ASSISTANT MASON:

	Submitted By:-
	Simplex Infrastructures Ltd
Submitted to:-	
Bihar Skill Development Mission, Labour	Session :
Resources Department, GoB	01
Resources Department, GoB	01

Course name: Assistant Mason

Course Id- Aligned to CON/Q0102Candidate Eligibility: 18 years of Age

• Course Duration: 254 Hours

CONTACT DETAILS OF THE BODY SUBMITTING THE QUALIFICATION FILE

Name and address of submitting body:

Consortium Led by Simplex Infrastructures Ltd

Name and contact details of individual dealing with the submission

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List of documents submitted in support of the Qualifications File

1. Curriculum Document

SUMMARY

Qualification Title	Certificate in Assistant Mason
Qualification Code	CON/Q0102
Nature and purpose of the qualification	Nature
	254 Hours (32 days) Certificate Course for Assistant Mason
	Purpose
	To work as semi-skilled Mason to perform all relevant tasks under supervision and guidance of Mason Level-3. He should engage the Helper mason suitably and productively under his close supervision.
Body/bodies which will award the qualification	Consortium Led by Simplex and BSDM
Occupation(s) to which the qualification gives access	Mason General
Entry requirements and / or recommendations	5TH Standard Pass

1. OBJECTIVE OF THE COURSE: -

Individual in this position need to work as semi-skilled category tradesman and perform tasks under instruction and close supervision of Mason Level-4 as Assistant Mason. He is expected to carry out the setting & layout, laying of bricks & blocks, rendering coat plastering, finishing of concrete, fixing doors and windows in a room/cubical while effectively engaging and supervising the Helper Mason under him for all trade relevant tasks. He should ensure trade specific compliance to environment, health and safety aspects

2. LEARNING OUTCOMES :-

- 1) Loading and unloading practices of materials.
- 2) Handling materials according to its physical properties
- 3) Handling and stacking of hazard/inflammable materials.
- 4) Stacking of materials by its size, shape and height.
- 5) Selection of shortest possible route for shifting material while adhering to safety procedures.
- 6) Housekeeping procedures relevant to the task.

3. MODULE- 254 Hours (32 Days) (CERTIFICATE PROGRAM IN ASSISTANT MASON)

DURATION :- 32 DAYS CERTFICATE PROGRAM IN ASSISTANT MASON			
MODULE CODE & NAMES			
1	Code :- CON/N0101 Module :- Erect and dismantle temporary scaffold up to 3.6 meter height		
RATIONALE & OBJECTIVE OF THE MODULES	This unit describes the skills and knowledge required to erect and dismantle 3.6 meter temporary scaffold		
MODULE COMPETENCE	 Level area where scaffold need to be erected and check for ground compactness if required Shift and stack required materials, components, tools and tackles at the instructed location Wear and use required safety gadgets and follow trade safety 		

	 Place base plates and sole boards on the ground as per markings and instructions Use proper components and follow standard procedure for erecting temporary scaffold up to 3.6 m Check verticality of scaffold at first level of erection and correct (if required) before moving to the next level Check for rigidity, stability and support of erected scaffold Fix walk-boards, guard rails, toe-boards and other components on working platform Follow standard procedure for dismantling of 3.6 m temporary scaffold Remove guard rails, toe boards, walk boards and other components sequentially Clean and stack all components properly after dismantling Maintain tidiness at work location 		
2	Code :- CON/N0105		
	Module :- : Handle and use hand and power tools related to masonry work		
RATIONALE &	This unit describes the skills and knowledge required to handle and use hand		
OBJECTIVE OF THE	and power tools related to masonry work		
MODULES	and poster tools related to masonly work		
MODULE	The user/individual on the job should know and understand:		
COMPETENCE	 Identify basic tools used for masonry works such as hand tools, measuring tools, power tools etc Check for serviceability/safety of tools and report faults to superiors Select and use appropriate hand and power tools relevant to the task Set up and use basic leveling devices like spirit level ,water level & straight edge Transfer levels and carry out set out using appropriate tools Maintain tools and equipment Clean and maintain tools prior to and after use 		
3	Code :- CON/N0106		
	Module:- Assist in tiling, stone laying and concrete masonry works		
RATIONALE &	This unit describes the skills and knowledge required to assist in tiling, stone		
OBJECTIVE OF THE	laying and concrete masonry works.		
MODULES			
MODULE	The user/individual on the job should know and understand:		
COMPETENCE	 Assist in tiling and stone laying works Assist in concreting works Mix and apply Anti-Termite solution on soil as per instructions Carry out brick soling and PCC flooring 		

