## INDIRA GANDHI INSTITUTE OF MEDICAL SCIENCES, PATNA-14 BILL OF QUANTITY

## SI. No.- 07Tender Notice No.88 (C)/2015-16

|            | SI. No 071 ender Notice No.88 (C)/2015-16  |  |          |          |           |  |  |  |
|------------|--|--|----------|----------|-----------|--|--|--|
| SI.<br>No. | Name of the Work :-  | Addition & Alteration Work in existing incomplete shade in north part of Ward Block for using it as Animal House. (Civil Work) |          |          |           |  |  |  |
| 1          | Estimated Cost (In Rs.) :-   | 963607.00  |          |          |           |  |  |  |
| 2          | Earnest Money (In Rs.) :-  | 19300.00   |          |          |           |  |  |  |
| 3          | Cost of B.O.Q. (In Rs.) :-   | 1250.00  |          |          |           |  |  |  |
| 4          | Time of completion :- ( In Days)   | 30.00  |          |          |           |  |  |  |
| 5          | Last Date, time & place for submission of tender-  | 17/03/2016 up to 1:30 PM at office of the Director, IGIMS, Patna-14 through Regt. /Speed Post/Courier.                         |          |          |           |  |  |  |
| 6          | Date and time for opening of tender-(Technical Bid)-   | 18/03/2016 at 3.30 PM in Conference Hall of IGIMS, Patna   |          |          |           |  |  |  |
| 7          | Date & Time for opening of Price Bid of technically Suitable bidders.  | 22/03/2016 at 3:30 PM  |          |          |           |  |  |  |
| SI.<br>No. | ITEM DESCRIPTION   | UNIT   | QUANTITY | RATE     | AMOUNT    |  |  |  |
|            | CIVIL WORK   |  |          |          |           |  |  |  |
| 1          | Providing designation 100 A one brick flat soling joints filled with local sand including cost of watering, taxes, royalty all complete as per building specification and direction of E/I   | Sqm.   | 189.0    | 227.60   | 43,016.40 |  |  |  |
| 2          | Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering-All work up to plinth level:  | ,  |          |          | -         |  |  |  |
|            | 1:2:4(1 Cement:3 coarse sand: 6 graded stone aggregate   |  |          |          |           |  |  |  |
| а          | 20mm nominal size) 15 mm cement plaster 1:3 (1 cement: 3 coarse sand ) finished  | cum  | 15.0     | 3,323.10 | 49,846.50 |  |  |  |
|            | with a floating coat of neat cement on the rough side of single  |  |          |          |           |  |  |  |
| 3          | or half brick wall.  | sqm  | 200.0    | 156.20   | 31,240.00 |  |  |  |
|            | Demolishing brick work including stacking of serviceable material and disposal of unserviceable material within 50 meters lead:In mud mortal   | cum  | 10.0     | 149.80   | 1,498.00  |  |  |  |
| 4          | Neat cement punning  | Sqm.   | 200.0    | 27.90    | 5,580.00  |  |  |  |
| 5          | Half brick masonry with bricks of class designation 100A in foundations and plinth in :Extra for half Brick masonry in superstructure above plinth level upto floor V level.   | Sqm  | 45.0     | 538.30   | 24,223.50 |  |  |  |
| 6          | Cement plaster in course sand 12 mm cement plaster of mix:1:4(1 cement :4 coarse sand)   | Sqm  | 140.0    | 100.30   | 14,042.00 |  |  |  |
| 7          | Providing asbestos cement 6 mm thick corrugated sheets roofing and fixing with G.I. J or L hooks bolts and nuts 8 mm dia G. I. plain and bitumen washers complete excluding the cost or purlins, rafters and trusses corrugated sheet. | Sqm  | 50.0     | 341.31   | 17,065.50 |  |  |  |

| SI.<br>No. | ITEM DESCRIPTION   | UNIT  | QUANTITY | RATE     | AMOUNT      |
|------------|--|-------|----------|----------|-------------|
| 8          | Providing and fixing GI Clip in Metal Ceiling System of 600x600 mm module which includes providing and fixing 'C' wall angle of size 20x30x20 mm made of 0.5 mm thick pre painted steel along the perimeter of the room with help of nylon sleeves and wooden screws at 300 mm center to centre, suspending the main C carrier of size 10x38x10 mm made of G.I steel 0.7 mm thick from the soffit with help of soffit cleat 37x27x25x1.6 mm,rawl plugs of size 38x12 mm and C carrier suspension clip and main carrier bracket at 1000 mm c/c. Inverted triangle shaped Spring Tee having height of 24 mm and width of 34 mm made of GI steel 0.45 mm thick is then fixed to the main C carrier and in direction perpendicular to it at 600 mm centers with help of suspension brackets. Wherever the main C carrier and spring T have to join, C carrier and spring T connectors have to be used. All sections to be galvanized @ 120 gms/sqm (both side inclusive), fixing with clip in tiles into spring 'T' with | sqm   | 65.0     | 1,682.60 | 1,09,369.00 |
