TRAINING ORGANIZATION GUIDE (TOG)

For

TVET CERTIFICATE III IN BUILDING CONSTRUCTION

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Production team

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<u>**Part 1: pedagogical organization**</u>

1.   Presentation of the training programme

1.1.   Qualification

This qualification prepares individuals to integrate in construction industry with professionalization building construction skills; it also offers the opportunity to execute the construction works such as building set out, bricks and blocks wall elevation, opening fixation, cement pavement, plastering of structure, construction of stone masonry, plumbing installation and basic skills in domestic electrical installation while ensuring that safety, security and environmental regulations are respected.

The areas of intervention of this occupation are focused typically on building set out, bricks and blocks wall elevation, opening fixation, cement pavement, plastering of structure, construction of stone masonry. This contributes to the improvement of construction industry and individual improvement in technical skills and financial income.

1.2. Minimum Entry requirements

The minimum entry requirement to this course is to successfully pass O'Level program with proof document and with an interest in building construction and related field.

Pathways into the qualification

Preferred pathways for candidates entering this qualification include:
- To complete O'Level program
- Having pass in mathematics, physics and chemistry
- Recognition of prior learning related to this qualification

Pathways from the qualification

Progression route of candidates achieving this qualification include:
- To create own business
- To be employed

2. The training programme

2.1 Information about competencies

No	Code	Complementary competencies	Credit
1	CCMOL302	Describe the occupation and learning process	3
2	CCMHE302	Maintain Safety, Health and Environment(SHE) at workplace	3
3	CCMCL302	Apply computer literacy	3
4	CCMWC302	Communicate effectively at workplace	3
5	CCMEN302	Communicate simply using English in familiar situations	3
6	CCMKN302	Gukoresha ikinyarwanda kiboneye	3
7	CCMCZ301	Citizenship	3
8	CCMFT302	Pratiquer les activités de communication en Français dans le métier	3
9	CCMBC302	Entrepreneurship	3
10	CCM KK302	Kiswahili wastani	3
Total			30

3

	No	Code	Core competencies	Credit
SPECIFIC	1	BDCBB302	Erect bricks and blocks masonry wall	12
	2	BDCBS302	Building set out	7
	3	BDCOF302	Opening fixation	5
	4	BDCCM302	Fundamentals of building materials	3
	5	BDCPC302	Cement pavement	5
	6	BDCPS302	Plastering of structure element	5
	7	BDCSB301	Production of soil based bricks and blocks	7
	8	BDCSS302	Construction of stones structures	9
GENERAL	1	BDCBP301	Apply basic plumbing	5
	2	BDCDE301	Basic knowledge of domestic electricity	3
	3	BDCTD301	Construction basic technical drawing	8
	4	GENAC302	Applied chemistry	4
	5	GENAP302	Applied Physics	5
	6	GENAT302	Applied mathematics	6
		Total		84

3. Human resources

3.1. Trainers' qualifications and competences (Trainers' profile)

No	Modules	Qualification	Field or training experience	Technical teaching experience	Languages skill	ICT skills.
1	**Brick and block masonry wall elevation**	At least Advanced diploma/A1 in construction Technology or Civil Engineering.	• Having training in bricklaying is an added value	• Pedagogical training in TVET related field is added value	• Fluent in English • Knowing kinyarwa nda, french and/or Kishahili is an added advantage	Computer literacy • MS word • MS excel • PPT and internet
2	**Building set out**	To be a holder of at least advanced diploma (A1) in: • Construction technology. • Civil engineering • Land surveying.	• Having training in land surveying and / or construction Technology is an added value	• Pedagogical training in TVET related field is added value.	• Fluent in English • Knowing kinyarwa nda, french and/or Kishahili is an added advantage	✓ Microsoft word ✓ Microsoft excel ✓ Microsoft power point ✓ Internet explorer

		At least advanced diploma/A1 in construction Technology or Civil Engineering.	• Having training in Carpentry and / or Welding is an added value	• Pedagogical training in TVET related field is added value	• Fluent in English • Knowing kinyarwa nda, french and/or Kishahili is an added advantage	Computer literacy MS word MS excel PPT and internet
	Opening Fixation					
4	**Fundamentals of building materials**	To be a holder of at least advanced diploma (A1) in: • Construction technology. • Civil engineering • Building and construction technology.	• Having training in construction material testing is an added value	• Pedagogical training in TVET related field	• Fluent in English • Knowing kinyarwa nda, french and/or Kishahili is an added advantage	Microsoft word Microsoft excel Microsoft power point Internet exploration
5	**Cement Pavement**	To be a holder of at least advanced diploma (A1) in: • Construction technology. • Civil engineering • Building and construction	No Experience	• Pedagogical training in TVET related field is an added value.	• Fluent in English • Knowing kinyarwa nda, french and/or Kishahili is an added advantage	Computer literacy MS word MS excel PPT and internet

		technology.				
6	**Plastering of structure elements**	To be a holder of at least advanced diploma (A1) in: • Construction technology. • Civil engineering • Building and construction technology.	No Experience	• Pedagogical training in TVET related field is an added value.	• Fluent in English • Knowing kinyarwa nda, french and/or Kishahili is an added advantage	• Microsoft word • Microsoft excel • Microsoft power point • Internet exploration
7	**Production of soil based bricks and blocks**	To be a holder of at least advanced diploma (A1) in: • Construction technology. • Geotechnical Engineering • Civil engineering • Building and construction technology.	• Having training in making bricks and blocks is an added value	• Pedagogical training in TVET related field is an added value.	• Fluent in English • Knowing kinyarwanda, french and /or Kishahili is an added advantage.	• Microsoft word • Microsoft excel • Microsoft power point • Internet exploration

| 8 | **Construction of stone structures** | To be a holder of at least advanced diploma (A1) in:
• Construction technology.
• Geotechnical Engineering
• Civil engineering
• Building and construction technology. | • Having training in stone structures masonry is an added value | • Pedagogical training in TVET related field is an added value. | • Fluent in English
• Knowing kinyarwa nda, french and/or Kishahili is an added advantage | • Microsoft word
• Microsoft excel
• Microsoft power point
• Internet exploration |

Apply Basic Plumbing	To be a holder of at least an advanced diploma (A1) in: • Water and Sanitation Technology • Construction Technology • Civil Engineering • Water and Environmental Engineering	No Expirience	• Pedagogical training in TVET related field is added value	• Fluent in English • Knowing kinyarwa nda, french and/or Kishahili is an added advantage	Computer literacy • MS word • MS excel • PPT and • Internet
	• A holder of advanced diploma (A1) in Construction related fields • To be a holder of A2 Certificate in Plumbing		• Pedagogical training in TVET related field is added value	• Fluent in English • Knowing kinyarwa nda, french and/or Kishahili is an added advantage	Computer literacy • MS word • MS excel • PPT and • Internet

