

CSIR- NATIONAL PHYSICAL LABORATORY
(Council of Scientific and Industrial Research)
DR. K.S. KRISHNAN MARG,
NEW DELHI-110 012

NOTICE INVITING TENDER 4 / 2013 (Works)

On behalf of Director, NPL, sealed item rate tenders are invited from eligible contractors for the works detailed below:-

Sl. No.	Name of work	Tender Cost (Rs.)	Estimated Cost (Rs.)	Earnest Money (Rs.)	Completion time
1.	Demolishing and re-construction of roof at Qtr No. E-18 and Kitchen roof at E-20 at NPL Colony. (Civil & Electrical)	500/-	7,33,907/-	14,678/-	03 Months

Tenderers are required to deposit tender fee (non-refundable) and Earnest Money Deposit in the form of separate pay orders drawn in favour of Director NPL, New Delhi along with written request and copies of latest sales tax clearance certificate, PAN No., satisfactory completion certificate of the similar works. Interested Tenderer may purchase the tender document for the above works from this office.

- Sale of Tenders : 6.3.2013 to 19.03.2013
(1000 Hrs to 1600 Hrs)
- Last Date for submission of tenders : 21.03.2013 upto 1430 Hrs.
- Verification of credentials of downloaded tenders : 21.03.2013 at 15.00 Hrs.

- Date and Time of opening of tenders : 21.03.2013 at 1530 Hrs

Detailed NIT & tender documents are available on our website www.nplindia.org and can be downloaded.

Controller of Administration



CSIR - NATIONAL PHYSICAL LABORATORY
(Council of Scientific and Industrial Research)
DR. K.S. KRISHNAN MARG,
NEW DELHI-110 012

NIT 4 / 2013 (Works)

DETAILED NOTICE INVITING TENDER

On behalf of Director, NPL, sealed item rate tenders are invited for the works detailed below from contractors of appropriate class of CPWD, Railways, MES, P&T Department, State PWD's, Central/State Govt./Semi Govt./PSU's and/or preferably from those who have successfully carried out two or one similar works amounting to 60% or 80% or above of the estimated cost during last five years for CSIR or its Laboratories/Institutes. Separate tender document for the work can be purchased from the Office of Section Officer (Works), Room No. 214, NPL Main Bldg., Dr. K S Krishnan Marg, New Delhi on payment of tender cost (non refundable) indicated against each work in the form of Pay Order drawn in favour of Director, NPL:-

Sl. No.	Name of work	Tender Cost (Rs.)	Estimated Cost (Rs.)	Earnest Money (Rs.)	Completion time
1.	Demolishing and re-construction of roof at Qtr No. E-18 and Kitchen roof at E-20 at NPL Colony (Civil & Electrical)	500/-	7,33,907/-	14,678/-	03 Months

Tenders will be issued on receipt of written requests accompanied by complete credentials such as copies of latest Sales Tax clearance certificate, PAN No., completion certificates, tender cost (non refundable) and requisite **EARNEST MONEY DEPOSIT** for the work in the shape of Pay Order and to the **complete satisfaction and on recommendation of the Engineer In-Charge concerned**. Tenders shall be issued on all working days from 25.2.2013 to 11.03.2013 between 1000 Hrs to 1600 Hrs.

Tender document for the above works can be downloaded from the website www.nplindia.org. In case of downloaded tenders, the tenderers are required to **submit the requisite documents as detailed above along with Tender Cost & EMD Pay orders in a separate cover** & filled up tender in another envelope. Priced tenders of such tenders will be opened after scrutiny of the documents and if found in order only.

Duly filled up tenders will be accepted upto **1430 Hrs on 13.03.2013** and the tenders received will be **opened on the same day at 1530 Hrs** in the presence of the tenderers or their authorized representatives, if any who may like to be present. Director, NPL reserves the right to reject any or all the tenders received or not to accept the lowest tender without assigning any reasons thereof.

