

## Schedule of Quantities

CONSTRUCTION OF LIQUID HELIUM PLANT ROOM AT S. N. BOSE NATIONAL CENTRE FOR  
BASIC SCIENCES AT SALT LAKE, KOLKATA.

TENDER REFERENCE: SNB/ENGG/TENDER/2012-13/07/020 DATED: 08.08.2013

| Sl. No. | Description of Item  | UNIT  | QTY     | RATE (Rs.) | AMOUNT (Rs.) |
|---------|--|-------|---------|------------|--------------|
| 1       | Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.   |       |         |            |              |
|         | i) All kinds of soil   | Cum   | 100.00  |            |              |
| 2       | Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.  | Cum   | 75.00   |            |              |
| 3       | Filling in foundation or plinth by silver sand in layers not exceeding 150 mm. as directed and consolidating same by thorough saturation with water ramming complete, including the cost of supply of sand. (Payment to be made on measurement of finished quantity)   | Cum   | 30.00   |            |              |
| 4       | Suppling & laying polythene sheet (150 gm /sqm) as per direction of Engineer in Charge   | Sqm   | 150.00  |            |              |
| 5       | Single brick flat soling of picked jhama bricks including ramming and dressing bed to proper level and filling joints with powdered earth or local sand.   | Sqm   | 200.00  |            |              |
| 6       | Neat cement punning about 1.5 mm. thick in wall, dado, window, sills, floor, drain etc.  | Sqm   | 20.00   |            |              |
| 7       | Antitermite treatment to bottom surface (in case of masonry foundation and basement) the sides of the excavation trenches, floor area with chemical emulsion by admixing chloropyrefos emulsifiable concentration (1% concentration) with water by weight at the rate of 5 lt. per sq.m. area. The work shall be carried out as per specification described in 6.2.1. of code IS-6313 (Part II) 1981 | Sqm   | 220.00  |            |              |
| 8       | Supplying chemical emulsion in sealed containers including delivery as specified.  |       |         |            |              |
|         | i) Chlorpyriphos/ Lindane emulsifiable concentrate of 20%  | litre | 40.00   |            |              |
| 9       | Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 stone (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size).  | Sqm   | 20.00   |            |              |
| 10      | Providing and laying in position of reinforced cement concrete 1:1.5:3 (1 Cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) excluding the cost of centring, shuttering, finishing and reinforcement - All work   |       |         |            |              |
|         | a) upto plinth level   | Cum   | 15.00   |            |              |
|         | b) above plinth level  | Cum   | 4.00    |            |              |
|         |  |       |         |            |              |
| 11      | Reinforcement (Thermo-Mechanically Treated bars) for R.C.C. work in all sorts of structures including straightening, cutting, bending, hooking, placing in proper position and binding with 16 gauge black annealed wire at every intersection, all complete as per drawing and direction. .   | Kg    | 1500.00 |            |              |

| Sl. No. | Description of Item  | UNIT | QTY    | RATE (Rs.) | AMOUNT (Rs.) |
|---------|--|------|--------|------------|--------------|
| 12      | Centring and shuttering including strutting, propping etc. and removal of form for :   |      |        |            |              |
|         | a) Foundations, footings, beams etc. for mass concrete upto plinth level.  | Sqm  | 20.00  |            |              |
|         | b) Lintels, beams, cantilevers etc. above plinth level   | Sqm  | 10.00  |            |              |
| 13      | Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :   |      |        |            |              |
|         | i) 1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).   | Cum  | 16.00  |            |              |
| 14      | Making plinth protection 50mm thick of cement concrete 1:2:4 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand including finishing the top smooth. | Sqm  | 40.00  |            |              |
| 15      | Brick work with common burnt clay F.P.S. bricks of class designation 75 with Cement mortar 1:6 (1 cement : 6 coarse sand)  |      |        |            |              |
|         | i) in foundation and plinth  | Cum  | 60.00  |            |              |
|         | ii) in superstructure above plinth level up to floor V level in all shapes and sizes   | Cum  | 120.00 |            |              |
| 16      | Half brick masonry with F.P.S. bricks of class designation 75 with Cement mortar 1:4 (1 cement : 4 coarse sand) above plinth level up to floor V level including continuous wire mesh providing every three layer interval   | Sq.m | 20.00  |            |              |
| 17      | Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints or roughening of concrete surface, including throating, nosing and drip course where necessary.  |      |        |            |              |
|         | a) 20 mm. thick plaster (6:1)  |      |        |            |              |
|         | i) In Ground floor   | Sqm  | 350.00 |            |              |
|         | b) 15 mm. thick plaster (6:1)  |      |        |            |              |
|         | i) In Ground floor   | Sqm  | 380.00 |            |              |
| 18      | Rendering the surface of walls and ceiling with white cement based wall putty of approved make and brand(1.5mm thick)  | Sqm  | 380.00 |            |              |
| 19      | Cement primer approved make on plastered surface to receive flat wall paint or plastic emulsion paint including preparation of surface by sand papering, putty etc.  | Sqm  | 380.00 |            |              |
| 20      | Applying acrylic emulsion paint of approved make and brand on walls & ceiling i/c sand papering in intermediate coats i/c putty ( to be done under specific instruction of Engineer-in-Charge  | Sqm  | 380.00 |            |              |
|         | a) Two coats   |      |        |            |              |