Construction basic technical drawing	To be a holder of advanced diploma (A1) in: • Construction Technology • Civil Engineering • Architecture	No experience	• Pedagogical training in TVET related field is added value	• Fluent in English • Knowing kinyarwa nda, french and/or Kishahili is an added advantage	• MS word • MS excel • PPT and • Internet
	To be a holder of bachelor's degree (A0) in Architecture	No experience	• Pedagogical training in TVET related field is added value	• Fluent in English • Knowing kinyarwa nda, french and/or Kishahili is an added advantage	• MS word • MS excel • PPT and • Internet
Basics knowledge of domestic electricity	• To be a holder of advanced diploma (A1) in Electrical engineering. • To be a holder of A2 Certificate in Electricity	No experience	• Pedagogical training in TVET related field	• Fluent in English • Knowing kinyarwa nda, french and/or Kishahili is an added advantage	• MS word • MS excel • PPT and • Internet

			• Pedagogical training in TVET related field	• Fluent in English • Knowing kinyarwa nda, french and/or Kishahili is an added advantage	• MS word • MS excel • PPT and • Internet
Apply algebra and trigonometry	To be a holder of at least an advanced diploma (A1) in Mathematics with Education.	No working experiences	N/A	• Fluent in English • Knowing kinyarwa nda, french and/or Kishahili is an added advantage	• MS word • MS excel • PPT and • Internet
Demonstrate basics of chemistry	To be a holder of at least an advanced diploma (A1) in chemistry with Education.	No working experiences	N/A	• Fluent in English • Knowing kinyarwa nda, french and/or Kishahili is an added advantage	• MS word • MS excel • PPT and • Internet

Demonstrate general of physics	To be a holder of at least an advanced diploma (A1) in Physics with Education.	No working experiences	N/A	• Fluent in English • Knowing kinyarwa nda, french and/or Kishahili is an added advantage	• MS word • MS excel • PPT and • Internet
Kutumia kiswahili wastani	To be a holder of at least an advanced diploma (A1) in Kiswahili with Education.	No working experiences	N/A	• Fluent in English • Knowing kinyarwa nda, French and/or Kishahili is an added advantage	• MS word • MS excel • PPT and • Internet

1. **Material Resources**

1.1. **Category 1: Machines, equipment and accessories**

NO	Equipment	Specification	Unit Price	Quantity	Type of room	Module code
1	**Concrete mixer**	• Model : Tilting • Weight : 950 Kg • Capacity (mixed): 200 Litres • Drum speed (Rev./min:20-22 • Power Electric Motor : 5H.P • Power Disel Engine : 6.5 H.P • Production rate : 6.8 m /hour.	**3,500,000**	1	• Workshop • Store	• BDCBB302 • BDCPC302 • BDCPS302 • BDCSS302

2	**Wheelbarrow**	• Dimension (mm): (1.100*640*700) • Fixed wheels (mm): 380 • Tyre : Pneumatic • Weight (kg): 15 • Load : 70	**80,000**	5	• Workshop • Store	• BDCBS302 • BDCBB302 • BDCBS302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSB301 • BDCSS302
3	**Brick cutter machine**	• Model code:BCZ600 • Dimensions(width*length*height)cm:(72*120*145) • Weight(kg):161 • Engine power:4kw • Engine rotation(rpm):1450 • Voltage(V):380 • Frequency(Hz):50	**1,500,000**	1	• Workshop • Store	• BDCBB302

4	**Professional line laser**	- Laser beam : 4V1H1D - Laser wave length : 532 nm laser diode , 10 mV - Light source : Class II - Level accuracy : ±1mm/ 5m - Spot accuracy : ±1mm/m - Width of line : 2mm/5m - Automatic Compensatory: $\pm 3^{0.}$	**700,000**	3	- Workshop - Store	- BDCBS302 - BDCBB302
5	**Ladder**	- Material : Aluminum - No of Step : 5 - Height : 1828mm - Surface Treatment : Anodized	**220,000**	3	- Workshop - Store	- BDCBB302 - BDCBS302 - BDCPS302 - BDCSS302
6	**Scaffolding**	- Weight 91.8lbs - Frame tube OD 1.625'' - Frame tube wall thickness 2.3mm - Frame dimensions 5'W*5'H - Brace lock spacing 27.75'' - Distance between frames 7'	**418,000**	30sqm	- Workshop - Store	- BDCBB302 - BDCBS302 - BDCPS302 - BDCSS302

		• Stack pin length 10" • Stack pin OD 1.375"				
7	**Total station**	• Range reflector less mode:0.3 to 5000m • Range prism code:1.3 to 4000m • Fine measurement mode:0.9sec • Rapid measurement mode:0.6sec	**8,000,000**	2	• Workshop • Store	• BDCBS302
8	**Theodolite**	• Image : Erect • Magnification : 30 X • Effective aperture : 45 mm • Resolving power : 3 inch • Field of view: 130 inch • Minimum focusing distance : 1.4 m • Stadia ratio : 100 • Stadia Constant: 0 • Tube length : 157 mm	**4,500,000**	4	• Workshop • Store	• BDCBS302 • BDCBB302
9	**Dumpy level**	• Length : 175 mm • Shortest focusing distance: 1.5 m • Longest focusing distance 200/300 mtr • Objective Aperture : 40mm • Stadia Constant : 1/100 • Normal accuracy 2-3mm / km • Weight :2.350kg	**400,000**	3	• Workshop • Store	• BDCBS302 • BDCBB302 • BDCPC302 • BDCSS302

10	**GPS**	• Brand: Garmin • Model Name /Number: GPSMAP 78s • Battery : 2 AA Batteries • Water Rating: IPX7 • Batery Life : 20Hours • Physical dimensions : 6.6*15*2*3.0 • Weight: 218.3 g with batteries • Built-in memory : 1.7 GB • Track log: 10,000 points,200 saved tracks	**900,000**	4	• Workshop • Store	• **BDCBS302**
11	**Tripod**	• Name: Travel Tripod Legs • Weight: 2to 4 lbs ((0.9to 1.8 kg) • Height contracted : 12 to 20 inches (30 to 50 cm) • Height Extended : 60 to 70 inches (152 to 178 cm) • Max load : 5 to 10 lbs	**100,000**	3	• Workshop • Store	• BDCBS302
12	**Staff reading**	• Product Name: MG Glaster/ SK live line Staff • Mass (kg) : 1.95 • Length when Extended (mm) :4000 • Number of Tiers : 4 • Size : 4 m/ 4Steps	**75,000**	3	• Workshop • Store	• BDCBS302 • BDCBB302 • BDCPC302and BDCSS302

13	**Screwing machine**	- Model : SF-1550 - Product Type : Bottle Capping Machine - Brand : Made in India - Electrical source : AC Supply 220V - Frequency : 50/60 Hz - Power : 80 W - Case : Plastic Material - Lock & cover diameter : 10 & 50 mm - Size : 70 mm - Weight : 1 Kg (Approx)	**120,000**	4	- Workshop - Store	BDCOF 301
14	**Drilling machine**	- No Load Speed : High: 0-2,900RPM, Low:0-1,200RPM - Voltage : 220 v - Blow rate : 6,000/19,000bpm - Cord Length : 2.5 m	**1,200,000**	1	- Workshop - Store	BDCBS302
15	**Grinder**	- Regulating Wheel : (mm) : TGS-CL-6020 - O.D.*Width*I.D (mm): Ø350*203* Ø152 - Minimum diameter : (mm) Ø270 - Speed range (rpm) 10-300 - Brand Name: Bosch - Model Number : 06018242F0	**160,000**	2	- Workshop - Store	BDCBS302
16	**Portable circular saw machine**	7 inch electrical circular saw - Diameter of saw blade : 20mm - Power: 1200W	**400,000**	2	- Workshop - Store	BDCBS302

