Model Curriculum

Assistant Shuttering Carpenter
(NSQF Level – 2)

SECTOR: CONSTRUCTION
SUB-SECTOR: REAL ESTATE AND INFRASTRUCTURE CONSTRUCTION
OCCUPATION: SHUTTERING CARPENTER
REF. ID: CON/Q0302, VERSION 1.1
NSQF LEVEL: 2

Skill India

Construction Skill Development Council

N·S·D·C National Skill Development Corporation
Transforming the skill landscape

Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

CONSTRUCTION SECTOR SKILLS COUNCIL

for the

MODEL CURRICULUM

Complying to National Occupational Standards of
Job Role/ Qualification Pack: '**Assistant Shuttering Carpenter**' QP No. '**CON/ Q 0302 NSQF Level 2**'

Date of Issuance: **December 31st, 2015**

Valid up to: **May 23rd, 2017**

* *Valid up to the next review date of the Qualification Pack*

Authorised Signatory
(Construction Skill Development Council)

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Assistant Shuttering Carpenter

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of an "Assistant Shuttering Carpenter", in the "construction" Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	**Assistant Shuttering Carpenter**		
Qualification Pack Name & Reference ID.	Assistant Shuttering Carpenter CON/Q0302		
Version No.	1.0	**Version Update Date**	30-12-2015
Pre-requisites to Training	Preferably 5th standard		
Training Outcomes	**After completing this programme, participants will be able to:** • **Use and maintain tools and equipments relevant to shuttering carpentry: -** Recognising, differentiating and using electrical tools and devices appropriately in basic electrical operations • **Assist in making wooden shutter used in shuttering carpentry: -** Selection and use of hand and power tools for cutting, planing and drilling of timber/plywood and making of wooden shutter • **Assist in Assembling & dismantling conventional & system formwork for R.C.C structures: -**Methods and standard procedures of assembling and dismantling of conventional and system formwork for R.C.C structures • **Erect and dismantle temporary scaffold of 3.6 m height:-**Standard procedure for erection and dismantling of temporary scaffold of 3.6m height**.** • **Work effectively in a team to deliver desired results at the workplace** :- Organised working procedure within a team at site • **Work according to personal health, safety and environment protocol at construction site:** - Importance of Health & Safety aspects & measures to be followed while working.		

This course encompasses 6 out of 6 National Occupational Standards (NOS) of "Assistant Shuttering Carpenter" Qualification Pack issued by "Construction Skill Development Council of India".

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	**Introduction to Job role** **Theory Duration** (hh:mm) 08:00 **Practical Duration** (hh:mm) 00:00 **Corresponding NOS Code**	• Role description/ functions of the job role • Expected personal attributes from the job role • Brief description about course content, mode of learning and duration of course • Future possible progression and career development provisions on completion of the course	1. Classroom of 30 students capacity 2. Black/White board 3. Projector/LED Monitor 4. Computer 5. Trade specific charts and other teaching aids
2	**Use and maintain tools and equipments relevant to shuttering carpentry** **Theory Duration** (hh:mm) 06:00 **Practical Duration** (hh:mm) 26:00 **Corresponding NOS Code** CON/N0312	**Theory: -** • Different types of hand and power tools used in shuttering works • Different types of woods, there common defects and how to identify defects visually • types and thickness of plywood • types and use of slings, shackles and lifting belts • shifting and stacking of various shuttering carpentry and scaffolding materials as per standard practices • upkeep repair and maintenance of tools • storing and stacking of hand and power tools • how to optimize use of consumables • importance of housekeeping, various procedures involved in housekeeping • safety: introduction to safety, working at heights, fall protection, fire safety, electrical safety, barrication etc. **Demonstration/ Practical (D/P) :-** • Demonstrate the use of hand and power tools required for shuttering carpentry works • Demonstrate the use of slings, shackles and lifting belts for material shifting • Demonstrate the use of PPE • Describe the importance of housekeeping	**Hand Tools** 1. Claw Hammer 2. Ball Pin Hammer 3. Handsaw 4. Tenon saw 5. Wooden Jack Planner 6. Iron Jack Planner 7. Wooden Marking Gauge 8. Wooden Mortise Gauge 9. Auger 10. Farmer Chisel 11. Mortise Chisel 12. Cutting Player 13. Screw Driver 14. Star Screw Driver 15. Marking Knife / Scribe 16. Wooden Mallet 17. Oil Stone (Rough / Smooth) 18. Cutting Chisel 19. Center Punch 20. Bench Vice 21. Hacksaw Frame with blade 22. Triangle file 23. Drill Bit 24. Ring Spanner 25. Double End Spanner 26. Flat File 27. Half Round File **Power Tool** 1. hand held circular

