

| BOQ of Akal Farmer Training Centre |  |           |       |        |
|------------------------------------|--|-----------|-------|--------|
| S.No.                              | Description  | Qty       | Unit  | Amount |
| 1                                  | <b>Civil Works</b>   |           |       |        |
| 2                                  | Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.<br>All kind of soil   | 195.000   | CUM   |        |
| 3                                  | Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :<br>1:4:8 (1 Cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size)  | 95.000    | CUM   |        |
| 4                                  | Centering and shuttering including strutting, propping etc. and removal of form work for : Foundations, footings, bases for columns  | 190.000   | SQM   |        |
| 5                                  | Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :<br>1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size)  | 119.000   | CUM   |        |
| 6                                  | Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III): 4 graded stone aggregate 12.5mm nominal size)   | 107.690   | SQM   |        |
| 7                                  | Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete up to plinth level.<br>Thermo Mechanically Treated Bars  | 18200.000 | KG    |        |
| 8                                  | Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement.<br>1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) : 3 graded stone aggregate 20 mm nominal size)   | 75.410    | CUM   |        |
| 9                                  | Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) : 3 graded stone aggregate 20 mm nominal size)   | 120.370   | CUM   |        |
| 10                                 | Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.<br>Thermo Mechanically treated bars.   | 10849.000 | KG    |        |
| 11                                 | Centering and shuttering including strutting ,propping etc. and removal of form for all works at all levels.<br>Suspended floors,roofs,landing,balconies and access platforms  | 570.000   | SQM   |        |
| 12                                 | lintels,beams,plinth beams,girders,bressumers and cantilevers.   | 122.250   | SQM   |        |
| 13                                 | columns pillars ,piers,Abutments,posts and struts.   | 195.000   | SQM   |        |
| 14                                 | Brick work with common burnt clay F.P.S (non modular)brick of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and size in:<br>Cement mortar 1:6(1cement: 6 coarse sand)   | 132.540   | CUM   |        |
| 15                                 | Half brick masonry with common burnt clay F.P.S.( non modular ) brick of class designation 7.5 in superstructure above plinth level up to floor V level .<br>Cement mortar 1:4(1cement: 4 coarse sand)   | 8.990     | SQM   |        |
| 16                                 | Extra for providing and placing in position 2 Nos 6 mm dia. M.S. bars at every third course of half brick masonry.   | 8.990     | SQM   |        |
| 17                                 | Three track three panels sliding window with two glazed & one wire mesh panels with Aluminium channel for roller track, wool pile, nylon rollers with SS 304 body. Using R2 series with frame (70 mm & above) x (40 mm & above) & both glazed and fly screen sash (25 mm & above) x (50 mm & above) with zinc alloy (zamak) powder coated touch locks with hook. (Height upto 1.2 metre).  | 91.910    | SQM   |        |
| 18                                 | Providing and fixing pressed steel door frames conforming to IS: 4351, manufactured from commercial mild steel sheet of 1.60 mm thickness, including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25 mm, or base ties of 1.60 mm, pressed mild steel welded or rigidly fixed together by mechanical means, including M.S. pressed butt hinges 2.5 mm thick with mortar guards, lock strike-plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-in-charge:<br>Profile B<br>Fixing with adjustable lugs with split end tail to each jamb | 147.580   | Metre |        |
| 19                                 | Profile C<br>Fixing with adjustable lugs with split end tail to each jamb  | 14.860    | Metre |        |
| 20                                 | Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters: 35 mm thick including ISI marked stainless steel butt hinges with necessary screws.   | 45.700    | SQM   |        |
| 21                                 | Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with :<br>5.5 mm thick glass panes   | 15.470    | SQM   |        |
| 22                                 | Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :<br>Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture  | 91.500    | SQM   |        |

