



Patients' Aid Foundation (PAF-JPMC)

Jinnah Postgraduate Medical Center (JPMC) Karachi

**Tender for Supply, Installation & Commissioning of
Equipment & Consumables at Radiation Oncology-
Cyberknife & Tomotherapy PAF-JPMC at Jinnah
Postgraduate Medical Centre, Karachi.**

**Bidding & Contract Documents Notice Inviting Tender (NIT)
Instructions to Bidders Evolution Criteria General
Conditions of Contract Specifications
Bill of Quantities Drawings**

For The Financial Year 2025-2026

Submission Date 30th July 2026 before 5:00 pm

Tender Technical Opening Date 31st July 2026 at 11:30 am

At

**Radiation Oncology, Cyberknife & Tomotherapy Building JPMC
Karachi**

Issued By:

**Founder Member Patients' Aid Foundation & Chairman Technical Committee, Radiation Oncology-
Cyberknife & Tomotherapy PAF-JPMC Cyberknife & Tomotherapy building, Room 17, Jinnah Postgraduate
Medical Center, Rafiqui Shaheed Road, Karachi – Pakistan 75510.**

E-mail: chairman.paf@pafjpmc.org

Cell: +92-306-2727913

**Patients' Aid Foundation (PAF-JPMC)
Jinnah Postgraduate Medical Centre (JPMC), Karachi**

**Tender for Supply, Installation & Commissioning of Equipment & Consumables at Radiation Oncology-
Cyberknife & Tomotherapy PAF-JPMC at Jinnah Postgraduate Medical Centre, Karachi.**

1. The Office of the Chairman Patients' Aid Foundation & Chairman Technical Committee, Radiation Oncology- Cyberknife & Tomotherapy PAF-JPMC, Karachi invites sealed tenders as per following details during financial year 2025 – 2026. The local/International manufacturer having local agent / sole distributor with established credentials in terms of technical, financial and managerial capabilities are eligible to participate.

S.No	Tender details	Tender Fee	Tender Due date
1.	UPS 60 KVA, 80 KVA, 100 KVA, 120 KVA, 160 KVA	5,000	30 th July 2026
2.	Computers, Laptops & Tablets	2,000	30 th July 2026
3.	Scanners & Printers	2,000	30 th July 2026
4.	Physics Cable with BNC connector	2,000	30 th July 2026
5.	Survey Meter	5,000	30 th July 2026

2. Interested bidders may obtain Tender Documents from the office of the Chairman Technical Committee, Radiation Oncology PAF-JPMC, (Address: Room no 17 Cyberknife & Tomotherapy Building, Jinnah Postgraduate Medical Center, Rafiqui Shaheed Road, Karachi – Pakistan 75510) on payment of non-refundable fee in the form of Pay Order/CDR/Demand Draft in the name of “Patients' Aid Foundation” during office hours before 5:00 pm.
3. Tender documents can also be downloaded from the website of Patients Aid Foundation /JPMC.
4. Bidders are required to submit their written application for issuance of tender documents along with copy of CNIC, NTN & GST certificate.
5. Single stage / two envelopes bidding procedure shall be adopted. The envelope shall be marked as “TECHNICAL PROPOSAL” and “FINANCIAL PROPOSAL” (sealed) in bold and legible letters. The financial proposal of bids found technically non-responsive shall be returned un-opened to the respective bidders.
6. The bidder shall ensure that their tenders are complete in all respects. The bidder should submit tender document on **30th July 2026** before **05:00 pm** as per schedule at Chairman Technical Committee, Radiation Oncology PAF-JPMC, (Address: Room no 17 Cyberknife & Tomotherapy Building, Jinnah Postgraduate Medical Center, Rafiqui Shaheed Road, Karachi – Pakistan 75510). Technical proposal will be opened on the **31st of July 2026** at **11:30 am** in the Radiation Oncology- Cyberknife & Tomotherapy building, Karachi. The incomplete tenders and tenders received after the closing date and time will not be considered.

7. In case the date of opening or last date of submission is declared as public holiday by the Government or non-working day due to any reason, the next official working day shall deem to be the date of submission and opening of bids. The time and venue will remain the same.
8. Original bid security / earnest money 2% of total cost in the form of Pay Order/CDR/Demand Draft in favor of “Patients’ Aid Foundation” should be attached with the financial bid and photocopy of the same without showing the value attached with the technical bid as demanded in the bidding documents.
9. The undersigned / tenderer reserves the rights to reject any or all the tenders without assigning any reason thereof.

Founder Member Patients’ Aid Foundation & Chairman Technical Committee, Radiation Oncology Section (Cyberknife, Tomotherapy Equinox & PET-CT) PAF-JPMC, Room 17, Jinnah Postgraduate Medical Center, Rafiqui Shaheed Road, Karachi – Pakistan 75510.
E-mail: chairman.paf@pafjpmc.org, Cell: +92-306-2727913

INSTRUCTIONS TO BIDDERS (ITB)

1. INTRODUCTION

- 1.1. The Goods procured through this tender will be procured out of Grant in Aid of Rs. 980M disbursed by Government of Sindh to Radiation Oncology (Cyberknife, Tomotherapy, Equinox & PET-CT Cyclotron) Patients' Aid Foundation at Jinnah Postgraduate Medical Centre, Karachi.

2. SOURCE OF FUND

- 2.1. The Government of Sindh has given a grant in aid to PAF-JPMC during the financial year 2024-2025, to equip the Sardar Yasin Medical Complex and Rabia Rashid Soorty Building Employees ward (RRSB) of JPMC Karachi.

3. ELIGIBLE BIDDERS

- 3.1. This Invitation for Bids is open to all original Manufacturers, within Pakistan and abroad, and their Authorized Agents/Importers/Suppliers subject to the conditions that:
- 3.2. The Agents/Suppliers/Importers must possess valid sole authorization from the Manufacturer. In case of Manufacturers, they should have documentary proof to the effect that they are the original Manufacturers of the required specifications.
- 3.3. Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by any Government (Federal or Provincial), a local body or a public sector organization.
- 3.4. The bidders should have operational office(s) in Pakistan and possess financial sustainability to meet timely supply.

4. ELIGIBLE GOODS

- 4.1. In the case of Goods offered from outside the Pakistan, Certified ISO, CE, FDA and respective quality certified products as required in the bidding document shall be considered as eligible goods by the bidder;
- 4.2. Goods should be packed and transported in a material that meets international standards;
- 4.3. Goods should meet required specification in the bidding document

THE BIDDING PROCEDURE

5. SINGLE STAGE – TWO ENVELOPES BIDDING PROCEDURE

- 5.1. Single stage - two envelopes bidding procedure will be applied.
- 5.2. The bid shall comprise a single package containing two separate envelopes. Each envelope shall contain separately the technical proposal and the financial proposal;
- 5.3. The envelopes shall be marked as “TECHNICAL PROPOSAL” and “FINANCIAL PROPOSAL” in bold and legible letters to avoid confusion;
- 5.4. Initially, only the envelope marked "TECHNICAL PROPOSAL" shall be opened; for technical bid each vendor is requested to fill up the Performa of technical specification with the desired information in the last column with verifiable references form the data sheets / technical brochures. Please fill up on the same MS Word format as per desired information saying YES/NO and if needed give proper pagination, paragraph & line description for easy assessment by technical committee.
- 5.5. The envelope marked as “FINANCIAL PROPOSAL” shall be retained in the custody of the Patients’ Aid Foundation JPMC without being opened.
- 5.6. Patients’ Aid Foundation JPMC shall evaluate the technical proposal, without reference to the financial proposal and reject any proposal which does not conform to the specified requirements.
- 5.7. The financial proposal of bids shall be opened in the presence of bidders qualifying in technical evaluation at time, date and venue to be announced / communicated in advance by e-mail.
- 5.8. Financial proposal of the bids failing to qualify in the technical evaluation will be returned to the bidders unopened.
- 5.9. The bidder quoting the lowest price and qualifying as per technical evaluation criteria mentioned in the bidding document shall be declared Successful.

THE BIDDING DOCUMENTS

6. CONTENTS OF BIDDING DOCUMENTS

6.1. The Bidding Documents:

- i. In addition to the Tender Notice, the bidding documents include:
- ii. **Pagination of technical bid with complete references of compliance on respective page of the bid and Compliance Sheet in both hard copy and soft copy in USB as Ms Excel file or Ms Word.**
- iii. Instructions to Bidders (ITB);
- iv. General Conditions of Contract (GCC);
- v. Special Conditions of Contract (SCC);
- vi. Schedule of Requirements;
- vii. Technical Specifications;
- viii. Contract Form;
- ix. Bid Form;
- x. Price Schedule;
- xi. Integrity Pact;
- xii. Form of Bid Security;

6.2. In case of discrepancies between the Tender Notice and the Bidding Documents listed in 6.1 above, the Bidding Documents shall take precedence.

6.3. The bidders are expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish complete information required in the bidding documents or to submit a bid not substantially responsive to the bidding documents may result in rejection.

7. AMENDMENT OF BIDDING DOCUMENTS

7.1. At any time prior to the deadline for submission of bids, PAF-JPMC may, for any reason, whether at its own initiative or in response to any query or clarification requested by a prospective Bidder, modify the bidding documents by amendment.

7.2. All prospective bidders that have received the bidding documents will be notified the amendment(s) in writing or by email which will be binding on them.

7.3. In order to allow prospective bidders reasonable time to take the amendment(s) into account in preparing their bids, PAF-JPMC may, at its discretion, extend the deadline for submission of the bids.

PREPARATION OF BIDS

8. LANGUAGE OF BID

8.1. Preparation of Bids

The bid prepared by the bidder, as well as all correspondence and documents relating to the bid exchanged by the bidder and PAF-JPMC shall be in English. Supporting documents and printed literature furnished by the bidder may be in another language provided these are accompanied by an accurate translation of the relevant passages in English, in which case for purposes of interpretation of the Bid, the translated version shall prevail.

9. DOCUMENTS COMPRISING THE BID

9.1. The bid prepared by the Bidder shall comprise the following:

- i. Bid Form and Price Schedule (to be submitted along with financial proposal);
- ii. Documentary evidence to the effect that the Bidder is eligible to bid and is qualified to perform the Contract if its bid is accepted;
- iii. Documentary evidence to the effect that the goods to be supplied by the Bidder are eligible goods as defined in clause-3 and conform to the bidding documents; and
- iv. Photo copy of Bid Security with hidden amount.

10. BID PRICES

- 10.1. The Bidder shall indicate in the Price Schedule, the unit prices and total bid price of the goods it proposes to supply under the Contract.
- 10.2. Prices indicated on the Price Schedule shall be on CIF basis except local items.
- 10.3. Price Schedule is to be filled in very carefully, preferably typed. Any alteration/correction must be initialed.
- 10.4. The Bidder should quote the price(s) of goods according to the technical specifications as provided in the Technical Specifications. The specifications of goods inferior from the ones required by the PAF-JPMC shall straightway be rejected.
- 10.5. The Bidder is required to offer competitive price(s). All price(s) must include the project management, drawing, transportation, loading/unloading/ installation/ commissioning/ up-to satisfaction of end user.

11. BID CURRENCIES

11.1. Prices shall be quoted in respective foreign currency for goods offered.

12. DOCUMENTS ESTABLISHING GOODS' ELIGIBILITY

12.1. The Bidder shall furnish along with technical proposal, as part of its bid, documents establishing eligibility and conformity of the goods which it proposes to supply under the Contract.

12.2. Submission of documents of Goods offered as under:

- i. Original Brochure
- ii. Technical Datasheet/ specifications
- iii. ISO, CE, FDA, 510(k) or whichever certification is required iv. Customer List (Local & International) wherever applicable.

12.3. No technical proposal / bid will be considered in the absence of mandatory document(s) or sample(s) as per ITB 12.2. The offer will be rejected / ignored for further evaluation in such absence.

13. BID SECURITY

13.1. The Bidder shall furnish, as part of its financial proposal, a Bid Security (earnest money) in the amount specified in Special Conditions of Contract (SCC). Unsuccessful bidders' Bid Security will be returned soon after approval of the successful Bidder. The successful Bidder's Bid Security will be discharged upon signing of contract and furnishing the Performance Security bond, duly guaranteed by a scheduled bank.

13.2. The Bid Security is required to protect PAF-JPMC against the risk of Bidder's conduct, which would warrant the Security's forfeiture;

13.3. The Bid Security may be forfeited:

- i. If a Bidder withdraws its bid during the period of bid validity; or
- ii. In the case of a successful Bidder, if the Bidder fails:
 - a. To sign the Contract; or
 - b. To complete the supplies in accordance with the General Conditions of Contract.

14. BID VALIDITY

- 14.1. Bids shall remain valid for a period of 30th June 2026. A bid valid for a shorter period shall be treated as non-responsive
- 14.2. Patients' Aid Foundation shall ordinarily be under an obligation to process and evaluate the bids within the stipulated bid validity period. However, for any reasons to be recorded in writing, if any extension is considered necessary, all those who have submitted their bids shall be asked to extend their respective bid validity period.