Sr. No.	Module	Key Learning Outcomes	Equipment Required
			saw 2. hand held zig saw 3. hand drill machine 4. table mounted saw 5. planing machine 6. power drilling machine **Consumables** 1. Masking tape 2. Nylon line thread 3. Nails **Levelling and measuring Tools** 1. Spirit Level 2. Steel Measuring Tape 3. Plumb Bob 4. water level tube 5. Tri-Square **Personal Protective equipment** 1. Safety PPE 2. Safety shoes 3. Safety Goggles 4. Safety Helmet 5. Cotton Hand - Gloves 6. Tools Bag 7. Safety Belt 8. Face Mask 9. Operator – Leather Apron 10. Safety Shoes (Assorted Size) 11. Ear Muff
3	**Assist in making wooden shutter board used in shuttering carpentry** **Theory Duration** (hh:mm) 12:00 **Practical Duration** (hh:mm) 42:00 **Corresponding NOS Code** CON/N0313	**Theory:-** • Different types of hand and power tools used for making shutter boards • Safety precautions to be taken while using power tools • Different types of measuring and marking tools and their use in making the shuttering boards • Different types of timber joints, their areas of application • What is seasoning, why is it important and how it is done • Different attachments of various power tools and their applications **Demonstration/ Practical (D/P) :-** • identify different types of power tools based upon the work requirement	**Power Tool** 1. hand held circular saw 2. hand held zig saw 3. hand drill machine 4. table mounted saw 5. planing machine **Hand Tools** 1. Claw Hammer 2. Ball Pin Hammer 3. Handsaw 4. Tenon saw 5. Wooden Jack Planner 6. Iron Jack Planner 7. Wooden Marking Gauge 8. Farmer Chisel

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		• demonstrate the use of measuring and marking tools for correct sizing of timber/plywood • demonstrate use of tale mounted saw • demonstrate the use of planing machine • identify the required hand tools and make the following joints o lap joint, o mortis and tenon joints o dovetail joints o housing joints • describe the procedure for making shuttering boards	9. Mortise Chisel 10. Marking Knife / Scribe 11. Wooden Mallet 12. Cutting Chisel 13. Bench Vice 14. Hacksaw Frame with blade 15. Flat File 16. Half Round File **Personal Protective equipment** 1. Safety PPE 2. Safety shoes 3. Safety Goggles 4. Safety Helmet 5. Cotton Hand - Gloves 6. Tools Bag 7. Safety Belt 8. Face Mask 9. Operator – Leather Apron 10. Safety Shoes (Assorted Size) 11. Ear Muff **Levelling and measuring Tools** 1. Spirit Level 2. Steel Measuring Tape 3. Plumb Bob 4. Tri-Square
4	**Assist in assembling and dismantling conventional and system formwork for R.C.C structures** **Theory Duration** (hh:mm) 30:00 **Practical Duration** (hh:mm) 114:00 **Corresponding NOS Code** CON/N0314	**Theory:-** • introduction to units of measurements • standard specification and sizes for hand tools used in shuttering carpentry • different types of knots and there use • standard procedure for assembling and dismantling conventional and system formwork • importance of safety and housekeeping • how to provide support in shuttering works • what is level, its requirement, how is it transferred • procedure for erection and dismantling of conventional and system formwork • what is line, level and alignment. How are the checked, what are the corrective actions for maintain line, level and alignment	**Hand Tools** 1. Claw Hammer 2. Ball Pin Hammer 3. Handsaw 4. Tenon saw 5. Wooden Jack Planner 6. Iron Jack Planner 7. Wooden Marking Gauge 8. Wooden Mortise Gauge 9. Auger 10. Farmer Chisel 11. Mortise Chisel 12. Cutting Player 13. Screw Driver 14. Star Screw Driver 15. Marking Knife / Scribe

