TENDER DOCUMENT

FOR CONSTRUCTION OF FOCUS INCUBATION CENTRE (F.I.C.) -EXTERNAL WORK AND REST ROOM AT NITRA GHAZIABAD

Tender No. Nitra/Pur/P- 3188

Sale of Tender Document & Downloading up to	:	16.08.2016 (05.30 PM)
Last date & time for acceptance of Tender	:	17.08.2016 (12.00 PM)
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NORTHERN INDIA TEXTILE RESEARCH ASSOCIATION (Linked to Ministry of Textiles, Govt. of India) SECTOR-23, RAJ NAGAR, GHAZIABAD-201 002 (U.P.), INDIA

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TENDER DOCUMENT

VOLUME-1

TECHNICAL BID

<u>Name of the Work</u>- Construction of F.I.C. External Work and Rest Room at NITRA, Sector-23, Ghaziabad.

Time of Completion – 1 (One) month.

Submitted By: (Name of Bidder / Contract Company)

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VOLUME-1 : TECHNICAL BID

<u>Name of the Work</u>- Construction of F.I.C. External Work and Rest Room at NITRA Sector-23, Ghaziabad.

CHAPTER-1

SCOPE OF WORK, IMPORTANT INSTRUCTIONS & QUALIFICATION CONDITIONS FOR SUBMISSION OF TENDER

A. WORK AND SITE

The work consists of construction of F.I.C. EXTERNAL WORK AND REST ROOM at Northern India Textile Research Association (NITRA), Sector-23, Raj Nagar, Ghaziabad (U.P.).

The tenderers are advised to inspect the site/ work before tendering the rates so that they may fully acquaint themselves with the nature of the work to be done, the means of communications and availability of materials and water required for the work.

The tenderer must complete the work in accordance with the specifications and to the entire satisfaction of the NITRA within the specified period.

The drawings regarding this work are attached with tender document and clarifications can be dealt in the office of the NITRA.

The prospective contractor in whose favour the tender would be awarded has to execute a separate and distinct agreement with the NITRA notwithstanding any thing contained herein.

B. <u>SCOPE OF WORK</u>

The Scope of work consists of construction OF F.I.C. EXTERNAL WORK AND REST ROOM in NITRA campus. The work consists of complete civil works with materials, from excavation, RCC foundation, Brick Work, Water Proofing, Wood Work, Flooring, Sanitary Fittings, Toilet Fixtures, Electrical Installation, Finishing & painting in case of Rest Rooom. In case of External work, Brick Edging PCC Work, Brick Work, Curb Stone Work and W..B.M + Mooram as per the Specifications and drawings (Drg-1 & 2) given with the tender document.

C. <u>RATES</u>

The tenderers should fill in the schedule in ink and the **rates should be** written in words as well as in figures.

The contract shall be a **Lump Sum rate contract based on Rs.per sq.Foot of Covered/External Area**. The Contractor shall be paid for the actual Area as measured at site, at *the rates finalized in the agreement* (to be signed during award of work).

That rates quoted shall include labour, materials, tools and plants, equipments, applications, transports, taxes, charges, levies, contractor's supervision, overheads, pollution, PF, ESI and other legislations and all charges necessary for the satisfactory completion of the work. *Rates for the work should include all such expenses.*

Rate in Rupees shall be quoted and the tender shall remain good and open for acceptance for a period of 90 days from the date of opening of tender.

The tenderer/contractor shall make his own arrangement in regard to *electricity and water supply* required for the execution of the works as well as for drinking water for his own people and he shall pay all charges in this connection and include in his rate an adequate amount to allow for these requirements.

The rates given by the tenderer/ contractor shall be for complete items of work covering all materials, labours, carriages, royalties, sovereignage, fees, rents, sale tax, octoroi, wastage, tools, plants, equipments, transports, temporary constructions, WCT (*Work Contract Tax*), *Labour Cess* and other taxes as applicable, overhead charges and profits as well as general liabilities, obligations and risks arising out of the conditions of the contract or carrying the work in parts or under/ across/ along drains, etc., complete and shall apply to all weather, heights, depths, leads and lifts , without any extra charge whatsoever.

C. <u>ELIGIBILITY / QUALIFICATION CONDITIONS</u>

1) Bidder/Contractor must have valid Registration for WCT (*Work Contract Tax*) and Service Tax.