- **Sale of tenders** : **6.3.2013 to 19.03.2013**
(1000 Hrs to 1600 Hrs.)
- **Last date for submission of tenders** : **21.03.2013 upto 1430 Hrs**
- **Verification of credentials of downloaded tenders** : **21.03.2013 at 1500 Hrs.**
- **Date of opening of tenders** : **21.03.2013 at 1530 Hrs.**

Controller of Administration



**NATIONAL PHYSICAL LABORATORY
DR. K.S. KRISHNAN MARG,
NEW DELHI - 110 012.**

Name of work:- Demolishing and re-construction of roof at Qtr No. E-18 and Kitchen roof at E-20 at NPL Colony (Civil & Electrical).

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4	Special Conditions, Additional Conditions and latest General Conditions of contract with amendments: can be seen in the Office Section Officer (Works), Room No.214.	

NOTE Tenderer should confirm that they have received all the above papers. All the documents issued are to be returned duly signed by the tenderer while submitting his offer.

TENDER ISSUED TO:

M/s. / Sh.

TENDER FEE: vide P.O. No.

Dated _____ for Rs. 500/-

Earnest Money Deposit:

Pay order No. _____ dated _____

For Rs. _____

Issued by _____

**SIGNATURE OF THE OFFICER
ISSUING Tenderer**



NATIONAL PHYSICAL LABORATORY
DR. K.S. KRISHNAN MARG,
NEW DELHI - 110 012

1. Sealed item rate tenders are hereby invited for the work "Demolishing and re-construction of roof at Qtr No. E-18 and Kitchen roof at E-20 at NPL Colony (Civil & Electrical)" from the contractors of appropriate class of CPWD, Railways, MES, Post & Telegraph Dept., State PWD'S, Central, State Govt./Semi Govt./PSU's or from those who have worked for CSIR or its Laboratories/Institutes and successfully carried out preferably two or one similar works amounting to 60% or 80% or above respectively of the estimated cost during last five years. **(In case of composite work contractor will be required to submit an undertaking that the electrical work would be carried out through valid electrical licence holder only)**. The tenderers are required to produce proof of fulfilling these conditions along with copy of latest Sales Tax Clearance Certificate, PAN No., **valid electrical licence and EARNEST MONEY DEPOSIT PAY ORDER** while making request for issue of tender document.
2. Estimated cost is **Rs. 7,33,907/-** (Rs. Seven Lakh Thirty Three Thousand Nine Hundred and Seven only) based on DSR 2012 and **Market Rates**.
3. Time for carrying out the work will be **03 Months** and the date of commencement shall be reckoned from the tenth day of issue of award letter.
4. Complete contract documents to be complied with by the tenderer whose tender may be accepted can be seen at the office of Section Officer (Works), NPL, Dr. K.S. Krishnan Marg, New Delhi - 110 012 on any working day.
5. Tenders should be on the specified form (non-transferable) which may be obtained from the Office of Section Officer (Works), Room No. 214, NPL Main Bldg. **from 1000 Hrs. to 1600 Hrs. between 6.03.2013 to 19.03.2013** on payment of **Rs. 500/-** (Rupees five hundred only) in the shape of Demand Draft/Pay order of a schedule Bank drawn in favour of Director, NPL (Non-refundable).
6. Tenders should be submitted in wax sealed cover subscribed with the name of the work, date of opening written on the envelope. Tenders will be received **upto 1430 Hrs on 21.03.2013** and will be **opened on the same day at 1530 Hrs** in the office of Section Officer (Works), CW&M Section Room No. 214. NPL, Dr. K. S. Krishnan Marg, New Delhi - 110 012. Tender should be dropped in the tender box before the closing date and time indicated above. In case these are sent by Post these should be sent Regd. Post / Speed Post addressed to Section Officer, CW&M Section Room No. 214, NPL Tenderers are to ensure that they post the tender well in advance so as to reach before the closing time and date indicated.
7. The Earnest Money amounting to **Rs. 14,678 /-** (Rs. Fourteen Thousand Six Hundred and Seventy Eight only) in the shape of pay order issued by a schedule Bank and drawn in favour of Director, NPL should accompany the request letter.
8. The Employer does not bind himself to accept the lowest or any tender and reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rates quoted.
9. Canvassing in connection with the tenders is prohibited and the tenders submitted by the contractor who resort to canvassing are liable for rejection.