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		Demonstration/ Practical (D/P) :- • Demonstrate shifting of materials and tools required for assembling system and conventional scaffolding • Demonstrate transfer of level using various leveling tools • Demonstrate making of shuttering boards • Demonstrate erection and dismantling of system and conventional formwork • Demonstrate checking procedure for line, level and alignment	16. Wooden Mallet 17. Oil Stone (Rough / Smooth) 18. Cutting Chisel 19. Center Punch 20. Bench Vice 21. Hacksaw Frame with blade 22. Triangle file 23. Drill Bit 24. Ring Spanner 25. Double End Spanner 26. Flat File 27. Half Round File **Levelling and measuring Tools** 1. Spirit Level 2. Steel Measuring Tape 3. Plumb Bob 4. water level tube 5. Tri-Square **Personal Protective equipment** 1. Safety PPE 2. Safety shoes 3. Safety Goggles 4. Safety Helmet 5. Cotton Hand - Gloves 6. Tools Bag 7. Safety Belt 8. Face Mask 9. Operator – Leather Apron 10. Safety Shoes (Assorted Size) 11. Ear Muff
5	**Erect and dismantle temporary scaffold of 3.6 meter height** **Theory Duration** (hh:mm) 08:00 **Practical Duration** (hh:mm) 40:00 **Corresponding NOS Code**	Theory: • What is scaffolding and its purpose of its erection • Common materials and tools used for erection of scaffolds (Pipe & coupler, Frame scaffold/Bamboo and ballies) • Characteristics of ideal base of scaffolding and its preparation • Visual checks to be carried out on the scaffolding components to ascertain their usability • Different components of a temporary scaffolding such as base, toe board, guard	Hand tools 1. Hammer 2. Spanner (set) 3. Wrench 4. Pulley 5. Rope 6. Nuts and bolts Measuring Instruments 1. Measuring tape 2. Spirit level 3. Plumb-bob 4. Mason's line

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	CON/N0101	rails, platform, walkways, ladder etc., their function and placing • Spacing/ height to be provided among different components of a temporary scaffold • Safety measures to be followed while tightening, fixing/ assembling different part of scaffold together • Function of different hand tools like hammer, spanner, pulleys, hooks, ropes etc. used for erection/ dismantling of scaffolds. • Use of different scaffolding accessories like different kind of clamps, washers, props, bracings and other supporting members • Standard method of erecting & dismantling 3.6 m temporary scaffold. • Material handling and shifting methods while scaffolding erection/ dismantling is under process • Standard safety procedure while working at height. • Checks to be done on completion of erection of scaffolds, such as verticality check, stability check <u>Demonstration/ practical:</u> • Sort and shift scaffolding material from stock yard to space of erection • Clean the area of the scaffolding and prepare the base • Erect scaffolds of 3.6 Mtr. height using pipes and cup locks using appropriate hand tools • Use clamp and other supporting members to ensure stability and verticality of the scaffolds • Place different components of scaffolds such as base plate, vertical/ horizontal members, toe boards, guard rails, platforms/ walkways, ladder etc. as per standard practice • Use PPEs as per necessity of the task • Dismantle the whole scaffold and stack their components as per standard practice	<u>Materials</u> 1. Cup-lock scaffolding components (set) 2. 40 NB pipes 3. Swivel coupler 4. Fixed clamp 5. Steel walers 6. Steel walkways 7. Aluminium/ GI ladder 8. Safety net <u>PPEs & safety equipment's</u> 1. Helmet 2. Safety shoes 3. Safety belt 4. Cotton hand gloves 5. Goggles 6. Reflective jackets 7. Safety message boards
6	**Work effectively in a team to deliver desired results at the workplace** **Theory Duration** (hh:mm)	<u>Theory:-</u> • Method of oral and written communication skills with co-workers, trade seniors while handling and carrying out visual checks on materials, tools and equipments • Reading and interpretation of work sketches	