2) Bidder/Contractor must have Experience in Construction of *Textile industry shed or Educational institute*. The value of similar completed work should be at-least Rs.1.00Crore (Rs One Crore only) or more. <u>List and</u> <u>Certificate of such work(s)</u>, should be submitted with the Tender in the <u>format given below</u>. NITRA may see these works, if required.

The tenders, which do not fulfill this requirement, may be rejected.

S1. No.	Detail of Work – Name and Address	Covered Area (sq. fT)	Cost (Rs.)	Year of Completion
1				
2				

D. <u>SPECIFICATIONS TO BE FOLLOWED</u>

All works executed or materials supplied under this contract unless otherwise specified in these specifications shall comply with the <u>SPECIFICATIONS mentioned in **Chapter-3** of this document</u> in respect of Civil works, piping and Electrical works. For the items not covered by above, latest C.P.W.D. Specifications and relavent ISI specifications shall be followed. These specifications, as they are applicable shall be deemed to be incorporated in this contract.

E. <u>MATERIALS</u>

Materials specified by the NITRA from time to time and brought on site of work shall be got tested at the cost of the contractor and the material rejected shall be removed by the contractor within 24 hours, failing which the rejected material shall be removed by the NITRA at the risk & cost of the contractor.

All materials supplied by the contractor and brought on the site shall be got tested frequently to check up to conform to the specifications. All tests as may be necessary shall be performed at the contractor's expenses and he shall make all necessary arrangements for conducting the tests in the approved laboratories or as directed by the NITRA.

F. <u>TIME OF COMPLETION</u> AND DEFECT LIABILITY PERIOD

All works, specified herein, shall be completed in all respects to the entire satisfaction of the NITRA and handed over to it or any person nominated by it to take within the period of **1(One)** month from the date of letter for commencement of work.

The **contractor's responsibility** shall, however, not end till the maintenance **period of 12 months** from the date of completion is over. If any defect during this period is notified, he shall rectify the same, failing which the same shall be rectified at his risk & cost.

G. <u>ACCEPTANCE OF TENDERS</u>

The Contractor must sign all the pages of the tender document Volume-1 (Technical Bid) and Volume-2 (Price Bid) and submit the same to NITRA before due date of submission.

The acceptance of tender shall rest with the NITRA, which does not bind itself to accept the lowest tender and reserves to itself the authority to reject any or all the tenders received without assigning any reasons thereto. All tenders, in which any of the prescribed conditions are not full- filled or are incomplete in any respect, are liable to be rejected. The NITRA also reserves the right of accepting the whole or any part of the tender and the Contractor shall be bound to perform the same at the quoted rates.

H. <u>REJECTION OF TENDERS</u>

The tenders received after due date of submission shall be rejected. The contractor should fill in the rates in figures as well as in words. The tenders, which do not fulfill this requirement, are liable to be rejected. No alterations be made by the Contractor in the notice to the tender, instructions to the contractors, the contract form, conditions of contract, the specifications or the quantities accompanying the same shall be recognized and if any such alterations are made or any special conditions are attached, the tender is liable to be rejected.

I. <u>CHECK RATES AND FIGURES</u>

If on checking and verification, differences are found between the rates given by the contractor in words and in figures or in the amounts worked out by him, the following procedure shall be followed.

- 1) Where there is a difference between the rate in figure and in words, the rate which corresponds to Total amount worked out by the contractor, shall be taken as correct.
- 2) Where amount in not worked out by the or it does not correspond with the rate written either in figure or in words, then the rate quoted by the Contractor in words shall be taken as correct.
- 3) Where rate quoted by the Contractor in figure and in words tallies but the amount is not worked out correctly, the rate quoted by the Contractor shall be taken as correct and not the amount.

J. <u>COMPETENCE</u>

If the tender is made by an individual, it shall be signed with his full name and his complete address, both present and permanent. If it is made by a firm, it shall be signed by a member of the firm who shall sign his own name and give the name and address of the each member of the firm and submit with the tender the power of attorney authorizing him to do so on their behalf. Certified copy of the Registered Partnership Deed shall also be submitted along with the tender. In case the tender is made by or on behalf of a company incorporated under the companies Act (1 of 1956), it shall be signed by its Managing Director duly authorized on their behalf and shall bear the official seal of the company. Tender is to be in a sealed cover.