10. The tenderer shall not be permitted to tender for work in the concerned unit of CSIR in which a relative is posted in the grade between Controller of Administration and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or subsequently employed by him and who are relatives as mentioned above.

NOTE: A person shall be deemed to be a relative of another if, and only if, (a) they are members of a Hindu undivided family; or (b) they are husband & wife, or (c) the one is related to the other in the following manner: Father, Mother (including step mother), son (including step son), Son's son's son. Son's son's wife, son's daughter, son's daughter's son's wife, daughter's daughter, daughter's daughter's husband, Brother (including step brother), Brother's wife, Sister (including step sister), Sister's husband.

11. Tender submitted shall remain valid for 90 days from the date of opening for the purpose of acceptance and award of work, validity beyond 90 days from the date of opening shall be by mutual consent.

12. The tenderer shall quote rates both in figures and words failing which, tender is liable to be rejected. On check if there are differences between the rates quoted by the tenderer in words and in figures or in the amount worked out by him, the following procedure shall be followed:

i) When there is a difference between the rates in figures and in words, the rates which correspond to the amounts worked out by the tenderer shall be taken as correct.

ii) When the amount of an item is not worked out by the tenderer or it does not correspond with the rate written either in figures or in words, the rate quoted by the tenderer in words shall be taken as correct.

iii) When the rate quoted by the tenderer in figures and in words tallies but the amount is not worked out correctly the rate quoted by the tenderer shall be taken as correct and not the amount.

13. The tenderer should see drawings and in case of doubt obtain required particulars, which may in any way influence his tender from the Engineer as no claim whatsoever will be entertained for any alleged ignorance thereof.

14. Before tendering, the tenderer shall inspect the site to fully acquaint himself about the condition in regard to accessibility of site, nature and extent of ground, working condition of site and locality including stacking of materials, installations of tools and plants (T&P) etc., conditions affecting accommodations and movement of labour etc. required for the satisfactory execution of the work contract. No claim whatsoever on such account shall be entertained by the Employer in any circumstances.

15. Earnest money will be forfeited if the contractor fails to commence the work as per letter of award.

16. Except writing rates and amount, the tenderer should not write any conditions or make any changes, additions, alterations and modifications in the printed form of tenders. Tenderers who are desirous to offer rebate the same should be brought out separately in the covering letter and submitted along with the tender.

17. Some of the provisions of General Conditions of contract are given below. Interpretation however shall be as given in the General Conditions of contract.