| 9          | Providing and fixing anodised aluminium work for doors, windows, ventilator and partitions with extruded built up standard tubular and otner sections of approved make conforming to IS: 733 and IS: 1285, anodised trasparent or dyed to required shade according to IS: 1868, (Minimum anodic coating of grade AC 15), fixed with rawl plugs and screws or with fixing clips, or with expansion hold fastners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt etc. Aluminium sections shall be smooth, rust fre straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading tor glazing/paneling, C.P. brass/stainless steel screws, all complete as per architecttural drawings and the directions of Engineer-in-charge. (GlazingFor fixed portion and panelling to be paid for separately   | kg    | 650.0    | 354.80   | 2,30,620.00 |
| 10         | Providing and fixing 12 mm thick prelaminated three layer medium density (exterior grade) particle board Grade I,Type II conforming to IS: 12823 bonded with phenol formaidhyde synthetic resin, of approved brand and manufacture in panelling fixed in aluminium doors, window shutters and partition frames, with C.P.brass/stainless steel screws etc. complete as per archiectural drawings and directions oa engineer-incharge. 24.2.1 Pre-laminated particle board with decorative lamination on one side and balancing lamination of other side  |       |          |          |             |
| 10         | Providing and fixing fitting aluminium glazad cliding window   | sqm   | 63.0     | 1,055.50 | 66,496.50   |
| 11         | Providing and fixing fitting aluminium glazed sliding window with 4 mm thick glazing of frost glass fitted on aluminium rail all complete as per specification and direction of E/S.   | sqm   | 17.5     | 2,959.00 | 51,782.50   |
| 12         | Providing and fixing factory made P.V.C. door frame of size 50x47 mm with a wall thickness of 5 mm, made out of extruded 5mm rigid PVC foam sheet, mitred at corners and joined with 2 Nos of 150 mm long brackets of 15x15 mm M.S. square tube, the vertical door frame profiles to be reinforced with 19x19 mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using M.S. screws of 65/100 mm size, complete as per manufacturer's specification and direction of Engineer- in-Charge.  | metre | 5.0      | 458.95   | 2,294.75    |

| SI.<br>No. | ITEM DESCRIPTION  | UNIT | QUANTITY | RATE     | AMOUNT    |
|------------|---|------|----------|----------|-----------|
|            | 25 mm thick PVC flush door shutters made out of a one piece Multi chamber extruded PVC section of the size of 762 mm X 25 mm or less as per requirement with an average wall thickness of 1 mm (± 0.3 mm). PVC foam end cap of size 23x10 mm are provided on both vertical edges to ensure the overall thickness of 25 mm. M.S. tube having dimensions 19 mm x 19 mm and 1.0 mm (± 0.1 mm) is inserted along the hinge side of the door. Core of the door shutter should be filled with High Density Polyurethane foam. The Top & Bottom edges of the shutter are covered with an end-cap of the size 25 mm X 11 mm. Door shutter shall be reinforced with special polymeric reinforcements as per manufacturer's specification and direction of Engineer-in-charge to take up necessary hardware and fixtures. Stickers indicating the locations of hardware will be pasted at appropriate places. |      |          |          |           |
| 13         | Providing and fixing M.S. grills of requirement pattern in frames   | sqm  | 2.0      | 2,718.60 | 5,437.20  |
| 14         | of windows etc. with M.S. flats, square or round bars etc. All complete.  Painting With ready mixed zinc chromate yellow primer of  | kg   | 350.0    | 91.50    | 32,025.00 |
| 15         | approved brand and manufacture on steel galvanized iron/steel works   | sqm  | 200.0    | 21.30    | 4,260.00  |
| 16         | Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:Two or more coats on new work  | Sqm. | 200.0    | 50.90    | 10,180.00 |
| 17         | Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.   | Sqm. | 150.0    | 76.80    | 11,520.00 |