K. <u>RETENTION MONEY</u>

Retention amount shall be calculated and deducted at the rate of 10% (Ten percent) on the bill amount and shall not carry any interest. The retention amount may be released (before defect liability period) by submitting Bank Guarantee of any Scheduled Bank. The contractor will furnish to the NITRA, the Bank Guarantee of for equal amount of any scheduled Bank which shall be released after the completion of defect liability period.

CHAPTER-2

FORM OF TENDER

The Director General NITRA

Sub: Tender for the construction of F.I.C. EXTERNAL WORK AND REST ROOM

Dear Sir,

I/ We hereby tender for the execution of the work specified in the tender written memorandum within the time specified, at the rate specified therein on **Lump Sum rate basis** and in all respects in accordance with the specifications, drawings, designs, and the instructions supplied in writing and with such materials as are provided for and in all respect in accordance with such conditions so far as possible.

1. **MEMORANDUM**

GENERAL DESCRIPTION -CONSTRUCTION OF PROPOSED F.I.C. EXTERNAL WORK AND REST ROOM AT SECTOR-23, RAJNAGAR, GHAZIABAD – 201 002 (U.P.).

TOTAL RETENTION MONEY-10% of Contract Value.

BANK GUARANTEE - Amount equal to Retention Money to be submitted later.

PERIOD OF COMPLETION- 1(One) Clear Calendar months from the date of written order to commence the work.

2. I/We hereby distinctly and expressively declare and acknowledge that before the submission of my/our tender, have carefully followed the general instructions and read detailed specifications and clearly understood all conditions of the contract.

I/We have seen the location where the said work is to be done and investigated the works required in regard to materials required so as to

enable me/us to complete the work successfully, should this tender be accepted in whole or in part.

I/We hereby agree, to abide by and fulfil all the terms and conditions annexed hereto, to execute all the works referred to in the tender documents / drawings / specifications upon the terms and conditions contained or referred to therein and carry out such deviations as may be ordered in future by the NITRA.

If I /We fail to commence the work by the specified date as per the Memorandum, I/We agree that my/our contract may be cancelled. I /We fulfill to start the work, the retention money shall be kept by NITRA towards retention/security deposit which shall be calculated and deducted as per clauses of general directions subject to a maximum amount specified above. I / we agree to keep the offer open for 90 days from the date of opening of the tender.

I/We /am/ are ----- (position in the Company).

Yours faithfully,

Signature_____

In the capacity of ______ duly authorized to sign the tender for and on behalf of M/s______

WITNESS:

Address _____

Signature_____

CHAPTER-3

SPECIFICATIONS OF WORKS AND MATERIALS

The following Specifications shall be read and construed with reference to and in context of the rules, specifications and the conditions hereinafter contained. **Technical Specification for Civil works in Foundation and Super structure**-

- i) **Earth work** in excavation in foundation up to required depth/minimum depth 1.50M. Back filling of earth with compaction.
- For all RCC works, 43 grade Cement OPC (Ordinary Portland Cement) shall be used. Use of PPC (Pozolona Portland Cement) is NOT allowed in RCC work. Coarse sand shall be washed Badarpur/ stone dust.
- iii) **PCC** 1:4:8 (1 cement :4 coarse sand :8 graded stone aggregate 40 mm nominal size) in Foundation and under Floor
- iv) **RCC footings**, Pedestial, Columns and plinth beam 1:1.5:3 (1 cement :1.5 coarse sand :3 graded stone aggregate) laying, centering, shuttering, curing & finishing complete.
- v) **Filling of earth** with compaction, to raise inside level for Floor at plinth level.
- vi) Pre-Construction <u>Anti-Termite Treatment.</u>
- vii) **Flooring:** well compacted sub base-150 mm thick Stone soling under floor with compaction, 75 mm thick PCC (1:4:8) under floor. <u>IPS flooring</u> 100mm thick RCC (1:1.5:3) flooring with 8dia bar @ 200 c/c both ways and using floor hardener @ 3.0kg/sqm.
- walls- Brick work with 1st class F.P.S. new bricks of class designation 75 using Cement mortar <u>1:5 (1 cement :5 coarse sand)</u> in foundation (thickness 9" or more) up to plinth level and 9" thick above plinth level, up to 12 feet height, complete including curing.
 - ix) **Plastering-** 20mm thick internal and external Plaster on walls using 1:6 Cement coarse Sand mortar. 12mm thick Plaster on Columns using 1:4 Cement badarpur Sand mortar.
 - x) **Roofing-** <u>Colour Coated Metal Sheets</u> (of approved reputed company) supported over pre-engineered fabricated MS trusses. Complete including eaves, rain water down pipe etc.
 - xi) **Finishing** oil bond distemper for internal wall and snocem for external wall. Primer and enamel paint on all MS shutters and other all MS items including trusses.