- a) DEFECT LIABILITY PERIOD: **Twelve months** from the date of completion as certified by the Employer.
- b) MINIMUM VALUE OF WORK FOR THE INTERMEDIATE CERTIFICATE: **Rs. 2,44,635/-**
- c) SECURITY DEPOSIT; A sum @ 10% of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum along with the sum already deposited as earnest money will amount to security deposit of 5% of the tendered value of the work. In addition, the contractor shall be required to deposit an amount equal to 5% of the tendered value of the contract as Performance Security within the period prescribed for commencement of work in the letter of award issued to him.
- d) COMPENSATION: Contractor shall pay as compensation an amount equal to one percent or such smaller amount as the Employer (whose decision in writing shall be final) may decide on the cost of the whole work as shown in the agreement for every week that the work remains uncompleted or unfinished or due quantity of work remains incomplete after the proper dates. Compensation to be paid shall not exceed ten percent of the estimated cost of the work as shown in the agreement.
18. Clauses No. 28 of conditions of contract i.e., "ESCALATION" will not be applicable in this contract.
19. The materials would be brought to site in one/two lots and would be used at site only after approval of Engineer-in-Charge.
20. Store to issue: NIL
(Contractor has to arrange Cement & Steel of the following brands:
(i) JK/Vikram/Shree/Birla Uttam and approved brands:
(ii) Steel-TMT/RANA/Rathi/Kamdhenu-TOR Steel or approved brand.
21. All tenderers should submit the proof of their registration with Sales Tax Department while tendering for works in N.C.T. of Delhi as per Works contract Act, 1999. Deduction of Sale Tax at the rate of 2% of payment will be made from their running / final bill on all works within N.C.T. of Delhi. It may be noted by the tenderers that the site of work is in restricted area and there will be curb on traffic movement in specified hours. This fact should be taken into account and no extra payment /claim in this regard shall be admissible.
22. If any tenderer withdraws his tender before expiry of the validity period, or before the issue of letter of acceptance, whichever is earlier, or makes any modification in the terms and conditions of the tender which are not acceptable to the department, then the Employer shall, without prejudice to any other right remedy, be at liberty to forfeit 50% of the earnest money absolutely. This provision would naturally apply only to the lowest tenderer once the earnest money of all the tenderers except that of the lowest is refunded .
23. In case of forfeiture of earnest money as prescribed above the tenderer shall not be allowed to participate in the retendering process of the work.
24. Tenders with any condition, including conditional rebates, shall be rejected. However, tenders with unconditional rebate will be acceptable.

**Signature of the Contractor
with date**



NATIONAL
Name of wo

NATIONAL PHYSICAL LABORATORY

Demolishing and re-construction of roof at Qtr No. E-18 and Kitchen roof at E-20 at NPL Colony (Civil & Electrical)

SUMMARY SHEET

Brought forward from Page No. 1	Rs.
Brought forward from Page No. 2	Rs.
Brought forward from Page No. 3	Rs.
Brought forward from Page No. 4	Rs.
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Brought forward from Page No. 9	Rs.
Brought forward from Page No. 10	Rs.
Brought forward from Page No. 11	Rs.

TOTAL Rs.

=====

(In words Rupees _____)

SIGNATURE OF THE CONTRACTOR

**NATIONAL PHYSICAL LABORATORY
DR. K.S. KRISHNAN MARG,
NEW DELHI – 110 012
A P P E N D I X**

Demolishing and re-construction of roof at Qtr No. E-18 and Kitchen roof at E-20 at NPL Colony (Civil & Electrical)

PARTICULARS OF MATERIAL			RATES AT WHICH THE MATERIAL WILL BE CHARGED TO THE CONTRACTOR		PLACE OF DELIVERY
	APPROX. QNTY	UNIT			
CEMENT	308 Bags	BAGS	CEMENT & Steel WILL BE ARRANGED BY THE CONTRACTOR		BY OWN ARRANGEMENT
STEEL	2467 Kg.	P.M.T.	RS. (FIGURE)	RS. IN WORDS	Central Store on availability otherwise to be arranges by the contractor at his own cost.
			34000/-PMT	Thirty-four thousand	



**NATIONAL PHYSICAL LABORATORY
DR.K.S. KRISHNAN MARG**

NEW DELHI-110012

Name of work:- "Demolishing and re-construction of roof at qtr. No. E-18 and kitchen roof at E-20 at NPL Colony."

