ceramic tile</p>
Key (answer)	D

DIT/ QS	Test Item Database Written (Theory) Test Item- No. 7			
Occupational Title:	TILER			
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:	January, 2022			
Related module:	M1.3			
Time allocation:	2 minutes			
Marks Allocated:	2 marks			

Test Item	Which of the following is a materials used when laying tiles? .
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Answer spaces	A. Tile cutter B. Brush C. Protective gear D. Grout
Key (answer)	D

DIT/ QS	Test Item Database Written (Theory) Test Item- No. 8			
Occupational Title:	TILER			
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:	January, 2022			
Related module:	M1.4			
Time allocation:	2 mins			
Marks allocation	4 marks			

Test item	Match the following tools to their uses in tile installation
------------------	--

Column A: Tiling activities	
1	Tile cutting
2	Cleaning
3	Mixing mortar
4	Spread bonding material

Column B: Tools	
A.	Notched trowel
B.	Hoe
C.	Brush
D.	Tile cutter
E.	Tape measure
F.	Spirit level

Key (answer)	1:D, 2:C, 3:B, 4:A
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DIT/ QS	Test Item Database Written (Theory) Test Item- no. 9			
Occupational Title:	TILER			
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:	January, 2022			
Related module:	M1.2			
Time allocation:	4mins			
Marks allocation	4 marks			
Test item	Match the following faults on the left to their causes on the right in the table below.			
Column A		Column B		
1.	Bond failure in tiles	A.	Un even alignment in the pattern	
2.	Improper centership	B.	Insufficient compaction of sub-base	
3.	Cracked tiled surface	C.	Pilling off of tiles from the surface	
4.	Uncoordinated layout	D.	Use of wrong adhesive	
		E.	Improper use of chalk liner	
		F.	Use of substandard materials	
Key (answer)	1:C, 2:D, 3:B, 4:A			

DIT/ QS	Test Item Database Written (Theory) Test Item- No. 10			
Occupational Title:	TILER			
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:	January, 2022			
Related modules:	M1.2			
Time allocation:	3 mins			
Marks allocation	6 marks			

Test Item	Re-arrange the following steps of tile installation in their correct order
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Column A (chronology)	Column B (work steps) in wrong chronology order	
1.	A	Soak tiles
2.	B	Dress finish and joints
3.	C	Spread bonding
4.	D	Prepare surface
5.	E	Lay tiles
6.	F	Prepare bonding material

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

DIT/ QS	Test Item Database Performance Test Item- No. 11
Occupational Title:	TILER
Competence level:	1
Code no.	
Test Item:	On an area of 4sq meters prepare a sub-floor of 25mm thickness and install porcelain tiles of 60cmx60cm using diagonal pattern.
Complexity level:	P2
Date of OP:	January, 2022
Related modules:	M1.2
Related skills and knowledge:	Measurement skills, different types of tiles, proportioning of material ratios, material, tools and equipment usage, different tile installation patterns, safety precautions, tile handling, plan interpretation.
Required tools, Materials and Equipment:	Tile cutter, porcelain tiles, tile adhesive, grout, wheelbarrow, bucket, spacers, notched trowel, tape measure, water, steel wire, detergents, strips, silicon sealer, protective gear, pincer, chalk line, sponge, cotton waste, carbonium paper, spirit level, rubber mallet.
Time allocation:	5hrs
Preferred venue:	Construction site
Remarks for candidates	Candidates must wear protective gears. Candidates must identify themselves.
Remarks for assessors	Provide all the necessary tools, equipment and materials.