4	Code :- CON/N0107
	Module :- Assist in brick/block work including fixing doors and windows and plastering work
RATIONALE & OBJECTIVE OF THE MODULES	This unit describes the skills and knowledge required to assist in brick/block work including fixing doors and windows and plastering work
MODULE COMPETENCE	The user/individual on the job should know and understand: • Assist in brick/block work • Assist in plastering work • Fix door & window frames in room/cubical
5	Code :- CON/N8001 Module :- Work effectively in a team to deliver desired results at the workplace
RATIONALE & OBJECTIVE OF THE MODULES	This unit describes the skills and knowledge required to work effectively within a team to achieve the desired results
MODULE COMPETENCE	 The user/individual on the job needs to know and understand: Interact and communicate in effective and conclusive manner Support co-workers to execute project requirements
6	Code :- CON/N9001 Module :- Work according to personal health, safety and environment protocol at construction site
RATIONALE & OBJECTIVE OF THE MODULES	This unit covers the skill and knowledge required for an individual to work according to personal health, safety and environmental protocol at construction site
MODULE COMPETENCE	 The user/individual on the job should know and understand: Follow safety norms as defined by organization Adopt healthy & safe work practices Implement good housekeeping practices
MODE OF DELIVERY	Practical and theoretical

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	Erect and dismantle temporary scaffold up to 3.6-meter height Theory Duration (hh:mm) 2:00 Practical Duration (hh:mm) 24:00 Corresponding NOS Code CON/N0101	 Explain scaffolding and its purpose List the common materials and tools used for erection of scaffolding (pipe, cup lock (vertical and ledgers), H-frames, bamboo and balli List the functions of different hand tools like hammer, spanner, pulleys, hooks, ropes, etc., used for erection/dismantling of scaffolds List the visual checks to be carried out on the scaffolding components to ascertain their usability Identify different components of a temporary scaffolding such as base, toe board, guard rails, platform, walkways, ladder and so on Explain the functions of materials, components and accessories used in scaffolding Demonstrate preparation of scaffolding base Explain the methods adopted for the erection of the scaffold to ensure its safety Demonstrate erection of a scaffold(up to 3.6 m height) using pipes and couplers/ cup lock system/ H frame using appropriate hand tools Demonstrate the various checks to be done while erecting scaffolds such as 	 Hammer Spanner (set) Wrench Pulley Rope Nuts and bolts Measuring tape Spirit level Plumb-bob Mason's line Helmet Safety shoes Safety belt Cotton hand gloves Goggles Reflective jackets

Sr. No.	Module	Key Learning Outcomes	Equipment Required
2	Handle and use hand	verticality check, stability check and rigidity check. Explain the sequence and standard procedure of dismantling and stacking of scaffold Demonstrate the dismantling and stacking of scaffold Demonstrate the stacking of material, components, tools and accessories during erection and after dismantling.	• Trowel
	and power tools related to masonry work Theory Duration (hh:mm) 2:00 Practical Duration (hh:mm) 24:00 Corresponding NOS Code CON/N0105	 Identify various masonry related hand tools, power tools and equipment Demonstrate the use of hand tools, power tools and equipment for the masonry work Describe the process adopted for care and maintenance of hand and power tools used in masonry work Demonstrate the checks required for the serviceability and safety of the tools Explain the procedure for transferring of level Use basic levelling devices such as water level, spirit level, auto level etc. to transfer level. Enumerate the basic terminologies used in masonry works Explain about the indent procedure. 	 Nason's hammer String line Jointers Mallets Wedges Screeds Floats Bolster chisel Spade Measuring tape Scale Steel square Power wet saws Electric drills Tile cutters Vibrators Grinders Concrete mixer Water level tube Spirit level Plumb bob Safety helmets Hand gloves Safety shoes Safety harness Nose mask
3	Assist in the tiling and stone laying works Theory Duration (hh:mm) 6:00 Practical Duration (hh:mm) 36:00 Corresponding NOS Code CON/N0106	 Describe the standard practices involved in tiling and stone laying works Determine the location and orientation of tiling and stone laying works by interpreting the sketches. Compute dimensions by interpreting hand sketches and simple drawing. Use basic tools and equipment related to tiling and stone laying works applying safe work practices. Differentiate between different types of tiles based on their physical properties and application 	 Trowel Mason's hammer String line Jointers Mallets Wedges Screeds Floats Bolster chisel Spade Measuring tape Scale Steel square Power wet saws

