TENDER NO-21/2020
Dated: 17-09-2020
FOR THE YEAR 2020-2021 & 2021-2022

TENDER TITLE

ANNUAL CONTRACT FOR OPERATION & MAINTENANCE
AND SERVICING WORK
CONTRACT FOR AIR-CONDITIONING PLANTS
AND EQUIPMENTS AT NICVD
(WITH AND WITHOUT PARTS)

TENDER DOCUMENTS

- Schedule of Bid
- Information to Bidder
- Instruction to Bidder
- Technical Bid Memorandum (form)
- Financial Bid Memorandum (form)
- Data sheet
- Condition of Contract
- Tender Specification (Scope Work)
- Tender Covering Letter

PROCUREMENT DEPARTMENT
NATIONAL INSTITUTE OF CARDIOVASCULAR DISEASES
Rafiqui (H.J) Shaheed Road, Karachi
Tel. No. 35218530, 99201271 Ext. 419, Fax. 99201289
Website: www.nicvd.org
SUMMARY OF CONTENT

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1. SCHEDULE OF BID

<table>
<thead>
<tr>
<th>I</th>
<th>Cost of Tender</th>
<th>Rs. 1000/- (Rupees One Thousand Only) [Non refundable].</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>Tender Selling Date from</td>
<td>01-09-2020 to 16-09-2020</td>
</tr>
<tr>
<td>III</td>
<td>Tender Submission Date</td>
<td>17-09-2020 before 11:30 a.m.</td>
</tr>
<tr>
<td>IV</td>
<td>Placed of submission</td>
<td>Procurement Department</td>
</tr>
<tr>
<td>V</td>
<td>Tender will be opened</td>
<td>17-09-2020 at 12:00 Noon</td>
</tr>
<tr>
<td>VI</td>
<td>Placed of bid opening</td>
<td>Head of Procurement office NICVD, Karachi.</td>
</tr>
</tbody>
</table>
2. INFORMATION TO BIDDERS

1- Tenderers are required to comply with all the clauses mentioned in the terms and conditions of the tender along with all the relevant documents required. Any deviation incomplete documents / tender will forbid for competing in the tender.

2- Tenders are to be submitted by the Manufacturers / duly authorized agents/ contractor must be registered with Pakistan Engineering council and that the has fully equipped workshop & trained Staff.

3- The Manufacture / contractor / vendor must be registered with the Sales Tax Dept and copy of Sales Tax Registration Certificate must be attached with the tender otherwise no one is eligible to participate in tender.

4- Contractors are bound to pay minimum wages / salary of **Rs. 17,500/- per month** to their employees as per government budget / law. (Dated: 19-09-2019).

5- The Manufacture / contractor / vendor must be registered with the Income Tax Dept and copy of NTN must be attached with the tender.

a) Sample Financial Bid Performa is being supplied with the tender document. The description of each item with full detail must be written. Without material descriptions & name of manufacturer tender will not be accepted. Tender proforma is to be filled very carefully, preferably typed. In financial bid the vendor should mention financial offer along with a Bank Draft/Pay order of 1% value of the quoted items, but not more than Rs. 100,000/- (Refundable) in the name of Executive Director, NICVD, Karachi, as Bid Security.

6- Any alteration/correction must be initialed and each page is to be signed and stamped at the bottom.

7- First Scrutiny of technical bids will be performed by the technical committee. Financial bids of those firms will be opened which qualify technically.

8- The Executive Director, NICVD, Karachi, reserve the right to increase or decrease the quantity mentioned in the tender.

9- Tenders are to be submitted by the firms / contractors. They should submit an undertaking that they will be responsible for smooth functioning of generators.

10- After the approval of contract the security amount of the firm will not be released till the completion of the tender period.

11- The competent authority will blacklist the firm / contractor for the sub-standard services and hence their Bid Security will not be released and amount will be forfeited in the NICVD Account, which will be considered as final.
12- The Bid Validity will remain up to 90 days as per SPPRA rules.