| Sl. No. | Description of Item  | UNIT | QTY     | RATE (Rs.) | AMOUNT (Rs.) |
|---------|--|------|---------|------------|--------------|
| 21      | Protective and Decorative Acrylic exterior emulsion paint of approved quality, as per manufacturer's specification and as per direction of EIC to be applied over acrylic primer as required. The rate includes cost of material, labour, scaffolding and all incidental charges but excluding the cost of primer.<br>In Ground floor (Two Coat)<br>a) Normal Acrylic Emulsion   | Sqm  | 350.00  |            |              |
| 22      | Applying priming one coat with ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel works.  | Sqm  | 80.00   |            |              |
| 23      | Painting with best quality synthetic enamel paint of approved make and brand including smoothening surface by sand papering etc. including using of approved putty etc. on steel or other metal surface<br>Two coats (with any shade except white)   | Sqm  | 80.00   |            |              |
| 24      | Structural steel work with simple rolled structural members (e.g. joists, angle, channel etc. conforming to IS: 226, IS: 808 & SP (6)-1964, IS: 806 - 1957 and IS: 1161-1958) connected to one another with bracket, gussets, cleats as per design, direction of engineer-in-Charge complete riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete. The rate includes the cost of structural members with consumables such as electrodes, gas and hire charges of all tools, plants and labour required including handling charges of materials for work with all incidental charges such as electricity charges, labour insurance charges etc. | Kg   | 1500.00 |            |              |
| 25      | Kota stone slab 25mm thick flooring over 20mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment match the said of the slab including grinding and polishing complete with base of cement mortar 1:4 (1 cement : 4 coarse sand) as per direction of Engineer-in-Charge.   | Sqm  | 110.00  |            |              |
| 26      | Kota stone slab 25mm thick in riser of steps, skirting, dado, and pillars laid on 12mm (average) thick cement mortar 1:4 (1 cement : 4 coarse sand) and jointed with grey cement slurry mixed with pigment match the said of the slab including grinding and polishing complete as per direction of Engineer-in-Charge.  | Sqm  | 20.00   |            |              |
| 27      | M.S. Ornamental grill of approved design joints continuously welded with M.S Flats and bars of windows, railing etc. fitted and fixed with necessary screws and lugs in all floor.<br>Grill weighing above 10 Kg/sqm and up to 16 Kg/sqm   | Kg   | 140.00  |            |              |
| 28      | Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. topcover of required thickness for rolling shutters.  |      |         |            |              |
|         | i) 80x1.25mm M.S. laths with 1.25 mm thick top cover.  | Sqm  | 18.00   |            |              |
|         | ii) Providing and fixing ball bearing for rolling shutters.  | each | 2.00    |            |              |
|         | iii) Extra for providing mechanical device chain and crank operation for operating rolling shutters exceeding 10.00 sqm and upto 16.80 sqm in the area..   | Sqm  | 18.00   |            |              |

| Sl. No.                   | Description of Item  | UNIT | QTY    | RATE (Rs.) | AMOUNT (Rs.) |
|---------------------------|--|------|--------|------------|--------------|
| 29                        | Supplying and installing glazed Aluminium fully openable/fixed/louver type door/window made of extruded and anodised (with anodising film thickness of minimum of 16 micron) matt finished aluminium composite window and shutter frame (both styles and rails) sections formed with extruded and anodised basic sections manufactured by M/s. Indal or any other approved manufacturer fitted with in-built integrated locking arrangements, sliding rollers and other necessary fitting, fixtures and joineries along with extruded Neoprene or EPDM gasketting in between window frame and masonry work (walls, column, beams, lintels etc.) as well as in between glass and shutter frame for fitting glass and between shutter and window frame wherever necessary i/c. fixing of glass as per thickness mentioned below complete in all respect as per drawing, specification and directives of Engineer-In-Charge - Anodised with AC3 colour. |      |        |            |              |
|                           | a) With 4.0 mm. thick clear float glass  |      |        |            |              |
|                           | i) Openable Portion  | Sqm  | 15.00  |            |              |
|                           | ii) Fixed Proportion   | Sqm  | 8.00   |            |              |
| 30                        | Supply and fixing of colour coated steel roofing sheets, light weight coating Galvalume (aluminium zink alloy). The sheet shall be fixed using self drilling / self tapping screws of suitable size with EPDM seal including cutting to size and shape wherever required as per direction of Engineer-in-Charge.<br>Make: Durashine/Durakolor/Prestar  | Sqm  | 150.00 |            |              |
| <b>TOTAL (IN FIGURE):</b> |  |      |        |            |              |
| <b>TOTAL (IN WORDS):</b>  |  |      |        |            |              |

.....  
Signature of Tenderer

Address: .....

.....

Date: .....

1. Rate shall be inclusive of all applicable taxes
2. Rates shall remain firm and fixed during the contract period.
3. Quoted rates shall be valid for 90 days from the due date of submission.