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# Sample Test Project

**Regional Skill Competitions – Level 3**

**Skill 12 - Wall and Floor Tiling**

*Category: Construction and Building Technology*

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SAMPLE

## Section - A

### *A. Preface*

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**Skill Explained:**

The work of tiller includes laying of tiles of ceramics, mosaics or natural stone on walls, floors staircases swimming pools, outside installations and facades to provide protective and decorative finishes.

A tiller generally works on commercial and residential projects from drawings and instructions. Successful tillers require endurance, concentration, an eye for details with continuing responsibility to work professionally in order to meet the requirements of the customer.

**Eligibility Criteria (for IndiaSkills 2018 and WorldSkills 2019):**

Competitors born on or after 01 Jan 1997 are eligible to attend the Competition.

**Total Duration: 12 Hrs** in two days

## Section - B

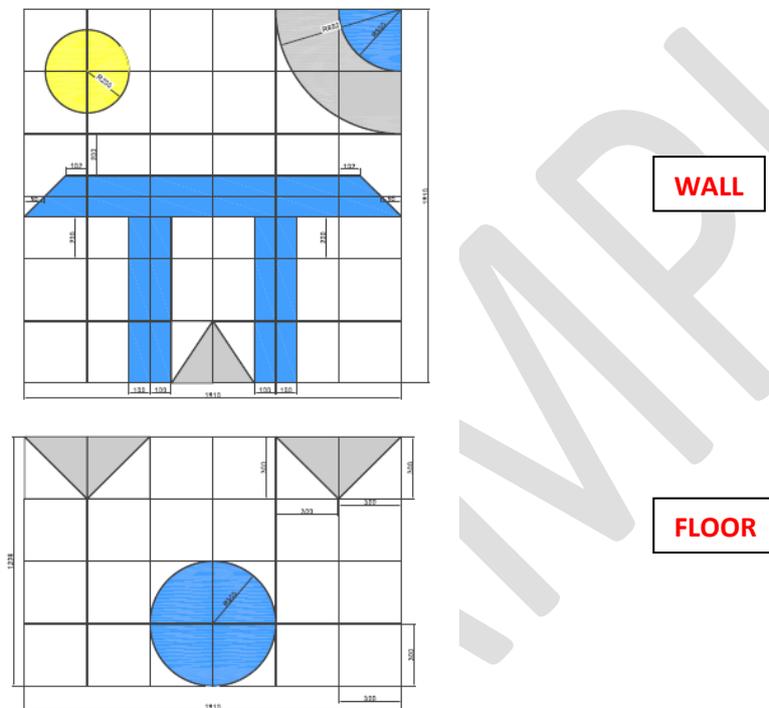
### B. Test Project

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Wall for Tiling work is provided. For Floor the bed to be prepared by trainee  
Test Project is divided in two parts:

1. Wall Tiling Work
2. Floor Tiling Work

(NOTE - For drawing reading at least 1 hour before competition is required.)



## Section – C

### C. Marking Scheme

The Assessment is done by awarding points by adopting two methods, Measurement and Judgments

- Measurement – One which is measurable
- Judgments - Based on Industry expectations

Aspects are criteria's which are judged for assessment

The assessment will be for **two parts** of project separately:

1. Wall Tiling Work – 7 Hours for performing practical
2. Floor Tiling Work - 5 Hours for performing practical  
Cleaning time is included in practical

Marking: Measurement - WALL						
Competitor Name:						
Sub Criterion - Module - Wall Tiling Work						
Aspect ID	Aspect Of Sub Criterion	Max Mark	Aspect of Sub Criterion - Description	Requirement of Size	Result or Actual Value	Mark Awarded
A1	Dimension	3	Length of Module	1810mm		
A2		3	Height of Module	1810mm		
A3		2	Radius of Circle	200mm		
A4		2	Radius of a bigger arc	602mm		
A5		2	Radius of a smaller arc	300mm		
B1	Level	2	At the middle of first row of tile from bottom	0mm		
B2		2	At the top of third row from bottom	0mm		
B3		2	At the first row from top	0mm		

C1	Surface Alignment	2	Diagonal from bottom triangle to right corner of fourth row	0mm		
C2		2	Diagonal from left corner of top first row to third row from bottom	0mm		
C3		2	Diagonal from right corner of top first row to left corner of fourth row from top	0mm		
CP1	Plumb	2	Left side - side view	0mm		
CP2		2	Left side - front view	0mm		
CP3		2	Right side - side view	0mm		
CP4		2	Right side - front view	0mm		
CP5		2	Middle of Third row from right side of module	0mm		
D1	Detail	2	Distance from bottom of third row from bottom to bottom of the roof	200mm		
D2		2	Distance from bottom of second row from top to top of the roof	200mm		
D3		2	Width of right side pillar of the home at bottom first row	100mm		
D4		2	Width of left side pillar of the home at bottom first row	100mm		
D5		2	Distance of roof from right side of module at bottom of third row from top	95mm		
D6		2	Distance of right corner of roof from left side of first row from left	102mm		
D7		2	Angle at the top of module right side corner	90 degrees		
D8		2	Angle at the top of module left side corner	90 degrees		
<b>Total Marks for Wall</b>		<b>50</b>				

