

#### INSTITUTE OF PHYSICS BHUBANESWAR-751 005

(An Autonomous research institute of Dept. of Atomic Energy, Govt.of India)

Tender No. NIT/IOP/ 02 /2016-17

# PART-I TECHNICAL BID



#### INSTITUTE OF PHYSICS BHUBANESWAR-751 005

(An Autonomous research institute of Dept. of Atomic Energy, Govt.of India)

Tender No. <u>NIT/IOP/02/2016-17</u>

MULTIPLE REPAIR/RENOVATION WORK IN IOP CAMPUS



### INSTITUTE OF PHYSICS BHUBANESWAR-751005, INDIA

(An Autonomous research institute of Dept. of Atomic Energy, Govt. of India)

No	/IP,	Date	

#### **NOTICE INVITING TENDERS**

Institute of Physics, Bhubaneswar is an Autonomous Research Institute of the Department of Atomic Energy, Government of India

Sealed tenders in TWO Parts are invited by the Director, Institute of Physics, Bhubaneswar- 751 005 from reputed contractors for the following work. Contractor who fulfill the following requirement shall be eligible to apply.

- (a) Should have satisfactorily completed minimum one /two/three similar works each of single value amounting to 80% / 60% / 40% of the estimated cost respectively or above during last seven years ending 31st March,2016 and
- (b) Should have carried out one work of any nature either above or a separate one costing not less than Rs. 4.80 lakhs with some Central/ State Government Department/ central Autonomous Body/ central Public Sector Undertaking.Govt. / Semi-govt. organization,need apply with proof (Completion Certificate along with detailed work order) of fulfilling the above conditions need apply only:
- (c) Similar work means repair/ renovation of any building works or, civil maintenance work.
- (d) Should have had average annual financial turnover Rs. 15 lakhs on during last three years ending 31<sup>st</sup> March 2016.

Tenderer have to submit the proof of above eligibility criteria i.e. (a) completion certificate along with detailed work order,(b) list of similar work carried out during last 7 year showing duration of work, value of work done, date of work order etc.. (c) Proof of work carried out in Govt. Department as above, (d) copy of Annual turn over during last three years.

Name of the Work	Multiple Repair/Renovation work in IOP Campus.
Estimated Cost	: Rs.5,09,800/-
Earnest Money Deposit Rs.	: Rs.10,200/-
Cost of Tender Document	: Rs.500/-
Duration of work	: 03 months from the date of commencement
Security Deposit	: 5 % of Tender Value
Performance Guarantee	: 5% of Tender Value
Last date for receipt of Tenders	: 1500 hours 29.04.2016
Time of Opening of Part-1 Tenders	: 1530 hours 29.04.2016

- 2. Tender documents are in two parts viz. Part-I (Technical Bid) and Part-II (Financial Bid). Part-I (Technical Bid) consists of Notice Inviting Tender with terms and conditions. Part-II (Financial Bid) contains of Schedule of quantities.
- 3. Tender Documents can be had from the Accounts Officer, IOP,Bhubaneswar-751 005 on written request in the official letterhead of the Tenderer duly recommended by the Officer on Special Duty, IOP or his authorized representative on any working day from 21.04.2016 to 29.04.2016 between 1100 hours & 1300 hours and 1400 hours & 1600 hours on payment of the cost of the tender document in person by cash. The cost paid towards Tender Document is not refundable.
- 4. Tenderers are required to submit in separate sealed and super scribed envelopes containing and indicating the following:

I	First Envelope	Earnest Money Deposit ( EMD)*
II	Second Envelope	PART-I ( Technical Bid) and the
		documents in support of eligibility
		conditions
III	Third Envelope	PART-II ( Financial Bid)

All the three sealed envelopes shall then be placed in another envelope super scribing the Tender No. sealed and submitted to the tender inviting authority.