S. No.	Description of Items	Qty	Unit	Rate in figure	Rate in words	Amount
1	Carriage of Materials by mechanical transport including loading, unloading and stacking : (beyond 20 km lead) out side NPL Campus. Lime, moorum, building rubbish	95	cum			
2	Reinforced cement concrete work in beams, suspended floors, roofs having slope upto 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases upto floor five level excluding the cost of centring, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	21	cum			
3	Centring and shuttering including strutting, propping etc. and removal of form for :					
(a)	Suspended floors, roofs, landings, balconies and access platform.	160	sqm			
(b)	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	20	sqm			
(c)	Edges of slabs and breaks in floors and walls. Under 20 cm wide	45	metre			
4	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete. Thermo-Mechanically Treated bars.	2350	kg			
5	Brick work with F.P.S. bricks of class designation 75 in superstructure above plinth level upto floor V level in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand)	15	cum			

6	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 : 250x16 mm	2	each			
7	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 : 250x10 mm	2	each			
8	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 : 125 mm	4	each			
9	Providing and fixing to existing door frames. 30 mm thick Glass Fibre Reinforced Plastic (FRP) panelled door shutter of required colour and approved brand and manufacture, made with fire - retardant grade unsaturated polyester resin, moulded to 3 mm thick FRP laminate for forming hollow rails and styles, with wooden frame and suitable blocks of seasoned wood inside at required places for fixing of fittings, cast monolithically with 5 thick FRP laminate for panels and confirming to IS: 14856 - 2000 including fixing to frames.	4	sqm			

10	Providing and fixing angles frames for doors, windows and ventilators of mild steel angles, joints mitred and welded with 15x3 mm lugs 10cm long embedded in cement concrete blocks 15x10x10 cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) or with wooden plugs and screws or with dash fastener or rawl plugs and screws or with fixing clips or with bolts and nuts as require including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.	50	kg			
11	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps etc. complete. 40mm thick with 20mm nominal size stone aggregate.	25	sqm			
12	Providing and laying brick tiles of class designation 100 over mumty roofs grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement, over a 12 mm layer of cement mortar 1:3 (1 cement : 3 fine sand) and finished neat : With common burnt clay F.P.S. (non modular) brick tiles of class designation 10.	20	sqm			
13	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1mx1mx400micron, finished with 12mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement rounding the edge sand making and finishing the outlet complete.	4	each			
14	12 mm cement plaster of mix : 1:4 (1 cement : 4 coarse sand)	100	sqm			
15	15 mm cement plaster on rough side of single or half brick wall of mix : 1:4 (1 cement : 4 coarse sand)	125	sqm			

16	6 mm cement plaster of mix : 1:3 (1 cement : 3 fine sand)	160	sqm			
17	White washing with lime to give an even shade: New work (three or more coats)	340	sqm			
18	Distemping with oil bound washable distemper of approved brand and manufacture to give an even shade New work (two or more coats) over and including priming coat with cement primer.	300	sqm			
19	Finishing walls with water proofing cement paint of required shade : New work (Two or more coats applied @ 3.84 kg/10 sum).	125	sqm			
20	Repairs to plaster of thickness 12mm to 20mm in patches of area 2.5 sq. metres and under including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground within 50metres lead : With cement mortar 1:4 (1 cement : 4 fine sand)	40	sqm			
21	Renewing glass panes, with putty and nails wherever necessary: Float glass panes of thickness 4 mm	10	sqm			
22	Re-grading terracing of mud phaska covered with tiles or brick, in cement by dismantling tiles or bricks, removing mud plaster preparing the surface of mud phaska to proper slope relaying mud plaster gobri leaping and tiles or bricks, grouted in cement mortar 1:3 (1 cement : 3 fine sand) including replacing unserviceable tiles or bricks with new ones and disposal of unserviceable material to the dumping ground (the cost of the new tiles or brick excluded) within 50 metres lead.	20	sqm			

23	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	334.74	sqm			
24	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	300	sqm			
25	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade : One or more coats on old work.	18.25	sqm			
26	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer-in-charge. 1:3:6 or richer mix	2	cum			
27	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.	24	cum			
28	Extra for cutting reinforcement bars manually/ by mechanical means in R.C.C. or R.B. work (Payment shall be made on the cross sectional area of R.C.C. or R.B. work) as per direction of Engineer-in-charge	2.7	sqm			
29	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. In cement mortar	15	cum			
30	Demolishing brick tile covering in terracing including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	160	sqm			