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| 23                                 | Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.<br>Twin rubber stopper  | 23.000         | Each  |        |
| 24                                 | Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :<br>125 mm  | 46.000         | Each  |        |
| 25                                 | Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI ,IS : 3564 embossed on the body ,door weight upto 35 kg and door width upto 700 mm) with necessary and screws etc. complete.   | 15.000         | Each  |        |
| 26                                 | Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868 ) transparent or dyed to required colour or shade, with necessary screws etc. complete<br>250*10 mm  | 23.000         | Each  |        |
| 27                                 | Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete :<br>300x16 mm   | 23.000         | Each  |        |
| 28                                 | Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc., complete.<br>Size of Tile 600x600 mm                                   | 657.800        | SQM   |        |
| 29                                 | Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc. complete.<br>Size of Tile 600x600 mm                | 78.400         | SQM   |        |
| 30                                 | 12 mm cement plaster of mix :Ceiling Plaster 1:4 (1 cement: 4 fine sand)   | 1069.000       | SQM   |        |
| 31                                 | 15 mm cement plaster on the rough side of single or half brick wall of mix : 1:4 (1 cement: 4 fine sand)   | 399.000        | SQM   |        |
| 32                                 | Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.<br>110 mm diameter  | 36.580         | Meter |        |
| 33                                 | 110 mm bend  | 18.000         | Each  |        |
| 34                                 | 110 mm Shoe  | 9.000          | Each  |        |
| 35                                 | Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.<br>110 mm  | 9.000          | Each  |        |
| 36                                 | Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing:<br>1:3:6 (1 cement : 3 coarse sand (zone-III) : 6 graded stone aggregate 20 mm nominal size) | 1.910          | CUM   |        |
| 37                                 | Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.<br>1<br>In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works   | 100.000        | KG    |        |
| 38                                 | SANITARY   |                |       |        |
| 39                                 | Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required : W.C. pan with ISI marked white solid plastic seat and lid  | 6.000          | Each  |        |
| 40                                 | Providing and fixing CP Brass 32 mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge.  | 6.000          | Each  |        |
| 41                                 | Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require: Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps   | White<br>6.000 | Each  |        |
| 42                                 | Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. 40 mm dia  | 6.000          | Each  |        |
| 43                                 | Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 :15 mm nominal bore   | 6.000          | Each  |        |

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| 44                                 | Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. 15 mm nominal bore   | 6.000   | Each  |        |
| 45                                 | Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 15 mm nominal bore   | 18.000  | Each  |        |
| 46                                 | <b>WATER SUPPLY SYSTEM</b>   |         |       |        |
| 47                                 | Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings and fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.  |         |       |        |
| 48                                 | 15 mm nominal dia Pipes  | 45.000  | metre |        |
| 49                                 | 20 mm nominal dia Pipes  | 65.000  | metre |        |
| 50                                 | <b>Electrical</b>  |         |       |        |
| 51                                 | Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.  |         |       |        |
| 52                                 | Group A  | 47.000  | Point |        |
| 53                                 | Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.  |         |       |        |
| 54                                 | Group B  | 31.000  | Point |        |
| 55                                 | Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.   |         |       |        |
| 56                                 | Group A  | 11.000  | Point |        |
| 57                                 | Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required. (independent plug)   |         |       |        |
| 58                                 | Group C  | 30.000  | Point |        |
| 59                                 | Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc as required. accessories as per specification No: WG-PW/CW  | 18.000  | Point |        |
| 60                                 | Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/recessed steel/ PVC conduit as required.   |         |       |        |
| 61                                 | 2 x 2.5 sq. mm + 1 x 2.5 sq.mm earth wire  | 695.000 | M     |        |
| 62                                 | Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/recessed steel/ PVC conduit as required.   |         |       |        |
| 63                                 | 2 x 1.5 sq. mm + 1 x 1.5 sq.mm earth wire  | 695.000 | M     |        |
| 64                                 | Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/recessed steel/ PVC conduit as required.   |         |       |        |
| 65                                 | 2 x 4 sq. mm + 1 x 4 sq mm earth wire  | 100.000 | M     |        |
| 66                                 | 15/16 amp switch   | 8.000   | Each  |        |
| 67                                 | 6 pin 15/16 amps modular socket outlet, ISI marked   | 8.000   | Each  |        |
| 68                                 | 5/6A Switch 1W - 1 Module  | 119.000 | Each  |        |
| 69                                 | 3 pin 5/6 amp socket outlet  | 30.000  | Each  |        |
| 70                                 | <b>SUBHEAD-2 : FANS &amp; LIGHT FIXTURES</b>   |         |       |        |
| 71                                 | Supply, Installation, Testing and Commissioning of 1200 mm sweep, BEE 5 star rated, ceiling fan with Brush Less Direct Current (BLDC) Motor, class of insulation: B, 3 nos. blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, Power Factor not less than 0.9, Service Value (CM/M/W) minimum 6.00, Air delivery minimum 210 Cum/Min , 350 RPM (tolerance as per IS : 374-2019), THD less than 10%, remote or electronic regulator unit for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise=75 degree C (max.), insulation resistance more than 2 mega ohm, suitable for 230 V, 50 Hz, single phase AC Supply, earthing etc. complete as required. | 16.000  | Each  |        |
| 72                                 | LED Batten light (System lumen efficacy >135 lm/Watt) 18- 22 watt  | 47.000  | Each  |        |
| 73                                 | Supplying and fixing call bell/ buzzer suitable for single phase, 230 volts, complete as required.   | 2.000   | Each  |        |