- Note -1: EMD shall be submitted by way of Deposit at call Receipt or Bankers cheque or Demand Draft or Pay order from any nationalized bank in favour of the Director, Institute of Physics, Bhubaneswar-751005 or Fixed Deposit Receipt (FDR) of a Scheduled Bank.
  - Note -2: Cash, Cheques and Bank Guarantee for EMD shall not be accepted.
  - Note-3: tenders not accompanied by the Earnest Money Deposit shall be summarily rejected.
  - Note-4: EMD in respect of unsuccessful tenderers shall be returned within 90 days from the date of issue of the Letter of Intent to the Successful Tenderer.
- 5. Tenders shall be received upto 1500 hours on 29.04.2016 ( or the next working day if the tender receiving date happens to be holiday) by the Director, IOP or his authorized representative at IOP, Bhubaneswar- 751 005.
- 6. Part-I of the tenders shall be opened same day on 29.04.2016 at 1530 hours in Director's Conference Hall/Library Conference hall, IOP, Bhubaneswar-751 005 in the presence of attending Tenderers.
- 7. The Envelope containing EMD shall be opened first. The Part-I of the Tender shall be opened only if the EMD is found to be in order.
- 8. Time and date of opening of the Part-II (Financial Bid) shall be intimated later, only to the Tenderers who are considered qualified after evaluation of PART-I and documents submitted by the tenderee in support of eligibility conditions..
- 9. The Part-II (Financial Bid ) of the tender shall be valid for a minimum period of 180 days from the date of opening of PART-I

- 10. The Tenderer shall ensure that the FDR is valid for a period of nine months or more after last date of receipt of tenders and that it is to be pledged in favour of Director, Institute of Physics, Bhubaneswar-751 005.
- 11. In case of successful tenderer, the Tenderer shall deposit an amount equal to 5% ( five percent) of the tendered/accepted value of the work as irrevocable performance guarantee in one of the following forms within a period of 15 days from the date of issue of letter of intent:
  - (a) Fixed Deposit Receipt (FDR) of scheduled Bank OR
  - (b) An irrevocable Bank Guarantee (BG) in the form prescribed by the Government from a Scheduled Bank.

The FDR/ BG shall be valid for the period of contract plus a further claim period of 6 months beyond the contract period.

The performance guarantee shall be refunded to the contractor soon after the completion of the work and recording of the completion certificate.

- 12. The work order shall be issued only after the said performance guarantee in any one of the prescribed from is received and accepted, failing which the Government shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the Earnest Money absolutely.
- 13. Director, Institute of Physics does not bind himself to accept the lowest or any other tender and reserves to himself the authority to reject any or all of the tenders or to allot parts of the works to different agencies without assigning any reasons therefore. All tenders, in which any of the prescribed conditioned is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer, shall be summarily rejected

**DIRECTOR** 

# INSTITUTE OF PHYSICS BHUBANESWAR GENERAL CONDITIONS

Name of the Work: Multiple Repair/Renovation work in IOP Campus.

- 1) The estimated cost of the above work is Rs.5,09,800/- (Rupees Five lakh Nine Thousand Eight Hundred only)
- 2) Tenderers are advised to visit the work spot and understand the scope of the work clearly before submitting the tender. No claim of any kind shall be entertained on account of ignorance in this respect.
- 3) The contractors should have adequate and effective organization for communications with the Engineer-in-charge, Institute of Physics, Bhubaneswar.
- 4) Tender should be signed by persons duly authorised to do so and if required such authority (Power of attorney etc) shall be furnished to the Director.
- 5) Neither the security deposit nor the retention money shall bear any interest.
- 6) The tenders must be filled in ink and in a legible way. Over writing should be avoided. All corrections must be attested by the tenderer with his initials before submission of the tender.
- 7) Tenders proposing any alterations in the work or specifications or in the form of tender or in any other conditions shall be summarily rejected.
- 8) This is an item rate tender. Payment will be made to the Contractor as per actual measurement.
- 9) The rate should be filled in figure and in words. The amount and the totals should also be drawn.
- 10) If the rate in figure differs from the rate in words then the rate corresponding to the calculated amount shall be taken as correct. If the calculated amount does not tally with any of the two rates then the lower of the two rates shall be accepted and the amount shall be corrected.