		• Voltage: 220 V • Cutting depth : 0-55mm • No-load speed : 5000r/min • Gross weight : 5.1 KG • Package size : 295*190 mm				
17	**Electric hand planer**	• Model KP0810, • The Makita 3-1/4-Inch Planer, • 7.5 AMP Power • Planing Width : 3-1/4" • Planing Depth : 5/32" • No Load Speed : 16,000 RPM • AMPS : 7.5 • Overall Length : 11-3/8" • Net Weight : 7.3 lbs. • Max. no load speed : 16,000 RPM • Power Type : Corded • Type (Planers) : Handhel	450,000	2	• Workshop • Store	• BDCBS302

18	**Sieve**	• Standards : BS 1377 | ASTMD2435 , D3877 , D4546|AAS HOT216 • Overall dimensions (l x d x h) : 1300 x 800x970 mm • Weight approx. : 145 kg	**120 ,000**	3	• Workshop • Store	• BDCCM301
19	**Electrical balance**	• Power supply:220v ac • Capacity :2000g-5000g • Readability(g):0.1g • Model number:LP-A series • Pan size;207*193mm • Function:hight precision balance	**300,000**	2	• Workshop • Store	• BDCCM301
20	**Graduated Cylinder**	• Material : Borosilicate Glass Lab 5-1000ml • Capacity : 100 ml	**22,000**	5	• Workshop • Store	• BDCCM301
21	**Slump cone**	• Top Diameter : 10 Cm • Bottom Diameter : 20 Cm • Height : 30 Cm	**80,000**	2	• Workshop • Store	BDCCM301

22	**Vicat apparatus**	• Material: Stainless steel, Mild steel • Size of mild steel base plate : 5 inches * 5 inches • Design Type : Standard • Accuracy : +/-1% • Height : 40 mm • Fulcrum mould : Brass,80mm • Minimum order quantity : 01 set	**120,000**	1	• Workshop • Store	• BDCCM301
23	**Power float machine**	• Weight: 80Kg • Engine Type: Honda GX200 Petrol • Path: 1000mm • Engine Speed: 3600rpm	**600,000**	1	• Workshop • Store	• BDCPC302
24	**Concrete leveling machine**	• Model Number: SCL55 • Power: 5.5hp/3600rpm • Brand Name: Storike • Warranty: 1 Year • Nominal amplitude: 0.6mm • Fuel tank capacity: 3.6L • Lubricating oil: 0.6L • Certification: ISO/CE • Vibration Frequency: 70HZ • Vibration Force: 11kN(<=)2000mm	**8,500,000**	1	• Workshop • Store	• BDCPC302

		• Special fuel consumption: 313g/kwh • Engine Model: HONDA GX160 • Place of Origin: Shandong,China • Fuel type: Gasoline • Length: 3-6m				

25	**Electrical Tyrolean gun**	• **Features:**
		
		  1. Hand-operated, rough-cast applicator for Tyrolean and textured wall coatings
		
		  2. Heavy-duty plastic casing
		
		  3. Hand-operated
		
		  4. Weight: 3.5kg
		
		  5. Size: 45 x 40 x 40cm
			70,000	5	• Workshop
					
					• Store
						• BDCPS302

26	Hydra form brick machine	• Dimension : 3800*1900*1500mm • Power : 12 HP Diesel • Pressure : 16 Mpa • Volume of mixer: 180 L.	3,500,000	1	• Workshop • Store	• BDCSB301
27	Electric Nail gun	• Weight: 1.5 kg • Frequency: 50Hz • Nail slot capcity:100			• Workshop • Store	•

		• Power supply:220-240V					
		• Nail speed: 90-120					
28	Threading machine	½" to 2" BSPT mod.12r complete with 6 die heads, ratchet handle, 65255	**600,000**	5		workshop	BDCBP301
29	PPR Welding machine.	Automatic Grade — Manual Material — Aluminum Voltage — 180 V to 240 V Usage — Welding Plastic Pipes Welding size — 20 mm, 25 mm, 32 mm, 40 mm, 50 mm, 63 mm	**150,000**	2		workshop	BDCBP301
30	Power hacksaw	Power of main motor — 0.75 kw, 415 V, 3 Ph., 50 Hz — 1.5 kW, 415 v, 3 Ph., 50 Hz Power of coolant motor — 0.09 kW — 0.09 kW Space occupied (L x B x H) — 1175 x 820 x 1150 — 1600 X 800 X 1350	500,000	2		workshop	BDCBP301

		Net Weight 500 Kg 600 Kg				
31	Hydraulic press bending machine (pipe bender)	Complete with all accessories (movable nozzle from ½" -2") and stand of tripod /bench work, capacity 720 kg/cm2, model NoSNP-1B	800,000	1	workshop	BDCBP301

1.2. Category 2: Tools

NO	Tools	Specification	Unit price	Quantity	Type of room	Module code
1	**Trowel**	• **Round point brick trowel, with wood handle Blade and handle spike forged in one piece.** • **High grade steel, Hardened and tempered, ground polished** • **Hard wood handle with polished steel ferrule.** • **Blade length: 200mm +/-2mm** • **Blade width: 120mm +/-2mm** • **Handle length: 140mm +/-10mm**	**5000**	30	• Workshop • Store	**BDCBB302** **BDCBS302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCDE301** **BDCBP301**
2	**Calibrated spirit level**	• Good quality aluminium body spirit level, shockproof. • Length: 600 mm which includes 3 vials: horizontal, vertical, and 45° angle.	5000	30	• Workshop • Store	**BDCBB302** **BDCBS302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCBS302**

3	**Brick hammer**	• Head weight: 830g • Handle length:280mm • Shaft type: Hickory • Handle type: Hickory	**10,000**	30	• Workshop • Store	**BDCBB302** **BDCBS302** **BDCDE301** **BDCBP301**
4	**Calibrated tape measure**	• Retractable tape measure, length 10 m (ten meters), width 25mm; • Made of thin plastic-coated metal, calibrated on one side with 1mm and 1cm lengths marked in black and 10cm lengths marked in red, for ease of reading. • Stored wound-up in plastic case (assorted colours), 3.15 x 1.77 x 3.15 inches; • With locking mechanism and metal clip for attachment to user's clothing	**5000**	30	• Workshop • Store	**BDCBB302** **BDCBS302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCOF302** **BDCDE301** **BDCBP301**

5	**Calibrated builder's square**	- Lightweight and durable 900(right angle) - Anodized Aerospace aluminium - Reverse reading scale - Size: 16 inches x 24 inches	**4000**	**30**	- Workshop - Store	**BDCBB302** **BDCBS302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCOF302**
6	**Calibrated decameter**	Length: 30m - Tape material: Carbon steel - Length : 30m - Blade width: 12.5mm - Tape width: 12.5mm	**20,000**	10	- Workshop - Store	**BDCBB302** **BDCBS302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCOF302** **BDCDE301** **BDCBP301**
7	**Mortar hawk**	- Type: Detachable handle hawk - Blade material: Polyurethane - Handle material: Polyurethane - Size: 13 inches x 13 inches	**10,000**	30	- Workshop - Store	**BDCBB302** **BDCPC302** **BDCPS302** **BDCSS302**