| 18         | Distempering with oil bound washa ble Distemper of approved brand and manufacture to give an even shade .Old work (one or more coats)   | sqm  | 500.0    | 20.20    | 10,100.00 |
| 19         | Applying one coat of distemper primer of approved brand and manufacture on wall surface:Distemper primer  | Sqm. | 500.0    | 26.10    | 13,050.00 |
| 20         | Removing dry or oil bound distemper by scrapping, sand paper and preparing the surface smooth including necessary repari scratches tec. Gmplete   | Sqm  | 500.0    | 5.40     | 2,700.00  |
| 21         | Finishing walls with water proofing cement paint of approved brand and manufacture and of required shade to give an even shade New work (three or more coats).  | Sqm. | 175.0    | 60.50    | 10,587.50 |
| 22         | Providing & fixing UV stabilised fiberglass reinforced plastic sheet roofing up to any pitch, including fixing with polymer coated 'J' or 'L' hooks, bolts & nuts 8mm dia. G.I plain/bitumen washers complete but excluding the cost of purlins, rafters, trusses etc. The sheets shall be manufactured out of 2400 TEX panel rovigs incorporating minimum 0.3% ultra-violet stabiliser in resin system under approximately 2400 psi and hot cured. They shall be of uniform pigmentation and thickness without air pockets and shall conform to IS 10192 and IS 12866.The sheets shall be opaque or translucent, clear or pigmented, textured or smooth as specified. 12.47.1 2 mm thick corrugated (2.5" or 4.2" or 6") or step-down (2" or 3" or 6") as specified sqm 975.90 12.47.2 2 mm thick flat   | -y   |          | 55.55    |           |
| a          | 2 mm thick flat   | sqm  | 53.0     | 869.95   | 46,107.35 |

| SI.     | ITEM DESCRIPTION   | UNIT  | QUANTITY | DATE     | AMOUNT    |
|---------|--|-------|----------|----------|-----------|
| No.     |  |       | QUANTITY | KAIE     | AMOUNT    |
|         | Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (Thickness to be specified by the       |       |          |          |           |
|         | manufacture) of approved make in all colours, shades except  |       |          |          |           |
|         | burgundy, bottle green, black of any size as approved by   |       |          |          |           |
|         | Engineer-in-charge in skirting, risers of steps and dados over 12 mm thick bed of cement Motor 1:3(1 cement: 3 coarse sand |       |          |          |           |
|         | ) and jointing with grey cement slurry @ 3.3 kg per sqm  |       |          |          |           |
|         | including pointing in white cement mixed with pigment of   |       |          |          |           |
|         | matching   |       |          |          |           |
| 23      | shade complete.  | sqm   | 16.0     | 754.20   | 12,067.20 |
|         | Providing and laying Ceramic glazed floor tiles 300x300 mm   |       |          |          |           |
|         | (thickness to be specified by the manufacturer) of ist quality conforming to IS: 15622 of approved make in colours such as |       |          |          |           |
|         | white , Ivory , Grey , Fume Red , Brown , laid on 20 mm thick  |       |          |          |           |
|         | Cement motar 1:4 (1 cement: 4 coarse sand ) including  |       |          |          |           |
|         | pointing the joints with white cement and matching pigment   |       |          |          |           |
| 24      | etc., complete PHED WORK   | sqm   | 3.5      | 788.60   | 2,760.10  |
|         | Providing and fixing Chlorinated Polyvinyl Chloride  |       |          |          |           |
|         | (CPVC)pipes, having thermal stability for hot & cold water   |       |          |          |           |
|         | supply,including all CPVC plain & brass threaded fittings,   |       |          |          |           |
|         | including fixing the pipe with clamps at 1.00 m spacing. This  |       |          |          |           |
|         | includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of |       |          |          |           |
|         | Engineer in Charge.Concealed work, including cutting chases  |       |          |          |           |
| 0.5     | and making goodthe   |       |          |          |           |
| 25<br>A | 15 mm nominal outer dia Pipes  | metre | 15.00    | 241.00   | 3,615.00  |
| В       | 20 mm nominal outer dia Pipes  | metre | 15.00    | 269.60   | 4,044.00  |