- 11) Sales Tax, Octroi or any other tax on materials in respect of this contract shall be payable by the contractor.
- 12) In addition to performance guarantee, 5 % of the work order value shall be deposited as security deposit in the form of Demand Draft drawn in favour of Director, Institute of Physics payble at Bhubaneswar on award of contract or shall be deducted @ 10% of the Bill amount from the RA bills for the said amount. EMD submitted along with the tender shall be adjusted in security deposit, This shall be refunded back after 6 months of successful completion of the work.
- 13) Payment will be made as per actual measurement submitted by the contractor you after checking the measurement physically by the Engineer-in-charge and payment of the bills will be made within 10 days of the checking of the bills by the Engineer-in-charge.
- 14) The total time allowed for the completion of the work is strictly for 3 months from the date of commencement of the work.
- 15) Income tax, work contract tax other statutory taxes as may be applicable will be deducted at source on all the payments to be released to you for onward deposit with appropriate authority.
- 16) The rates quoted by you will remain firm throughout the currency of contract.
- 17) On the recommendation of the Engineer-in-charge based on the workmanship, quantity and quality of work done the bill will be passed for payment.
- 18) The acceptance of tender is at the discretion of the Director, Institute of Physics, Bhubaneswar. The Director does not bind himself to accept the lowest tender and reserve the authority to reject any or all the tenders without assigning any reason and reserve 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. All tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable for rejection.

- 19) The Director does not undertake any responsibility regarding any instructions issued verbally in respect of this tender. All questions relating to the tender shall be referred to the Director in writing.
- 20) The amounts to be calculated against various items shall be in terms of whole rupees, less than fifty paise being ignored and fifty paise and above being rounded to the next rupees.

#### Institute of Physics Bhubaneswar

- 1) General: The Contractor shall forthwith in a good substantial and workman like manner, to the satisfaction of the Institute, build and complete the work at Bhubaneswar.
- 2) Date of completion: The Contractor shall actively prosecute the execution of completion of the work to the satisfaction of the Director. The work specified above shall be completed in all respects within 3 months from the date of commencement of work.
- 3) Materials: The Contractor shall provide at his own cost all materials specified in the bills of quantities (with exception of those otherwise mentioned in the specifications) and all labour, tools and plants scaffolding and other implements of every description necessary for execution and completion of the work. All materials to be supplied by the contractor shall be the best of their respective kinds and subject to approval by the Director.
- 4) Sub-Contractor: The Contractor shall not assign or sublet the contract for the work or any part thereof.
- 5) Removal of equipment: The Contractor shall, at his own expenses, within one week from the completion date, remove all tools, plants, scaffoldings, implements and unused materials from the site and leave the same in a clean and proper state, to the satisfaction of the Director.
- 6) Inspection of works: The Contractor shall allow the Engineer-in-charge to inspect and supervise the work during its progress.
- 7) Defective work & rejections: The Contractor shall within 24 hours of notice so to do forth with pull down and rebuild any part of the work which has not been erected, build or completed to the satisfaction of the Director or which is in the opinion of the Director, defective or not in accordance with the specification or the plans.
- 8) Alteration or Deviations: The Institute may at any time during the progress of the work by order in writing make any alteration in the original specifications or plans by