						BDCOF302
8	**Spade**	• Material: Stainless steel • Blade dimension L x W (shoulder) x Thickness (mm): 320 x 160 x 1.75 min, • Blade lift (mm): 55, • Blade dish (mm): 25 lateral	4000	20	• Workshop • Store	**BDCBB302** **BDCBS302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCSB301** **BDCDE301** **BDCBP301**
9	**Shovel**	• Dimension: 295mmx225mm • Hole diameter: front side 36mm, back side 40mm • Weight: 1Kg +/-50g without handle	4,500	20	• Workshop • Store	**BDCBB302** **BDCBS302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCSB301** **BDCDE301** **BDCBP301**

9	**Panga**	Blade material: High carbon steel Handle material: Wood Blade length: 18 inches Weight: 0.2 kg	4500	15	• Workshop • Store	**BDCBB302** **BDCBS302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCOF302** **BDCSB301**
10	**Hand saw**	• Hardpoint handsaw medium Cut • Teeth: 7/8 TPI • Medium Size: 20" (500mm)	**5000**	30	• Workshop • Store	**BDCBB302** **BDCBS302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCOF302** **BDCDE301** **BDCBP301**
11	**Pick axe**	• Point + chisel ends, • Fitting: Eye oval, • Head dimensions(L*W in mm) 610 x	**9000**	15	• Workshop • Store	**BDCBB302** **BDCBS302** **BDCPC302**

		40		30		BDCPS302
						BDCSS302
						BDCOF302
						BDCSB301
12	**Claw hammer**	• Metal handle claw hammer • Head Material : High carbon steel, forged steel head hardened	**7000**	30	• Workshop • Store	BDCBB302 BDCBS302 BDCPC302 BDCPS302 BDCSS302 BDCOF302 BDCDE301 BDCBP301
13	**Club hammer**	• 2.5 kg hammer	**7000**	30	• Workshop • Store	BDCBB302 BDCBS302 BDCPC302 BDCPS302 BDCSS302 BDCOF302

14	**Sledge hammer**	• 7.5 kg hammer	**15000**	10	• Workshop • Store	BDCBS302 BDCPC302 BDCSS302
15	**Calibrated plumb bob**	• Material: Cast iron • Weight: 400g	**8000**	10	• Workshop • Store	**BDCBB302** **BDCBS302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCOF302**
16	**Chalk line**	• Plastic line level with accuracy of 1mm/m • Net weight: 115 g • Length: 30 m	**9000**	10 box set	• Workshop • Store	**BDCBB302** **BDCBS302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCBS302** **BDCDE301**

						BDCBP301
17	**Chisel**	- Type: Masonry chisel - Blade material: Chrome Vanadium steel - Size: Blade width: 23mm	**3000**	30	- Workshop - Store	**BDCBB302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCOF302** **BDCDE301** **BDCBP301**
18	**Bolster**	- Material: Hardened and tempered steel - Shot peen finished shank - Size: 102X216mm	**5000**	30	- Workshop - Store	**BDCBB302** **BDCPS302** **BDCOF302** **BDCDE301** **BDCBP301**
19	**Horse pipe**	Type: water level pipe Material: PVC Size/ Diameter: 6-10mm	**50000**	5 rolls	- Workshop - Store	**BDCBB302** **BDCBS302** **BDCPC302**

		Length: 30 meter				BDCPS302
						BDCSS302 BDCOF302
						BDCDE301
						BDCBP301
20	**Bucket**	Type: Heavy duty stainless steel bucket Capacity: 10 liters	**6000**	10	• Workshop • Store	**BDCBB302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCOF302** **BDCSB301** **BDCDE301** **BDCBP301**
21	**Pan**	• Type: Mortar head pan • Material: Heavy gauge galvanized steel • Diameter: 46.5/47.5 cm	15000	30	• Workshop • Store	**BDCBB302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCOF302** **BDCSB301**

22	**Jerrycan**	• Material: Plastic • Capacity: 20 liters	**4000**	**10**	• Workshop • Store	**BDCBB302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCOF302** **BDCSB301**
23	**Screw driver**	• Mixed sizes and shapes	20000	1 Set	• Workshop • Store	**BDCOF302** **BDCDE301** **BDCBP301**
25	**Hand Hoe**	• Head only, approx. 23x17cm, • 1.4kg, forged carbon steel.	5000	10	• Workshop • Store	**BDCBB302** **BDCBS302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCOF302** **BDCSB301** **BDCDE301** **BDCBP301**
26	**Rake**	• Material: Hot forged carbon steel • Size: 12 teeth	6000	10	• Workshop • Store	**BDCBB302** **BDCBS302** **BDCPC302**

						BDCPS302 **BDCSS302** **BDCOF302** **BDCSB301**
27	**Spanner**	• Mixed sizes	35000	1 Set	• Workshop • Store	**BDCOF302** **BDCBB302** **BDCPS302** **BDCSS302** **BDCDE301** **BDCBP301**
28	**Wire brush**	• Type: Heavy duty brush • Bristle material: Steel • Bristle length: 37mm • Number of rows: 4 • Brush depth: 290mm • Brush width: 150mm	5000	25	• Workshop • Store	**BDCBB302** **BDCBS302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCOF302**
29	**Allen keys**	• Mixed sizes (from 1.5mm to 10mm)	40000	Set	• Workshop • Store	**BDCOF302** **BDCDE301** **BDCBP301**

30	**Hacksaw**	• Material: Steel frame. • Grip: Rubber grip, hard and comfortable. • Height : 98mm • Length: 355mm	6000	30	• Workshop • Store	**BDCBS302** **BDCBB302** **BDCOF302** **BDCSS302** **BDCPC302** **BDCDE301** **BDCBP301**
31	**Hand drill**	• Type: Manual • Handle material: Wooden • Bit material: Stainless steel • Length: 12 inches		15	• Workshop • Store	**BDCOF302** **BDCDE301** **BDCBP301**
32	**Single brace**	• Material: Alloy steel • Size : 10 inches • Shank type: Brace	35,000	25	• Workshop • Store	**BDCOF302** **BDCDE301** **BDCBP301**
33	**Pincer**	• Tower pincer CRV (With insulation) • Size:250mm	5000	30	• Workshop • Store	**BDCBB302** **BDCSS302** **BDCOF302**

34	**Scraper**	• Material: Stainless steel blade and Polypropylene handle • size: 120 x 245 mm	4000	25	• Workshop • Store	**BDCBB302** **BDCPC302** **BDCPS302** **BDCSS302**
35	**Straight edge**	• Type: Lightweight and accurate straight edge • Material: Steel • Gauge: 1.5mm • Size: (40 X 40)mm	4500/m	72m	• Workshop • Store	**BDCBB302** **BDCPC302** **BDCPS302**
36	**Wooden float**	• Material: wood • Size: 280mm x 140mm x 70mm	3000	30	• Workshop • Store	**BDCBB302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCOF302**
37	**Steel float**	• Material: Stainless steel • Size: 280 x 130 mm • Weight: 0.46 kg	5500	30	• Workshop • Store	**BDCBB302** **BDCBS302** **BDCPC302**