- xii) **Plinth protection** 750 mm wide plinth protection using CC (1:2:4) allaround the shed / building.
- xiii) The entire structure shall be resistant to Earth quakes and wind loads.

GENERAL SPECIFICATIONS OF WORK-

- 1) If cement is used in bags the concrete mortar mix shall be determined on the basis of their standard weight. The Contractor will ensure that all the bags are filled with exact weight of a standard bag. Necessary weighing arrangements shall be installed near site and subject to verification by the Architect/NITRA.
- 2) The Architect and NITRA shall require (where he deems so necessary) to provide grooves of approved pattern between various surface or surfaces of same items of works such as timber and plaster concrete, exposed concrete/ concreting operations of same or different members (particularly in the exposed concrete work) etc. Such grooves shall have to be provided without extra charges and the Contractor's rates for various items are deemed to include the cost of all labour, tools and materials required for making such grooves.
- 3) On being directed by the Architect and NITRA, the Contractor shall provide suitable stone with flat tops and build the same permanently to act as benchmarks. Likewise any other levels or lines or points specially required by the Architect and NITRA, shall be built. The Contractor shall carefully protect and preserve such important marks during execution of the work.
- 4) A programme and P.E.R.T. Chart for completion of work shall be submitted within 15 days of the award of work , and the same shall be displayed at site of work. The Contractor will maintain a site office. A register wherein all remarks by Architect and the NITRA will be recorded, will be maintained at site.
- 5) The progress of the work will be reviewed on first Monday every month and the progress should be more or less proportionately to the time schedule, failing which action under appropriate clause shall be taken.
- 6) Theodelite, I.O.P. Level with staff, steel taps, sieves, stop watch, platform type weighting machine of 200 kgs. Capacity, small balance with weights,

spring balance, slump cone with rod, six inches 24 Nos. cubes moulds, Plumb-bobs, spirit level, vernier/ micro meter, calibrated cylinder, hammers, thermometer as per requisition as site etc. shall be kept at site of work by the Contractor for execution of work and testing of material.

The Contractor shall store all materials, keep the T&P, install water and power system, electrical and mechanical equipment and construct all temporary structures etc. on the site only at places approved by the NITRA. Should the place where the materials are stored by the Contractor is required by the NITRA for any other purposes, the Contractor shall clear the place within such time as may be instructed by the NITRA and no claim whatsoever will be entertained.

- 7) The tests for materials and works shall be carried out in the laboratories approved by the NITRA as often as it may consider them necessary or it may ask the Contractor to install testing equipments at site for such tests which are required to be carried out more frequently. The Contractor shall ensure and certify the calibrations of the equipment so installed and shall maintain the same in working order throughout the period of construction. The Contractor shall also provide necessary trained and qualified staff for carrying out such tests and using such equipments.
- 8) The NITRA shall have the power to cause the Contractor to purchase such materials of particular make or from particular sources as may be in his opinion be necessary for proper and reasonable compliance with the specifications and executions of the works.
- 9) The levels, measurements and other information concerning the existing site as shown on the drawing or as described are supposed to be correct but the Contractor shall verify them for himself as no extra claim whatsoever shall be entertained on account of errors or omissions in such matters or on account of the descriptions turning out to be different form what was expected.
- 10) The Contractor shall provide all equipments, instruments, labour and such other allied assistance required by the NITRA for measurements of the works, materials etc.