13- After finalization of the tender, this Institute will intimate the tenderer regarding approval of their contract and they will have to acknowledge the NICVD letter for accepting of tender for fiscal year 2020-2021.

14- Conditional tenders are not accepted.

15- After finalization of tender procuring agency requires signing of a written contract from the date on which the signatures of both the procuring agency and the successful are affixed to the written contract. Such affixing of signatures shall take place with a reasonable time.

16- Providing that where the coming into force of a contract is contingent upon fulfillment of a certain condition or conditions, the contract shall take effect from the date whereon such fulfillment takes place.

- The NICVD may reject all bids or proposals at any time prior to the acceptance of a bid or proposal. The NICVD shall upon request communicate to any supplier or contractor who submitted a bid or proposal, the grounds for its rejection of all bids or proposals, but is not required to justify those grounds.
- The NICVD shall announce the results of bid evaluation in the form of a report giving justification for acceptance or rejection of bids at least ten days prior to the award of procurement contract.

NICVD will not pay any Sales Tax or other taxes to any supplier as per serial No 52A, 6th schedule of Sales Tax Act, 1990.

“Goods supplied to hospitals run by the Federal or Provincial Governments or charitable operating hospitals of fifty beds or more or the teaching hospitals of statutory universities of two hundred or more beds”.

17- The decision of the NICVD will be final and binding.

18- Tender is valid for one year (extendable for one year), work order what so ever convenient to the Institute will be given after awarding contract. Once tender accepted by the competent authority cannot be withdrawn within the period of one year.

19- The tenderer will assure us for the Re-doing the defective / repairing work.

20- Tender will be allotted to only register companies / contractors etc. Those who have not provided complete papers as required will not be considered.

21- Previous work experience including similar work indicating name of works done along with clause of each work and name of clients for repairing work etc.

22- That the contractor is fully responsible for maintenance / running of required items all the times including holidays for which contract will made.
23- That the contractor is also responsible for arrangement of emergency repair work if any all the times.

24- That the tools and other instruments required will be used should be arranged by the contractor. They must be informed to security department & maintenance department

25- That proper information will be given to the Institute if there is any major damages / repair works / parts involved or required so that it may be arranged by NICVD.

26- All old, broken, damages parts / component are NICVD property; it will not taken from out side of NICVD.
3. INSTRUCTION TO BIDDERS

Tenderers are required to comply with all the clauses mentioned in the terms and conditions of the tender any deviation will forbid for competing in the tender.

1- In this tender Two Envelopes as per procedure of SPPRA-2010 (46, 2a) will be followed i.e. (i) the bid shall comprise in two separate envelopes. Each envelope shall contain separately the financial proposal and the technical proposal. (ii) The envelopes shall be marked as “Financial Proposal” and “Technical Proposal” in bold and legible letter to avoid confusion each envelope should be drop in separate box (iii) initially, only the envelope marked “Technical Proposal” shall be opened (iv) the financial proposals of bids will opened publicly, time, date and venue will be announced later.

b) In technical bid, the bidder must provide original data sheet and technical brochure and all other related documents, otherwise the will be ignored. The technical evaluation will be done on the basis of data sheet provided by the vendor as per technical bid. “Any mention of financial bid in the technical bid envelope will render the bidder in illegible for further processing.

c) In financial bid the vendor should mention financial offer along with a Bank Draft/Pay order of 1% value of the quoted items, but not more than Rs. 100,000/- (Refundable) in the name of Executive Director, NICVD, Karachi, as Bid Security.

2- Two SAMPLE TENDER PROFORMAS are being supplied with the list. Any items have to be quoted ON THIS PROFORMA OR TYPED ON SAME PATTERN. No other proforma for the tender would be accepted only those items may be typed on the proforma for which the rates to be quoted.

3- The successful bidder will be required to submit Security Money in shape of pay order/deposit at call @ 5% of the total value of order in name of NICVD, Karachi within Seven (07) days which will be kept with NICVD till the end of the warrantee period of Three (3) years.

4- The commencement of work not later than 7 days from the date issuance of letter of award work.