SUBMISSION OF BIDS

15. SEALING AND MARKING OF BIDS

- 15.1. The envelopes shall be marked separately as "TECHNICAL PROPOSAL" and "FINANCIAL PROPOSAL" in bold and legible letters to avoid confusion. The Bidder shall seal the proposals/bids in separate envelopes and put them in a relatively bigger envelope to be sealed.
- 15.2. The inner and outer envelopes shall:
 - i. Be addressed to PAF-JPMC at the address given in the Tender Notice (Invitation of Bids); and
 - ii. Bear the Project name indicated in the [Invitation for Bids (IFB)] title and number indicated, and a statement: "DO NOT OPEN BEFORE," to be completed with the time and the date specified in the Tender Notice.
- 15.3. The inner envelopes shall also indicate the name and address of the Bidder to enable Patients' Aid Foundation to return the bid unopened in case it is declared as "non-responsive" or "late" as the case may be.
- 15.4. If the outer and the inner envelopes are not sealed and marked as required, PAF-JPMC will assume no responsibility for the bid's misplacement or premature opening.

16. DEADLINE FOR SUBMISSION OF BIDS

- 16.1. Bids must be submitted by the bidders and received by Patients' Aid Foundation at the specified address not later than the time and date specified in the Tender Notice.
- 16.2. PAF-JPMC may, at its convenience, extend this deadline for submission of bids by amending the bidding documents in which case all rights and obligations of PAF-JPMC and the Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

17. LATE BID

- 17.1. Any bid received by PAF-JPMC after the deadline for submission of bids prescribed by PAF-JPMC shall not be entertained and returned unopened to the bidder.

18. WITHDRAWAL OF BIDS

- 18.1. The Bidder may after its submission withdraw prior to the expiry of the deadline prescribed for submission of bids.

OPENING AND EVALUATION OF BIDS

19. OPENING OF BIDS BY PATIENTS' AID FOUNDATION

- 19.1. The Procuring Agency will initially open only the envelopes marked "TECHNICAL PROPOSAL" in the presence of Bidders' or their representatives who choose to be present at the time of bid opening on the date, time and place specified in the Tender Notice. The bidders or their representatives who are present shall sign the Attendance Sheet evidencing their attendance. The envelope marked as "FINANCIAL PROPOSAL" shall be retained in the custody of Procuring Agency without being opened till the completion of the evaluation process.
- 19.2. The bidders' names, item(s) for which they quoted their rate(s) and such other details as PAF-JPMC may consider appropriate, will be announced at the time of opening of technical proposals. However, at the time of opening of Financial Proposals on a pre-indicated date, time and venue, the bid prices, discounts (if any), and the presence or absence of requisite Bid Security and such other details as Patients' Aid Foundation, may consider appropriate, will be announced.
- 19.3. Any financial bid found without the prescribed bid security (earnest money) shall be straightaway rejected even if it qualified in the process of technical evaluation.
- 19.4. PAF-JPMC will prepare minutes of the technical and financial bids opening meetings and will get these minutes signed by the Chairman and members of the Supervisory Committee constituted by Chairman PAF-JPMC.

20. CLARIFICATION OF BIDS

- 20.1. During the process of evaluation of the bids, PAF-JPMC may ask a Bidder for any clarifications of its bid. The request for such clarifications and the response shall be in writing. However, no change in the quoted price or substance of the bid shall be sought, offered, or permitted.

21. PRELIMINARY EXAMINATION

- 21.1. PAF-JPMC will examine the bids to determine whether they are complete; whether any computational errors have been made; whether the required sureties have been furnished; whether the documents have been properly signed and linked, and whether the bids are generally in order.
- 21.2. Arithmetical errors in a financial bid will be rectified in the following manner:
- i. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected.
 - ii. If there is a discrepancy between words and figures, the amount in words will prevail.
 - iii. If the Bidder/Supplier does not accept the correction of the errors, its bid will be rejected.
- 21.3. The Project & Procurement Committee may waive any minor infirmity, non-conformity, or discrepancy in a bid if in their view, it does not constitute some material deviation, provided that such waiver does not prejudice or affect the relative ranking of any Bidder.
- 21.4. If a bid is found substantially non-responsive, it will be rejected by PAF-JPMC. It cannot subsequently be made responsive by the Bidder by correction of the nonconformity / discrepancy.

22. EVALUATION & COMPARISON OF BIDS

- 22.1. PAF-JPMC will evaluate and compare the bids, which have been determined to be substantially responsive.
- 22.2. The technical proposals/bids will be evaluated on the basis of Technical Specification / rule, previous supply experience, financial soundness working period / backup service with part-without part and such other details as PAF-JPMC may consider appropriate for making a sound judgment. However, the financial proposal will be evaluated on the basis of price and bid Security, being major factor, without ignoring the other relevant conditions as well.

23. EVALUATION CRITERIA

23.1. Technical Proposals

DOCUMENTS CHECKLIST

Please review the following list of **MANDATORY DOCUMENTS** to be enclosed with the Technical Proposal.

A. Mandatory Documents:

S. No	Document Description	Yes/No	Page No
1.	Tender Purchase Receipt (Original) / Tender Fee Pay Order		
2.	Bid Security [Copy with value hidden in Technical Proposal; Original in Financial		
3.	Bidding Documents issued by Patients' Aid Foundation [Duly filled, Signed & Stamped by Bidder]		
4.	Item-wise/ Feature – wise product compliance/ deviation sheet/ statement on Bidder's Letterhead. [Duly filled, Signed & Stamped by Bidder]		
5.	Technical Proposal on bidder's letterhead [Duly filled, Signed & Stamped by Bidder]		
6.	Undertaking (as per attached sample)		
7.	Certificates (as per attached sample)		
8.	Income Tax & GST Registration Certificate with Active tax payer status on FBR.		
9.	Valid Professional Tax Certificate (Sindh)		
10.	DRAP Registration/License (for medical equipment/ devices only)		
11.	Income Tax Return (last 3 years)		
12.	Audited Financial Statement (last year), bidders' annual average turnover must be Rs.10 million or more.		
13.	Manufacturer's Authorization to Bidder.		
14.	Bidder must have at least completed two assignments of similar nature and size in last 03 years. Furthermore, attach satisfactory completion certificate.		
15.	Brochure or Catalogue (Original) [Submission in form of photocopy, photographs or word document is not acceptable]		
16.	Technical Data Sheet		
17.	Quality Certificates such as ISO, CE, FDA and Origin etc. (as per specs)		

*****: FOR ITEMS 2 & 3 MANDATORY DOCUMENTS SERIAL NO 9-16 SHALL BE EXCLUDED.**

B. Mandatory Documents:

S. No	Document Description	Yes/No	Page No
18.	Pagination of technical bid with complete references of compliance on respective page of the bid and Compliance Sheet in both hard copy and soft copy in USB as Ms Excel file or Ms Word.	-	-
19.	Schedule of Requirements		
20.	Technical Specifications		
21.	Contract Form		
22.	Bid Form		
23.	Price Schedule		
24.	Integrity Pact		
25.	Form of Bid Security		

Financial Proposals:

- a. After technical evaluation is completed, PAF-JPMC shall inform the disqualified bidders that their bid has been found non-responsive and that their financial proposal will be returned unopened after completing the process PAF-JPMC shall simultaneously inform in writing the qualified bidders date, time and place for opening the financial proposals. Bidder's attendance at the opening of financial proposal is optional.
- b. Financial proposals shall be opened publicly in the presence of the bidders or their representatives who choose to be present. Total prices quoted by each the financial proposal shall also be announced and recorded.

24. CONTACTING PAF-JPMC

- 24.1. No bidder shall contact PAF-JPMC on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded. If any bidder wishes to bring additional information to the notice of PAF-JPMC, it may do so in writing.
- 24.2. Any direct or indirect effort by a bidding firm to influence PAF-JPMC during the process of selection of a bidder or award of contract may besides rejection of its bid result into its disqualification from participation in PAF-JPMC future tenders.

25. REJECTION OF BIDS

- 25.1. Notwithstanding anything stated here-before after PAF-JPMC may reject any or all bids at any time prior to the acceptance of a bid. PAF-JPMC may upon request communicate to a bidder (subjected to decision of procurement committee), regarding grounds for its rejection, but shall not be under obligation to justify those grounds.

26. RE-BIDDING

- 26.1. If PAF-JPMC has rejected all bids, it may move for a re-bidding or may seek any alternative method of procurement.

27. ANNOUNCEMENT OF EVALUATION REPORT

- 27.1. PAF-JPMC will announce the Evaluation Report and the resultant acceptance or rejection of bids at least 3 days prior to the award of procurement contract.

AWARD OF CONTRACT

28. ACCEPTANCE OF BID AND AWARD CRITERIA

- 28.1. The bidder with lowest evaluated bid under clause 22, if not in conflict with any other law, rules, regulations or policy of the Government, will be awarded the contract within the original or extended period of bid validity.

29. PROCURING AGENCY'S RIGHT TO VARY QUANTITIES

- 29.1. PAF-JPMC reserves the right to increase or decrease the quantity of stores originally specified in the Price Schedule and Schedule of Requirements without any change in unit price or other terms and conditions.

30. LIMITATIONS ON NEGOTIATIONS

- 30.1. Negotiations only for delivery schedule or completion schedules will be conducted.
- 30.2. Negotiations will not be used to change substantially:
- i. The technical quality or details of the requirement, including the tasks or responsibilities of the bidder or the performance of the goods;
 - ii. The terms and conditions of the Contract and;
 - iii. Anything affecting the crucial or deciding factors in the evaluation of the proposals / tenders and / or selection of successful bidder.

31. NOTIFICATION OF AWARD

- 31.1. Prior to the expiry of the original or extended period of bid validity, the successful bidder will be informed in writing of acceptance of its bid by PAF-JPMC.

32. SIGNING OF CONTRACT

- 32.1. While conveying acceptance of bid to the successful bidder, PAF-JPMC will send him / her Contract Form provided in the bidding documents, incorporating all points of agreement between the Parties.
- 32.2. Five days after the official announcement of the award, both the successful Bidder and PAF-JPMC will sign and date the Contract on legal stamp paper valuing 0.35% of the value of

contract (cost shall be borne by the bidder). In case the successful Bidder, after completion of all codal formalities, shows inability to sign the Contract, its Bid Security / Earnest Money shall be forfeited. The firm may also be blacklisted from taking part in any future bidding of Procuring Agency for a period up to five years. In such a situation, PAF-JPMC may make the award to the next lowest evaluated bidder or move for re-tender.

33. PERFORMANCE GUARANTEE SECURITY

- 33.1. One day before the date of signing of the Contract, the successful Bidder shall furnish.
- 33.2. 5% Performance Guarantee/Security in line with the Performance Guarantee/Security Form provided with the bidding documents. Upon submission of Performance Guarantee the Bid Security (Earnest Money) will be returned to the Bidder.
- 33.3. Failure of the successful Bidder to comply with any of the requirements specified in this document shall be considered as sufficient grounds for the annulment of the award and forfeiture of the Bid Security, in which event PAF-JPMC may make the award to the next lowest evaluated Bidder at the risk and cost of the former.

34. CORRUPT OR FRAUDULENT PRACTICES

- 34.1. The Procuring Agency and the Bidders / Manufacturers / Suppliers / Contractors are expected to observe the highest standard of ethics during the procurement and execution of the Contract. In pursuance of this policy, the relevant terms / phrases as may apply are defined below:
 - i. "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of Members in the procurement process or in Contract execution; and
 - ii. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a Contract to the detriment of PAF-JPMC, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive PAF-JPMC of the benefits of free and open competition;
- 34.2. PAF-JPMC will take all possible administrative / legal measures if it is found that the Bidder recommended for award was / is engaged in corrupt or fraudulent practice(s) before or after signing of the contract resulting into the conviction of the proprietor under criminal case besides blacklisting of the firm either indefinitely or for such period of time as may be determined by PAF-JPMC.
- 34.3. Will declare a firm ineligible, either indefinitely or for a stated period of time, for the award of a Contract if it, at any time, determines that the firm has engaged in corrupt or fraudulent practices in competing for or in executing a Contract.

General Conditions of Contract (GCC)

1. DEFINITIONS

1.1. In this Contract, the following terms shall be interpreted as indicated:

- a. "The Contract" means the agreement entered into between PAF-JPMC and the Supplier, as recorded in the Contract Form signed by the Parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- b. "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its Contractual obligations.
- c. "The Goods" means Machinery/Equipment and Accessories which the Supplier is required to supply to Patients' Aid Foundation under the Contract.
- d. "The Services" means those services ancillary to the supply of the above goods, such as project management, drawing, and packing, transportation of goods up to the desired destinations and other such obligations of the Supplier covered under the Contract.
- e. "GCC" mean the General Conditions of Contract contained in this section. f) "SCC" means the Special Conditions of Contract.

" PAF-JPMC" means the Founder Member Patients' Aid Foundation & Chairman Technical Committee, Radiation Oncology Section (Cyberknife, Tomotherapy Equinox & PET-CT) PAF-JPMC, Karachi. Cyberknife & Tomotherapy building, Room 17, Jinnah Postgraduate Medical Center, Rafiqui Shaheed Road, Karachi – Pakistan 75510 E-mail: chairman.paf@pafjpmc.org, Cell: +92-306-2727913

- f. "The Supplier" means the individual or firm supplying the goods under this Contract.
- i. "Day" means official working day excluding national holidays.