|         | Providing and fixing alluminium sliding door bolt  |       |          |          |           |
|         | anodised(anodic coating not less than grade AC 10 as per IS  |       |          |          |           |
|         | :1868) transparent or dyed to required colour and shade with   |       |          |          |           |
| 26      | nuts and screws etc. complete: 250x 16 mm  | Each  | 12.00    | 184.90   | 2,218.80  |
|         | Providing and fixing alluminium sliding tower bolt   |       |          |          |           |
|         | anodised(anodic coating not less than grade AC 10 as per IS :1868) transparent or dyed to required colour and shade with   |       |          |          |           |
| 27      | nuts and screws etc. complete:   |       |          |          | _         |
| A       | 300x10 mm  | Each  | 12.00    | 114.10   | 1,369.20  |
| В       | 150x10 mm  | Each  | 12.00    | 66.00    | 792.00    |
|         | Providing and fixing alluminium handles anodised(anodic  |       |          |          |           |
|         | coating not less than grade AC 10 as per IS :1868) transparent or dyed to required colour and shade with necessary screws  |       |          |          |           |
| 28      | etc. complete100mm   | Each  | 24.00    | 55.80    | 1,339.20  |
|         | Providing and fixing alluminium hanging floor door stopper   |       |          |          |           |
|         | anodised (anodic coating not less than grade AC 10 as per IS   |       |          |          |           |
|         | :1868) transparent or dyed to required colour and shade with   |       |          |          |           |
| 29      | necessary screws etc.complete:Twin rubber stopper  | Each  | 12.00    | 82.70    | 992.40    |
|         | Providing and fixing white vitreous china laboratory sink with   |       |          |          |           |
|         | C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P  |       |          |          |           |
|         | brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete, including painting of fittings and         |       |          |          |           |
|         | brackets, cutting and making good the wall wherever required   |       |          |          |           |
| 30      | :Size 450x300x150 mm   | Each  | 4.00     | 2,158.20 | 8,632.80  |
| 50      |  | Lauii | 4.00     | ۷,۱۵۵.۷  | 0,032.00  |

| SI.<br>No.     | ITEM DESCRIPTION  | UNIT  | QUANTITY | RATE     | AMOUNT    |
|----------------|---|-------|----------|----------|-----------|
| 31             | 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 | Each  | 1.00     | 2,953.50 | 2,953.50  |
|                | Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc.  | Lacii | 1.00     | 2,000.00 | 2,000.00  |
| 24<br>a        | 15 mm dia nominal bore  | rmt   | 20.0     | 166.90   | 3,338.00  |
| b              | 20 mm dia nominal bore  | rmt   | 50.0     | 207.30   | 10,365.00 |
| 34             | Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 15 mm dia.nominal bore.  | each  | 16.00    | 497.00   | 7,952.00  |
| 35             | Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931. 15 mm dia.nominal bore.  | each  | 16.00    | 670.70   | 10,731.20 |
| 36             | Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. 32 mm dia   | Each  | 6.00     | 81.10    | 486.60    |
| 37             | Providing and fixing unplasticised P.V.C. connection pipe with PTMT Nuts, collar and bush of approved quality and colour.   | Each  | 5.00     | 79.30    | 396.50    |
| 38             | Providing and fixing PTMT grating of approved quality and colour. Circular type125 mm nominal dia with 25 mm waste hole.  | each  | 5.00     | 61.80    | 309.00    |
| 39             | Providing and fixing PTMT soap Dish Holder having length of 138mm,breadth 102mm, height of 75mm with concealed fitting arrangements,weighing not less than 106 gms  | each  | 5.00     | 165.60   | 828.00    |
| 40             | Providing and fixing PTMT towel ring trapezoidal shape 215 mm long, 200 mm wide with minimum distances of 37 mm from wall face withconcealed fittings arrangement of approved quality and colour, weighing not less than 88 gms.  | each  | 1.00     | 189.40   | 189.40    |
| 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 requireWhite Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap   | Each  | 1.00     | 2,120.30 | 2,120.30  |