5- The amount of third party insurance should be Rs. 500,000/= (minimum for any one a accident for loss of property and or life.)

6- Last year paid Income Tax Certificate should be submitted along with the tender.

7- The tender in Sealed cover should be addressed to the Executive Director National Institute of Cardiovascular Diseases, Karachi and the envelope should be marked at the top left corner “Operation Maintenance and Servicing Work of Power Generating Sets, Electric Substation and Electrical Systems” and inserted in the tender box, placed in the office of Procurement department, NICVD on 17-09-2020 up to 11:30 a.m. The same will be opened on the same day before the tenderers at 12:00 Noon.
8- The tenderer will also give their permanent and business address with telephone numbers and fax number which can be inspected by tender committee or their member as and when deemed necessary. No tender will be accepted if no proper address will found.

9- Certificate from the sole agent/manufacturer that the vendor has fully equipped workshop trained personal / Engineers and Chemicals should be provided with technical bid and it can be physically verified by the technical committee of NICVD.

10- Contractor should set up workshop with NICVD premises.

11- Previous work experience including similar work indicating name of works done along with clause of each work and name of clients.

12- List of technical staff and equipments owned.

13- Final status as bank reference.

14- Documents mentioned in DATA SHEET should be submitted along with technical bid.

15- An undertaking containing the matter mentioned below, on stamp paper of Rs. 50/- duly attested by Notary Public, to be submitted with the tender.

- We hereby confirm to have read carefully and all the terms and conditions of your tender enquiry due for opening on 17-09-2020
- We accept that if the required Bid Security is not furnished or our offer is found lacking in any of the requirement of your tender enquiry, it shall be ignored.
- We certify that we will abide all terms and conditions of the tender infringement of any of the terms / conditions, will make the tender invalid as recommended by the competent authority.

Signature: ______________________

Contact Person Name: ________________
C.N.I.C No: ________________________
Address: __________________________

Stamp : ____________________________
Phone No: _________________________
Fax No: ____________________________
Mobile No: _________________________

Witnesses:
1 ________________________
2 ________________________
### DATA SHEET

**TENDER NO-21/2020 DATED 17-09-2020**  
**FOR THE YEAR 2020-2021 & 2021-2022**  
**ANNUAL CONTRACT FOR OPERATION & MAINTENANCE AND SERVICING WORK**

**CONTRACT FOR AIR-CONDITIONING PLANTS AND EQUIPMENTS AT NICVD (WITH AND WITHOUT PARTS)**

<table>
<thead>
<tr>
<th>S.NO</th>
<th>A- MANDATORY</th>
<th>Tick relevant box</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Name, Address, Tel, Fax #, E-mail Address</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>National tax Number (NTN)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Latest Income Tax Certificate or Income Tax exemption certificate.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Copy of PEC Registration Certificate.</td>
<td></td>
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<tr>
<td>5</td>
<td>Latest GST/SST Certificate or exemption certificate.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Name of Banker with Current Bank statement.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Copy of Bid Security (1% of Bid Value of the quoted items) As per clause no 1-b. (Original with financial bid).</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>List of litigation with clients (if any) and nature of litigations.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Affidavit that the firm has never been black Listed.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Detail of Registration with major organizations</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Original tender purchase receipt.</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Original terms and conditions duly signed and stamped.</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Each page should be signed and stamped by competent authority.</td>
<td></td>
</tr>
</tbody>
</table>
TECHNICAL EVALUATION

TENDER NO-21/2020 DATED 17-09-2020
FOR THE YEAR 2020-2021 & 2021-2022
ANNUAL CONTRACT FOR OPERATION & MAINTENANCE AND
SERVICING WORK
CONTRACT FOR AIR-CONDITIONING PLANTS AND EQUIPMENTS AT NICVD
(WITH AND WITHOUT PARTS)