						BDCPS302 **BDCSS302** **BDCOF302**
38	**Mallet Hammer**	• Material: Tough rubber head molded to a wooden handle • Weight: 450g	6000	30	• Workshop • Store	**BDCOF302**
39	**Steel ruler**	• Material: Stainless steel • Type: Metric and Imperial Graduation; With conversion table on the back side • Length: 12 in(300mm)	2500	10	• Workshop • Store	**BDCBS302** **BDCOF302** **BDCDE301** **BDCBP301**
40	**Sponge float**	• Type: One piece polyethylene handle and base. • Blade size: 280mm x 106mm • Sponge thickness: 30mm	5000	50	• Workshop • Store	**BDCBB302** **BDCPC302** **BDCPS302** **BDCSS302**
41	**Brooms**	• Wooden handle detachable: 1,2m • Brush : wood or plastic block of 300mmx60mm • Bristles length of 80 to 100mm	5,000	15	• Workshop • Store	**BDCBB302** **BDCBS302** **BDCPC302** **BDCPS302** **BDCSS302**

						BDCOF302 **BDCSB301** **BDCDE301** **BDCBP301**
42	**Silicon gun**	• Type: Single component. • Inner diameter: 50.8mm. • Outer diameter: 53.8mm. • Barrel length: 375mm. • Drive: Manual. • Capacity: 300ml to 600ml. • Handle: Aluminum alloy.	25000	10	• Workshop • Store	**BDCOF302**
43	**Brush**	• Type: Paste brush • Material: Tampico bristles with wooden handle	2000	15	• Workshop • Store	**BDCBB302** **BDCBS302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCOF302** **BDCSB301**
44	**Sickle**	• Type: Toothed grass Sickle reunion model, with wooden handle • Blade made of premium quality steel • Size: 28.8 x 6.6 x 6.6 cm	5000	30	• Workshop • Store	**BDCSB301**

		• Weight: 220 g				
45	**Molding box/ Bricks**	• Length between 200 mm and 300 mm; • Width between 100 mm and 130 mm; • Height between 75mm and 120 mm.	30,000	30	• Workshop • Store	**BDCSB301**
	Molding box/ Blocks	• Length between 300 mm and 500 mm; • Width between 100 mm and 300 mm; • Height between 100 mm and 300 mm.	30,000	30	• Workshop • Store	**BDCSB301**
46	**Claw bar**	• Type: Both slotted claw and chisel ends are polished • Material: High carbon steel • Size: 59 cm	20,000	10	• Workshop • Store	**BDCBB302** **BDCBS302** **BDCPC302** **BDCPS302** **BDCSS302** **BDCOF302**
47	**PPR Scissors**	1.calbon steel or 65Mn blade 2.alumnium body 3.ratchet mechanism 4. High strength anticorrosion. surface	15000	30	• Workshop • Store	**BDCBP301**

		treatment				
48	**Scriber**	Double ended hardened steel engineers scriber. Knurled & blacked grip.	3000	30	• Workshop • Store	**BDCBP301**
49	**Pipe wrench**	Size:14"; Material: steel; Types: offset and ridged	10000	50	• Workshop • Store	**BDCBP301**
50	**Ratchet spanners**	Chain size:8 Lashing capacity:40KN Weight KG:5.1	40000	10	• Workshop • Store	**BDCBP301**
51	**Pipe Cutter**	1/8" to3/8"; Die-cast cutter body with fold-away pipe; De-burring tool; Smooth action thread with one piece cutter-slide and hardened alloy steel cutting wheel	25000	25	• Workshop • Store	**BDCBP301**
52	**Drain stick**	Overall length (ln) Construction :Nylon Features: flexible with an angled head for tight bends in pipe.	20000	1	• Workshop • Store	**BDCBP301**

53	**Pliers**	• Chrome vanadium steel • Induction hardened cutting edges • Serrated gripping surfaces • L (mm):180 • Weight (g):240	4000	15	• Workshop • Store	**BDCBP301**
54	**Vernier caliper**	Material: carbon steel, stainless steel Hardness: carbon steel 700HV.Min Stainless steel: 550HV.Min	70000	15	• Workshop • Store	**BDCBP301**
55	**Snips**	Rolson 22157 Tin snips,250 mm	50000	15	• Workshop • Store	**BDCBP301**
56	**Combination square**	Order no. 180-910U* Size:300 mm Graduation:1mm,0.5mm	15000	30	• Workshop • Store	**BDCBP301**
57	**Pipe vice**	Bench vice, drop forged, with anvil, opening in front, jaw width: 120 mm, opening of jaws: 170 mm, depth of jaws: 100 mm German Industry Quality (PROMAT) or the best Pedding house or similar	100000	15	• Workshop • Store	**BDCBP301**

58	**Pipe vice**	Leg vice, fixed and movable jaws are made of high-grade, steel castings, ensuring high strength and long service life; other parts are of high quality constructional steel	200000	15	• Workshop • Store	**BDCBP301**
59	**File**	File, Flat(35 pieces) and triangle(20 pieces), 300 mm, Cut 1 (incl. Handle)	10000	30	• Workshop • Store	**BDCBP301**
60	**Trimming Knife**	Retractable Blade, metal housing	4000	30	• Workshop • Store	**BDCBP301**
61	**Ammeter**	• Description : AC/DC Mini Clamp-on • Method of detection: Mean Value • Display: LCD (Digital display : 3999 counts) • DC Current Range: 40/300A • DC Current Resolution:0.01A • Response Time:Approx . 2Second	3000	30	• Workshop • Store	**BDCDE301**
62	**Electrical pliers**	• Model no: 501774–B • Product Category : Electrical Connectors • Current Rating : 50.amps	80,000	30	• Workshop • Store	**BDCDE301**
63	**Voltmeter**	• Product Category : Digital Voltmeters	12,000	30	• Workshop	**BDCDE301**

		• Form Factor; Handheld			• Store	
		• Measurement type : DC				
		• Display Digits : 5 Digits				
		• DC Voltage : -20000 to 20000 Volts				
		• Option and Features: Auto-ranging				
64	**Multi-meter**	• Product Category : Fiber optic Test Equipment • Test Equipment : Fiber Optic Power Meter	10,000	30	• Workshop • Store	**BDCDE301**
65	**Screw driver kit**	• Two micrometer-adjustable torque wrenches. Nine hex-wrench bits. • Two 7/16" hex-wrench extensions. • One 7/16" female hex-wrench adaptor (Coupler). • One hex-to-square adapter for wrenches and one adaptor for screwdrivers. • One adjustable torque screwdriver. • Seven screwdriver bits; five slotted, two Phillips. • Hinged metal box. • Additional torque screwdrivers available	200	30	• Workshop • Store	**BDCDE301**

		in screwdriver section.				
66	**Knife**	• Stand on hall • Stopping fire by using powder • 12(Kg) of loaded weight • Made in metal and coated with red color. • Having cylindrical shape • Unit : piece	40,000	4	• Workshop • Store	**BDCDE301**