11) LOADING TEST

The Architect and NITRA shall during the progress of the work or during the period of maintenance instruct the Contractor and such instruction shall always be binding ,that a loading test (tests) be made on the works as any part thereof, if in his opinion, such test (or tests) be made on the works or any part thereof, if in his opinion, such test (or tests) be deemed necessary for one or more of the reasons herein below specified:

- (a) The site-made concrete test cubes failing to attain the specified strength.
- (b) The shuttering for concrete work being prematurely removed.
- (c) Over loading during the construction of the work or part thereof.
- (d) Concrete improperly cured.
- (e) If any portion of the work carried out without prior approval to proceed with such work.
- (f) If concrete is honey-combed or damaged or in the opinion of the Architect and NITRA, a particular work is important or critical areas of the structure where weakened concrete will affect the stability of the structure to carry designed load.
- (g) Any other circumstances attributable to alleged negligence on the part of the Contractor which in the opinion of the Architect and NITRA resulting in work or part thereof being of less than the expected strength.
- (h) Any reason other than foregoing.

If the loading test be instructed to be made in part for the reason (a) to (h), the tests shall be made at the Contractor's cost whether the results of such test be satisfactory or otherwise.

All the loading tests shall be carried out strictly in accordance with the instructions of the Architect and NITRA. Local testing will generally follow the procedure set out in the Indian standard codes of practice.

12) <u>EARTH WORK</u>

Stacking of excavated material shall be done in places approved by the Architect and NITRA and the original ground levels of such places shall have

been recorded by him jointly with the Contractor before commencement of stacking operations. Any thing if found during the excavation shall be the property of the NITRA and Contractor shall have no claim over it.

Extra excavation required for the allied lead / lift required specifically for providing working space to workmen or shuttering to well, etc. shall not be paid for. No extra claim being allowed for such works incidental to development and execution to allied jobs.

Earth work for foundation trenches, drains and over areas shall be in all types of strata such as ordinary soil, hard soil, ordinary hard rock, etc. Excavation shall be done to the required depth including all lead and lifts.

13) <u>CONCRETE WORK</u>

- i) Side shuttering required for the work shall not be paid for separately for items like making panels in concreting, stair steps and for making construction joint in concrete work etc.
- ii) No extra payments shall be made for laying concrete on slopped camber, curved in plan or different thickness.
- iii) Representative samples of materials intended to be used in concrete work shall be taken and tests shall be carried out to determine the quality, grading, strength, water cement ratio, cement aggregate ratio, etc. as directed by the Architect and/or NITRA. Test shall be carried out separately for different grades of concrete.

In case of preliminary test, the same can be repeated by varying i.e. mix grading, water cement ratio, etc., till desired results are obtained. If a work test does not meet the specified requirements, the architect and NITRA may adopt the procedure of accepting the work at the correspondingly reduced rate as per C.P.W.D. procedure for it. However, the Architect & NITRA is not bound to adopt this procedure if the structural member is load bearing.

If the results are poorer than 75% of the specified strengths, the Architect & /NITRA may order further testing or any kind as may be deemed necessary in his opinion including loading tests. The loading tests shall be carried out on the portion of structure involving concrete represented by the unsatisfactory work tests and such other adjoining elements of buildings as the Architect and NITRA may decide. If the result of loading test is not satisfactory the Contractor shall take remedial measures including

dismantling and construction according to the direction and to the satisfaction by the Architect and NITRA. The NITRA may exercise its judgement before accepting or rejecting the work and shall still have the power to apply reduction in rate as herein before taxed in case the work in question is accepted.

14. RCC (Reinforced Cement Concrete) Work.

i) For all RCC works, the **Ordinary Portland Cement (OPC**) of approved manufacturer only shall be used.

Use of PPC (Pozolona Portland Cement) is NOT allowed in RCC work.

ii) The mix proportions shall apply in terms of average weight of cement in one bag unless otherwise directed. Adjustments shall be made from time to time for variation in moisture content. The Architect and NITRA shall check cement, sand and aggregate by weighing each as often as deemed necessary. If required the mixing has to be done by weighing each materials separately. All RCC work will need vibration. The mix shall be prepared in power driven concrete mixers to the entire satisfaction of the NITRA.

iii) <u>Test Cubes</u>

At least six cubes shall be taken for every 10 cu.m. of concrete or part thereof deposited in the work on any day. There cubes shall be tested for 7 days strength. The Architect and NITRA may at his opinion, exempt the Contractor from performing 28 days test, if the earlier test results are satisfactory.

iv) **Form Work**:- The term 'form work' centering, shuttering, or such other temporary carpentry work shall apply collectively to all forms, moulds, sheeting, shuttering, planking, bracing walls possts, shores, struts, and everything including the temporary support necessary for the concrete including the erection and removal. Holes for cleaning and inspection shall be left in the form work at necessary places as directed and subsequently closed before concreting and its vibration.