31	Demolishing mud phaska in terracing and disposal of material within 50 metres lead.	32	cum			
32	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern 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 : White Vitreous china Orissa pattern W.C. pan of size 580x440mm with integral type foot rests.	1	each			
33	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 : White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap.	1	each			
34	Providing and fixing kitchen sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P. brass waste complete, including painting the fittings and brackets, cutting and making good the walls wherever required : White glazed fire clay kitchen sink of size 600x450x250 mm.	2	each			
35	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. Flexible pipe 32 mm dia	3	each			
36	Providing and fixing 600x120x5mm glass shelf with edges round of supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.	1	each			
37	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete : 15 mm nominal bore	1	each			

38	Providing and fixing uplasticised PVC connection pipe with brass unions : 45 cm length 15 mm nominal bore	3	each			
39	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws including excavation, refilling the earth or cutting of wall and making good the same complete wherever required : 15 mm nominal bore.	2	each			
40	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank	500	per litre			

<p>41</p>	<p>Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations:</p> <p>a) Applying a slurry coat of neat cement using 2.75 kg/sum. of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300mm height including cleaning the surface before treatment.</p> <p>b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs</p> <p>c) After two days of proper curing applying a second coat of cement slurry using 2.75kg/ sum of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge.</p>					
	<p>d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3mm deep.</p> <p>e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge :</p> <p>With average thickness of 120mm and minimum thickness at khurra as 65 mm.</p>	<p>124</p>	<p>sqm</p>			

Total (.....)

(Rupees In words

(.....)

Note.

1. All Paint items to be of M/s Asian Paint / Nerolac / Burger or equivalent as approved by Engineer-in-charge.
2. All G.I. Pipes, of medium quality (B-class) installation & fitting to be of UNIK/Leeder/Jindal/Tata make or equivalent as approved by Engineer-in-charge.
3. All contractor should be advised to visit site.
4. Safety will be specific job in this work and contractor should ensure to adjacent structures should not be disturbed during execution.
5. Contractor should also submit design for slab/beam without any extra cost.

Signature of contractor

with date.

NATIONAL PHYSICAL LABORATORY
ABSTRACT OF QUANTITIES

Subject:- Demolishing & Reconstruction of Roof at Qtr. No. E-18 & Kitchen roof of E-20 at NPL Colony(Elec.)

DSR/MR	Sr.No.	Description	Qty.	Rate	Rate in Words	Unit	Amount
	1.	Item No.1:- Wiring for light point/exhaust fan point/call bell point with 1.5 sq.mm FR PVC insulated, copper conductor single core cable on surface/recessed steel conduit, with piano type switch, phenolic laminated sheet suitable size M.S box and earthing the point with 1.5 sq.mm FR PVC insulated, copper conductor single core cable etc. as required. Group "B".	27 Nos			each	
	2.	Item No.2:- Wiring for circuit /submain wiring along with earth wire with the following sizes of FR PVC insulated, copper conductor, single core cable in surface/recessed steel conduit as required.					
	a	2 x 2.5 sq.mm + 1 x 2.5 sq.mm earth wire	40 Mtr			each	
	b	2 x 4 sq. mm + 1 x 4 sq. mm earth wire	50 Mtr			mtr	
	c	4 x 2.5 sq.mm + 2 x 2.5 sq.mm earth wire	15 Mtr			mtr	
	d	4 x 4 sq.mm + 2 x 4 sq.mm earth wire	10 Mtr.			mtr	
	3.	Item No.3:- Supplying & fixing metal box of 150 mm x 75 mm x 60 mm deep (Nominal size on surface or in recess with suitable size of phenolic laminated sheet cover on front including providing and fixing 3 pin 5/6 amps. socket outlet and 5/6 amp. Piano type switch. connection, painting etc. as required.					
	4.	Item No.4:- Supplying & fixing metal box	01 No.			each	