2. APPLICATION

- 2.1. These General Conditions shall apply to the extent that they are not inconsistent with provisions of other parts of the Contract.

3. STANDARDS

- 3.1. The goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications.

4. USE OF CONTRACT DOCUMENTS AND INFORMATION

- 4.1. The Supplier shall not without the Procuring Agency's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern; sample, or information furnished by or on behalf of PAF-JPMC in connection therewith, to any person other than a person employed by the Supplier in the performance of the Contract. Disclosure to such employed person shall be made in confidence and shall

extend only, as far as may be' necessary, to such performance and not further or otherwise.

- 4.2. Any document, other than the Contract itself, shall remain the property of PAF-JPMC and shall be returned (all copies) on completion of the Supplier's performance under the Contract.
- 4.3. The Supplier shall permit PAF-JPMC to inspect the Supplier's accounts and records relating to the performance of the Supplies.

5. PATENT RIGHTS

- 5.1. The Supplier shall indemnify PAF-JPMC against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof in the country.

6. ENSURING STORAGE ARRANGEMENTS

- 6.1. To ensure storage arrangements for the intended supplies, the Supplier shall inform PAF-JPMC at least four weeks prior to the arrival of the consignments at its store/warehouse. However, in case no space is available at its store/warehouse of PAF-JPMC at the time of supply. Holding of equipment in a safe container at parking area of Surgical Complex will be responsibility of the Vendor.

7. INSPECTIONS

- 7.1. PAF-JPMC or its representative shall have the right to inspect and/or test the goods to confirm their conformity to the Contract specifications.
- 7.2. PAF-JPMC reserves the right to have third party inspection, test and, where necessary, reject the goods upon arrival at Procuring Agency's destinations.

8. DELIVERY AND DOCUMENTS

- 8.1. The Supplier shall in accordance with the terms specified in the Schedule of Requirements make delivery of the goods. Details of documents to be furnished by the Supplier are specified in SCC.

9. TRANSPORTATION

- 9.1. The Supplier shall arrange such transportation of the goods at respective at Radiation Oncology section whatever safe mode is needed to prevent them from damage or deterioration during transit to their final destination as indicated in the Schedule of Requirements.

10. INCIDENTAL SERVICES

- 10.1. The Supplier will be required to provide to the Procuring Agency incidental services the cost of which should be included in the total bid price.

11. WARRANTY

11.1. As per warranty terms mentioned in respective tender.

- 11.2. During the period of warranty, the Contractor shall remedy, at his / her expense, all defects in design, materials, and workmanship that may develop or are revealed under normal use of the goods.
- 11.3. The contractor shall provide guarantee for spare parts for at least 10 years (where applicable).
- 11.4. PAF-JPMC shall promptly notify the Supplier in writing of any claims arising out of this warranty.

12. PAYMENT

- 12.1. The method and conditions of payment to be made to the Supplier under this Contract are specified in SCC.

13. ASSIGNMENT

- 13.1. The Supplier shall not assign, in whole or in part, its obligations to perform to another party under this Contract, except with PAF-JPMC prior written consent.

14. DELAYS IN THE SUPPLIER'S PERFORMANCE

- 14.1. Delivery of the goods shall be made by the Supplier in accordance with the time schedule prescribed by PAF-JPMC in the Schedule of Requirements.
- 14.2. If at any time in the course of performance of the Contract, the Supplier encounters anything impeding timely delivery of the goods, he shall promptly notify PAF-JPMC in writing of the causes of delay and its likely duration. As soon as practicable, after receipt of the Supplier's notice, PAF-JPMC shall evaluate the situation and may, depending on merits of the situation, extend the Supplier's time for performance, with or without liquidated damages, in which case the extension shall be ratified by the Parties by a supplementary Contract to be treated as an addendum to the original contract.
- 14.3. Any undue delay by the Supplier in the performance of its delivery obligations shall render it liable to the imposition of liquidated damages.

15. TERMINATION FOR DEFAULT

- 15.1. PAF-JPMC may, without prejudice to any other remedy for breach of Contract, by a written notice of default sent to the Supplier, terminate this Contract in whole or in part if:
- a. The Supplier fails to deliver any or all installments of the goods within the period(s) specified in the Contract, or within any extension thereof granted by PAF-JPMC.
 - b. The Supplier fails to perform any other obligation(s) under the Contract to the satisfaction of PAF-JPMC; and
 - c. The Supplier, in the judgment of PAF-JPMC, has engaged itself in corrupt or fraudulent practices before or after executing the Contract.

16. FORCE MAJEURE

- 16.1. The Supplier shall not be liable for forfeiture of its Performance Guaranty/ Bid Security, or termination / blacklisting for default if and to the extent that this delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure. For the purposes of this Clause Force Majeure means an act of God or an event beyond the control of the Supplier and not involving the Supplier's fault or negligence directly or indirectly purporting to mal-planning, mismanagement and /or lack of foresight to handle the situation. Such events may include but are not restricted to acts PAF-JPMC in its sovereign capacity, wars or revolutions, fires, floods, earthquakes, strikes, epidemics, quarantine restrictions and freight embargoes. If a Force Majeure situation arises, the Supplier shall promptly notify PAF-JPMC in writing with sufficient and valid evidence of such condition and the cause thereof. The Committee, constituted for redressing grievances, will examine the pros and cons of the case and all reasonable alternative means for completion of purchase order under the Contract and will submit its recommendations to the competent authority. However, unless otherwise directed by PAF-JPMC in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical and shall seek reasonable' alternative means for performance not prevented by the Force Majeure event.

17. TERMINATION FOR INSOLVENCY

- 17.1. PAF-JPMC may at any time terminate the Contract by giving written notice of one month time to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In that event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right or remedy which has accrued or will accrue thereafter to the Parties.

18. ARBITRATION AND RESOLUTION OF DISPUTES

- 18.1. PAF-JPMC and the Supplier shall make every effort to resolve amicably by direct informal negotiations any disagreement or dispute arising between them under or in connection with the Contract.
- 18.2. If, after thirty (30) days from the commencement of such informal negotiations, the PAF-JPMC and the Supplier have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred to the Arbitrator for resolution through arbitration.
- 18.3. In case of any dispute concerning the interpretation and/or application of this Contract is to be settled through arbitration, the National Centre for Dispute Resolution and an Arbitrator assigned by the Centre &/or his nominee shall act as a sole arbitrator. The decisions taken and/or award given by the sole arbitrator shall be final and binding on the Parties unless appealed in the High Court of Sindh.

19. GOVERNING LANGUAGE

- 19.1. The Contract shall be written in English language. All correspondence and other documents pertaining to the Contract, which are exchanged by the Parties, shall be written in English.

20. APPLICABLE LAW

- 20.1. This Contract shall be governed by the laws of Pakistan and the courts of Pakistan shall have exclusive jurisdiction.

Special Conditions of Contract (SCC)

21. DEFINITIONS (GCC CLAUSE 1)

GCC 1.1 (g) Founder Member Patients' Aid Foundation & Chairman Technical Committee, Radiation Oncology Section (Cyberknife, Tomotherapy Equinox & PET-CT) PAF-JPMC, Karachi. Cyberknife & Tomotherapy building, Room 17, Jinnah Postgraduate Medical Center, Rafiqui Shaheed Road, Karachi – Pakistan 75510 E-mail: chairman.paf@pafjpmc.org, Cell: +92-306-2727913

GCC 1.1 (h) The Supplier is: _____

(Name and address of the successful bidder)

22. BID SECURITY (ITB CLAUSE 12)

ITB Clause 12.1. The Bidder shall furnish, as part of its financial proposal/bid, refundable Valid bid Security/Earnest Money in Pak Rupees @ 2% fixed In the shape of Bank Draft / Pay Order / Call Deposit / Bank Guarantee in the name of the Chairman Patient' Aid Foundation. The financial bid found deficient of the Bid Security will be rejected. No personal cheque in lieu thereof will be acceptable at any cost. The previous Bid Security, if any, will not be considered or carried forward. However, the Bid Security of the successful Bidder will be returned upon submission of Performance Guarantee equal to 5% of the Contract amount that will remain with the Founder Member Patients' Aid Foundation & Chairman Technical Committee, Radiation Oncology Section (Cyberknife, Tomotherapy Equinox & PET-CT) PAF-JPMC, Cyberknife & Tomotherapy building, Room No 17, Jinnah Postgraduate Medical Center, Rafiqui Shaheed Road, Karachi – Pakistan till satisfactory completion of the Contract period. In case of unsuccessful bidders, the Bid Security will be returned as soon as possible.

23. PERFORMANCE GUARANTEE/SECL, LRITY (ITB CLAUSE 32)

ITB Clause 32.1. After signing of Contract, the successful Bidder shall furnish the Performance Guarantee/Security on legal stamp paper equivalent to 5% of the total Contract amount from any of the scheduled banks. The Performance Guarantee/Security Form is provided in the bidding documents. Upon submission of Performance Guarantee the Bid Security would be returned to the Bidder.

24. INSPECTIONS AND TESTS (GCC CLAUSE 7)

GCC 7.1 & 7.2. The goods received in the premises of JPMC from the Supplier will be thoroughly inspected and examine by a committee to make sure that the goods received conform to the specifications laid down in the tender documents and which have been approved by the Technical Committee for procurement. The Technical Committee reserve the right for third party inspection for the quality of any equipment. Any deficiency pointed out by the Committee shall have to be rectified by the Supplier free of cost.

25. DELIVERY AND DOCUMENTS (GCC CLAUSE 8)

GCC Clause 8.1. For Goods from outside PAF-JPMC country:

The Bidder shall provide the following documents at the time of delivery of goods to the Store / Warehouse of the PAF-JPMC, for verification duly completed in all respects:

Manufacturer's detailed packing list.

26. WARRANTY (GCC CLAUSE 11)

26.1. GCC 12.1. As per warranty terms mentioned in respective tender.

GCC 12.2. PAF-JPMC shall promptly notify the Bidder in writing of any claims arising out of this warranty.

27. PAYMENT (GCC CLAUSE 12)

GCC 13.1. The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:

- a. Payment shall be made through letter of credit at sight for the purchase order based on CPT/CFR basis
- b. Payment shall be made after delivery of goods for the purchase order based on DDP basis
- c. Payment on local goods shall be made in PKR after the delivery of goods.

28. PENALTIES/ LIQUIDATED DAMAGES (GCC CLAUSE 14)

GCC 14.1. In case deliveries are not completed within the time frame specified in the schedule of requirements, a Show Cause Notice will be served on the Supplier which will be following by cancellation of the Contract to the extent of non- delivered portion of installments. No supplies will be accepted and the amount of Performance Guarantee / Security to the extent of non-delivered portion of supplies of relevant installments will be forfeited. If the firm fails to supply the whole installments, the entire amount of Performance Guarantee/Security will be forfeited to the PAF-JPMC Account and the firm will be blacklisted at least for two years for future participation in bids:

29. ARBITRATION AND RESOLUTION OF DISPUTES (GCC CLAUSE 18)

GCC 18.3. Dispute resolution mechanism to be applied shall be as follows: In case of any dispute concerning the interpretation and/or application of the Contract, it shall be settled through arbitration. The National Centre for Dispute Resolution & their Arbitrator assigned there-in &/or his nominee shall act as sole arbitrator. The decisions taken and/or award given by the arbitrator shall be final and binding on the Parties unless appealed in the High Court of Sindh at Karachi

30. GOVERNING LANGUAGE (GCC CLAUSE 19)

GCC 19.1. The language of this Contract shall be English.

31. APPLICABLE LAWS (GCC CLAUSE 20)

GCC 20.1. The Contract shall be governed by the Laws of Pakistan and the Courts of Pakistan shall have exclusive jurisdiction.

32. TRAININGS

Vendors should provide international service and Application (if applicable) training to biomedical Engineer for smooth and proper working of equipment for long time of machinery and local trainings for end user for satisfactory operation of equipment.

33. NOTICES

Procuring Agency's address for notice purposes:

Founder Member Patients' Aid Foundation & Chairman Technical Committee, Radiation Oncology Section (Cyberknife, Tomotherapy Equinox & PET-CT) PAF-JPMC, Karachi. Cyberknife & Tomotherapy building, Room 17, Jinnah Postgraduate Medical Center, Rafiqui Shaheed Road, Karachi – Pakistan 75510. E-mail: chairman.paf@pafjpmc.org, Cell: +92-306-2727913

Supplier's address for notice purposes	
Bidder:	
Contact Person & Designation:	
Phone:	
Fax:	
Mobile:	
Email:	

Schedule of Requirement (s) of enlisted items

**Tender for Supply, Installation & Commissioning of Equipment & consumables at Radiation Oncology-
Cyberknife & Tomotherapy PAF-JPMC at Jinnah Postgraduate Medical Centre, Karachi.**

Item No.	Name of Item	Qty	Model	Brand	Country of Origin	Delivery
1.	UPS	As per Specifications				
2.	Computers & Laptops	As per Specifications				
3.	Scanners & Printers	As per Specifications				
4.	Physics Cables with BNC Connector	As per Specifications				
5.	Survey Meter	As per Specifications				

Bidder Authorized Signature:	
Bidder Name:	
Contact Person:	
Contact No:	

Bid Form

Date

:

To: [Name and address of Procuring

Agency] Dear Sir,

Having examined the Bidding Documents, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply and deliver the goods specified in the said Bidding Documents for the sum of [Total Bid Amount], [Bid Amount in words] or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this bid.