Bidders provide all following documents:-

<table>
<thead>
<tr>
<th>S.NO</th>
<th>Descriptions</th>
<th>Total Points</th>
<th>Yes</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Document as per required proforma / specifications.</td>
<td>20</td>
<td>20</td>
<td>00</td>
</tr>
<tr>
<td>02</td>
<td>Previous experience in the relevant field.</td>
<td>20</td>
<td>20</td>
<td>00</td>
</tr>
<tr>
<td>03</td>
<td>Financial status as per bank statement.</td>
<td>20</td>
<td>20</td>
<td>00</td>
</tr>
<tr>
<td>04</td>
<td>Recommendations of Technical Committee.</td>
<td>10</td>
<td>10</td>
<td>00</td>
</tr>
<tr>
<td>05</td>
<td>Bidder has atleast three (03) service engineers in its staff list.</td>
<td>10</td>
<td>10</td>
<td>00</td>
</tr>
<tr>
<td>06</td>
<td>Bidder has its proper office in Karachi with staff.</td>
<td>10</td>
<td>10</td>
<td>00</td>
</tr>
<tr>
<td>07</td>
<td>Bidder must provide the following documents.</td>
<td>10</td>
<td>10</td>
<td>00</td>
</tr>
<tr>
<td></td>
<td>a. Affidavit that the firm has never been black Listed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. A certificate that the firm will abide all terms and conditions of the tender infringement for consequence as recommended by the competent authority.</td>
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<tr>
<td></td>
<td>c. Certificate that the prices quoted are not high or more than local/imported market.</td>
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<tr>
<td></td>
<td>d. Bio Data of key personnel / staff strength with designation, education &amp; experience and details of man power.</td>
<td></td>
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</tr>
</tbody>
</table>

Note: Qualifying marks at technical stage is 70 out of 100 (i.e. 70%)
**SCOPE OF WORK**

(For Operation & Maintenance and Servicing Work Contract for Air-conditioning Plants and Equipments, with and without Parts)

1. The Contractor shall be responsible for the operation of the complete Air-conditioning plants, Equipments and System including automatic and safety controls, components and accessories(collectively referred herein as the plants), complete servicing and maintenance of the plants including minor repairs, annual overhauling and servicing.

2. The Employer shall be responsible for the following:
   (a) Electricity, Gas and Water supply
   (b) Spares and material, chemicals plants and gases i.e acetylene, oxygen and nitrogen and welding electrodes required for operation, maintenance servicing, minor repairs and overhauling excluding miscellaneous items listed in clause.
   (c) Water treatment chemical, lithium bromide, inhibitor, Alcohol, refrigerants and special lubricants or oil grease.

3. The Contractor shall be responsible for the following:
   (a) All Staff required for the work including but not limited to the O&M staff listed elsewhere in the documents.
   (b) All tools, Cleaning brushes, instruments and equipments required to carry out the works.
   (c) Supply of Miscellaneous items required for work such as cotton waste and cloth, normal lubricants, grease, kerosene oil.
   (d) To keep the plant rooms and spaces, equipment room and spaces adjoin passages and cooling tower terraces clean and neat & cleaning to done every day.

4. The Contractor shall ensure that the plants are operated, maintained and serviced efficiently to avoid breakdown during normal operation. The Contractor shall also ensure economical consumption of the materials and spare part supplied by the Employer.

5. The contract shall:
   a) Record twice daily the temperatures on each floor at different locations designated by the Employer’s Representative.
   b) Record plants and equipment operational data at suitable intervals.
   c) Record all observations in printed log sheets approved by the Employer’s Representative. Three sets to be prepared and two sets supplied to the Engineer’s Representative every day.

6. The work of routine servicing and maintenance as required must be completed by the Contractor’s Staff every day.

7. The O&M work to be carried out by the contractor is briefly detailed in clauses 8,9,10 and 11 for reference only without any limitation.