1.3. Category 3: Consumables and raw materials

SN	Name and description	Specification	Price/Unit	Quantity	Type of room	Module Code	Learning hour(s)
1.	**Bricks**	• Types: Burnt • Length between 200 mm and 300 mm; • Width between 100 mm and 130 mm; • Height between 75mm and 120 mm.Material: Pure Clay	75/Pce	5000Pcs	• Workshop • Store	BDCBB302 BDCCM301 BDCPC302	
2.	**Blocks**	• Length between 300 mm and 500 mm; • Width between 100 mm and 300 mm; • Height between 100 mm and 300 mm.			• Workshop • Store	• BDCBB302 • BDCCM301 • BDCPC302	
3.	**Sand**	• Types: River or Pit	24,000	5cum	• Workshop	• BDCBB302	

		• Size: 2mm • Color: white or black			• Store	• BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSS302	
4.	**Gravel**	• Types: crushed • Size:2mm-6mm • Color: black and white	28,000	5cum	• Workshop • Store	• BDCBB302 • BDCOF302 • BDCCM301 • BDCPC302 • BDCSS302	
4.	**Stones**	• Little or no porosity • Uniformity of a freshly broken or cut surface • Good workability	17,000	5cum	• Workshop • Store	• BDCCM301 • BDCPC302 • BDCSS302	

5	Cement	• Types: Portland 32.5Mpa • Color: grey • Size:0.007-0.2mm	15,000	10Pcs	• Workshop • Store	• BDCBB302 • BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSS302	
6	Clay	• Type: pure • Size: Small • Color: White or light-colored	8000	5pcs	• Workshop • Store	• BDCBB302 • BDCCM301 • BDCPS302 • BDCSB301 • BDCOF302	
7	Cutting Disc	Material: Metal/Stainless Diameter: 4.5inch Size: 115*1*22.2mm	3,500	pcs	• Workshop • Store	• BDCBS302	

8	**Drill bit**	• Rated Voltage:220V • Rated input power:800W Drilling diameter: 20mm	30,000	1 Box	• Workshop • Store	• BDCOF302	
9	**Anchor bolt**	• Type: M8-M22 • stainless or carbon steel • Bolt length: 20mm	4,500	4pcs	• Workshop • Store	BDCOF302	
10	**Timber Plank/ Madrier**	• Types: Eucalyptus or cypress • Size: 4*0.15*0.05m	8,000	25pcs	• Workshop • Store	• BDCBB302 • BDCOF302 • BDCBS302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSS302	
11	Wooden Board/ Planche	• Types: • Eucalyptus or cypress • Size:4*0.2*0.03m • Body material :soft	5000	25	• Workshop • Store	• BDCBB302 • BDCOF302 • BDCBS302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSS302	
12	**Wooden nail**	• Material: Iron steel • Color: black • Types: Fasterning	3000	13	• Workshop • Store	• BDCBB302 • BDCOF302 • BDCBS302	

		• Size: 4-15cm
		•
						• BDCCM301
						  • BDCPC302
						  • BDCPS302
						  • BDCSS302	

13	**Concrete nail**	• Material: high-carbon hardened steel • Size: 3"-3/4" • Shape: round • Color: Black	10000	1Box	• Workshop • Store	• BDCCM301 • BDCPC302	
14	Building line	• Size :30ml • Material: Nylon • Color: Blue, Red, Yellow, Green	500	25	Workshop/Store	• BDCBB302 • BDCBS302 • BDCBS302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSS302	
15	**Water**	• Quality : Pure, drinkable.	200	100Jercans	Workshop/Store	• BDCBB302 • BDCBS302 • BDCCM301 • BDCPC302 • BDCPS302	

						• BDCSB301 • BDCSS302	
16	**Lime**	• Plasticity index:8-20% • Color: White • Workability	5,0000	5bags	Workshop/Store	• BDCBB302 • BDCPS302 • BDCCM301	
17	**Marrum**	• Plastic index: 1-5	45,000	5 cum	Warehouse	• BDCCM301 • BDCPC302 • BDCSB301	
18	Mortise lock	• Material: Stainless steel, steel, and Iron steel • Front plate:235*23*3mm • Centre distance:72*82mm • Striker plate: 1.2mm	21,000	12	Workshop/Store	• BDCBS302 • BDCCM301	
19	Wall plugs	• Material: Plastic • Diameter:8-16	2,200	50	Workshop/Store	• BDCBS302 • BDCPS302	
20	**Metal door**	• Material : Mild Steel • Size: 90*210cm	77,500	13	Workshop/Store	• BDCOF302	

21	**Wooden door**	• Material : Wood • Size: 90*210cm	42,300	13	Workshop/Store	• BDCOF302	
22	**Metal window**	• Material: Mild Steel • Size: 140*160cm	56,400	13	Workshop/Store	• BDCOF302	
23	**Wooden window**	• Material: Wood Size: 100*120cm	28,000	13	Workshop/Store	• BDCOF302	
24	**Metal Silicone**	• Minimum Tensile:860Mpa • Minimum Elongation:150%	10,000	2	Workshop/Store	• BDCOF302	
25	**Wood Silicone**	• Density:1.35g/cm3 • Breaking Elongation:300%	15,000	2	Workshop/Store	• BDCOF302	
26	**Disinfectant**	• Surface Strong disinfectant, liquid, alkyl dimethyl ammonium chloride • Shelf life: more than 1 year • Unit : liter	9000	50L	• Workshop Store Room	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302	

					• BDCSB301 • BDCSS302
27	**Sanitizer**	• Germ killing products, alcohol based sanitizer (98% glycerine). • Autaurized by RFDA. • Unit : liter	5000	50L	• Workshop Store Room	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSB301 • BDCSS302
28	**Ventilated Blocks**	• Length between 300 mm and 500 mm; • Width between 100 mm and 300 mm; • Height between 100 mm and 300 mm. Open both sides				

29	**Elbow**	PPR DN 25	1000	100	Workshop	BDCBP301	
30	**Tee fitting**	PPR 20 DN	1000	30	Workshop	BDCBP301	
31	**WYE-fitting**	PVC/ T-Y 90mm diameter	6000	20	Workshop	BDCBP301	
32	**Socket**	PPR 20 DN	500	100	Workshop	BDCBP301	
33	**Plastic reducer**	PVC 110X90 DN	6500	50	Workshop	BDCBP301	
34	**PVC female Socket adapter**	½' X 16DN	1200	50	Workshop	BDCBP301	
35	**PVC male Socket adapter**	4'- 110 DN	17000	50	Workshop	BDCBP301	
36	**PPR Pipe**	PPR 20 DN, green color, 4m	3000	25	Workshop	BDCBP301	
37	**Pipe**	PVC 50mm diameter	6000	25	Workshop	BDCBP301	
38	**Pipe**	PVC 63 mm diameter	8500	25	Workshop	BDCBP301	