We undertake, if our bid is accepted, to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements.

If our bid is accepted, we shall obtain an unconditional guarantee of a bank in the sum of 5% of the Contract Price for the due performance of the Contract, in the form prescribed by Patients' Aid Foundation- Jinnah Postgraduate medical Centre (PAF-JPMC).

We agree to the validity of this bid till 30th June 2026 from the date fixed for financial bid opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal Contract is prepared and executed, this bid, together with the written acceptance thereof and notification of award, by PAF-JPMC, shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive. Dated

this _____ day of _____ 2026.

Signature

(In the capacity of)

Duly authorized to sign bid for and on behalf of

Price Schedule

Tender for Supply, Installation & Commissioning of Equipment & consumables at Radiation Oncology- Cyberknife & Tomotherapy PAF-JPMC at Jinnah Postgraduate Medical Centre, Karachi.

Item No.	Name of Item	Qty	Model	Brand	Country of Origin	Delivery
1.	UPS	As per Specifications				
2.	Computers & Laptops	As per Specifications				
3.	Scanners & Printers	As per Specification				
4.	Physics Cables with BNC Connector	As per Specification				
5.	Survey Meter	As per Specification				

Bidder Authorized Signature:	
Bidder Name:	
Contact Person:	
Contact No:	

Undertaking

WHEREAS [Bidder Name] hereby undertake against the Tender Enquiry No.____ to abide by the following clauses.

- a. Whether our tender accepted for total, partial or enhanced quantity for all or any single item. I/We agreed to supply and accept the said item(s) at the rates for the supply of contracted quantity within the stipulated period shown in the contract.
- b. If placed order, Equipment/Machinery to be supplied will be original, brand-new product / latest model and none of the part is refurbished, replace or old.
- c. We understand and confirm the refund of cost difference if the same goods is/was supplied at lower rates to any other Govt. /Semi Govt. institution in the province in the same fiscal year.
- d. If any of the information submitted in accordance to this tender Enquiry found incorrect, our contract may be cancelled at any stage on our cost and risk.

[Signature for and on behalf of Bidder]

[Date]

Note: This undertaking should be on a stamp paper of Rs. 100/- arranged by the Bidder. It should be enclosed inside the Technical Proposal by the Bidder.

[SAMPLE FORM: B]

Certificate

To

[Name & Address of Patients' Aid
Foundation- Jinnah Postgraduate medical
Centre (PAF-JPMC).

WHEREAS [Bidder Name] hereby certify against the Tender Enquiry No. abide by the following clauses.

- a) We guarantee to supply the stores exactly in accordance with the requirement specified in the tender documents.
- b) We guarantee **letter** that the supplied item(s) is original / brand new product.
- c) Our firm is not black listed in any **Government** Department.

Authorized Sign & Stamp

[Bidder Name]

Note: This certificate should be on the letterhead of the Bidder and should be signed by a person competent and having the power of attorney to bind the Bidder. It should be enclosed inside the Technical Proposal by the Bidder.

Contract

THIS AGREEMENT made the ____ day of _____ 20____ between [name of Procuring Agency] of [country of Procuring agency] (hereinafter called “Patients’ Aid Foundation- Jinnah Postgraduate medical Centre (PAF-JPMC)”) of the one part and [name of Supplier] of [city and country of Supplier] (hereinafter called “the Supplier”) of the other part:

WHEREAS PAF-JPMC invited bids for certain goods and ancillary services, viz., [brief description of goods and services] and has accepted a bid by the Supplier for the supply of those goods and services in the sum of [contract price in words and figures]

(hereinafter called “the Contract Price”) as follows.

S. No.	Item Description	Model	Brand	Qty	Unit Price	Total Price
1	2	3	4	5	6	7

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall be deemed to form and be read and construed as part of this

Agreement, viz.:

- a. The Bid Form and the Price Schedule submitted by the Bidder;
 - b. The Schedule of Requirements;
 - c. The Technical Specifications;
 - d. The General Conditions of Contract;
 - e. The Special Conditions of Contract; and
 - f. Patients’ Aid Foundation Notification of Award.
3. In consideration of the payments to be made by PAF-JPMC to the Supplier as hereinafter mentioned, the Supplier hereby covenants with PAF-JPMC to provide the goods and services and to remedy defects therein in conformity in all respects with the provisions of the Contract.

4. PAF-JPMC hereby covenants to pay the Supplier in consideration of the provision of the goods and services and the remedying of defects therein; the Contract Price or such other sum as may become payable under the provisions of the contract at the times and in the manner prescribed by the contract.

IN WITNESS where of the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

Patients' Aid Foundation		Supplier	
Authorized Signature & Official Stamp		Authorized Signature & Official Stamp	
Patients' Aid Foundation		Bidder Name	
Address		Address	
Contact No		Contact No	
Witness		Witness	
Name, Sign & CNIC No		Name, Sign & CNIC No	

[SAMPLE FORM: D]

Performance Guarantee/Security Form

To:

[Name & Address of Patients' Aid
Foundation- Jinnah Postgraduate Medical
Centre (PAF-JPMC)]

Whereas **[Name of Bidder]** (hereinafter called "the Bidder") has undertaken, in pursuance of Contract

No. **[Number]** dated **[date]** to supply **[description of goods]** (hereinafter called "the Contract").

And whereas it has been stipulated in the said Contract that the Bidder shall furnish to Patients' Aid Foundation with a Bank Guarantee by a scheduled bank for the sum of 5% of the total Contract amount as Security for compliance with the Bidder's performance obligations in accordance with the Contract.

And whereas we have agreed to provide a Guarantee: for the said Bidder

Therefore, we hereby unconditionally and irrevocably guarantee, on behalf of the Bidder, up to a total of **[Amount of the Guarantee in Words and Figures]** and we undertake to pay you, upon your first written demand declaring the Bidder to be in default under the Contract and without requiring Patients' Aid Foundation to initiate action against the Bidder and without cavil or argument any sum or sums within the limits of **[Amount of Guarantee]** as aforesaid. The amount stated in the demand made under this guarantee shall be conclusive proof of the amount payable by the Guarantor under this guarantee.

The obligations of the Guarantor under this guarantee shall be valid for one year after the completion of delivery of supplies by the Bidder to PAF-JPMC of the full quantity of the goods for which this Guarantee is being given, and until all and any obligations and sums due have been paid in full.

[Signature and Seal of the Guarantors /

Bank] Address
Date

Integrity Pact

DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC PAYABLE BY THE SUPPLIERS/CONTRACTORS/CONSULTANTS.

Contract Number: _____

Dated: _____

Contract Value: _____

Contract Title: _____

[Name of Supplier/Contractor/Consultant] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Sindh (GoS) or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GoS) through any corrupt business practice.

Without limiting the generality of the foregoing, [Name of Supplier/Contractor/Consultant] represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit, in whatsoever form, from Procuring Agency (PA), (PAF-JPMC) except that which has been expressly declared pursuant hereto.

[Name of Supplier/Contractor/Consultant] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with PA and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

[Name of Supplier/Contractor/Consultant] accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other right and remedies available to PA under any law, contract or other instrument, be voidable at the option of PA.

Notwithstanding any rights and remedies exercised by PA in this regard, [Name of Supplier/Contractor/Consultant] agrees to indemnify PA for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to PA in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by [Name of Supplier/Contractor/Consultant] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit, in whatsoever form, from PA.

[Procuring Agency]

[Supplier/Contractor/Consultant]

FORM OF BID SECURITY

(Letter by the Guarantor to the Employer)

Name of Guarantor (Bank) with Address:

Name of Principal (Bidder) with Address:

Penal Sum of Security: PKR _____ /-(_____)

BID Reference No.: DATE OF BID:

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the Bid and at the request of the said Principal, we the Guarantor above-named are held and firmly bound unto the **PATIENTS' AID FOUNDATION** (hereinafter called the "Employer") in the sum stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted the accompanying Bid numbered and dated as above for _____ (particular of bid) to the said Employer; and

WHEREAS, the Employer has required as a condition for considering the said Bid that the Principal furnishes a Bid Security in the above said sum to the Employer, conditioned as under:

(1) that the Bid Security shall remain valid for a period 28 days beyond the period of validity of the Bid; till

(_____).

(2) that in the event of;

- (a) the Principal withdraws his Bid during the period of validity of Bid, or
- (b) the Principal does not accept the correction of his Bid Price, pursuant to Sub-Clause 21.2 of Instructions to Bidders, or
- (c) failure of the successful bidder to
 - (i) furnish the required Performance Security, in accordance with Clause 33 of Instructions to Bidders, or
 - (ii) sign the proposed Contract Agreement, in accordance with Clause 32 of Instructions to Bidders, then the entire sum be paid immediately to the said Employer as liquidated damages and not as penalty for the successful bidder's failure to perform.

NOW THEREFORE, if the successful bidder shall, within the period specified therefore, on the prescribed form presented to him for signature enter into a formal Contract Agreement with the said Employer in accordance with his Bid as accepted and furnish within twenty-eight (28) days of his being requested to do so, a Performance Security with good and sufficient surety, as may be required, upon the form prescribed by the said Employer for the faithful performance and proper fulfillment of the said Contract or in the event of non-withdrawal of the said Bid within the time specified for its validity then this obligation shall be void and of no effect, but otherwise to remain in full force and effect.

PROVIDED THAT the Guarantor shall forthwith pay to the Employer the said sum stated above upon first written demand of the Employer without cavil or argument and without requiring the Employer to prove or to show grounds or reasons for such demand notice of which shall be sent by the Employer by registered post duly addressed to the Guarantor at its address given above.

PROVIDED ALSO THAT the Employer shall be the sole and final judge for deciding whether the Principal has duly performed his obligations to sign the Contract Agreement and to furnish the requisite Performance Security within the time stated above, or has defaulted in fulfilling said requirements and the Guarantor shall pay without objection the sum stated above upon first written demand from the Employer forthwith and without any reference to the Principal or any other person.

IN WITNESS WHEREOF, the above bounden Guarantor has executed the instrument under its seal on the date indicated above, the name and seal of the Guarantor being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

Operation Manager Branch Manager

AGM / Area Manager

WITNESS:

1. _____
Name _____
C.N.I.C. _____

2. _____
Name _____
C.N.I.C. _____

Note

1. All the above-mentioned instructions, terms and conditions in this bidding document must be read carefully for compliance; else the offer will be ignored.
2. In case of discrepancy between the unit price and total, the unit price shall prevail
3. Institute reserves the right to ask and verify any document from the participants related to Manufacturer / Importer of item, to assess the quality.
4. All the Bid documents should be submitted page wise, any missing of papers will not be responsible of procurement authority
5. The quantity of items will be increased or decreased subject to the release of funds
6. Shortfall of any document given under evaluation criteria shall render the Bidding firm ineligible for competition

Founder Member Patients' Aid Foundation & Chairman Technical Committee, Radiation Oncology Section (Cyberknife, Tomotherapy Equinox & PET-CT) PAF-JPMC, Karachi. Cyberknife & Tomotherapy building, Room 17, Jinnah Postgraduate Medical Center, Rafiqui Shaheed Road, Karachi – Pakistan 75510 E-mail: chairman.paf@pafjpmc.org, Cell: +92-306-2727913.