#	Assessment criteria	Scoring guide	Max. Score	
			Process	Result
1	Preparation for task	wore protective gear <ul style="list-style-type: none"> • Safety boots • Overall/over coat • Gloves • Head gear • Goggles • Nose mask • Ear mask 		4
		Assembled tools, equipment and materials		3
		Cleaned work area		2
	Preparation of screed surface to receive tiles	Measured the working area	3	
		Measurements confirmed to be 4sq meters		1
		Checked floor levels	2	
		Gradient of 1:100cm verified		1
	Preparation of bonding materials	Proportioned bonding materials	3	
		1:2 adhesive cement and sand observed		2
		Mixed bonding materials	3	
		Mixed dry materials until a uniform colour is obtained		2
		Added water	2	
		Water added gradually until a workable paste is obtained		3
	Setting out of tile pattern	Drew Layout patterns	4	
		Cross chalk lines observed in the centre of the 4sq meters		1
		Determined bonding material thickness	2	

		25mm thickness of the bonding material verified		1
	Installation of the tiles	Installed first tile	3	
		First tile at dead level observed		2
		Laid remaining whole tiles according to pattern	4	
		Measured and cut tile pieces to complete the edges and corners	4	
		Installed the cut pieces at corners and edges	4	
		Fitted tile pieces according to edges and corners observed		2
		Firmly, uniformly laid and spaced tiles observed		3
S	Finishing of the tiling	Removed spacers	2	
		Spacer free surface observed		2
		Installed the skirting tiles	3	
		Skirting of 100mm-200mm verified		3
		Cleaned tiles	2	
		Dirt free tiles observed		2
		Filled the joints with grout	3	
		Evenly filled joints observed		1
		Performed final cleaning of the tiled area	3	
	Demobilization of the resources	Cleaned tools, equipment and working space	2	
		Disposed waste	2	
		Stored tools, equipment and remaining materials	3	
		Cleaned self	1	
		Handed over site/work	2	

	TOTAL		58	35
	MAXIMUM SCORE (Y)	$\frac{X}{Y} \times 100$	93	

4.0 ATP- PART IV

INFORMATION ON DEVELOPMENT PROCESS

4.1 Occupational Profile Development (January 2022)

The assessment and Training Package was exclusively developed by job practitioners who were working in the occupation of **TILER**.

The job expert panel, guided by UVQF facilitators developed the Occupational Profile that mirrors duties and tasks performed in the world of work and also provided additional generic information regarding the occupation.

4.2 Training Modules Development (January 2022)

Based on the Occupational Profile for TILER of **January 2022**, Training Modules were developed by job practitioners, guided by UVQF Facilitators.

4.3 Test Item Development (January 2022)

Based on the Occupational Profile for TILER of **January 2022**, 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 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 Developing Panel

The participating panel of Job Practitioners required for different stages of the assessment training package i.e., occupational profile, training modules, assessment instruments were constituted by members from the following organizations;

No.	Name	Institution/ Organization
1.	Kafeero Adnan	NCDC
2.	Kaddu Mukasa Samuel	St. Peters' Bukalagi
	Mosinghi Jackson	Nakawa Vocational Training Institute
4.	Adong Evelyn	Kampala Tile Market
5.	Kyasanga Joad	Open World Contractors
6.	Nsubuga Francis	Mikigan Investments (U) Ltd
7.	Bafundizeki Robert Deus	UNEB

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, DIT
2. **Facilitators (Occupational Profile Development)** – Ms Noeline Komugisha, Ms. Sarah Asimwe Mashaija
3. **Facilitators (Training Modules Development)** - Ms Noeline Komugisha, Ms. Sarah Asimwe Mashaija
4. **Facilitators (Test Item Development)** - Ms Noeline Komugisha, Ms. Sarah Asimwe Mashaija
5. **Compiled** by Ms. Ronah Byamukama, Mr Ssentongo Simon Peter
6. **Edited** by Ms. Mukyala Ruth Ag. DD, DIT, Qualification Standards Dept. DIT
7. **Coordinated** by – Mr Byakatonda Patrick, Ag. Director, DIT;

4.7 Reference time:

The Assessment and Training Package was compiled in January 2022 and may be periodically revised to match the dynamic trends in the occupation and hence issued in different versions:

References:

- Tom Meehan & Lane Meehan (2004). Working with Tile (Taunton's Build like a Pro), Taunton Publishers.
- Joseph Truini (2011). Planning, layout and Installation, Pros publishers
- Charles Byers (2016). Ultimate Guide to Home Repair and improvement: Updated edition. Creative Homeowner publishers