

TOTAL MARKS- 480

TOTAL TIME- 5 hours 30 minutes

SHUTTERING CARPENTER SYSTEM LEVEL-4 SET-1

CON/N0302: Make wooden shutters used in shuttering carpentry

Infrastructure and tools required: 1.) Infra - Store room, Class room for 30 candidates, Practical yard (30 meter x 30 meter),
 2.) Tools & materials - Measuring tape, hand saw, chisel, Ball peen hammer, straight peen hammer, cross peen hammer, mallet, nailing hammer, circular saw, jig saw, planner machine, hand drill, water/spirit level, marking chalk/pencil, nails screws, timber, plywood (12mm), wooden battens (50mmX50mm), pan, line Dori, plumb bob, bamboos & ballis, acrow span, H-beam, shuttering sheets, foot plates, U heads, base plate, couplers, joint pin.

Each candidate will perform this task individually.

Sl no	Practical assessment question	Marks	Duration (Min)
1	Prepare wooden shuttering (any one) as shown in the given sketch for a column (200mmX200mmX2500mm) using appropriate tools and equipments .	80	120 min
Total Marks		80	

Note- Questions to be distributed to the candidates.

CON/N0313: Assemble and dismantle system formwork for R.C.C. structures

**Infrastructure and tools required: 1.) Infra - Store room, Class room for 30 candidates, Practical yard (30 meter x 30 meter),
2.) Tools & materials - Measuring tape, hand saw, chisel, Ball peen hammer, straight peen hammer, cross peen hammer, mallet, nailing hammer, circular saw, jig saw, planner machine, hand drill, water/spirit level, marking chalk/pencil, nails screws, timber, plywood, wooden battens, line Dori, plumb bob, shuttering sheets, DOKA system form work assembly for shear wall (2000mmX230mmX2500mm)**

Task to be performed by group of two candidate.

Sl no	Practical assessment question	Marks	Duration (Min)
1	Assemble and dismantle DOKA formwork for a shear wall (2000mmX230mmX2000mm) using appropriate tools, equipments and supports.	80	210 min
			
Total Marks		80	

Note- Given picture is for representation of DOKA formwork only.

Note- Questions to be distributed to the candidates.

CON/N0304: Carry out quality checks for shuttering works

Infrastructure and tools required: 1.) Infra - Store room, Class room for 30 candidates, Practical yard (30 meter x 30 meter), 2.) Tools & materials - Measuring tape, hand saw, chisel, Ball peen hammer, straight peen hammer, cross peen hammer, mallet, nailing hammer, circular saw, jig saw, planner machine, hand drill, water/spirit level, marking chalk/pencil, nails screws, timber, plywood, wooden battens 38X38mm, pan, line dori, plumb bob, bamboos & ballis, acrow span, H-beam, shuttering sheets, foot plates, U heads, base plate, couplers, joint pin.

Sl no	Practical assessment question	Marks	Duration (Min)
1	Observe that the candidate is checking the cover blocks provided at desired interval or not.	7	
2	Observe that the candidate is applying shuttering oil in adequate manner before installing the formwork.	8	
3	Observe that the candidate has ensured the placement of the formwork as per desired layout.	10	
4	Observe that the candidate has made proper joints and adequately fixed the formwork	10	
5	Observe that the candidate is checking the verticality of the formwork.	15	
6	Observe that the candidate is checking line and levels of the formwork.	15	
7	Observe that the candidate is checking alignment of assembled formwork	15	
Total Marks		80	

Note- Above task needs to be observed during the assembling of DOKA formwork in previous task.

Note- Questions not to be distributed to the candidates.

CON/N8001: Work effectively in a team to deliver desired results at the workplace

Infrastructure- Observation on basis of core task as mentioned below

Task- Based on performance of conventional shuttering, system formwork and scaffolding.

Sl no	Practical assessment question	Marks
1	Observe the cooperation of team member in terms of willingness to share the task responsibility during any one of following core task. 1. Making wooden shutter 2. System formwork assembling 3. During quality checks	10
2	Check how the candidate report the deviation from the planned task to its seniors. (provide some different material from described in the task)	15
3	The effectiveness of communication to be checked. By observing the candidates' approach to replace the defective material/tools(provide some defective tool/material)	15
4	Check the alertness/attentiveness of candidate for instructions given by assessor.	10
5	Check for handling of tools and materials during all the tasks-shutter making, system formwork assembling and scaffolding.	15
6	Check for communication between the candidate and subordinate during assigned task.	15
Total Marks		80

Note- Questions not to be distributed to the candidates.

CON/N8002: Plan and organize work to meet expected outcomes**Task- Based on performance of NOS CON/N0302 & CON/N0303**

Sl no	Practical assessment question	Marks	Remarks
1	Observe the adherence to the targets and timelines set by assessors during the given core task: making of wooden shutter, assembling and dismantling of DOKA formwork.	15	
2	Observe the candidate during planning of activities as per schedule and sequence while performing making of wooden shutter, assembling and dismantling of DOKA formwork.	15	
3	Observe the candidate effectiveness of the communication with subordinates/ team members during assembling of DOKA formwork.	10	
4	Observe how a candidate arrange required resources for completion of task within the allocated timelines for making of wooden shutter, assembling and dismantling of DOKA formwork.	15	
5	Observe how a candidate utilize required resources optimally while performing making of wooden shutters.	10	
6	Observe how candidate adhere to the standard procedures and instruction while performing assembling of DOKA formwork.	15	
Total Marks		80	

Note- Questions not to be distributed to the candidates.

CON/N9001: Work according to personal health, safety and environment protocol at construction site

Infrastructure- All PPEs such as (helmets, safety harness, insulated glove, reflective jackets, safety shoes, gum boot, goggle, Nose and face mask, earplug,) Fire Extinguisher, safety message boards, fire extinguishers and sand buckets

Mock up for hazardous condition to be created for assessment purpose

Sl no	Practical assessment question	Marks	Remarks
1	Observe how candidate identify hazards, risk at sight and report it to seniors. (mock situation can be created e.g. Loose material in walkway, cut in wire of power tool etc.	10	
2	Observe how candidate respond to emergency situation by creating mock exercise for fire alarm, fire safety drill.	25	
3	Identification and demonstration of fire extinguishers provided by the assessor.	10	
4	Observe attitude towards safety while handling the tools and equipment during core tasks-making of shuttering, assembling of DOKA formwork.	15	
5	Observe the adherence of safe working practices while working at height and towards maintaining and upkeeping of the work place.	10	
6	Identify & demonstrate wearing the following PPE 1. Safety harness 4. Ear Plug 2. Helmet 5. Insulated gloves 3. Reflective jacket 6. Nose mask	10	
Total Marks		80	

Note- Questions not to be distributed to the candidates.