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	08:00 **Practical Duration** (hh:mm) 16:00 **Corresponding NOS Code** CON/N8001	• How to interpret scope of carpentry activities, material/ tools handling by adhering to instructions or consulting with seniors • Method of providing instruction to subordinates or reporting to seniors clearly and promptly • Seek necessary support and complete assigned tasks within stipulated time duration • Keep good relation and maintain well behavior with co-workers Demonstration/ Practical (D/P) :- The skills will be developed and practiced while carrying out following trade related activities in a predictable and familiar working condition 1. Selection of materials, tools or devices for defined purpose under 2. Handling formwork material, tools and equipments 3. preparation of shuttering boards 4. assembling and dismantling conventional formwork 5. assembling and dismantling system formwork	
7	**Work according to personal health, safety and environment protocol at construction site** **Theory Duration** (hh:mm) 10:00 **Practical Duration** (hh:mm) 38:00 **Corresponding NOS Code** CON/N9001	Theory:- • Types of hazards involved in construction sites • Types of hazards involved in shuttering works • Emergency safety control measures and actions to be taken under emergency situation • Concept of :- First Aid process Use of fire extinguisher Classification of fires and fire extinguisher Safety drills Types and use of PPEs as per general and electrical safety norms • Reporting procedure to the concerned authority in emergency situations • Standard procedure of handling, storing and stacking material • What is safe disposal of waste, type of waste and their disposal • basic ergonomic principles as per applicability **Demonstration/ Practical (D/P) :-** The skills will be developed and practiced while	PPE and Safety equipment 1. Safety PPE 2. Safety shoes 3. Safety Goggles 4. Safety Helmet 5. Cotton Hand - Gloves 6. Tools Bag 7. Safety Belt 8. Face Mask 9. Operator – Leather Apron 10. Safety Shoes (Assorted Size) 11. Ear Muff 12. Reflective jackets 13. Safety message boards 14. Fire extinguishers 15. Sand buckets

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		carrying out following trade related activities in a predictable and familiar working condition. 1. Selection of PPEs and use them appropriately as per working need of shuttering carpentry, handling, storing, stacking and shifting of different materials, tools and equipments 2. Selection of PPEs and use them appropriately as per working need of handling formwork material, tools and equipments 3. Identification of locations, situations/circumstances, malpractices which can be hazardous for general works 4. Selection of fire extinguisher based on classification of fire, standard practice of storing & stacking fire fighting equipments/ materials at work locations 5. Disposal of waste materials as per their nature and effects on weather	
	Total Duration **Theory Duration 79.00** **Practical Duration 275.00**	**Unique Equipment Required:** **Hand Tools** Claw Hammer, Ball Pin Hammer, Handsaw, Tenon saw, Wooden Jack Planner, Iron Jack Planner , Wooden Marking Gauge, Wooden Mortise Gauge, Auger, Farmer Chisel, Mortise Chisel, Cutting Player, Screw Driver, Star Screw Driver , Marking Knife / Scribe, Wooden Mallet, Oil Stone (Rough / Smooth), Cutting Chisel, Center Punch, Bench Vice, Hacksaw Frame with blade, Triangle file, Drill Bit, Ring Spanner, Double End Spanner, Flat File, Half Round File **Power Tool** Hand held circular saw, Hand held zig saw, Hand drill machine, Table mounted saw, Planing machine, Power drilling machine **Consumables** Masking tape, Nylon line thread, Nails, Cotton waste **Levelling and measuring Tools** Spirit Level, Steel Measuring Tape, Plumb Bob, water level tube, Tri-Square **Personal Protective equipment** Safety PPE, Safety shoes, Safety Goggles, Safety Helmet, Cotton Hand – Gloves, Tools Bag, Safety Belt, Face Mask, Operator – Leather Apron, Safety Shoes (Assorted Size),Ear Muff, Reflective jackets, Safety message boards, Fire extinguishers, Sand buckets	

Grand Total Course Duration: 350 Hours 00 minutes

(This syllabus/ curriculum has been approved by Construction skill development council of India.)