Technical Specifications

Item No: 01		UPS
a. UPS 3 KVA		
1.	Model	UPS
2.	Capacity (kVA)	3
3.	Capacity (kW)	3
4.	Phase	Single Phase
5.	Architecture	Online Double Conversion
6.	Redundancy	Not Required
7.	Input Voltage (Vac)	120 -280 Vac
8.	Input Power Factor	≥ 0.99
9.	Input THDi	$\leq 2\%$ (Resistive load), $\leq 4\%$ (Non-linear load)
10.	Input Frequency (Hz)	45-65
11.	Output Voltage (Vac)	220 Vac $\pm 5\%$
12.	Output Frequency (Hz)	50 Hz $\pm 10\%$ (Auto Sensing)
13.	Output voltage Stabilization accuracy	$\leq 1\%$
14.	Efficiency (%)	Up to 99% in ECO mode, Up to 99.5% in iECO mode
15.	Battery Voltage VRLA	48 VDC
16.	Transfer Time	0 ms
17.	Bypass Mode	Required
18.	Overload Capacity	110% for 10 min
19.	Operating Temp	-5°C~55°C
20.	Operating Relative Humidity	$\leq 95\%$, non-condensation
21.	Mandatory	Online Monitoring via SNMP or Wifi or else Mandatory Cloud-Based Monitoring: UPS should be equipped with a secure cloud-based monitoring platform that provides real-time remote monitoring, comprehensive event and alarm logging, historical data recording, and continuous health monitoring and associated battery system. System shall enable to monitor operational status, receive instant notifications of faults or critical events

b. UPS 5 KVA		
1.	Model	UPS
2.	Capacity (kVA)	5
3.	Capacity (kW)	5
4.	Phase	Single Phase
5.	Architecture	Online Double Conversion
6.	Redundancy	Not Required
7.	Input Voltage (Vac)	120 -280 Vac
8.	Input Power Factor	≥ 0.99
9.	Input THDi	$\leq 2\%$ (Resistive load), $\leq 4\%$ (Non-linear load)
10.	Input Frequency (Hz)	45-65
11.	Output Voltage (Vac)	220 Vac $\pm 5\%$
12.	Output Frequency (Hz)	50 Hz $\pm 10\%$ (Auto Sensing)

13.	Output voltage Stabilization accuracy	$\leq 1\%$
14.	Efficiency (%)	Up to 99% in ECO mode, Up to 99.5% in iECO mode
15.	Battery Voltage VRLA	48 VDC
16.	Transfer Time	0 ms
17.	Bypass Mode	Required
18.	Overload Capacity	110% for 10 min
19.	Operating Temp	-5°C~55°C
20.	Operating Relative Humidity	$\leq 95\%$, non-condensation
21.	Mandatory	Online Monitoring via SNMP or Wifi or else Mandatory Cloud-Based Monitoring: UPS should be equipped with a secure cloud-based monitoring platform that provides real-time remote monitoring, comprehensive event and alarm logging, historical data recording, and continuous health monitoring and associated battery system. System shall enable to monitor operational status, receive instant notifications of faults or critical events

c. UPS 6 KVA

1.	Model	UPS
2.	Capacity (kVA)	6
3.	Capacity (kW)	6
4.	Phase	Single Phase
5.	Architecture	Online Double Conversion
6.	Redundancy	Not Required
7.	Input Voltage (Vac)	120 -280 Vac
8.	Input Power Factor	≥ 0.99
9.	Input THDi	$\leq 2\%$ (Resistive load), $\leq 4\%$ (Non-linear load)
10.	Input Frequency (Hz)	45-65
11.	Output Voltage (Vac)	220 Vac $\pm 5\%$
12.	Output Frequency (Hz)	50 Hz $\pm 10\%$ (Auto Sensing)
13.	Output voltage Stabilization accuracy	$\leq 1\%$
14.	Efficiency (%)	Up to 99% in ECO mode, Up to 99.5% in iECO mode
15.	Battery Voltage VRLA	48 VDC
16.	Transfer Time	0 ms
17.	Bypass Mode	Required
18.	Overload Capacity	110% for 10 min
19.	Operating Temp	-5°C~55°C
20.	Operating Relative Humidity	$\leq 95\%$, non-condensation
21.	Mandatory	Online Monitoring via SNMP or Wifi or else Mandatory Cloud-Based Monitoring: UPS should be equipped with a secure cloud-based monitoring platform that provides real-time remote monitoring, comprehensive event and alarm logging, historical data recording, and continuous health monitoring and associated battery system. System shall

		enable to monitor operational status, receive instant notifications of faults or critical events
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d. UPS 10 KVA

1.	Model	UPS
2.	Capacity (kVA)	10
3.	Capacity (kW)	10
4.	Phase	Single Phase
5.	Architecture	Online Double Conversion
6.	Redundancy	Not Required
7.	Input Voltage (Vac)	120 -280 Vac
8.	Input Power Factor	≥ 0.99
9.	Input THDi	≤ 2% (Resistive load), ≤ 4% (Non-linear load)
10.	Input Frequency (Hz)	45-65
11.	Output Voltage (Vac)	220 Vac ± 5%
12.	Output Frequency (Hz)	50 Hz ±10% (Auto Sensing)
13.	Output voltage Stabilization accuracy	≤ 1%
14.	Efficiency (%)	Up to 99% in ECO mode, Up to 99.5% in iECO mode
15.	Battery Voltage VRLA	48 VDC
16.	Transfer Time	0 ms
17.	Bypass Mode	Required
18.	Overload Capacity	110% for 10 min
19.	Operating Temp	-5°C~55°C
20.	Operating Relative Humidity	≤ 95%, non-condensation
21.	Mandatory	Online Monitoring via SNMP or Wifi or else Mandatory Cloud-Based Monitoring: UPS should be equipped with a secure cloud-based monitoring platform that provides real-time remote monitoring, comprehensive event and alarm logging, historical data recording, and continuous health monitoring and associated battery system. System shall enable to monitor operational status, receive instant notifications of faults or critical events

e. UPS 10 KVA

1.	Model	UPS
2.	Capacity (kVA)	10
3.	Capacity (kW)	10
4.	Phase	Three Phase
5.	Architecture	Online Double Conversion
6.	Redundancy	No less than 4 units (N+1)
7.	Input Voltage (Vac)	380V / 400V / 415V AC (3-Phase, 4-Wire + PE)
8.	Input Power Factor	≥ 0.99
9.	Input THDi	≤ 2% (Resistive load), ≤ 4% (Non-linear load)
10.	Input Frequency (Hz)	50 ±10%
11.	Output Voltage (Vac)	380V / 400V / 415V AC ± 1%
12.	Output Frequency (Hz)	50 Hz ±10% (Auto Sensing)

13.	Output voltage Stabilization accuracy	$\leq 1\%$
14.	Efficiency (%)	Up to 96% (Online mode); $\geq 99\%$ (ECO mode)
15.	Battery Voltage VRLA	192-240 or 384 (configurable)
16.	Transfer Time	0 ms
17.	Bypass Mode	Required
18.	Overload Capacity	110% for 60 min, 125% for 10 min, 150% for 1 min
19.	Operating Temp	-5°C~55°C
20.	Operating Relative Humidity	$\leq 95\%$, non-condensation
21.	Mandatory	Online Monitoring via SNMP or Wifi or else Mandatory Cloud-Based Monitoring: UPS should be equipped with a secure cloud-based monitoring platform that provides real-time remote monitoring, comprehensive event and alarm logging, historical data recording, and continuous health monitoring and associated battery system. System shall enable to monitor operational status, receive instant notifications of faults or critical events

f. UPS 15 KVA

1.	Model	UPS
2.	Capacity (kVA)	15
3.	Capacity (kW)	15
4.	Phase	Three Phase
5.	Architecture	Online Double Conversion
6.	Redundancy	No less than 4 units (N+1)
7.	Input Voltage (Vac)	380V / 400V / 415V AC (3-Phase, 4-Wire + PE)
8.	Input Power Factor	≥ 0.99
9.	Input THDi	$\leq 2\%$ (Resistive load), $\leq 4\%$ (Non-linear load)
10.	Input Frequency (Hz)	50 $\pm 10\%$
11.	Output Voltage (Vac)	380V / 400V / 415V AC $\pm 1\%$
12.	Output Frequency (Hz)	50 Hz $\pm 10\%$ (Auto Sensing)
13.	Output voltage Stabilization accuracy	$\leq 1\%$
14.	Efficiency (%)	Up to 96% (Online mode); $\geq 99\%$ (ECO mode)
15.	Battery Voltage VRLA	192-240 or 384 (configurable)
16.	Transfer Time	0 ms
17.	Bypass Mode	Required
18.	Overload Capacity	110% for 60 min, 125% for 10 min, 150% for 1 min
19.	Operating Temp	-5°C~55°C
20.	Operating Relative Humidity	$\leq 95\%$, non-condensation
21.	Mandatory	Online Monitoring via SNMP or Wifi or else Mandatory Cloud-Based Monitoring: UPS should be equipped with a secure cloud-based monitoring platform that provides real-time remote monitoring, comprehensive event and alarm logging, historical data recording, and continuous health monitoring and associated battery system. System shall

		enable to monitor operational status, receive instant notifications of faults or critical events
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g. UPS 20 KVA		
1.	Model	UPS
2.	Capacity (kVA)	20
3.	Capacity (kW)	20
4.	Phase	Three Phase
5.	Architecture	Online Double Conversion
6.	Redundancy	No less than 4 units (N+1)
7.	Input Voltage (Vac)	380V / 400V / 415V AC (3-Phase, 4-Wire + PE)
8.	Input Power Factor	≥ 0.99
9.	Input THDi	≤ 2% (Resistive load), ≤ 4% (Non-linear load)
10.	Input Frequency (Hz)	51 ±10%
11.	Output Voltage (Vac)	380V / 400V / 415V AC ± 1%
12.	Output Frequency (Hz)	50 Hz ±10% (Auto Sensing)
13.	Output voltage Stabilization accuracy	≤ 1%
14.	Efficiency (%)	Up to 96% (Online mode); ≥ 99% (ECO mode)
15.	Battery Voltage VRLA	192-240 or 384 (configurable)
16.	Transfer Time	0 ms
17.	Bypass Mode	Required
18.	Overload Capacity	110% for 60 min, 125% for 10 min, 150% for 1 min
19.	Operating Temp	-5°C~55°C
20.	Operating Relative Humidity	≤ 95%, non-condensation
21.	Mandatory	Online Monitoring via SNMP or Wifi or else Mandatory Cloud-Based Monitoring: UPS should be equipped with a secure cloud-based monitoring platform that provides real-time remote monitoring, comprehensive event and alarm logging, historical data recording, and continuous health monitoring and associated battery system. System shall enable to monitor operational status, receive instant notifications of faults or critical events

h. UPS 60 KVA		
1.	Model	Modular UPS
2.	Capacity (kVA)	60
3.	Capacity (kW)	60
4.	Phase	3Ph+N+PE
5.	Architecture	Modular Online Double Conversion
6.	Power Module Rating	15kVA/15kW
7.	Redundancy	No less than 4 units (N+1)
8.	Input Voltage (Vac)	380V / 400V / 415V AC (3-Phase, 4-Wire + PE)
9.	Input Power Factor	≥ 0.99
10.	Input THDi	≤ 2% (Resistive load), ≤ 4% (non-linear load)
11.	Input Frequency (Hz)	50 ±10%
12.	Output Voltage (Vac)	380V / 400V / 415V AC ± 1%

13.	Output Frequency (Hz)	50 ±10%
14.	Output voltage Stabilization accuracy	≤ 1%
15.	Efficiency (%)	Up to 99% in ECO mode, Up to 99.5% in iECO mode
16.	Battery Voltage VRLA	40 (Range 32-44)
17.	Transfer Time	0 ms
18.	Bypass Voltage Range	±20%
19.	Overload Capacity	110% for 60 min, 125% for 10 min, 150% for 1 min
20.	Operating Temp	-5°C~40°C
21.	Operating Relative Humidity	≤ 95%, non-condensation
22.	Communication	Modbus、SNMP、dry contactRS485/SNMP
23.	Mandatory	Modbus、SNMP、dry contactRS485/SNMP
		Modular design, hot swappable, Advanced DSP digital control technology, Master-slave synchronization in sequence control, multi-level decentralized control technology, Adaptive lead-acid battery complete battery management function, Power module sleep mode settable, automatic adjustment of quantity of working modules, Soft start function for Gensets, (CCM) is adopted for AC input.
		Online Monitoring via SNMP or Wifi or else
		Mandatory Cloud-Based Monitoring: UPS should be equipped with a secure cloud-based monitoring platform that provides real-time remote monitoring, comprehensive event and alarm logging, historical data recording, and continuous health monitoring and associated battery system. System shall enable to monitor operational status, receive instant notifications of faults or critical events

i. UPS 80 KVA		
1.	Model	Modular UPS
2.	Capacity (kVA)	80
3.	Capacity (kW)	80
4.	Phase	3Ph+N+PE
5.	Architecture	Modular Online Double Conversion
6.	Power Module Rating	15kVA/15kW
7.	Redundancy	No less than 4 units (N+1)
8.	Input Voltage (Vac)	380V / 400V / 415V AC (3-Phase, 4-Wire + PE)
9.	Input Power Factor	≥ 0.99
10.	Input THDi	≤ 2% (Resistive load), ≤ 4% (non-linear load)
11.	Input Frequency (Hz)	50 ±10%
12.	Output Voltage (Vac)	380V / 400V / 415V AC ± 1%
13.	Output Frequency (Hz)	50 ±10%
14.	Output voltage Stabilization accuracy	≤ 1%
15.	Efficiency (%)	Up to 99% in ECO mode, Up to 99.5% in iECO mode
16.	Battery Voltage VRLA	40 (Range 32-44)
17.	Transfer Time	0 ms
18.	Bypass Voltage Range	±20%