Marking:_Measurement - FLOOR						
Competitor Name :						
Sub Criterion - Module – Floor Tiling Work						
Aspect ID	Aspect Of Sub Criterion	Max Mark	Aspect of Sub Criterion - Description	Requirement of Size	Result or Actual Value	Mark Awarded
A1	Dimension	3	Length of Floor	1810mm		
A2		3	Width of floor	1206mm		
A3		3	Radius of circle	300mm		
B1	Level	2	First layer from wall (top)	0mm		
B2		2	Last layer of floor from Wall A	0mm		
C1	Surface Alignment	2	Diagonal from left corner to right corner	0mm		
C2		2	Diagonal from right corner to left corner	0mm		
D1	Details	1	Distance of centre of the right side triangle from left side of second colom from left side module	299mm		
D2		1	Distance of centre of left side triangle from right side of module	299mm		
D3		2	Right angle at bottom of wall and top of floor right side	90 degrees		
D4		2	Right angle at bottom of wall and top of floor left side	90 degrees		
D5		1	Right angle at right side corner away from wall	90 degrees		
D6		1	Right angle at left side corner away from wall	90 degrees		
<b>Total Marks for Floor</b>		<b>25</b>				
<b>Total Marks for Module – Wall &amp; Floor Measurement - 75</b>						

**Marking: Judgment - WALL**

**Competitor Name:**

**Sub Criterion: Module - WALL**

<b>Aspect ID</b>	<b>Aspect Of Sub Criterion</b>	<b>Max Mark</b>	<b>Aspect of Sub Criterion - Description</b>	<b>Mark Awarded</b>
J1	Missing/Cutting Of Tiles	4	Piece of tiles missing, wrong colour tiles placed, Cutting of tiles not done properly	
		0	Below Industry Standard	
		2	Industry Standard	
		4	Surpasses Industry Std. in some ways	
J2	Jointing	4	Uniformity of Joints for vertical and horizontal, regular joints size of 2mm	
		0	Below Industry Standard	
		2	Industry Standard	
		4	Surpasses Industry Std. in some ways	
J3	Finishing	4	Overall Impression, Sharp Edge, Shape of Structure	
		0	Below Industry Standard	
		2	Industry Standard	
		4	Surpasses Industry Std. in some ways	
J4	Appearance	1.5	Cleaning Of Tiles and Overall Module	
J4		1.5	Cleaning Of Area Around	
<b>Total Marks For WALL</b>		<b>15</b>		
Remarks -				

Marking: Judgment - FLOOR				
Competitor Name:				
Sub Criterion: Module - FLOOR				
Aspect ID	Aspect Of Sub Criterion	Max Mark	Aspect of Sub Criterion - Description	Mark Awarded
J1	Missing/Cutting Of Tiles	3	Piece of tiles missing, wrong colour tiles placed, Cutting of tiles not done properly	
		0	Below Industry Standard	
		1	Industry Standard	
		2	Surpasses Industry Std. in some ways	
		3	Surpasses industry std. in many ways	
J2	Jointing	3	Uniformity of Joints for vertical and horizontal, regular joints size of 2mm	
		0	Below Industry Standard	
		1	Industry Standard	
		2	Surpasses Industry Std. in some/most ways	
		3	Surpasses industry std. in many ways	
J3	Finishing	2	Overall Impression, Sharp Edge, Shape of Structure	
		0	Below Industry Standard	
		1	Industry Standard	
		2	Surpasses Industry Std. in some/many ways	
J4	Appearance	1	Cleaning Of Tiles and Overall Module	
J5		1	Cleaning Of Area Around	
<b>Total Marks For FLOOR</b>		<b>10</b>		
Remarks -				
<b>TOTAL MARKS IN JUDGEMENT FOR MODULE – 25 MARKS</b>				

**TOTAL MARKS FOR WALL AND FLOOR – 100 MARKS**

## Section - D

### D. Infrastructure List

- Workshop Installation-Tools & Equipment positioned by Organizers
- Tool Kit-Tool & Equipment allowed to be brought by competitors for competitions