- way of addition, omission or other deviation whereupon the Contractors shall execute the work according to such alterations to the satisfaction of the Director.
- 9) Additions & Deductions: All additions and deductions to be made to or from amount of the contract price in respect of any such alteration in the specifications or plans shall be ascertained according to the rates specified in the bill of quantities (provided that if appropriate rates are therein specified, they shall be fixed by mutual agreement between the parties) and the difference of expenses occasioned by any such alteration shall be added to or deducted from the contract price. No payment or allowance whatsoever shall be made to the Contractor for any work done or materials used without a previous order, in writing from the Director.
- 10) Measurement of work: The work as it proceeds will be measured net exposed measurements. The Contractors or his representative will accompany the Engineer-in-charge in order that they agree on the measurements. The measurement book can also be examined at the office of the Director before payment is made.
- 11) Precautions against accident: The contractor shall, at all times, take due and proper precautions against accidents or injury to the work or any person or property, and shall indemnify the company for all motions suits or any damage or compensation payable in consequence of any accident or injury sustained by any workman or other person whether in the employment of the Contractor or not.
- 12) Failure to execute the work: If the Contractor fails to execute and complete the work otherwise fail to comply with any of the terms and conditions of this order, then the Institute shall be at liberty without avoiding this order forthwith, to require the Contractor to remove his workmen from the site and to take the work out of the hands of the Contractor and to employ any other person to execute and use all materials, tools, scaffolding, plants, implements and things on or about the work, and thereafter neither the Contractor nor his workman shall have any power to intervene with any person employed by the Institute.

All expenses and damages to property incurred by the Institute, consequent on the employment and certified by Director and shall be paid to the Institute by the

- Contractor or deducted by the Institute from any money due to or to become due to the Contractor.
- 13) Serving Notices: Any notice to the Contractor under this order may be served personally or by registered post addressed to the Contractor last known place of address.
- 14) Discrepancies: Should there be any discrepancies between the plans, specifications and bills of quantities the same shall be immediately referred to the Director who shall decide what shall be followed.
- 15) The work will be taken up in hands within seven days of the award of the work and shall be completed in all respect within 3 months from the date of commencement of work.
- 16) Extension of time for completion may be allowed if the Director consider that the reasons for the delay in completion of the work is beyond the control of the Contractor.
- 17) Liquidity damages: 0.5% per week subject to maximum of 10%.
- 18) The tender should accompany with the following documents at the time of submission.
  - a) Proof of registration with Govt./Semi Govt. organizations like CPWD, State
     PWD/Railway etc. in appropriate class, PAN card, VAT Clearance certificates etc.
  - b) Experience having successfully carried out minimum one /two/three similar works in Govt. / Semi-govt. organization, each of single value amounting to 80% / 50% / 40% of the estimated cost respectively or above during last five years need apply with proof ( Completion Certificate along with detailed work order) of fulfilling the above conditions.
  - c) EMD amounting to Rs.10,200/- (Rupees Ten thousand Two hundred only ) in shape of demand draft or Bankers Cheque , drawn in favour of the Director, Institute of Physics, Bhubaneswar.
  - d) EMD of the successful tenderer will be retained and will be adjusted in Security Deposit.
    - In case of absence of any of the documents listed above the tender papers will not be entertained.

Signature of the tenderer with seal

### Institute of Physics Bhubaneswar

- 1 Defects Liability
- 2. Period of final measurement and valuation
- 3. Date of commencement
- 4. Agreed liquidated damages
- 5. Minimum value of work for interim payment.
- 6. Performance guarantee & Security deposit or Retention money

- 7. Payment
- 8. Completion Period

- = 6 months
- = Within 10days of submission of the bill by the contractor.
- = Within 7 days from the date of issue of the work order.
- = 0.5% per week subject to maximum of 10%.
- = The minimum value of work done should not be less than Rs.3,00,000/-. 5% of the value of work order should be deposited as performance guarantee upon award of the contract and in addition 5% of work order value shall be deposited as security deposit or will be deducted against Running the accounts bill. Security Deposit will be refunded after successful completion of period of 6 months.
- = Within 10 days of of the checking of bill by E-I\_C
- Within 3 months from the date of commencement of work.