Form work shall be designed, erected and maintained by qualified Engineer so as to give the necessary levels slopes, cambers, plumbs, etc. and also according to size and shaps and position of various R.C.C. structural members. They shall be supported on firm surfaces through the agencies of double wedges and should be braced at suitable intervals. Only after obtaining the approval of formwork, the RCC work started.

15. Brick Work

Brick work shall be with F.P.S. new bricks of class designation 75, soaked in water before use. *Cracked, deshaped, uder-burnt bricks shall NOT be used.* <u>Contractor shall provide the Samples for approval before procurement.</u>

Cement mortar 1:5 (1 cement: 5 coarse sand) shall be well mixed before use. Use of PPC (Pozolona Portland Cement) is allowed in Brick work and plastering. Coarse sand shall be washed Badarpur/ stone dust.

CHAPTER-4

A) LIST OF APPROVED MAKES OF CIVIL MATERIALS

S.No	Description of Material	Approved Make / Manufacturers
1	Cement – OPC (43 Grade)	Birla Uttam/ Ultratech/Jaypee/ Shree/ JK
		Cement.
2	PPC 53 Grade Cement	Jaypee / Birla /ACC / JK / Shree/
		Heidelberg/ Lafarge/ Ultratech
3	Colour Coated Metal Sheet	TATA/ Bhusan steel / Equivalent
	for Roof Sheeting	
4	Reinft. and Structural Steel	RATHI / KAMDHENU.
	(TMT bars, Sections,Angles, Tees, I & H, Channels)	
5		
6	Bricks	F.P.S. bricks designation 75 from Kiln of U.P.
7	RMC with OPC	Ultra-tech, ACC Ready mix
8	White Cement	JK white, Birla white
9	Glass , Mirror	Modiguard, Atul or approved equivalent
10	Toughened Glass	GSC, Asahi, Sejal or approved equivalent
11	Laminated flush door	Swastik, Kitply
12	Stainless steel fittings	Ozone, Doorset, Everest or appvd. equivalent
13	Aluminium section	Jindal, Indalco, Hindalco, Mahavir.
14	Flush Door Shutter	Archidply, Mayur, Century, Corbett
	Plywood and Lamination	Archidply, Century, Kitply, Merino (Century
15	Sheets	Laminators)
16	Gypsum board	India Gypsum, Lafarge Boral Gypsum
17	Ceramic Tiles	KAJARIA, SOMANY, JOHNSON, NITCO, Bell
18	Float Glass	Saint Gobain, AIS or approved equivalent
19	M.S.PIPES	TATA / JINDAL
20	G.I PIPES	JINDAL HISAR.
21	Paint, Distemper, Primer	Berger, Asian, Nerolac, ICI.
22	Waterproof Cement Paint	Snowcem or approved equivalent
23	Putty	JK White, Birla wall care
24	Waterproofing Compound	CICO, Dr. Fixit, Accoproof

25	PVC water stopper	Sintex, Superplast or approved equivalent
26	R.C.C. Pipes & collars	Indian Hume Pipe /as approved
27	uPVC Pipe, HDPE	Supreme, Prakash, Kisan
28	HDPE fittings	Kisan, Supreme.
29	GI fittings	New, HB, UNIK
30	Cast Iron Pipes and Fitting	I.S.I. Marked.