19.	Overload Capacity	110% for 60 min, 125% for 10 min, 150% for 1 min
20.	Operating Temp	-5°C~40°C
21.	Operating Relative Humidity	≤ 95%, non-condensation
22.	Communication	Modbus、SNMP、dry contactRS485/SNMP
23.	Mandatory	Modbus、SNMP、dry contactRS485/SNMP
		Modular design, hot swappable, Advanced DSP digital control technology, Master-slave synchronization in sequence control, multi-level decentralized control technology, Adaptive lead-acid battery complete battery management function, Power module sleep mode settable, automatic adjustment of quantity of working modules, soft start function for Gensets, (CCM) is adopted for AC input.
		Online Monitoring via SNMP or Wifi or else
		Mandatory Cloud-Based Monitoring: UPS should be equipped with a secure cloud-based monitoring platform that provides real-time remote monitoring, comprehensive event and alarm logging, historical data recording, and continuous health monitoring and associated battery system. System shall enable to monitor operational status, receive instant notifications of faults or critical events

j. UPS 100 KVA		
1.	Model	Modular UPS
2.	Capacity (kVA)	100
3.	Capacity (kW)	100
4.	Phase	3Ph+N+PE
5.	Architecture	Modular Online Double Conversion
6.	Power Module Rating	25kVA/25kW
7.	Redundancy	No less than 4 units (N+1)
8.	Input Voltage (Vac)	380V / 400V / 415V AC (3-Phase, 4-Wire + PE)
9.	Input Power Factor	≥ 0.99
10.	Input THDi	≤ 2% (Resistive load), ≤ 4% (non-linear load)
11.	Input Frequency (Hz)	50 ±10%
12.	Output Voltage (Vac)	380V / 400V / 415V AC ± 1%
13.	Output Frequency (Hz)	50 ±10%
14.	Output voltage Stabilization accuracy	≤ 1%
15.	Efficiency (%)	Up to 96% (Online mode); ≥ 99% (ECO mode)
16.	Battery Voltage VRLA	192-240 or 384 (configurable)
17.	Transfer Time	0 ms
18.	Bypass Voltage Range	±20%
19.	Overload Capacity	110% for 60 min, 125% for 10 min, 150% for 1 min
20.	Operating Temp	Forced air
21.	Operating Relative Humidity	≤ 95%, non-condensation
22.	Communication	Modbus、SNMP、dry contactRS485/SNMP
23.	Mandatory	Modbus、SNMP、dry contactRS485/SNMP

		Modular design, hot swappable, Advanced DSP digital control technology, Master-slave synchronization in sequence control, multi-level decentralized control technology, Adaptive lead-acid battery complete battery management function, Power module sleep mode settable, automatic adjustment of quantity of working modules , Soft start function for Gensets, (CCM) is adopted for AC input.
		Online Monitoring via SNMP or Wifi or else
		Mandatory Cloud-Based Monitoring: UPS should be equipped with a secure cloud-based monitoring platform that provides real-time remote monitoring, comprehensive event and alarm logging, historical data recording, and continuous health monitoring and associated battery system. System shall enable to monitor operational status, receive instant notifications of faults or critical events

k. UPS 120 KVA

1.	Model	Modular UPS
2.	Capacity (kVA)	120
3.	Capacity (kW)	120
4.	Phase	3Ph+N+PE
5.	Architecture	Modular Online Double Conversion
6.	Power Module Rating	15kVA/15kW
7.	Redundancy	No less than 4 units (N+1)
8.	Input Voltage (Vac)	380V / 400V / 415V AC (3-Phase, 4-Wire + PE)
9.	Input Power Factor	≥ 0.99
10.	Input THDi	≤ 2% (Resistive load), ≤ 4% (non-linear load)
11.	Input Frequency (Hz)	50 ±10%
12.	Output Voltage (Vac)	380V / 400V / 415V AC ± 1%
13.	Output Frequency (Hz)	50 ±10%
14.	Output voltage Stabilization accuracy	≤ 1%
15.	Efficiency (%)	Up to 99% in ECO mode, Up to 99.5% in iECO mode
16.	Battery Voltage VRLA	40 (Range 32-44)
17.	Transfer Time	0 ms
18.	Bypass Voltage Range	±20%
19.	Overload Capacity	110% for 60 min, 125% for 10 min, 150% for 1 min
20.	Operating Temp	-5°C~40°C
21.	Operating Relative Humidity	≤ 95%, non-condensation
22.	Communication	Modbus、SNMP、dry contactRS485/SNMP
23.	Mandatory	Modbus、SNMP、dry contactRS485/SNMP Modular design, hot swappable, Advanced DSP digital control technology, Master-slave synchronization in sequence control, multi-level decentralized control technology, Adaptive lead-acid battery complete battery management function, Power module sleep mode settable, automatic adjustment of quantity of working modules, soft start function for Gensets, (CCM) is adopted for AC input.

		Online Monitoring via SNMP or Wifi or else
		Mandatory Cloud-Based Monitoring: UPS should be equipped with a secure cloud-based monitoring platform that provides real-time remote monitoring, comprehensive event and alarm logging, historical data recording, and continuous health monitoring and associated battery system. System shall enable to monitor operational status, receive instant notifications of faults or critical events

I. UPS 160 KVA		
1.	Model	Modular UPS
2.	Capacity (kVA)	160
3.	Capacity (kW)	160
4.	Phase	3Ph+N+PE
5.	Architecture	Modular Online Double Conversion
6.	Power Module Rating	25kVA/25kW
7.	Redundancy	No less than 4 units (N+1)
8.	Input Voltage (Vac)	380V / 400V / 415V AC (3-Phase, 4-Wire + PE)
9.	Input Power Factor	≥ 0.99
10.	Input THDi	≤ 2% (Resistive load), ≤ 4% (non-linear load)
11.	Input Frequency (Hz)	50 ±10%
12.	Output Voltage (Vac)	380V / 400V / 415V AC ± 1%
13.	Output Frequency (Hz)	50 ±10%
14.	Output voltage Stabilization accuracy	≤ 1%
15.	Efficiency (%)	Up to 96% (Online mode); ≥ 99% (ECO mode)
16.	Battery Voltage VRLA	192-240 or 384 (configurable)
17.	Transfer Time	0 ms
18.	Bypass Voltage Range	±20%
19.	Overload Capacity	110% for 60 min, 125% for 10 min, 150% for 1 min
20.	Operating Temp	Forced air
21.	Operating Relative Humidity	≤ 95%, non-condensation
22.	Communication	Modbus、SNMP、dry contactRS485/SNMP
23.	Mandatory	Modbus、SNMP、dry contactRS485/SNMP
		Modular design, hot swappable, Advanced DSP digital control technology, Master-slave synchronization in sequence control, multi-level decentralized control technology, Adaptive lead-acid battery complete battery management function, Power module sleep mode settable, automatic adjustment of quantity of working modules, Soft start function for Gensets, (CCM) is adopted for AC input.
		Online Monitoring via SNMP or Wifi or else
		Mandatory Cloud-Based Monitoring: UPS should be equipped with a secure cloud-based monitoring platform that provides real-time remote monitoring, comprehensive event and alarm logging, historical data recording, and continuous health monitoring and associated battery system. System shall

		enable to monitor operational status, receive instant notifications of faults or critical events
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Item No: 02	Computer/ Laptop/Tablets	Qty
1	Laptop ▪ Processor: Intel Core i7 (13th Generation or latest equivalent) ▪ RAM: Minimum 16 GB DDR4 (Upgradeable) ▪ Storage: Minimum 1 TB SSD (Upgradeable) ▪ Graphics: Integrated Graphics (Minimum 2 GB shared or equivalent) ▪ Display: 15.6" Full HD (1920 × 1080) ▪ Operating System: Windows 11 Pro (Licensed) ▪ Connectivity: Wi-Fi, Bluetooth ▪ Ports: USB (Type-A/Type-C), HDMI, Audio Jack ▪ Battery Backup: Minimum 5–6 Hours ▪ Keyboard: Full-size Keyboard ▪ Optical Drive: DVD-ROM (External, if required) ▪ Build Quality: Business-class laptop ▪ Warranty: Minimum 1 Year ▪ Brand: HP / Dell or Equivalent	10
2	Desktop PC ▪ Processor: Intel Core i5 (13th Generation or latest equivalent) ▪ RAM: Minimum 8 GB DDR4 ▪ Storage: ▪ Primary: Minimum 500 GB SSD ▪ Secondary: Minimum 4 TB SATA HDD ▪ Graphics: Integrated Graphics (Minimum 2 GB shared or equivalent) ▪ Operating System: Windows 11 Pro (Licensed) ▪ Monitor: 19.5" or 21.5" LED HD Display ▪ Keyboard & Mouse: USB Keyboard and Mouse ▪ Connectivity: Wi-Fi, Bluetooth ▪ Optical Drive: DVD-ROM (Built-in) ▪ Power Supply: Standard OEM Power Supply ▪ Form Factor: Tower / Small Form Factor (As required) ▪ Warranty: Minimum 1 Year ▪ Brand: HP / Dell or Equivalent	20
3	All in one PC ▪ All-in-One 27-CR0075D ▪ Processor: Intel Core i7-1355U (up to 5.0GHz) ▪ Graphics: Intel Iris Xe Graphics ▪ Memory: 16GB DDR4-3200MHz ▪ Storage: 512GB PCIe NVMe M.2 SSD ▪ Display: 27" Full HD (1920x1080), IPS, touchscreen ▪ Operating System: Windows 11 Home ▪ Wireless: Wi-Fi 6 (2x2), Bluetooth 5.3 ▪ Ports: 1 USB-C, 2 USB-A 5Gbps, 2 USB 2.0, 1 RJ-45, headphone and mic combo ▪ Camera: 720p HD privacy camera with dual microphones ▪ Audio: Dual 2W speakers	10

	▪ Keyboard and Mouse: Wired USB white set included ▪ Color: White ▪ Weight: 6.42kg ▪ Dimensions: 61.25 x 18.62 x 44.09cm ▪ HP or equivalent	
4	Tablets ▪ Operating System: Android 15 with One UI ▪ Display: 13.1-inch ▪ Resolution: 2880 x 1800 (WQXGA+) ▪ Processor: Exynos 1580 Octa-Core (4nm) ▪ RAM: 8 GB ▪ Internal Storage: 128 GB ▪ Expandable Storage: Up to 2 TB via microSD ▪ Rear Camera: 13 MP ▪ Front Camera: 12 MP Ultra-Wide ▪ Battery: 10,090 mAh ▪ Charging: 45W Fast Charging ▪ Connectivity: Wi-Fi 6, Bluetooth 5.3, USB Type-C ▪ Security: Fingerprint Sensor (Side Mounted) ▪ Water Resistance: IP68 ▪ Audio: Stereo Speakers ▪ Stylus: S Pen Included ▪ Weight: Approx. 664 g ▪ Warranty: Minimum 1 Year Manufacturer Warranty Metallic Desktop Tablet Stand ▪ Compatible with tablets up to 13.1 inches or larger ▪ Premium aluminum alloy or heavy-duty steel with corrosion-resistant finish ▪ Silver, Space Gray, Black, or equivalent ▪ Load Capacity is Minimum 1 kg ▪ Adjustable height with locking mechanism ▪ Adjustable tilt from 0° to at least 180° ▪ 360° rotatable (preferred) ▪ Heavy-duty weighted base with anti-slip silicone pads ▪ Silicone padding on contact surfaces to prevent scratches ▪ Stable construction with anti-slip rubber feet ▪ Foldable design for easy storage and transportation ▪ Provision for charging cable routing during use ▪ Anodized or powder-coated scratch-resistant finish ▪ Ready-to-use or tool-free assembly ▪ Suitable for office, hospital, classroom, laboratory, and conference environments Preferred Features ▪ Full aluminum alloy construction. ▪ Ergonomic design for prolonged use. ▪ Smooth multi-angle adjustment. ▪ Compatible with tablets in portrait and landscape orientations. ▪ Scratch-resistant and fingerprint-resistant finish.	10

	Heavy-duty hinge mechanism designed for continuous professional use. All equipment must be brand new, unused and in original sealed packaging. Equivalent or higher specifications may be accepted. Vendor must provide manufacturer authorization (if applicable). Minimum 1-year warranty from manufacturer or authorized distributor. All accessories including S Pen, charging cable and manuals must be included. Compliance with international quality certifications (CE/FCC or equivalent). Delivery must be completed as per purchase order schedule.	
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5	Server for Application and Database Server		Qty: 02
a.	Server Type	Enterprise-grade Rack/Tower Server suitable for 24/7 operation.	
b.	Processor	Minimum Intel® Xeon Processor equivalent to or higher than Intel Xeon E5-2673 v3 @ 2.40 GHz , with at least 4 physical cores (or latest equivalent Intel Xeon Silver/Gold or AMD EPYC processor) capable of delivering performance equal to or better than Microsoft Azure B4ms instance.	
c.	Memory (RAM)	Minimum 64 GB DDR4 ECC Registered RAM , expandable to at least 256 GB .	
d.	Operating System Drive	Minimum 1 TB SSD configured in RAID 1 for Operating System and 1 TB SSD Align RT app partition for Application installation.	
e.	Database Storage	Minimum 40 TB usable storage configured in RAID 10 using Enterprise SAS/SATA HDDs or SSDs suitable for database applications.	
f.	RAID Controller	Hardware RAID Controller supporting RAID 0, 1, 5, 6, 10 with cache memory and battery/flash-backed write cache.	
g.	Operating System	Compatible with Microsoft Windows Server 2012 R2 or later (Windows Server 2016/2019/2022 preferred). The system shall also support Windows 10 64-bit (Version 1903 or later) where applicable. Operating system licensing shall be included if required.	
h.	Database Software Compatibility	Fully compatible with Microsoft SQL Server 2014 Standard Edition or later for handling patient database transactions and application queries.	
i.	Network Interface	Minimum dual 1 Gigabit Ethernet ports (10 Gigabit Ethernet preferred).	
j.	Power Supply	Redundant hot-swappable power supplies with automatic failover.	
k.	Management	Integrated remote server management (iLO, iDRAC, XClarity, or equivalent) with remote monitoring and administration capabilities.	
l.	Expansion	Adequate PCIe expansion slots for future upgrades and storage expansion.	
m.	Cooling	Redundant hot-swappable cooling fans.	
n.	Warranty	Minimum Three (03) Years comprehensive onsite warranty with parts, labor, and technical support.	

o.	Compliance	CE, FCC, RoHS compliant. Manufacturers should be ISO 9001 certified or equivalent.
p.	Rack	Rack for server, Hard drives storage box, UPS
q.	UPS	3 KVA with batteries with 10 min backup
r.	Functional Requirements	▪ The server shall be capable of hosting the application server and SQL database server simultaneously. ▪ The storage subsystem shall support high availability through RAID configuration. ▪ The proposed solution shall be optimized for handling patient records, treatment planning data, and associated medical databases. ▪ The bidder shall provide all necessary drivers, firmware, utilities, and documentation required for installation and operation. ▪ All supplied hardware shall be new, genuine, unused, and from the latest production model available.