Trainer Prerequisites for Job role: "Assistant Shuttering Carpenter" mapped to Qualification Pack: "CON/Q0302"

Sr. No.	Area	Details
1	**Job Description**	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack "CON/Q0302".
2	**Personal Attributes**	Aptitude for conducting training, and pre/ post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organised and focused, eager to learn and keep oneself updated with the latest in the mentioned field
3	**Minimum Educational Qualifications**	10th standard or equivalent standard in literacy and numeracy
4a	**Domain Certification**	Certified for Job Role: "Shuttering Carpenter-System" mapped to QP: "CON/N0304". Minimum accepted % as per respective SSC guidelines is 70%.
4b	**Platform Certification**	Recommended that the Trainer is certified for the Job Role: "Trainer", mapped to the Qualification Pack: "SSC/Q1402". Minimum accepted % as per respective SSC guidelines is 70%.
5	**Experience**	i. Technical Degree holder with minimum Five years of Field & Two years of teaching experience (At least one year each at workers and Engineers level) or, ii. In case of a Diploma Holder Ten years of field & five years of teaching experience (Three years at workers level and two years at Engineers level) having Total experience to 15 yrs. or, iii. In case of specific to trades than should have qualified the Minimum Level- 4 and have Fifteen year of field experience and Three years of Teaching experience or, iv. Graduate or Intermediate should possess at least Level – 4 Certificate and have 12 years of field experience and two years of trade teaching experience or

Annexure: Assessment Criteria

Assessment Criteria for Assistant Shuttering Carpenter	
Job Role	**Assistant Shuttering Carpenter**
Qualification Pack	**CON/Q0302**
Sector Skill Council	**Construction**

Sr. No.	Guidelines for Assessment
1	Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2	The assessment for the knowledge part will be based on knowledge bank of questions created by Assessment Bodies subject to approval by SSC
3	Individual assessment agencies will create unique question papers for knowledge/theory part for assessment of candidates as per assessment criteria given below
4	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on assessment criteria.
5	The passing percentage for each QP will be 50%. To pass the Qualification Pack, every trainee should score a minimum of 50% individually in each NOS.
6	The Assessor shall check the final outcome of the practices while evaluating the steps performed to achieve the final outcome
7	The trainee shall be provided with a chance to repeat the test to correct his procedures in case of improper performance, with a deduction of marks for each iteration.
8	After the certain number of iteration as decided by SSC the trainee is marked as fail, scoring zero marks for the procedure for the practical activity.
9	In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack within the specified timeframe set by SSC.
10	Minimum duration of Assessment of each QP shall be of 4hrs/trainee.

Assessment outcomes	Assessment Criteria for outcomes	Marks Allocation			
		Total Mark	Out Of	Theory	Skills Practical
CON/N0312: Use and maintain tools and equipments relevant to shuttering carpentry	PC1. use hand tools such as claw hammer, hand saw, hack saw wooden planners, measuring tape, nailing hammer, try square, plumb bob and other relevant tools	**100**	10	2	8
	PC2. use power tools for cutting, planing and drilling of timber/plywood		10	2	8
	PC3. use materials such as timbers, plywood, runner pieces of different size, wooden battens for shuttering work		15	3	12
	PC4. use consumable items such as nails of different size, masking tape, cotton waste, cotton and nylon line thread in relevant to shuttering works		10	2	8
	PC5. use personal protective gears such as safety shoes, gloves, helmets, ear plugs, nose mask, safety goggles		5	1	4
	PC6. identify and wear full and half body safety harness		5	1	4
	PC7. use bamboos &ballis, props, acrow span, H-beam, shuttering sheets, foot plates, U head and other relevant components for shuttering works		15	3	12
	PC8. store, stack and shift shuttering components as per standard procedure		5	1	4
	PC9. use different types of slings, shackles and lifting belts for lifting operation		10	2	8
	PC10. maintain tidiness at site location		5	1	4
	PC11. barricade area of work to prevent unauthorized entrance		10	2	8
	Total		**100**	**20**	**80**
CON/N0313: Assist in making wooden shutter board used in shuttering carpentry	PC1. identify power tools such as hand held circular saw, hand held zig saw, hand drill machine, table mounted saw, planing machine and power drilling machine	**100**	5	1	4
	PC2. identify different types of wood & plywood		10	2	8
	PC3. select circular saw blade based on thickness and type of wood to be cut				
	PC4. check cutting blade for its sharpness and bend		10	2	8
	PC5. check wooden planing machine blade, auger drill bit for its sharpness		5	1	4
	PC6. use measurement and marking tools for correct sizing of timber/plywood		15	3	12
	PC7. use hand held power saw for cutting and sizing of timber and plywood				
	PC8. safely feed timber/ plywood to the table mounted saw		10	2	8
	PC9. cut timber and plywood of different types and thickness using table mounted saw		15	3	12
	PC10. use planing machine for planing of timber and finishing the rough surface		10	2	8