Signature of the tenderer with seal



#### INSTITUTE OF PHYSICS BHUBANESWAR-751 005

(An Autonomous research institute of Dept. of Atomic Energy, Govt.of India)

Tender No. NIT/IOP/ 02 /2016-17

## PART-II FINANCIAL BID

#### **SCHEDULE OF QUANTITIES**

#### Name of the work:

- (A) Repair/Renovation of Pump operating Room near to Overhead Watertank and carpentry store.
- (B) Repair/Renovation of Overhead Water Tank of the Institute.
- (C) Painting of Grills and Windows of Staff Canteen and IBL.
- (D)Repair of Boundary Wall damaged during Phailin in the Bank Premises.
- (E) Repair of Stone cladding work in Auditorium

SI.				Unit R	ate(Rs.)
No.	Description of Items	Qnty.	Unit	in figure	in words
	Dismantling doors, windows and clerestory windows (steel or				
	wood) shutter including chowkhats, architrave, holdfasts etc.				
1	complete and stacking within 50 metres lead :				
1,1	Of area 3 sq. metres and below(code No.15.12.1 of DSR:2014)	11 2	604		
1.1	Niamanakina aldularakan ara akinakina makina anakinina anakinina anakinina	11.2	5QM		
	Dismantling old plaster or skirting raking out joints and cleaning				
	the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.(Code No. 15.56 of DSR				
2	2014)	42	SQM		
	Disposal of building rubbish / malba / similar unserviceable,				
	dismantled or waste materials by mechanical means, including				
	loading, transporting, unloading to approved municipal dumping				
	ground or as approved by Engineer-in-charge, beyond 50 m initial				
	lead, for all leads including all lifts involved.(Code No. 15.60 of				
3	DSR 2014)	4.2	CUM.		
	Repairs to plaster of thickness 12 mm to 20 mm in patches of				
	area 2.5 sq. meters 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				
4	the dumping ground within 50 metres lead :				
	With cement mortar 1:4 (1 cement : 4 fine sand) with an adding				
	water proofing agent of M/s. India Waterproofing Company @2%				
4.1	by the weight of cement.  Cement Plaster in coarse sand ,20 mm cement plaster of mix1:4	42	SQM.		
5	(1 cement: 4 coarse sand)				
<del>-</del>	52 mm thick cement concrete flooring with concrete hardener				
	topping, under layer 40 mm thick cement concrete 1:2:4 (1				
	cement: 2 coarse sand: 4 graded stone aggregate 20 mm				
	nominal size) and top layer 12 mm thick cement hardener				
	consisting of mix 1:2 (1 cement hardener mix: 2 graded stone				
	aggregate 6 mm nominal size) by volume, hardening compound				
	mixed @ 2 litre per 50 kg of cement or as per manufacturer's				
	specifications. This includes cost of cement slurry, but excluding				
6	the cost of nosing of steps etc. complete.	14.7	SQM.		
Щ_	The cost of hosting of steps etc. complete.	- 1.7	<b>-≪™</b> .	L	ļ

	TAITEDALAL DATAITTAIC MODE Description of all maintail			
	INTERNAL PAINTING WORK: Repainting of old painted			
	surface with two coats of acrylic emulsion paint of ICI			
	dulux/Asian paints/Nerolac or other equivalent make & shade			
	over one coats of approved cement primer(alkali resistant)			
	consist of throughly scrapping oil bound distemper /acrylic			
	emulsion /white wash surface ,filling of the cracks with approved			
	Birla wall care white cement based putty to entire surface to fill			
	up crevices middepression etc. throughly scrapping the surface ,			
	paint the surface by using roller includding necessary covering			
	materials and removal of splashing & dropping from floors , wall			
	includding scaffolding,ladder as required & disposing of debris			
_	outside colony etc. complete all as directed by Engineer -in-			
7	charge.	720	SQM.	
	Repainting of old painted wooden/steel surface with two coats			
	of synthetic enamel paint using first quality synthetic enamel			
	paint of approved make and shade over one coat of approved			
	wood/steel primer including preparing surfaces , filling with			
	suitable putty scaffolding and cleaning etc. including removing old			
	paint by scrapping , blowlamp etc. complete all as directed by the			
8	Engineer-in-Charge.	145	SQM.	
	EXTERNAL PAINTING WORK:Providing and applying three			
	finished coats of acrylic based emulsion exterior coating of Apex			
	ultima of M/s. Asian Paints and shade over the sand face / rough			
	cast plaster / RCC jali/ RCC fins at locations as required,			
	including preparation in proportion of one litre of Apex Ultima or			
	other makes with 400 ML. of potable water, thoroughly mixed			
	and applied at an interval of 4-6 hours for each successive coats			
	and ensure consumption of 0.27 ltr /Sqm for 3 coats, including			
	preparation of surface, cleaning and filling the cracks and			
	crevices with Latex caulking crack filling etc. complete with			
	necessary scaffolding work if requiredgenerally as per the			
9	manufacturer's specification and as directed by the EIC.	841	SQM.	
	a) Over sana Tacea paisterea surtaces		,	
	Note:			
	1) The surface shall be cleaned with water jet with high pressure			
	water pump spray of at least 100kg/ sq.cm and brushing /			
	rubbing with coir to remove all foreign materials etc. before			
	painting work.  2) Lower consumption less than as mentioned will be recovered @			
9.1	260/Itr			
9.1	Providing and fixing 1mm thick M.S. sheet door with frame of			
	40×40×6 mm angle iron and 3 mm M.S. gusset plates at the			
	junctions and corners,all necessary fittings complete, including			
11	applying a priming coat of approved steel primer.			 
	(a)Using M.S. angels 40×40×6 mm for diagonal braces	4.2	SQM.	