8. (a) The Contractor’s Supervisor Engineer and other supervising staff shall study manufacturer’s Technical Catalogues for the plants and familiarize themselves with the operation, maintenance and servicing of the plants to ensure trouble free operation of the plants.
   (b) The Contractor/contractor’s Supervisor Engineering shall immediately report any malfunctioning of the plants to the Employer’s representative.
   (c) The contractor’s will attend promptly to complaints of malfunctioning of any system/equipment made by Engineer’s Representative to the supervisor Engineer of the contractor and rectify the same on priority basis. A log book will be maintained to record the date and time of each complaint and date time of its rectification.
(d) The Contractor shall coordinate with the hospital’s water supply services to ensure that sufficient make up water is available for the operation of the plants.

In case of unusual water requirements such as filling of the entire system, the contractor’s supervisor engineer will inform the employer’s Representative at least 2 day in advance.

9 PLANTS OPERATION
(a) Check for the working of all electrical and mechanical components of the plants.
(b) Regular dosing of chemicals for effective treatment of cooling and chilled water systems. Taking of samples and testing with test kits and recording the result daily for city water supply, cooling tower and weekly for chilled water.
Two sets of chemical treatment reports shall be prepared indicating the quantities of chemicals added and result of sample tested for each system. One set shall be supplied to the engineer’s Representative every day.
Complete analysis test shall be arranged from reputed laboratory in first week of every quarter. These copies of Lab Report shell be prepared, one copy supplied to Engineer’s Representative and 2nd copy kept in contractor’s site office.
(c) Maintenance of daily operation log sheets required as per section 04 page 402, clause 6(c)
(d) Any servicing or running repair required during the operation of the plants.

10 WEEKLY/FORNIGHTLY/MONTHLY SERVICING AND MAINTENANCE
(a) Washing and Cleaning of air Filters.
(b) Flushing and cleaning of strainers of water system.
(c) Cleaning of air devices.
(d) Servicing of Automatic and safety Controls of the plants
(e) Checking of oil and other lubricant levels and changing the same when required.
(f) Adjustment and lubrication /greasing of bearing and glands
(g) Checking of Belt driven equipment and adjustment of belt tension and alignment.
(h) checking and Adjustment of all pressure and safety devices and controls.
(i) Periodic servicing of the plants including topping up of refrigerant, Lithium Bromide, Chromate, alcohol, etc
(j) Changing of parts due to normal wear and tear when necessary, leak repairs of condensers and evaporators of chillers and packages units, pressure and vacuum testing and recharging of refrigerant.
(k) Monthly Chemical analysis and bacteriological culture testing.

11 ANNUAL SERVICING, MAINTENANCE AND OVERHAULING
11.1 The work to be carried out between 1st December to last week of February under the supervision of a senior Engineer to be depute by the contractor. Parts to be changed where necessary. Instructions given in the Manufacturer’s Manuals to be followed. Record of various checks and tests to be maintained for future reference.

Immediately on shut down of the Plants for annual servicing, etc, the contractor shall open all components of the Equipment and prepare a list of major repairs required within one week of the shut down. The opened Equipment shall be shown to the Consultant to check the list of major repairs prepared by the Contractor.

11.2 Flue Gas/DGF Absorption Type Water Chiller/Shuangliang 750TR.
(a) Chemicals and Mechanical cleaning of bottle generator, condensers, absorbers and evaporator tubes.
(b) Adjustment and calibration of automatic and safety controls.
(c) Checking, cleaning and adjusting of control panel.
(d) Cleaning of furnace service of blower, service of purge unit.
11.3 DGF Absorption Type Water Chiller/Shaungliang 750TR.

(a) Chemical and mechanical cleaning of generators, condensers, absorbers and evaporator tubes.
(b) Servicing of pumps, change oil.
(c) Servicing of purge unit.
(d) Adjustment and calibration of automatic and safety controls.
(e) Checking, cleaning and adjusting of control panel.
(f) Cleaning of furnace.
(g) Servicing of blower.
(h) Laboratory Test or Lithium Bromide.

11.4 Cooling Towers.

(a) Checking and adjustment of fan belts and tension and mounting bolts.
(b) Cleaning and adjustment of fan blades.
(c) Removing of scale on cooling tower fill and checking and adjustment of fill levels.
(d) Cleaning of decks, louvers and metering orifices.
(e) Cleaning of basin and sumps.
(f) Painting of Cooling Tower.