Assessment outcomes	Assessment Criteria for outcomes	Marks Allocation			
		Total Mark	Out Of	Theory	Skills Practical
	PC11. use power drilling machine for drilling different diameter hole in timber and plywood				
	PC12. make timber joint such as lap joint, mortis and tenon joints, dovetail joints and housing joints using appropriate hand tools		10	2	8
	PC13. assist in making shutter boards as per instructions		5	1	4
	PC14. maintain tidiness at site location		5	1	4
	PC15. follow standard safety measure while operating power tools				
	Total		**100**	**20**	**80**
CON/N0314: Assist in assembling and dismantling conventional and system formwork for R.C.C structures	PC1. select tools and tackles, materials, components and equipments as per the instructions	**100**	5	1	4
	PC2. shift and stack required quantity of materials, components at work place as per instructions		0		0
	PC3. assist in marking, cutting and sizing of timber for making shutter boards		5	1	4
	PC4. transfer level from reference points using water level tube				
	PC5. select bamboo, ballis based on height, diameter and thickness		5	1	4
	PC6. ensure jute thread is kept in water before using it for tying of bamboo, ballis				
	PC7. select , cut and size timber/ plywood of required size for making shutter boards		5	1	4
	PC8. carry out nailing works in making of shutter boards as per instructions		2.5	0.5	2
	PC9. assist in erecting staging for shuttering using conventional formwork		5	1	4
	PC10. assist and place props at marked location as per instructions				
	PC11. assist and place shutter boards at specified location as per instructions		2.5	0.5	2
	PC12. assist in aligning and providing support to shutter boards as per instructions using ballis, wooden battens, pipes and props		5	1	4
	PC13. assist in checking line, level and alignment and making corrective action if required				
	PC14. tie different types of knots effectively		5	1	4
	PC15. follow method statement for sequence of task		2.5	0.5	2
	PC16. assist in de-shuttering works for removal of shutter boards safely under instructions		5	1	4
	PC17. follow standard safety procedure and housekeeping practices		2.5	0.5	2
	PC18. select tools and tackles, materials, components and		2.5	0.5	2