				1	
	Supplying and fixing fabrication and erection of steel work of				
	MS angle 45x45x6 mm and MS flat of 35x6mm complete with				
	cost of material ,tools and plants etc. including cost of labour				
10	charges as per design and specification complete in all respects		14.0		
12	as per direction of FIC.	120	KG.		
	Earth work excavation in foundation pits, trenches Plinth / tie				
	beams etc. in all soils other than soft and hard rock up to depths				
	mentioned below including shoring & de watering if necessary,				
	dressing the sides, trimming, ramming and preparing the bed for				
	foundation and refilling around the foundation and in plinth with				
	selected excavated earth, in layers not exceeding 150mm thick,				
	watering, consolidation and disposing of the surplus 150mm thick,				
	watering consolidation and disposing of the surplus earth within a				
	distance of 150M. etc. complete as per specification drawings &				
13	as directed by the Engineer-in-Charge				
	Depth not exceeding 1.5m from ground level	8.2	CUM.		
	Cement concrete for the following works of specified mix using				
	graded stone aggregate of 20mm. maximum size including				
	necessary form work, machine mixing, transporting, placing in				
	position consolidation, finishing, curing etc. complete as per				
	specification drawings and as directed by the Enginner-in-				
	Charge.				
14	Note: Nominal reinforcement if provided shall be measured and				
14.1	paid under relevant item C.C. 1:4:8 in foundation	2.6	CUM.		
14.1			COM.		
	Providing and construction of Brick masonry 250mm thick using				
	well burnt bricks of approved class designation 7.5 [classification				
	as per IS 1077-1992 and minimum average compression strength				
	not less than 7.50 N/mm2] of approved manufacturer C.M 1:6 in				
	foundation and plinth including trench etc. to correct line, level				
	and plumb including raking out joints/ simultaneous flush pointing				
	with cement mortar 1:4, curing etc. all complete as per				
	specifications and drawings and as directed by the Engineer-in-				
15	Charge.	13.2	CUM.		
	18 mm cement plaster in two coats under layer 12 mm thick				
	cement plaster 1:5 (1 cement: 5 coarse sand) and a top layer 6				
	mm thick cement				
16	plaster 1:3 (1 cement : 3 coarse sand) finished rough with sponge.	33	5QM		
	Providing & fixing fly proof wire gauze to windows, clerestory				
	windows & doors with M.S. Flat 15x3 mm and nuts & bolts				
17	complete. Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and 1.4				
10		Q 4	5044		
18	mm aperture on both sides	8.6	SQM.		