11.5 Water Pump Motor Sets.

(a) General Servicing.
(b) Replacement of mechanical seal and bearings.

11.6 Air-handling Units.

(a) Flushing and cleaning of finned surfaces and water tubes of the cooling coils.
(b) Checking and adjustment of dampers.
(c) Checking and adjustment of fan bearings.
(d) Checking of belts alignment and tension and mounting bolts.
(e) Checking of motor bearings.
(f) Checking and servicing of control panel.

11.7 Fan Coil Units.

(a) General servicing
(b) Flushing and cleaning of finned surfaces and water tubes of the cooling coils.
(c) Checking of fan-motor bearings/bush.

11.8 Fans

(a) Cleaning of fans
(b) Checking and adjustment of bearings/bush.
(c) Checking of belts alignment and tension and mounting bolts.

11.9 Air Filters

(a) Cleaning and repair of air filters.

11.10 Automatic Controls

(a) Checking of setting and calibration of the automatic temperature, humidity and level controls.
11.11 Electric Motors
(a) General servicing
(b) Checking and tightening of wire connections.
(c) Checking of earthing.
(d) Checking and lubrication of bearings.
(e) Checking of motor winding insulation with a meggar.

11.12 Electric Control Boards
(a) Checking and servicing of all MCB's, disconnect switches, fuses, contractors, starters, relays, overload cutouts and other safety devices, checking and cleaning of contact surfaces.
(b) Tightening of wiring connections.
(c) Checking of wiring insulation.
(d) Checking of earthing.

11.13 Air-Distribution Systems.
(a) Cleaning of all air devices. Removal, cleaning and refixing of exceptionally dirty air devices.
(b) Internal cleaning of air ducts as required and directed by the Employer's Representative. Cleaning is to be programmed to ensure internal cleaning of 25% air ducts every year.
(c) Repair of exposed ducts, duct insulation, jacketing and covering.
(d) Removal and refixing of false ceiling tiles as required by the Contractor for carrying out his work. The contractor shall be responsible for any damage to the false ceiling framing and tiles.

11.14 Piping Systems.
(a) Cleaning and flushing of all piping systems including chemical cleaning when required.
(b) Servicing of all valves, strainers, CFRVs, specialties, etc.
(c) Repair of insulation, jacketing and covering of all insulated piping.

11.15 Painting.
(a) Painting of all equipment, exposed ducting and piping, if the previous paint has been scratched or has deteriorated.
(b) Painting of air devices is excluded and shall be considered a major repair work.
1. **PART-A LIST OF MINIMUM O & M STAFF (GENERAL SHIFT)**
   
a) Site Incharge - Engineer (B.E / D.A.E) 01-No
b) Air-conditioning Supervisor (B. Tech Hon.) 01-No
c) A/c Technician (D.A.E) 01-No
d) Semi Skilled Workers 01-No
e) Fitter 01-No
f) Air-conditioning Unit Operator (Chiller operator) (D.A.E) 01-No
g) Duct fabricator. 01-No
h) Decorative F.C Tech. Electronic (D.A.E / Short Course) 01-No
i) Decorative F.C Helper Electronic 01-No

2. **Shift A**
   
   From 07:00 AM to 15:00 PM
   a) Air-conditioning Unit Operator (Chiller operator) (D.A.E) 01-No
   b) Electrician (Electric Wireman License) 01-No
c) Fitter 01-No
d) Semi Skilled Workers 01-No

3. **Shift B**
   
   From 15:00 PM to 23:00 PM
   a) Air-conditioning Unit Operator (Chiller operator) (D.A.E) 01-No
   b) Electrician 01-No
c) Semi Skilled Workers 01-No
d) Decorative F.C Unit Tech. Electronic 01-No
e) Decorative F.C Helper Electronic 01-No

4. **Shift C**
   
   a) From 23:00 PM to 07:00 AM
   b) Air-conditioning Unit Operator (Chiller operator) (D.A.E) 01-No
c) Semi Skilled Workers 01-Nos