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		 Demonstrate transferring, handling and proper stacking of tiles, granite and stones Demonstrate the checks of surface preparation prior to laying tiles/stones. Demonstrate preparation of bed mortar, cement slurry and cement paste as per standard method Demonstrate marking of dummy dots to the required thickness Demonstrate the dry tile arrangement using spacers as per the design plan 	Electric drills Tile cutters Grinders Water level tube Spirit level Plumb bob Safety helmets Hand gloves Safety shoes Safety harness Nose mask
4	Assist in concreting works Theory Duration (hh:mm) 6:00 Practical Duration (hh:mm) 36:00 Corresponding NOS Code CON/N0106	 Describe the standard practices involved in concreting works Determine the location and orientation of concreting works by interpreting the sketches. Compute dimensions by interpreting hand sketches and simple drawing. Use basic tools and equipment related to concreting works applying safe work practices. Describe the checks prior to and post concreting Demonstrate the checks of surface preparation prior to concreting works State the basic properties of concrete including weight, slump, etc. and its batching according to the specified grade Explain the technique of pouring of concrete in various structures Demonstrate the pouring and finishing of concrete in the form of layers Discuss the procedure for compaction of concrete Demonstrate the compaction of concrete using vibrator or other appropriate tools Explain about the procedure adopted for concrete curing Demonstrate curing of finished 	 Trowel Mason's hammer String line Mallets Wedges Screeds Floats Bolster chisel Spade Measuring tape Scale Steel square Vibrators Concrete mixer Water level tube Spirit level Plumb bob Safety helmets Hand gloves Safety shoes Safety harness Nose mask
5	Carry out anti-termite treatment	concrete surface Explain basic anti-termite treatment used at site	Trowel Mason's hammer
	Theory Duration	Demonstrate the procedure of anti- termite treatment	String line Safety helmets

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	(hh:mm) 2:00 Practical Duration (hh:mm) 12:00 Corresponding		Hand gloves Safety shoes Safety harness Nose mask
	NOS Code CON/N0106		
6	Carry out brick soling and plain cement concrete(PCC) flooring Theory Duration (hh:mm) 2:00 Practical Duration (hh:mm) 12:00 Corresponding NOS Code CON/N0106	 Describe the standard practices involved in brick soling and PCC flooring Determine the location and orientation of PCC flooring works by interpreting the sketches. Compute dimensions by interpreting hand sketches and simple drawing. Explain the process of brick soling and PCC flooring Demonstrate the pouring and finishing of concrete in in case of PCC flooring Demonstrate the compaction of concrete using vibrator or other appropriate tools Demonstrate brick soling works 	 Trowel Mason's hammer String line Wedges Screeds Floats Spade Measuring tape Scale Steel square Vibrators Concrete mixer Water level tube Spirit level Plumb bob Safety helmets Hand gloves Safety shoes Safety harness Nose mask
7	Assist in brick/ block work Theory Duration (hh:mm) 4:00 Practical Duration (hh:mm) 36:00 Corresponding NOS Code CON/N0107	 Use different types of masonry tools and equipment applying safe work practices Determine the location and orientation of brick/block works by interpreting the sketches. Compute dimensions by interpreting hand sketches and simple drawing Use basic levelling devices such as water level, spirit level etc. for transferring level Explain different types of bonds in brickwork. Describe the various types of mortar mixes required for block/ brick work Discuss the various checks involved in brick/block work Explain the process of setting out of the layout as per the given sketches 	Trowel Mason's hammer String line Jointers Wedges Screeds Floats Spade Steel scale Measuring tape Spirit level Steel square Concrete mixer Water level tube Spirit level Plumb bob Safety helmets Hand gloves Safety shoes Safety harness Nose mask