39	**Galvanised pipe**	3/4 inch	25000	25	Workshop	BDCBP301	
40	**Flexible hose pipe**	¾ inch	5000	20	Workshop	BDCBP301	
41	**Union**	1/2 inch PPR	1200	50	Workshop	BDCBP301	
42	**Union**	¾ inch PPR	2300	50	Workshop	BDCBP301	
43	**Crossing**	½ inch galvanized	6000	25	Workshop	BDCBP301	
44	**Crossover**	2 inch PPR	5000	25	Workshop	BDCBP301	
45	**Tank adapter**	1 inch	5000	10	Workshop	BDCBP301	
46	**Nipple galvanized**	¾ inch	1000	50	Workshop	BDCBP301	
47	**Nipple galvanized**	1 inch	2000	50	Workshop	BDCBP301	
48	**Ball valve**	¾ inch dia	10000	10	Workshop	BDCBP301	
49	**Ball valve**	1 inch dia	17000	10	Workshop	BDCBP301	
50	**Ball valve**	2 inch dia	25000	10	Workshop	BDCBP301	

51	Floating valve	½ inch dia	10000	10	Workshop	BDCBP301	
52	Gate valve	¾ inch GI	7000	10	Workshop	BDCBP301	
53	Pressure reducer valve	¾ inch GI	35000	10	Workshop	BDCBP301	
54	Pressure reducer valve	1 inch GI	55000	10	Workshop	BDCBP301	
55	Angle valve	½ inch	4000	10	Workshop	BDCBP301	
56	Push button for sink	½ inch	15000		Workshop	BDCBP301	
57	Mechanism WC complete	Push button/ ceramic /European WC (Seating position)	25000	5	Workshop	BDCBP301	
58	Mechanism WC complete	Pull cable/ceramic /Indian WC (squatting position)	15000	5	Workshop	BDCBP301	
59	shower head		20000	5	Workshop	BDCBP301	
60	Shower flexible pipe		5000	10	Workshop	BDCBP301	
61	Shower mixer valve		50000	5	Workshop	BDCBP301	

62	**Solar Water Heater**	Water heater type: FPC, Red &white color, Below 300Ltr, body material ABS Plastic in put voltage 220-250v.collector dimensions: width 450mm, height 787mm	1,500,000	1	Workshop	BDCBP301	
63	**Wall plug**	Box of 10mm	5000	5	Workshop	BDCBP301	
64	**Pipe clamp PVC (PIPE CLIP)**	10-110 mm dia	1500	50	Workshop	BDCBP301	
65	**Stainless steel pipe clamp**	10-110 mm dia	5000	50	Workshop	BDCBP301	
66	**Pipe Clip and ties**	10-110 mm dia	1500	50	Workshop	BDCBP301	
67	**Bathtub complete**	Enameled steel	200,000	2	Workshop	BDCBP301	
68	**Bidet complete**	Pedestal type	100,000	2	Workshop	BDCBP301	
69	**Silicon**	BLACK OR WHITE	5000	10	Workshop	BDCBP301	
70	**Tangite glue**	Special Adhesive, 1Kg	10000	10	Workshop	BDCBP301	

71	**Tefron**		500	2000	Workshop	BDCBP301	
72	**Mixer tap**	1/2 inch	40,000	10	Workshop	BDCBP301	
73	**Tap**	PL Bib Tap -Ball Type 1/2" Valve Red Handle	6000	10	Workshop	BDCBP301	
74	**P trap**	PVC, 110 dia	10000	10	Workshop	BDCBP301	
75	Electrical cable	- Size:$2.5mm^2*3$ - Types: Steel wire braid armoured cable - Material: Copper Conductor with polyster insulator - Color: Black Skin	250000	1 Roll	- Work shop - Store	BDCDE301	
76	Electrical wire	Material: Copper	40,000	4	- Work shop - Store	BDCDE301	

		• Insulation material: PVC • Types: Low Voltage • Size: 1.5-2.5m2				
77	Sockets	• Max. Voltage:250V • Max current:10A • Shape: Square • Color: White	3000	30	• Work shop • Store	BDCDE301	
78	Bulbs	• Low Voltage 15V • Color: White • Light source: Red • Input Voltage:220V • Power supply: AC	2500	30	• Work shop • Store	BDCDE301	
79	SWITCHES	• Max Voltage:250V	3000	30	• Work shop	BDCDE301	

		- Max. Current: 10A - Color: White - Size: 81.5*80.5*44			Store		
80	Circuit break	- Rated Voltage:380V - Rated frequency:50/60V	4000	30	- Work shop - Store	BDCDE301	
81	Junction Box	- External Size: 1/0.5" - Material : Plastic		30	- Work shop - Store	BDCDE301	
82	Fuses	- Voltage: 1000V - Current:20A - Rated Voltage:1000VDC	3500	35	- Work shop - Store	BDCDE301	

1.4. Category 4: Security materials

N°	Name and description	Specifications	Price	Quantity	Type of room	Module code
1	Hard Hat / **Helmet (all module)**	• Color: All colors • Type: Lightweight safety helmet • Material: Vented ABS hard top material, with harness, headband,sweatband and chinstrap as internal arrangements for satefy and comfort.	3000	30	Changing room	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSB301 • BDCSS302
2	Safety Shoes **(all module)**	• Type: Water proof shoes, • Material: leather with steel toe cap and working ankle lightweight foot wear	60,000	30	• Changing room	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301

						• BDCPC302
						• BDCPS302
						• BDCSB301
						• BDCSS302
3	Reflected Vests	• Polyester, • solid vest with reflective silver tape; • ID pocket & zip front; • SECURITY printed on back; • Colour: Hi **Viz Lime;** Packaging: Each	12,000	30	• Changing room	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSB301 • BDCSS302
4	**Overall**	• Material: 100% Cotton • Feature: Anti-Wrinkle, Quick Dry Breathable • Long sleeved • Color:Hight visility overall	10,000	30	• Workshop • Construction Site	• BDCBB302 • BDCBS302 • BDCOF302

		• Unit :piece				• BDCCM301 • BDCPC302 • BDCPS302 • BDCSB301 • BDCSS302
5	Goggles	• Composition: non-woven polyester • Appearance: solid white dyed • Size: standard, With elastic around the head • Packs of 100pieces	200	40	Changing room	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSB301 • BDCSS302
6	Safety gloves	• Type: heavy duty cut resistant, • Material: leather, • Size: XXS • Color: Not specified	2,000	30	Changing room	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301

						• BDCPC302
						• BDCPS302
						• BDCSB301
						• BDCSS302
7	**Fire extinguisher(powder& foam)**	• Stand on hall • Stopping fire by using powder • 12(Kg) of loaded weight • Made in metal and coated with red color. • Having cylindrical shape • Unit : piece	40,000	4	Workshop	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSB301 • BDCSS302
8	Headset, Foam earplug and Earmuffs	• Manufacturer model: 1010929 • Package specification: 20 pairs / box • Wearing method: headwear • Height adjustment: can • Adjustable headband: have • Nrr: 28db • Snr: 33db				• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301

		• Color: green				• BDCPC302
						• BDCPS302
						• BDCSB301
						• BDCSS302
9	**Safety Belts/Safety Harness**	• Colour: Blue. • Material: 100% non-woven polypropylene • Construction: three layers with adjustable nose piece • Unit : box of 50 pieces	15,000	25	Changing room	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSB301 • BDCSS302
10	**Apron**	• Cotton 100%, • White in colour • Have one pocket in front • Small, Medium to large size • Sleeveless	12,000	3	• Workshop Changing Room	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301 • BDCPC302