Infrastructure List - Wall & Floor Tiling	
<b>Workshop Installation</b>	<b>Quantity</b>
Mortar Mixer	1
Water Tank	1
Water Bucket	1
Water Mug	1
Mortar Bucket	1
Waste skip on wheels/Wheel barrow	1
Shovel for cleaning of area	1
<b>Workshop Installation – Tools</b>	<b>Quantity</b>
Spirit Level 1m	1
Spirit Level 2m	1
Measuring Tape	1
Tile Cutting Machine	1
Trowels Big	1
Trowel Small	1
Rubber Hammer	1
Straight Edge 6 feet	2
Right angle big	1
Grout Pad	1
Rounder Big - ( considering tile size)	1
Spacers	2 packet
Teeth Trowel	1
Spartech Machine if possible	1
<b>Materials/ Consumables</b>	<b>Quantity</b>
Plywood 2m * 1.5m (If table is possible)	1
Broom	1
Dustpan	1
Sponge	2
Tiles 300*300*6 mm white	70 No.s
Tiles 300*300*6 mm blue	35 No.s
Tiles 300*300*6 mm black	20 No.s
Tile grout - Chemical grout - 5kg	1 bag
Tile Adhesive / Tile fixo 25kg	2 bag

Mortar For Floor Bed 40 kg (Masala)	1 bag
Masking Tape 2 inch	1
Water	As required
<b>Health &amp; Safety Instruments</b>	<b>Quantity</b>
Ear Plug	1 pair
Knee pad	1 pair
Nose mask	1
Goggle	1
Safety Shoes	1 pair
Hand Gloves	1 pair
<b>Stationary</b>	<b>Quantity</b>
Calculator	1
Scale 600mm	1
Scale 300mm	2
Protractor Small	1
Geometric Compass box	1
Marker Pen	5

#### **AREA OF WORKSTATION –**

##### **Shape and Area -**

The shape of workstation preferably to be 'Square'

- Workstation Area – approximately 9sqm (3m\*3m) or 100sq.ft (10ft\*10ft).
- Platform for marking and cutting the tiles – 8feet \* 4feet (plywood platform) and in the form of table is preferable or minimum 200mm rise from the floor.
- Wall for test project – Minimum 2000mm\*2000mm is required with min.300mm width.

## Section – E

### E. Instructions for candidates

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#### 1. Time:

Drawing Reading – Either previous day or 1 hours before competition

Field Working Time – 12 Hours in 2 days

1. For Wall – 7 Hours approximately and
2. For Floor - 5 Hours (Bedding time included)

Note:

- a) Before tiling on floors, kindly prepare the bed for floors with Mortar (Masala)
- b) If Wall work is finished before given time, the competitor can start with Floor Tiling Module Work

Cleaning of Area – To be done in practical working time

- #### 2. Drawing –
- Read the drawing carefully. Understand Dimensions, Alignment, Plumb, Level and Cutting of tiles.

#### 3. Tiles –

**Tile Size –**

300 \* 300 \* 6 mm

Joint Size – 2mm (Spacers)

**Tile Colour** - Mark the color of tiles

#### 4. PLANNING –

Before starting to the work kindly submit the planning stating activity and time for that. (This includes marking, cutting and time distribution for laying each layer of tile for wall & Floor)

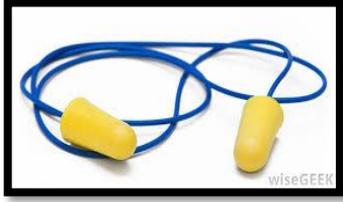
#### 5. Health, Safety and Environment

Safety requirement while constructing Wall and Floor Tiling -

During Cutting and Constructing Tiles for the Wall and Floor Project following PPE's are mandatory--

- Safety shoes- All The time during the competition
- Safety Helmet- All The time during cutting and constructing
- Safety Jacket- All The time during the competition
- Ear Plugs and Nose Mask- Compulsory during Cutting of Tiles
- Hand Gloves- Handling, cutting and pasting application of tiles on wall and floor
- Goggle- During Cutting
- Knee pad – During Marking and Cutting



High Visibility Jacket	Safety Helmet	Safety Shoes
		
<b>Safety Goggles</b>	<b>Hand Gloves</b>	<b>Ear Plugs</b>

#### Safety Guidelines ---

Check for hazards at workplace and surrounding and notify the supervisor immediately  
Always inspect the machine before starting to work. Ensure that all the protection guards are in place.

Turn the motor off during cleaning and while carrying out adjustments of the machine and in emergency.

When operating the machine, keep your hands, ear at a safe distance

Concentrate on work and do not talk with others while working

Ensure regular cleaning of workplace

#### 6. Cleaning –

Cleaning of module must be done in working time though 30 min extra are provided for cleaning of area around it.

- Clean all area
- Remove excess Material
- Clean tools & Keep on safe place

## Section – F

### **F. Health, Safety, and Environment**

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1. All accredited participants and supporting volunteers will abide by rules and regulations with regards to Health, Safety, and Environment of the Competition venue.
2. All participants, technicians and supporting staff will wear the required protective Personnel clothing.
3. All participants will assume liability for all risks of injury and damage to property, loss of property, which might be associated with or result from participation in the event. The organizers will not be liable for any damage, however in case of Injury the competitor will immediately inform the immediate organizer for medical attention.