Item No 03		Scanners & Printers
1.Document Scanner		Qty: 03
1.	Document Feeding	Automatic or Manual
2.	Document Size U-Turn Path	Width: 50.8 – 305mm Length: 70 – 432mm
3.	Long Document Mode	Up to 5500mm
4.	Document Weight	U-Turn Path (Automatic Feeding / Manual Feeding): 20 to 255 Gram
5.	Feeder Capacity	Up to 500 Sheets
6.	Color	24-bit
7.	Scanning Element	CIS
8.	Scanning Modes	Simplex, Duplex, Color, Grayscale, Black and White, Error Diffusion, Advanced Text Enhancement
9.	Scanning Resolution	150/200/240/300/400/600 dpi
10.	Scanning Speeds Black And White Grayscale Color	(Simplex / Duplex) 110 ppm / 220 ipm (Simplex / Duplex) 110 ppm / 220 ipm (Simplex / Duplex) 110 ppm / 220 ipm
11.	Interface	Gigabit Ethernet & Hi-Speed USB 3.1 Gen1
12.	Scanner Drivers	ISIS/TWAIN
13.	Options Other Features	Flatbed Scanner. Automatic Color Detection, Automatic Page Size Detection, Batch Separation, Custom Color Dropout/Enhance Color, Deskew, Folio Mode, Moiré Reduction, MultiStream, Pre-Scan, Prevent Bleed Through/Remove Background, Punch Hole Removal, Rapid Recovery System, Skip Blank Page, Text Orientation Recognition, Ultrasonic Double-Feed Detection, User Registration

2.Film/Photo Scanner		Qty: 02
1.	Scanner Type	Professional A4 Flatbed Photo and Film Scanner

2.	Optical Resolution	Minimum 6400 × 6400 dpi
3.	Optical Density	Minimum 4.0 Dmax
4.	Sensor	Matrix CCD with High-Pass Optics
5.	Lens System	Dual-lens system (automatic lens selection)
6.	Color Depth	48-bit input / 48-bit output color
7.	Maximum Scan Area	216 × 297 mm (A4)
8.	Film Scanning	Integrated Transparency Unit (TPU) for film and slides
9.	Supported Film Formats	35 mm film strips, 35 mm slides, 120/220 medium format, 4 × 5 inch sheet film, up to 8 × 10 inch with film area guide
10.	Light Source	White LED with ReadyScan LED Technology and IR LED
11.	Warm-up Time	Approximately 1 second (no significant warm-up)
12.	Dust & Scratch Removal	Digital ICE Technology for film and photographs
13.	Image Enhancement	Color restoration, grain reduction, dust removal, backlight correction, de-screening, histogram and tone curve adjustment
14.	Scan Speed	A4 preview approximately 6 seconds
15.	Output Formats	TIFF, JPEG, BMP, PDF, Searchable PDF, Multi-page TIFF
16.	Interface	High-Speed USB 2.0
17.	Software Included	Epson Scan, Epson Event Manager, SilverFast SE Plus, X-Rite i1 Scanner software
18.	Operating Systems	Windows 10/11 or later, macOS compatible
19.	Power Supply	AC 220–240 V, 50/60 Hz
20.	Dimensions	Approximately 503 × 308 × 152 mm
21.	Weight	Approximately 6.6 kg
22.	Standard Supply	- Two sets of professional film holders - USB cable - Power adapter and power cable - Software license/media - User manual - Driver package - Warranty documentation
23.	Warranty	Minimum 1-year manufacturer's warranty (or longer if required by the procuring agency)
24.	Technical Support	Local after-sales service and technical support
25.	Spare Parts	Availability of spare parts for at least 5 years
26.	Compliance	- Be brand new and unused. - Be supplied with all standard accessories. - Be CE/FCC or equivalent certified. - Include original manufacturer software and drivers. - Meet or exceed all the specifications listed above.

3.All in One (Photocopier, Printer & Scanner)		Qty: 04
1.	Equipment Type	A3 Monochrome Multifunction Laser Copier, Network Printer & Color Scanner
2.	Technology	Laser Electrostatic Transfer
3.	Print/Copy Speed	Minimum 35 pages per minute (A4)
4.	First Copy Output Time	Maximum 6.5 seconds
5.	Print Resolution	Minimum 600 × 600 dpi , with enhancement up to 1200 × 1200 dpi

6.	Copy Resolution	Minimum 600 × 600 dpi
7.	Scan Resolution	Up to 600 × 600 dpi
8.	Display Panel	Minimum 7-inch Color Touchscreen LCD
9.	Processor	Manufacturer's latest embedded controller
10.	Memory	Minimum 2 GB RAM
11.	Storage	Standard internal storage or optional SSD/HDD support
12.	Duplex Printing	Automatic Duplex Printing and Copying
13.	Duplex Scanning	Single-pass Duplex Automatic Document Feeder (DADF)
14.	Document Feeder Capacity	Minimum 100 Sheets
15.	Paper Size	A6 to A3
16.	Paper Weight	Drawer: 52–256 gsm ; Bypass: Up to 300 gsm
17.	Standard Paper Capacity	Minimum 1,200 Sheets
18.	Maximum Paper Capacity	Expandable to 2,300 Sheets or more
19.	Output Capacity	Minimum 250 Sheets
20.	Monthly Duty Cycle	Recommended for medium to heavy office workload
21.	Copy Reduction/Enlargement	25%–400% in 1% increments
22.	Continuous Copy	Up to 9,999 Copies
23.	Scan Speed	Minimum 70 ipm (Duplex) or better
24.	Scan Destination	Email, SMB Folder, FTP, USB, Network Folder, PDF, JPEG, TIFF
25.	OCR	Searchable PDF support
26.	Print Languages	UFR II standard; PCL6 and Adobe PostScript 3 support (standard or optional)
27.	Mobile Printing	AirPrint, Mopria, Canon PRINT Business or equivalent
28.	Network Interface	Gigabit Ethernet (10/100/1000 Base-T), USB 2.0
29.	Wireless Connectivity	Wi-Fi (Optional or Standard)
30.	USB Printing	Direct Print from USB Memory
31.	Supported Operating Systems	Windows 10/11, Windows Server, macOS, Linux
32.	Security Features	Secure Print, User Authentication, TLS/SSL, IP Filtering, HDD/SSD Data Protection (where applicable)
33.	Energy Saving	ENERGY STAR® compliant or equivalent
34.	Power Supply	220–240 VAC, 50/60 Hz
35.	Toner	High-yield toner suitable for heavy-duty office use
36.	Warranty	Minimum One (1) Year Comprehensive On-site Warranty
37.	Installation	Supply, Delivery, Installation, Configuration, Testing & Commissioning
38.	Training	Basic operational training for users
39.	Standard Accessories	▪ Automatic Duplex Unit ▪ Dual 550-sheet Paper Cassettes ▪ 100-sheet Multipurpose Tray ▪ Duplex Automatic Document Feeder (100-sheet minimum) ▪ Network Printing ▪ Network Color Scanning ▪ Power Cable ▪ Starter Toner ▪ User Manual

		▪ Driver & Utility Software
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4.All in One (Photocopier, Printer & Scanner)		Qty: 04
1.	Printer Type	Monochrome Multifunction Laser Printer
2.	Functions	Print, Copy, Scan
3.	Print Technology	Laser
4.	Print Speed	Minimum 43 pages per minute (A4)
5.	Print Resolution	Minimum 1200 × 1200 dpi
6.	First Page Out Time	Maximum 6 seconds
7.	Automatic Duplex Printing	Standard
8.	Duty Cycle	Minimum 150,000 pages per month
9.	Recommended Monthly Volume	2,000–7,500 pages or higher
10.	Processor	Minimum 1.2 GHz
11.	Memory	Minimum 1.25 GB RAM
12.	Display	Minimum 8-inch (20 cm) Color Touchscreen LCD
13.	Standard Input Capacity	Minimum 650 sheets (100-sheet Multipurpose Tray + 550-sheet Main Tray or equivalent)
14.	Maximum Paper Capacity	Expandable to at least 2,300 sheets
15.	Output Capacity	Minimum 250 sheets
16.	Automatic Document Feeder	Minimum 100-sheet Duplex Single-Pass ADF (DSPF)
17.	Scan Type	Flatbed + Automatic Document Feeder
18.	Scan Resolution	Optical resolution minimum 600 dpi
19.	Scan Speed	Minimum 40 images per minute (duplex)
20.	Copy Speed	Minimum 43 copies per minute
21.	Copy Resolution	Minimum 600 × 600 dpi
22.	Maximum Copies	Up to 9,999 copies
23.	Zoom Range	25%–400%
24.	Supported Paper Sizes	A4, A5, A6, B5, Letter, Legal, Executive, Envelopes, Custom Sizes
25.	Supported Media	Plain Paper, Bond, Recycled, Labels, Cardstock, Envelopes
26.	Paper Weight	60–220 g/m ² (Multipurpose Tray) or better
27.	Connectivity	Hi-Speed USB 2.0, Gigabit Ethernet (10/100/1000)
28.	Optional Connectivity	Wireless capability through optional manufacturer accessory
29.	Network Protocols	TCP/IP, IPv4, IPv6, SNMP, DHCP, IPP, LDAP
30.	Mobile Printing	Apple AirPrint, Mopria, and manufacturer mobile printing solution
31.	Print Languages	PCL 6, PCL 5, PostScript Level 3 Emulation, Native PDF Printing
32.	Scan Destinations	Scan to Email, Network Folder, USB, PC, FTP, SMB
33.	Security Features	Secure Boot, Firmware Integrity Validation, Encrypted Communication, PIN Printing, User Authentication, SNMPv3, IPsec, Secure Device Management or equivalent
34.	Operating System Support	Windows 10/11, Windows Server, macOS, Linux
35.	Toner System	Separate black toner cartridge with high-yield option available
36.	Power Supply	220–240 VAC, 50/60 Hz
37.	Energy Efficiency	ENERGY STAR® certified or equivalent
38.	Warranty	Minimum One (01) Year Comprehensive On-site Warranty

5.Black & White Printer		Qty: 15
1.	Printer Type	Monochrome Laser Printer
2.	Functions	Print Only

3.	Print Technology	Laser
4.	Print Speed	Minimum 40 pages per minute (A4)
5.	Print Resolution	Minimum 1200 × 1200 dpi
6.	First Page Out Time	Maximum 6.5 seconds
7.	Duplex Printing	Automatic duplex (standard)
8.	Duty Cycle	Minimum 80,000 pages per month
9.	Recommended Monthly Volume	750–4,000 pages or higher
10.	Processor	Minimum 1.2 GHz
11.	Memory	Minimum 256 MB
12.	Display	Minimum 2-line LCD or equivalent display
13.	Standard Input Capacity	Minimum 350 sheets (100-sheet multipurpose tray + 250-sheet input tray or equivalent)
14.	Output Capacity	Minimum 150 sheets
15.	Expandable Paper Capacity	Expandable to at least 900 sheets
16.	Supported Paper Sizes	A4, A5, A6, B5 (JIS), Letter, Legal, Executive, Envelopes, Custom Sizes
17.	Supported Media Types	Plain paper, Heavy paper, Bond paper, Recycled paper, Labels, Envelopes, Cardstock
18.	Paper Weight	60–200 g/m ² (Multipurpose Tray); 60–120 g/m ² (Main Tray) or better
19.	Connectivity	Hi-Speed USB 2.0 and Gigabit Ethernet (10/100/1000)
20.	Network Protocols	TCP/IP, IPv4, IPv6, SNMP, DHCP, BOOTP
21.	Mobile Printing	Support for Apple AirPrint, Mopria, and manufacturer mobile print application
22.	Print Languages	PCL 6, PCL 5e, PostScript Level 3 Emulation, PDF, PWG Raster or equivalent
23.	Operating Systems	Windows 10/11, Windows Server, macOS, Linux support
24.	Security Features	Secure Boot, Secure Firmware Integrity Validation, Password Protection, Secure Network Management or equivalent
25.	Toner Type	Separate toner cartridge
26.	Power Supply	220–240 VAC, 50/60 Hz
27.	Operating Temperature	10–32°C or better
28.	Noise Level	≤54 dB(A) during printing
29.	Dimensions	Compact desktop design
30.	Weight	Maximum 10 kg
31.	Warranty	Minimum One (01) Year Comprehensive On-site Warranty
32.	Compliance	CE, FCC, Energy Star or equivalent certifications