B) APPROVED MAKES OF ELECTRICAL ITEMS

S.No.	ITEMS	APPROVED MAKES
	MOULDED CASE CIRCUIT	L&T/ SIEMENS/ GE POWER / ABB
1	BREAKERS	
2	AMMETER, VOLTMETER	AE/ UNIVERSAL/RISHAB/CONZERV
3	DIGITAL METERS	ENERCON / NEPTUNE / SCHNEIDER / CONZERV
4	MULTI-FUNCTIONAL DIGITAL	ENERCON/NEPTUNE/AE
	METER	
5	SELECTOR SWITCH, PUSH BUTTON	KAY CEE / L&T / GE POWER CONTROL /
	SWITCH/ EMERGENCY SWITCH	SIEMENS / SCHENIDER
	LED INDICATION LAMPS	AE /VINAY LED / SIEMENS/ L&T/ SCHENIDER /
6		CONZERV
	CT'S	AE / KAPPA / MEI / UNIVERSAL / C &S / L&T,
7		MECO / CONZERV
	A). CABLE GLANDS	DOWELL / SIEMENS / JHONSONS
8	B). LUGS & THIMBLES	
	A). UPTO & INCLUDING 11KV	BONTON / SKYTONE / DIAMOND / CCI
9	CABLES (ISI MARKED)	
	B). CONTROL CABLES (ISI MARKED)	BONTON / SKYTONE / CCI.
10	RACEWAY/ CABLE TRAY	RICOH / ELPOWER / VENUS.
11	PROTECTION & OTHER RELAYS	ALSTOM / L & T / ABB / ALLEN BRADLEY
12	MCB, MCB DB & ISOLATORS	L & T (HAGER) / LEGRAND/ ABB.
13	RCCB / RCBO	L & T (HAGER) / LEGRAND/ GE.
14	MS CONDUIT	BEE / AKG .
15	PVC CONDUIT	DAUPHIN / AKG / POLYPACK/ DOLLAR / SETIA
	INDUSTRIAL SOCKET IN SHEET	MDS (LEGRAND)/ HAGER / SCHNEIDER / C &S/
16	STEEL ENCLOSURE WITH MCB	GE
	PVC INSULATED COPPER WIRE (ISI	BONTON / SKYTONE / RAJNI GANDHA / LAPP
17	MARKED).	

18	CO- AXIAL CABLES	BONTON / SKYTONE / FINOLEX
19	LIGHTNING ARRESTOR	ALLTEC / PHOENIX
20	TAG BLOCK	KRONE OR EQUIVALENT MAKE APPROVED
		BY E-I-C
21	LIGHT FIXTURES & LAMPS	CROMPTON/PHLIPS/BAJAJ/WIPRO/GE / THORN
		/ KESELEC/ GEWISS(C &S)
22	CEILING FANS	GEC / USHA / CROMPTON / BAJAJ / HAVELLS
23	EXHAUST FANS	GEC / CROMPTON / BAJAJ / HAVELLS
24	CONTACTORS	L & T / GE / BCH / SIEMENS / ABB / SCHNEIDER
25	PUSH BUTTONS	L & T / SIEMENS / BCH / CON CORD

Notes : 1) In case of any other material to be used in work which is not mentioned above, the contractor shall submit the sample/s for the approval of NITRA.

2) Where Equivalent materials are proposed these shall be approved by Architect/consultants and NITRA in advance of procurement. Samples shall be submitted by the Contractor. Any change in the approved make shall be with prior approval of NITRA.

CHAPTER-5

LIST OF DRAWINGS

S.No	Drawing No.	Description
1	Drg-1	Plan Layout of F.I.C External Work
2	Drg-2	Plan Layout of F.I.C- Rest Room

TENDER DOCUMENT

VOLUME-2

PRICE BID

Name of Work:

FOR CONSTRUCTION OF FOCUS INCUBATION CENTRE

(F.I.C.) - EXTERNAL WORK AND REST ROOM AT NITRA GHAZIABAD

Time of Completion – 1 (One) month.

Submitted By: (Name of Bidder / Contract Company)

PRICE BID (To be filled by the bidder)

Name of Work:

FOR CONSTRUCTION OF FOCUS INCUBATION CENTRE (F.I.C.) -EXTERNAL WORK AND REST ROOM AT NITRA GHAZIABAD

Our Rate for the above mentioned work as defined in the scope of work in Technical bid document Volume-1, is as Follows :

For: F.I.C- Rest Room Rate (in figures) Rupees.....per Sq.Ft. of Covered Area.

Rate (in words) Rs. per Sq.Ft. of Covered Area.

For: F.I.C- External Work Rate (in figures) Rupees.....per Sq.Ft. of Area.

Rate (in words) Rs. per Sq.Ft. of Area.

Signature of Bidder / Contractor