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		 Demonstrate preparation of cement mortar in required mix ratio Demonstrate fixing brick in position as per alignment and prescribed bond pattern (such as English and Flemish bond) 	
8	Assist in plastering work Theory Duration (hh:mm) 02:00 Practical Duration (hh:mm) 12:00 Corresponding NOS Code CON/N0107	 Identify different types of plastering tools and equipment Interpret hand sketches and simple drawings for obtaining required dimensions and plastering specification Demonstrate transferring of levels using levelling devices such as water level, spirit level Describe the various types of mortar mix required for plastering work Demonstrate preparation of cement mortar for plastering works Demonstrate marking of dummy dots for plastering works Demonstrate various checks such as plumb check, surface finish, thickness, corners and squareness in plastering work 	 Trowel Mason's hammer String line Jointers Wedges Spade Steel scale Measuring tape Spirit level Steel square Concrete mixer Water level tube Spirit level Plumb bob Safety helmets Hand gloves Safety shoes Safety harness Nose mask
9	Fix door & window frames in room/cubical Theory Duration (hh:mm) 02:00 Practical Duration (hh:mm) 12:00 Corresponding NOS Code CON/N0107	 Determine the location and orientation of doors and windows by interpreting the sketches. Compute dimensions by interpreting hand sketches and simple drawing Describe the standard size of door/window used in building construction Explain about various materials and fittings used in door and window fixing Demonstrate fixing of door and window frames using appropriate levelling tools and supports 	 Trowel String line Wedges Spade Steel scale Measuring tape Spirit level Steel square Electric drills Water level tube Spirit level Plumb bob Safety helmets Hand gloves Safety shoes Safety harness Nose mask
10	Work effectively in a team to deliver desired results at the workplace Theory Duration (hh:mm) 02:00	 Demonstrate effective communication skills while interacting with coworkers, trade seniors and others during the assigned task. Interpret work sketches, formats, permits, protocols, checklists and other work-related requirements 	- Nosc mask

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Practical Duration (hh:mm) 08:00 Corresponding NOS Code CON/N8001	 which are to be conveyed to other team members Demonstrate effective reporting to seniors as per applicable organisational norms. Explain effects and benefits of timely actions relevant to masonry works with examples Explain importance of team work and its effects relevant to masonry works with examples Demonstrate team work skills during assigned task. 	
11 🔥	Vork according to personal health, safety and environment protocol at construction site Theory Duration (hh:mm) 02:00 Practical Duration (hh:mm) 30:00 Corresponding NOS Code CON/N9001	 Explain the types of hazards at the construction sites Identify the hazards specific to the masonry works Recall the safety control measures and actions to be taken under emergency situations Explain the classes of fire and types of fire extinguishers Demonstrate the operation of fire extinguisher Demonstrate different methods involved in providing first aid to the affected person. Explain the importance of worker participation in safety/mock drills Demonstrate the use of all Personal Protective Equipment (PPE) like helmet, safety shoe, safety belt, safe jackets and other safety equipment relevant to masonry works requirement Explain the reporting procedures adopted during emergency situations Describe the standard procedure for handling, storing and stacking of material, tools, equipment and accessories Explain different types of wastes produced at a construction site including their disposal method Explain the purpose and importance of vertigo test at construction site Demonstrate vertigo test List out basic medical tests required for working at construction site Explain the types of ergonomic principles adopted while carrying out specific task at the construction 	safety helmet reflecting jackets Safety Belts safety shoes gum shoes hand gloves fire extinguisher safety boards nose mask ear plug first aid box

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		 Explain the benefits of basic ergonomic principles used at construction sites. Explain the importance of housekeeping works Demonstrate housekeeping practice followed after masonry works 	
		Total Duration: 254 Hrs. Theory Duration: 32 Hrs. Practical Duration: 222 Hrs.	