Assessment outcomes	Assessment Criteria for outcomes	Total Mark	Out Of	Marks Allocation	
				Theory	Skills Practical
	equipments as per instructions				
	PC19. shift and stack required quantity of materials, components at work place as per instructions		5	1	4
	PC20. assist in marking, cutting and sizing of timber for making shutter boards		5	1	4
	PC21. transfer level from reference points using water level tube		5	1	4
	PC22. select , cut and size timber/ plywood of required size for making shutter boards		5	1	4
	PC23. carry out nailing works for making of shutter boards as per instructions		2.5	0.5	2
	PC24. assist in erecting staging for shuttering using system formwork		5	1	4
	PC25. assist, place and fix props at marked location as per instructions		5	1	4
	PC26. assist and place shutter boards at specified location as per instructions		2.5	0.5	2
	PC27. assist in aligning and providing support to shutter board as per instructions using standard components		2.5	0.5	2
	PC28. assist in checking line, level and alignment and making corrective action if required		2.5	0.5	2
	PC29. assist in de-shuttering works for removal of shutter boards safely under instructions		2.5	0.5	2
	PC30. follow standard safety procedure and housekeeping practices		5	1	4
	Total		**100**	**20**	**80**
CON/N0101: Erect and dismantle temporary scaffold of 3.6 meter height	PC1. level area where scaffold need to be erected and check for ground compactness if required	**100**	10	2	8
	PC2. shift and stack required materials, components ,tools and tackles for scaffold at the instructed location		10	2	8
	PC3. wear and use required safety gadgets and follow trade safety		10	2	8
	PC4. place base plates and sole boards on the ground as per markings and instructions		10	2	8
	PC5. use proper components and follow standard procedure for erection of 3.6 m temporary scaff old		10	2	8
	PC6. check verticality of scaffold at first level of erection and correct (if required) before moving to the next level		10	2	8
	PC7. check for rigidity, stability and support of erected scaffold		5	1	4
	PC8. fix walk-boards, guard rails, toe-boards and other components on working platform		10	2	8
	PC9. follow standard procedure for dismantling of 3.6 m temporary scaffold		10	2	8

Assessment outcomes	Assessment Criteria for outcomes	Marks Allocation			
		Total Mark	Out Of	Theory	Skills Practical
	PC10. remove guard rails, toe boards, walk boards and other components sequentially		5	1	4
	PC11. clean and stack all components properly after dismantling		5	1	4
	PC12. maintain tidiness at work location		5	1	4
		Total	**100**	**20**	**80**
CON/N8001: Work effectively in a team to deliver desired results at the workplace	PC1. pass on work related information/ requirement clearly to the team members	**100**	10	2	8
	PC2. inform co-workers and superiors about any kind of deviations from work		5	1	4
	PC3. address the problems effectively and report if required to immediate supervisor appropriately		5	1	4
	PC4. receive instructions clearly from superiors and respond effectively on the same		5	1	4
	PC5. communicate to team members/subordinates for appropriate work technique and method		5	1	4
	PC6. seek clarification and advice as per the requirement and applicability		10	2	8
	PC7. hand over the required material, tools tackles, equipment and work fronts timely to interfacing teams		30	6	24
	PC8. work together with co-workers in a synchronized manner		30	6	24
		Total	**100**	**20**	**80**
CON/N9001: Work according to personal health, safety and environment protocol at construction site	PC1. identify and report any hazards, risks or breaches in site safety to the appropriate authoritys	**100**	5	1	4
	PC2. follow emergency and evacuation procedures in case of accidents, fires, natural calamities		5	1	4
	PC3. follow recommended safe practices in handling construction materials, including chemical and hazardous material whenever applicable		10	2	8
	PC4. participate in safety awareness programs like Tool Box Talks, safety demonstrations, mock drills, conducted at site		5	1	4
	PC5. identify near miss , unsafe condition and unsafe act		5	1	4
	PC6. use appropriate Personal Protective Equipment (PPE) as per work requirements including: • Head Protection (Helmets) • Ear protection • Fall Protection • Foot Protection • Face and Eye Protection • Hand and Body Protection • Respiratory Protection (if required)		10	2	8
	PC7. handle all required tools, tackles , materials & equipment safely		5	1	4
	PC8. follow safe disposal of waste, harmful and hazardous		5	1	4

Assessment outcomes	Assessment Criteria for outcomes			Marks Allocation	
		Total Mark	Out Of	Theory	Skills Practical
	materials as per EHS guidelines				
	PC9. install and apply properly all safety equipment as instructed		15	3	12
	PC10. follow safety protocol and practices as laid down by site EHS department		15	3	12
	PC11. collect and deposit construction waste into identified containers before disposal, separate containers that may be needed for disposal of toxic or hazardous wastes		10	2	8
	PC12. apply ergonomic principles wherever required		10	2	8
		Total	**100**	**20**	**80**

Skill India
कौशल भारत-कुशल भारत

सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP

N·S·D·C
National
Skill Development
Corporation
Transforming the skill landscape

Construction Skill Development Council
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