**Total** 20-Nos

**NOTES:**

1. The Contractor must ensure that the work of servicing and maintenance is satisfactorily and regularly completed, if necessary by extending the working hours of his staff or by deputing more staff for the work or by working on Sundays or Holidays.
2. Attendance Register should be maintained and daily submit to Chief Engineer.
PART-B SUGGESTED QUALIFICATIONS AND EXPERIENCE OFF O & M STAFF

1. **Supervisor Engineer**
   Preferably a B.E Engineer (Site In charge) in Air-conditioning & Refrigeration Technology from a Government College of Technology or Government Polytechnic with minimum 15 years experience in installation, operation, maintenance, servicing, overhauling and repairs of 600TR capacity and above central type Air-conditioning plants including Centrifugal, Absorption and Reciprocating type water chillers, cooling towers, Air-handling units, electric/electronic automatic controls, electrical systems and packaged air-conditioners.
   Must have held independent charge of operation, maintenance, servicing, overhauling and repairs of 600TR capacities and above central type Air-conditioning Plants Higher Technical Education (such as B. Tech Hons. Or Engg. Degree) will be additional qualification.

2. **Air-conditioning Foreman**
   Must have a Diploma of Associate Engineer in Air-conditioning & Refrigeration Technology from a Government College of Technology or Government Polytechnic with minimum 10 years experience in installation, operation, maintenance, servicing, overhauling and repairs of 500TR capacity and above central type Air-conditioning Plants including Centrifugal, Absorption and Reciprocating type water chillers, cooling towers, air-handling units, electrical systems and packaged air-conditioners.

3. **Air-conditioning Technician. (D.A.E)**
   Must have passed Matriculation Examination of Secondary Board of Education and have a Certificate in Air-conditioning technology from a recognized Technical Institute and minimum 05 years experience in operation, maintenance, servicing, overhauling and repairs of plants according to duties to e assigned:
   (a) Central type air-conditioning plants with DGF Absorption or Reciprocation type water chillers of 400TR capacity and above, air-handling units, cooling towers etc.

   Must have passed Matriculation Examination of Secondary Board of Education and have a Certificate as Air-conditioning Mechanic from a recognized Technical Institute and minimum 05-years experience in operation, maintenance, servicing and repairs of absorption chiller.

5. **Electrician**
   Must have passed Matriculation Examination of Secondary Board of Education and have DAE Diploma / Electrical Wireman License and minimum 05 years experience in operation, maintenance, servicing and repairs of Industrials type electrical Installation and equipment including electrical systems and equipment of central type air-conditioning plants packaged air-conditioners etc.

6. **Fitter**
   Must have passed Matriculation Examination of Secondary Board of Education and have a Trade (Fitter) certificate from a recognized Technical Institute and minimum 05-years experience as a Fitter in central type air-conditioning plants or similar Mechanical Systems installations.

7. **Semi Skilled Worker**
   Must have passed Matriculation Examination of Secondary Board of Education and have worked for minimum 02-years as a helper in different central type air-conditioning plants installation or similar mechanical systems installations.
## APPENDIX-1 TO TENDER
### LIST OF PROPOSED O&M STAFF
(To be filled in by the tenderer)

<table>
<thead>
<tr>
<th>No. Off.</th>
<th>Designation/Name</th>
<th>Qualifications</th>
<th>Experience</th>
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<tr>
<td></td>
<td>Site Incharge (Engineer)</td>
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<tr>
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<td>Air-conditioning Supervisor</td>
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<tr>
<td></td>
<td>Air-conditioning Technician.</td>
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<tr>
<td></td>
<td>Air-conditioning chiller operator.</td>
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<tr>
<td></td>
<td>Semi Skilled Worker</td>
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</tr>
</tbody>
</table>
To
National Institute of
Cardiovascular Diseases,
Rafiqui (H.J.) Shaheed Road,
Karachi- 75510.