		of 180 mm x 100 mm x 60 mm deep (Nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 5/6 amps. and 15/16 amps. socket outlet and 15/16 amps. piano type switch, connection, painting etc. as required.	04 Nos.		each	
5.		Item No.5:- Supplying and fixing brass batten holder including connections etc. as required.	07 Nos.		each	
6.		Item No.6:- Supplying and fixing following way single pole & neutral sheet steel MCBDB, 240 volts on surface/recess complete with tinned copper bus bar, neutral bus bar, earth bar, din bar detachable gland plate, inter - connections, phosphatized and powder painted including earthing etc. as required.				
	a	2 way single door	02 Nos		each	
	b	8 way single door	02 Nos.		each	
7.		Item No.7:- Supplying & fixing 5-32 amps rating, 240 volts, "C" curve miniature circuit breaker suitable lighting and other load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	a	Single pole	12 No.		each	
	b	Single Pole & Neutral	03 Nos		each	
	c	Single Pole & Neutral 63 Amp.	01 No.		each	
9.		Item No.9:- Installation, testing and commissioning of ceiling fan including wiring the down rod upto the length of 600 mm with 1.5 sq.mm FR PVC insulated, copper conductor, single core cable, including providing & fixing phenolic laminated sheet cover on the fan box etc. as required.	03 Nos.		each	

10.	Item No.10:- Numbering of ceiling fan as required.	05 Nos.			each	
11.	Item No.11:- Supplying & fixing following type switch/ socket on the existing switch box/ cover including connections etc. as required.					
	a	5/6 amps. switch	07 Nos.		each	
	b	3 pin 5/6 amps. socket outlet	07 Nos.		each	
12.	Item No.12:- Supplying and fixing electric call bell suitable for A.C single phase, 230 volts, complete as required as per Anchor Code No. 8272. Anchor/Cona make.	01 No.			each	
13.	Item No.13:- Supplying and fixing of 5 step type electronic fan regulator on the existing switch box including connection etc. as reqd.	05 Nos.			each	
14.	Item No.14:- Supply of following type light fitting with all accessories as required of Havels/ Lustrre make as per cat. Nos. given below:-					
	a	Wall bracket fitting as per Havels Cat. No. LHYL-03160099 (City - 2).	05 Nos.		each	
	b	Pendant light fitting as per Lustrre Cat. No. LI-3415, Lustrre/ Decon make.	02 Nos.		each	
	c	Bulk Head fitting suitable for one no. 100 Watt GLS lamp as per Havels Cat. No. LHKL- 01160099. Havels/ Lustrre make.	02 Nos		each	
15.	Item No.15:- Erection of wall bracket fitting/ Pendant fitting/bulk head fitting of all sizes and shapes containing upto 2 GLS lamps per fitting, complete with all accessories including connections etc. as required.	09 Nos.			each	
16.	Item No. 16:- Supplying & fixing suitable size fan box in ceiling with heavy M.S. rod					

		for hanging the fan as required.	05 Nos.			each	
17.		Item No. 17:- Disconnection & dismantling of following material at the site as given below:-					
	a	Switch boards, DB, fan, Fitting etc.	27 Nos.			each	
	b	Conduit pipe with wiring.	90 Mtr.			mtr	
						Total:	

Rupees in Words-----

Note:-

1. The electric wires should be Kalinga Premium/Finolex make.
2. Switch , Socket , Ceiling rose & Regulator should be Anchor/Cona make(White).
3. All the MCB & DB' s should be Leygrand/L&T make.
4. The conduit pipe should be used AKG/JK/VIKAS ISI marked.
5. The material will be brought by the contractor at the site through proper challan.
6. The contractor is requested to visit the site before quoting the rates.

SIGNATURE OF THE CONTRACTOR