	Removing of old sand stone clading by supplying labour, tools and			
	3 , 11 , 3			
	plants as require from the existing wall and arches including all			
	scaffolding work complete alongwith surface preparation and			
19	dispasal of debris all work complete as per direction of Eingineer	45	SQM.	
<u> </u>	in-charae. Providing & fixing " khandolite stone cladding" of approved sand		own.	
	stone with dressing complete as per existing			
	design/pattern/approved design, fixing with 30mm thick grinded			
	lime surkhi mortar 1:2 & pointing with white cement with araldite			
	and pigment to match shade the stone complete in all respect as			
20	per direction of Engineer incharge. (75mm thick)	45	SQM.	
	Supplying at site Angle iron post & strut of required size			
	including bottom to be split and bent at right angle in opposite			
	direction for 10 cm length and drilling holes upto 10 mm dia. etc.			
21	complete(size of angle iron =(50x50x6) mm			
	Structural steel work at all floors and locations using angles,			
	tees, flats, bars,chequered plates hollow section etc. of			
	required sizes including supplying ,cutting			
	fabricating,welding,erecting ,making holes /chases where ever,			
	required and fixing embedding in position in concrete /masonary			
	work/stone work with necessary hold fasts etc. and finishing the			
	concrete /masonry after fixing/embedding including painting			
	two coats of anti-corrosive bitumastic paint on all unexposed			
	surfaces and two coats of synthetic enamel paints of approved			
	make and colour on all exposed surfaces over a coat of approved			
	steel primer etc. complete as per specifications , drawings and			
21.1	as directed by Engineer-in-charge.	418	KG.	
	Supplying and fixing in position G.I. chain link fencing 1.2 mtr.			
	Height of of size 10gauge and meshing size 50x50mm above			
	existing brickwork with slanting arm of 500mm with chain link			
	fixed to angle iron posts of size 50x50x6mm and 1.20 M. high			
	above brick work 500mm slanting portion and 300mm inside			
	brickwork /concrete at 1800mm c/c with supporting struts of			
	angle iron of size 50x50x6mm at every 5th post or as required			
	and corner post and strut embedded in cement concrete 1:2:4 of			
	size 250x250x350 deep and providing and fixing G.I. barbed			
	wire of 12 gauge,2 ply, 4 spikes & fixed to starting portion of			
	angle iron post including 6mm dia. G.I. J hooks, bolts,			
	nuts,washers,or 6mm dia. MS fixing rods includding scaffolding ,			
	stretching, straightening etc. complete including painting GI			
22	chromate all as per specification and direction of EIC.	40	SQM	
22	existing brickwork with slanting arm of 500mm with chain link fixed to angle iron posts of size 50x50x6mm and 1.20 M. high above brick work 500mm slanting portion and 300mm inside brickwork /concrete at 1800mm c/c with supporting struts of angle iron of size 50x50x6mm at every 5th post or as required and corner post and strut embedded in cement concrete 1:2:4 of size 250x250x350 deep and providing and fixing G.I. barbed wire of 12 gauge,2 ply, 4 spikes & fixed to starting portion of angle iron post including 6mm dia. G.I. J hooks, bolts, nuts, washers, or 6mm dia. MS fixing rods including scaffolding, stretching, straightening etc. complete including painting GI channel with 2 coats of synthetic enamel paint of approved zinc		SQM	

	Providing corrugated G.S. sheet roofing including vertical / curved surface				
	fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter				
	with bitumen and G.I. limpet washers or with G.I. limpet washers filled				
	with white lead, including a coat of approved steel primer and two coats				
	of approved paint on overlapping of sheets complete (up to any pitch in				
	horizontal/ vertical or curved surfaces), excluding the cost of purlins,				
	rafters and trusses and including cutting to size and shape wherever				
23	required				
24	1.00 mm thick with zinc coating not less than 275 gm/m²	22.5	SQM		
				Total A	mount=Rs.
Toata	al Amount(in words)=				

N.B. The bidders are required to inspect the site before quotating their rates

Amount(Rs.)

1		
-		
1		

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_		
4		
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J		