6.Color LaserJet Printer		Qty: 05
1.	Printer Type	Color Laser Printer
2.	Functions	Print Only
3.	Print Technology	Laser
4.	Color Printing	Yes
5.	Print Speed (Black)	Minimum 52 pages per minute (A4)
6.	Print Speed (Color)	Minimum 52 pages per minute (A4)
7.	Print Resolution	Minimum 1200 × 1200 dpi
8.	First Page Out Time	Maximum 6.5 seconds (Black) and 7.5 seconds (Color)
9.	Automatic Duplex Printing	Standard
10.	Monthly Duty Cycle	Minimum 100,000 pages
11.	Recommended Monthly Volume	2,000–14,000 pages or higher

12.	Processor	Minimum 1.2 GHz
13.	Memory	Minimum 1.5 GB RAM
14.	Display	Minimum 4.3-inch Color Touchscreen LCD
15.	Standard Input Capacity	Minimum 650 sheets (100-sheet Multipurpose Tray + 550-sheet Main Tray or equivalent)
16.	Maximum Input Capacity	Expandable to at least 3,300 sheets
17.	Output Capacity	Minimum 500 sheets
18.	Paper Sizes Supported	A4, A5, A6, B5, Letter, Legal, Executive, Envelopes, Custom Sizes
19.	Media Types	Plain Paper, Bond Paper, Recycled Paper, Cardstock, Glossy Paper, Labels, Envelopes, Letterhead
20.	Media Weight	Minimum 60–220 g/m²
21.	Connectivity	SuperSpeed USB 3.0 Device, USB Host, Gigabit Ethernet (10/100/1000 Base-T)
22.	Optional Connectivity	Manufacturer-supported Wireless and NFC module (optional)
23.	Network Protocols	TCP/IP, IPv4, IPv6, SNMP v1/v2/v3, IPP, DHCP, LDAP, FTP, HTTPS
24.	Mobile Printing	Apple AirPrint, Mopria Certified, Manufacturer Mobile Print Application
25.	Print Languages	PCL 6, PCL 5c, PostScript Level 3 Emulation, Native PDF Printing, URF or equivalent
26.	Security Features	Secure Boot, Firmware Integrity Validation, Secure Firmware Updates, PIN Printing, User Authentication, SNMPv3, IPsec, TLS Encryption, Secure Device Management or equivalent
27.	Supported Operating Systems	Windows 10/11, Windows Server, macOS, Linux, Chrome OS
28.	Toner System	Four separate toner cartridges (Black, Cyan, Magenta, Yellow) with high-yield cartridge support
29.	Power Supply	220–240 VAC, 50/60 Hz
30.	Energy Efficiency	ENERGY STAR®, EPEAT Gold or equivalent
31.	Operating Temperature	10°C to 32.5°C
32.	Noise Level	Maximum 55 dB(A) during printing
33.	Warranty	Minimum One (01) Year Comprehensive On-site Warranty

7.A4 Size 6-Color Ink Tank Printer		Qty: 05
1.	Product Type	A4 Photo Ink Tank Printer (Print Only)
2.	Print Technology	Inkjet, Epson Micro Piezo Print Head
3.	Ink System	Integrated EcoTank, Refillable Ink Tanks
4.	Number of Ink Colors	6 (Black, Cyan, Magenta, Yellow, Light Cyan, Light Magenta)
5.	Print Resolution	Up to 5760 × 1440 dpi
6.	Paper Size	A4, A5, A6, Letter, Legal, Envelopes, Photo Sizes
7.	Borderless Printing	Supported up to A4
8.	Print Speed	Up to 22 ppm (draft), 8 ipm ISO (Black/Colour), 10×15 cm photo in approximately 12 seconds
9.	Connectivity	USB 2.0 High-Speed, Wi-Fi, Wi-Fi Direct
10.	Mobile Printing	Epson Smart Panel, Epson iPrint
11.	Paper Input Capacity	Minimum 100 Sheets
12.	Supported Media	Plain Paper, Glossy Photo Paper, Matte Paper, PVC ID Cards, Printable CD/DVD
13.	Duplex Printing	Manual Duplex
14.	Display/Control	Control Panel with Status Indicators
15.	Ink Bottle Capacity	70 ml per colour
16.	Operating Voltage	AC 100–240 V, 50/60 Hz
17.	Dimensions	Approximately 403 × 369 × 149 mm

18.	Weight	Approximately 6 kg
19.	Operating Systems	Windows 7/8/10/11, Windows Server, macOS
20.	Warranty	Minimum 1 Year or 50,000 Prints (whichever comes first)
21.	Accessories Included	Printer, Initial Ink Bottles (6 Colours), Power Cable, Setup Guide, Driver/Software Download, Warranty Card
22.	Key Features	▪ Cartridge-free EcoTank refillable ink system. ▪ High-quality 6-colour dye ink for professional photo printing. ▪ Borderless photo printing up to A4 size. ▪ Wireless printing via Wi-Fi and Wi-Fi Direct. ▪ Printing on photo paper, PVC ID cards, CDs/DVDs. ▪ Replaceable maintenance box for easier service. ▪ Compact desktop design with front-facing ink tanks.

8.LaserJet Printer Enterprise (Heavy Duty)		Qty: 05
1.	Product Type	Enterprise A4 Color Laser Printer (Print Only)
2.	Print Technology	Color Laser
3.	Functions	Print
4.	Print Speed	Minimum 38 ppm (A4) for both Black & Color
5.	First Page Out	Black: ≤ 7 seconds
6.	Print Resolution	Up to 1200 × 1200 dpi (HP ImageREt 3600 or equivalent)
7.	Monthly Duty Cycle	Up to 80,000 pages
8.	Recommended Monthly Volume	2,000–10,000 pages
9.	Processor	Minimum 1.2 GHz
10.	Memory	Minimum 1 GB RAM
11.	Duplex Printing	Automatic Duplex (Standard)
12.	Standard Paper Input	100-sheet Multipurpose Tray + 550-sheet Input Tray
13.	Output Capacity	Minimum 250 Sheets
14.	Maximum Paper Capacity	Expandable with optional trays
15.	Supported Media Sizes	A4, A5, A6, Letter, Legal, Executive, Envelopes, Custom Sizes
16.	Media Types	Plain, Heavy, Glossy, Cardstock, Labels, Envelopes, Recycled Paper
17.	Connectivity	High-Speed USB 2.0, Gigabit Ethernet (10/100/1000 Base-T)
18.	Mobile Printing	Apple AirPrint, Mopria, HP ePrint, HP Smart App
19.	Printer Languages	HP PCL 6, HP PCL 5c, HP PostScript Level 3 Emulation, Native PDF Printing
20.	Display	Color Touchscreen Control Panel
21.	Security Features	Trusted Platform Module (TPM), Secure Boot, Secure Firmware, PIN Printing, User Authentication
22.	Operating Systems	Windows 10/11, Windows Server, macOS, Linux
23.	Power Supply	220–240 VAC, 50/60 Hz
24.	Energy Efficiency	ENERGY STAR Certified or Equivalent
25.	Dimensions	Approximately 458 × 479 × 399 mm
26.	Weight	Approximately 27.5 kg
27.	Warranty	Minimum 1-Year Manufacturer Warranty
28.	Standard Accessories	▪ Printer Unit ▪ Starter Black, Cyan, Magenta & Yellow Toner Cartridges ▪ Power Cord ▪ Documentation/User Guide ▪ Software/Drivers (Downloadable) ▪ Warranty Card
29.	Key Features	▪ Enterprise-grade A4 color laser printer. ▪ Automatic duplex printing. ▪ High-speed printing up to 38 ppm in both black and color.

		▪ Gigabit Ethernet networking with USB connectivity. ▪ Expandable paper capacity through optional trays. ▪ Advanced security features including TPM, secure boot, and encrypted data protection. ▪ High monthly duty cycle is suitable for medium to large workgroups.
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Item No 4 – Physics Cable with BNC Connector			Qty: 07
1.	Cable Type	Low-noise Triaxial Cable suitable for precision electrometer, picoammeter, and low-current measurement applications	
2.	Characteristic Impedance	50 Ω or 75 Ω (as required by the connected instrument)	
3.	Conductor Material	Tinned copper conductor, stranded or solid, high conductivity	
4.	Shielding	Double-shielded construction comprising inner and outer braided copper shields to minimize electromagnetic interference (EMI) and noise	
5.	Insulation / Dielectric	PTFE (Teflon) or high-quality Polyethylene (PE), low dielectric absorption	
6.	Leakage Current	Ultra-low leakage current of less than 1×10^{-14} A	
7.	Voltage Rating	Minimum ± 500 V DC continuous operating voltage	
8.	Connector Type	BNC Triaxial connectors (male-to-male), compatible with the specified measuring instrument	
9.	Cable Length	20 meters ($\pm 5\%$ tolerance)	
10.	Operating Temperature	0 $^{\circ}$ C to +50 $^{\circ}$ C minimum	
11.	Cable Jacket	Flexible, abrasion-resistant PVC or equivalent low-noise outer jacket	
12.	Capacitance	Low capacitance suitable for precision low-current measurements	
13.	Signal Integrity	Designed for low-noise operation with excellent shielding effectiveness and minimal triboelectric noise	
14.	Mechanical Properties	High flexibility, kink-resistant, suitable for laboratory and industrial environments	
15.	Standards Compliance	Cable shall comply with applicable IEC, RoHS, CE, or equivalent international standards	
16.	Warranty	Minimum 12 months manufacturer's warranty against defects in material and workmanship	
17.	Additional Requirements	▪ Cable shall be factory-assembled and factory-tested. ▪ Both connectors shall be securely terminated and fully shielded. ▪ The cable shall be suitable for use with sensitive electrometers, picoammeters, and high-resistance measurement systems. ▪ The supplied item shall be new, unused, and from the current production model. ▪ Manufacturer's technical datasheet shall be provided with the bid to verify compliance with the tender specifications. ▪ The bidder shall clearly indicate compliance against each specification in the offered product datasheet.	

Item No 5 – Survey Meter			Qty: 04
1.	Radiation Types	Gamma, Beta, X-ray	
2.	Measuring Range	Automatic range detection from 1 μ Sv/h to 1 Sv/h (0.1 mR/h to 100 R/h)	
3.	Dose Measurement	Dose rate and accumulated dose	
4.	Accuracy	Better than or equal to $\pm 10\%$ (Cs-137)	

5.	Gamma Energy Response	20 keV to 3 MeV
6.	Beta Energy Response	≥ 200 keV
7.	Ion Chamber Volume	Approximately 350 cm ³
8.	Beta Window	Thin Mylar window with status indication
9.	Pulsed X-ray Measurement	Capable of measuring pulses down to 50 nanoseconds
10.	Response Time	≤ 3 seconds above 1 mR/h
11.	Auto-ranging Time	≤ 5 seconds
12.	Temperature Compensation	Required
13.	Zero Adjustment	Automatic
14.	Threshold Alarm	User programmable
15.	Alarm Indication	Audible and Visual
16.	Display	Color TFT illuminated display
17.	Display Features	Digital display with analog bar graph
18.	Data Logging	Minimum 200 records
19.	Connectivity	USB-C interface
20.	Wireless Connectivity	Optional RF or Wi-Fi capability
21.	Software	Data download software included
22.	Internal Memory	Built-in memory
23.	Power Supply	Four AA batteries
24.	Battery Life	Minimum 100 hours
25.	Sleep Mode	Automatic motion-based sleep function
26.	Temperature Range	-10°C to +50°C operating
27.	Humidity	Up to 95% RH non-condensing
28.	Weight	Approximately 1 kg including batteries
29.	Housing	High-impact ABS or equivalent
30.	Units	SI and US selectable
31.	Functional Features	▪ Automatic measurement range selection. ▪ Simultaneous digital and analog display. ▪ Color backlit display. ▪ Dose rate monitoring. ▪ Accumulated dose monitoring. ▪ Internal memory for measurement storage. ▪ Automatic movement-based sleep function. ▪ Beta window status indication. ▪ Temperature-compensated measurements. ▪ Automatic zero function. ▪ User-selectable alarm thresholds. ▪ Audible count rate indication. ▪ Firmware upgrade capability through USB. ▪ Data download capability to PC software.
32.	Accessories	▪ Carrying case ▪ Four AA batteries ▪ USB communication cable ▪ PC software for data download ▪ User manual ▪ Calibration certificate ▪ Factory test report
33.	Compliance	▪ Suitable for healthcare radiation protection applications. ▪ Factory calibrated. ▪ Supplied with traceable calibration certificate. ▪ CE marked or equivalent international certification.

		▪ Manufacturer shall have ISO 9001 quality certification.
34.	Warranty	▪ Minimum 24 months comprehensive warranty. ▪ Free software updates during warranty period. ▪ Availability of spare parts for at least 10 years.
35.	Training	▪ Instrument operation ▪ Radiation measurements ▪ Alarm configuration ▪ Data download ▪ Preventive maintenance ▪ Routine quality control
36.	Documentation	▪ User Manual ▪ Service Manual ▪ Calibration Certificate ▪ Factory Test Certificate ▪ Certificate of Conformity ▪ Warranty Certificate

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