						• BDCPS302
						• BDCSB301
						• BDCSS302

1.5   Training facilities

1.5.1 Furniture and office materials

SN	Name and description	Specification	Unity /price	Quantity	Type of room	Module Code	Learning hou (s)
1	Laptop and its accessories	• Model No. 001 • Processor Type: Intel Atom • RAM Capacity: ≥4GB • Hard Disk Capacity: 500GB • Graphics Card: Integrated Graphics Card	586,500	5	Computer lab	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302	

		• Processor Brand: intel • Widescreen: Widescreen • Built-in Bluetooth: Built-in Bluetooth • Fingerprint: Without Fingerprint • Laptops: Light and Ultra-Slim Laptops • ROM: > 256G				• BDCSB301 • BDCSS302
2	Desktop & its accessories	• Model No. K-21.504 • Memory Type: DDR3 • Use: Home/Commercial/Game • CPU Frequency: 2.5-3.0GHz • Keywords: All in One PC • Colour: Black • Interface Type: HDMI, VGA, USB • Display Ratio: 16:9 • Processor Series: Intel Core I7 • Memory: >4G • Hard Disk: SSD 500 GB • Display Resolution: 1920X1080 Power: 100-240V AC 50/60Hz • Output: 12V DC 6A 60W • Dimension: 60*15*45 • Trademark: Kuai	395,373	25	Office room	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSB301 • BDCSS302

3	File box	• Type: Display Book • Material: Plastic • Type Document Bag: Multiply • Size: A4 • Feature: Label • Usage: Data Book • Model No. 5005 • Colour: Assorted • Lock: Without Lock • Zipper: Without Zipper • Material: Plastic • Thickness: 0.6/0.03mm	2500	60	Office room	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSB301 • BDCSS302	
4	Printer	• Model no. all in one copier, printer and fax-0350 • Function: print, copy, scan and fax • Without network printing • Max printable size: A4 • Laser type.	400,000	2	Office room	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSB301 • BDCSS302	
5	Paper	• Material: 100% wood pulp • Size: A4,	Carton (5Ream)	2	Office room	• BDCBB302	

		• Letter size(8.5"x11"), • Legal size(8.5"x14") • Whiteness: 98-100% • Packing: 500 sheets per ream				• BDCBS302 • BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSB301 • BDCSS302	
6	Office table	• Usage: office room/ • Material: MDF • Color: woody • Style: Modern • Folded: Unfolded • Size: 1200W*600d*750hmm • Drawers: 3 Drawers	250,000	2	Office room	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSB301 • BDCSS302	
7	Chair	• Model no. HY-128B • Rotary • Material: Genuine leather	100,000	6	Office room	• BDCBB302 • BDCBS302	

		• Modern style • Dimension: 78*32*58 cm				• BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSB301 • BDCSS302	
8	Power extension cable(	• Mode no. SR 530 • Color: not specified • Cable length: 5m • Hole digits: 6 • Material: PC+ABS • Dimension: 370*70.5*43mm	15000	10	Office room	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSB301 • BDCSS302	
9	Documents Shelf	• Mode no. SZ-FC017 • Condition: New • Wood style: woody • Material: wood • Door: 2	350,000	4	Office room	• BDCBB302 • BDCBS302 • BDCOF302	

						• BDCCM301	
		• Length and width:				• BDCPC302	
						• BDCPS302	
						• BDCSB301	
						• BDCSS302	
10	Pen	• Mark: Bic • Colour: blue and red • Material: Plastic • Inner box: 50 pcs	200	5 boxes	Office room	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSB301 • BDCSS302	
11	Pencil	• Body material: wood • Body colour: multiple • Lead diameter: 2.65mm • Dimension: 7 inches.	150	30 pcs	Office room	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301	

						• BDCPC302	
						• BDCPS302	
						• BDCSB301	
						• BDCSS302	
12	Marker	• Color: Multi colour • Hardness: Medium soft • Ink type: Dry Erase • Point diameter: 4.5 mm • Size: normal • Material: Plastic(polypropylene) • Dimension: 142*15mm	300	5 boxes	Office room Class room Workshop	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301 • BDCPC302 • BDCPS302 • BDCSB301 • BDCSS302	
13	A4 paper padded envelope	• material: Rigid paper • Seal bag • Moisture proof • Bio-degradable • Disposable • Shock resistance • Thickness: 2.5-4mm • - Color: Gold	Package (50Pces)	2	Office room Workshop	• BDCBB302 • BDCBS302 • BDCOF302 • BDCCM301 • BDCPC302	

						• BDCPS302	
						• BDCSB301	
						• BDCSS302	

1. **Didactic materials**

S/N	Name and description	Specifications	Unit price	Quantity	Type of room	Module code	Learning hours
10	Animated video	• Animated Video	100,000	1	Class room	• BDC301 • BDC301 • BDCBB301 • BDCBS301 • BDCOF301 • BDCPC301 • BDCPS301 • BDCSS301	

2. **Audio-visual materials**

No	Name and description	Specifications		Quantity	Type of room	Module code
2	Projector	• Brightness 3,600 ANSI Lumens • Resolution 800x600 • Aspect Ratio 4:3 (SVGA) • Contrast 20,000:1 (full on/off) • Display Type DLP x 1 • Color Processing 10-bit • Video Modes 720p, 1080i, 1080p/60, 1080p/24, 1080p/50, 576i, 576p, 480p, 480i • Data Modes MAX 1920x1200 • Lamp Life 4,000 hours / 10,000 hours (Eco) • Lamp Model MC. JPV11.001 • Digital Zoom Yes • Power 240 Watts 100V - 240V • Size 11 cm x 31 cm x 24 cm	700,000	1	Classroom	• BDCBB301 • BDCBS301 • BDCOF301 • BDCPC301 • BDCPS301 • BDCSS301 • BDCSB301 • BDCCM301

| 3 | **Projector board screen** | Length: 2m Height: 1.5m Colour: white | 300,000 | 1 | Classroom | BDCBB301 BDCBS301 BDCOF301 BDCPC301 BDCPS301 BDCSS301 BDCSB301 BDCCM301 |
| 4 | **Laptop** | 6200U CPU @ 2.30GHz 2.40 GHz Installed RAM:8.00 GB (7.89 GB usable) System type: 64-bit operating system, x64-based processor RAM: 500 GB | 700,000 | 25 | Classroom | BDCBB301 BDCBS301 BDCOF301 BDCPC301 BDCPS301 BDCSS301 BDCSB301 BDCCM301 |

2.4. **Infrastructures**

This level will need two kinds of the workshops one for competencies related to Ruminant farming and another one related to processing.

The illustration bellow shows each workshop and its components:

WORKSHOP
FLOOR PLAN
Date:8/31/2022

Recommendation for this documents:

1. Entry requirements has to be respected refer to level descriptors

2. Some module codes have to be checked and adjusted accordingly (Ex: Opening Fixation code was changed from BDCBS301 to BDCOF302)

3. Total credits for this curriculum must be adjusted to 84 credits for core modules and 30 credits for complementary modules