| 42             | Providing and fixing on wall face unplastidsed-PVC(working pressure 4 kgf per sqm) rain water pipes conforming to IS:4985 including jointing with seal ring conforming to IS: 5382 leaving 10 mm gap for thermal expansion. 110 mm dia  | rmt   | 50.00    | 214.20   | 10,710.00 |
| 44             | Providing and fixing on wall face unplasticised -PVC molded fittings/accessories for unplasticised-PVC rain water pipes conforming to (S:4985 including jointing with seal ring conforming to IS: 5382 leaving 10 mm gap for thermal  |       |          |          |           |
| 44<br>A        | expansion. Single pushfit coupler   |       |          |          | -         |
| _ <del>^</del> | 110 mm dia PVC  | each  | 18.00    | 181.20   | 3,261.60  |
| В              | Single tee with door  | Cauli | 10.00    | 101.20   | 5,201.00  |
|                | 110 x110 x110 mm dia PVC  | each  | 4.00     | 315.90   | 1,263.60  |
| С              | Single tee without door   |       |          |          |           |
| _              | 110 x110 x110 mm dia PVC  | each  | 6.00     | 265.50   | 1,593.00  |
| D              | Band 87.5<br>110 mm dia PVC   | each  | 8.00     | 173.70   | 1,389.60  |
|                | TTO HILL UIA FVC  | each  | 6.00     | 173.70   | 1,369.00  |

| SI.<br>No. | ITEM DESCRIPTION   | UNIT     | QUANTITY | RATE     | AMOUNT                  |  |
|------------|--|----------|----------|----------|-------------------------|--|
| 33         | Constructing brick masonry manhole in cement mortar 1:4 (1 cement: 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement: 4 coarse sand: 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design:  |          |          |          | _                       |  |
| а          | Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg): With common burnt clay F.P.S. (non modular) bricks of class designation 7.5  | each     | 2.0      | 6,641.80 | 13,283.60               |  |
| 45         | Carrage of the following material  |          |          |          | -                       |  |
| b          | Sone Sand (45 km from Koelwar)   | Cum      | 17.15    | 690.74   | 11,846.19               |  |
| С          | Stone Aggregate ,(156 Km From Domchch, Koderma   | Cum      | 11.71    | 2,018.10 | 23,631.95               |  |
| d          | Bricks (7P+ 1K)  | %o       | 9.09     | 601.67   | 5,469.18                |  |
| d<br>f     | Difference of Cost of Bricks   | %o       | 9.09     | 1,473.55 | 13,394.57               |  |
| - 1        | Difference of Cost of Cement  Total Amount ( Rs.)  | tonn     | 9.04     | 798.89   | 7,221.97<br>9,63,607.16 |  |
|            | PERMISSIBLE LIMIT UP TO 10% ("   | HIGH" OR | "LOW")   |          | 0,00,007.10             |  |
|            | Quoted Rates:  |          |          |          |                         |  |
| а          | % above  |          |          |          |                         |  |
| b          |  |          |          |          |                         |  |
| С          | % below  |          |          |          |                         |  |
| <u> </u>   | at estimated cost.   |          |          |          |                         |  |
|            | NOTE:-   |          |          |          |                         |  |
|            | Contractors are requested to quote their rates % above / % below / at estimated rate   |          |          |          |                         |  |
|            | In above format tenders quoting item wise rate will be rejected.   |          |          |          |                         |  |
|            | and the second s |          |          |          |                         |  |
| 1-         | Issued to  |          |          |          |                         |  |
| 2-         | Full postal address  |          |          |          |                         |  |
| 3-         | Earnest money deposited  |          |          |          |                         |  |
| 4-         | Registration No.   |          |          |          |                         |  |
| 5-         | Time of completion   |          |          |          |                         |  |
|            | Signature of Contractors  Superintending Engineer  |          |          |          |                         |  |
| <u> </u>   | I.G.I.M.S., Patna  |          |          |          |                         |  |