Dear Sirs,

1. Having examined the tender documents, schedules, site conditions and addenda Nos. for the above named works, we, the undersigned offer to carry out the said works, in accordance with the said tender documents, schedules, site conditions and addenda Nos, and in all respects in accordance with the conditions as far as applicable for the sum named in the Memorandum annexed hereto or such other sum as may be ascertained in accordance with the conditions of contract.

2. In consideration of your agreeing to examine this tender, we undertake if our tender is accepted:

   (a) To commence the work within the period named in the Memorandum on written orders to commence.

   (b) Within 14 (fourteen) days of your requiring us to do so to provide a surety or sureties (to be approved by you) to be jointly and severally bound with us in the sum named in Memorandum for the due performance of the contract under the terms of a Performance Bond on the form specified in the tender documents with such modifications as you may accept at any time before the expiration of that period.

   (c) To sign the formal Contract Agreement within 14 (fourteen) days of the issue of the Letter of Award of Work and to pay all costs towards the preparation of Contract Agreement.

   (d) To abide by and fulfill all the terms and provisions of the said conditions of contract or in default thereof to forfeit and pay to you the sums of money mentioned in Memorandum.

3. The Bid Security has been tendered as per details given in the Memorandum, the full value of which is absolutely forfeited by you, without prejudice to any other rights and remedies which you may have, should we fail to commence the work or execute the Performance Bond and formal Contract Agreement, within the periods specified above, otherwise the said sum of Bid Security shall be repaid by you when formal Contract Agreement and Performance Bond has been duly entered into and executed by us on acceptance of our tender.

4. We hereby confirm that we have examined the tender documents and schedules, have inspected the site and have obtained all the information which may affect this tender. We understand that no claim will be admitted by you which may arise from our pleading ignorance of the nature of works.

5. We agree to abide by this tender for the period stated in the Memorandum from the date of opening of the tenders and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

6. We undertake to carry out such alterations, additions or curtailments of the works as may from time to time be determined and ordered in writing by you in accordance with the contract.

7. Unless and until a formal Contract Agreement is prepared and executed this tender together with your written acceptance thereof and tender documents shall constitute a binding contract between us and shall be deemed for all purposes to be the Contract Agreement.

8. We understand that certain information applicable to the contract which is the subject of this tender is set for ease of reference in the Memorandum annexed hereto.

9. We understand that you are not bound to accept the lowest or any tender you may receive, and that not defray any expenses incurred by us in tendering.
Dated this………………………………………………………day of…………………………………2020……

Signature……………………………………………………………………………………………………

In the Capacity of…………………………………………………………………………………………

Duly authorized to sign tenders for and behalf of……………………………………………………

………………………………………………………………………………………………………………

(Full Address)……………………………………………………………………………………………..

Witness……………………………………………………………………………………………………

Address……………………………………………………………………………………………………

Occupation………………………………………………………………………………………………
TENDER PROFORMA (TECHNICAL)

TENDER NO-21/2020 TENDER FOR THE YEAR 2020-2021 & 2021-2022 OPENING DATE: **17-09-2020**

ANNUAL CONTRACT FOR OPERATION & MAINTENANCE AND SERVICING WORK CONTRACT FOR AIR-CONDITIONING PLANTS AND EQUIPMENTS (WITH AND WITHOUT PARTS)

**Note:** *Columns to be filled*

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<th>Country of Origin</th>
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<td>With O &amp; M Staff As Required in tender</td>
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Signature

Official Seal
TENDER PROFORMA (FINANCIAL)

TENDER NO-21/2020 TENDER FOR THE YEAR 2020-2021 & 2021-2022 OPENING DATE: **17-09-2020**

ANNUAL CONTRACT FOR OPERATION & MAINTENANCE AND SERVICING WORK CONTRACT FOR AIR-CONDITIONING PLANTS AND EQUIPMENTS (WITH AND WITHOUT PARTS).

Note: **Columns to be filled**

<table>
<thead>
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<th>Qty</th>
<th>Per month charges</th>
<th>Total Amount</th>
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</table>

Signature

Official Seal