Tender Document

Tender for Supply of

Equipment for Establishing Educational Multimedia Centre

in

Annamalai University, Annamalainagar

TenderNo: AU/DRD/RUSA 2.0/EMMC/Equipment/Tender/05/2020-21



Registrar i/c Annamalai University Annamalainagar- 608 002 Tel: 04144-238259, Fax: 04144-238080

Visit us at http://www.annamalaiuniversity.ac.in

TABLE OF CONTENTS

| Section | Title | Page No. |
|----------|--|----------|
| Part I | Tender Notice | 3 - 4 |
| Part II | Tender Conditions | 5 - 8 |
| Part III | Procedure for Submission of Tender | 9 - 13 |
| Part IV | General Terms & Conditions | 14 - 16 |
| Part V | Opening of Tender | 17 - 21 |
| Appendix | | |
| I | Application Form for supply of Equipment | 22 - 23 |
| II | Letter of Tender | 24 - 26 |
| III | Format for Price Bid | 27 - 34 |
| IV | Format for Contract Agreement | 35 - 36 |
| V | Specification of the Equipment | 37 – 42 |
| VI | Layout of EMMC | . 43 |

TENDER NOTICE

| WITH COURAGE AND FAITH | THE REGISTRAR, ANNAMALAI UNIVERSITY, ANNAMALAINAGAR – 608 002 |
|--|---|
| Office of Issue | The Registrar , Annamalai University, |
| | Annamalainagar – 608 002 |
| Tender No. | AU/DRD/RUSA 2.0/EMMC/Equipment /Tender/05/2020-21 |
| Date and Time of Issue/Publishing | 28.07.2021 10:45 a.m. |
| Document Download/Sale Start Date & Time | 28.07.2021 10:45 a.m. |
| Tender Submission Start Date & Time | 28.07.2021 10:45 a.m. |
| Tenders Submission Last Date & Time | 18.08.2021 05.00 p.m |
| Date and Time of opening of Technical bid | 19.08.2021 10:30 a.m. |
| Place of opening of Technical bid | Syndicate Room, Administrative Building, Annamalai University, Annamalainagar – 608 002 |
| Date of opening of Price bid | To be intimated later |

Sealed Tenders are invited on behalf of Annamalai University. Tenders are invited for **supply of Equipment for Establishing Educational Multimedia Centre** in Annamalai University from the **Indian Companies of Original Equipment Manufacturers (OEM)** or **Authorized distributors / Authorized Dealers**. Prices quoted should be F.O.R. Destination, inclusive of all levies and taxes and packing & forwarding charges etc.

Signature of the Tenderer

Part I

Tenderer shall have to deposit **EMD** of **Rs. 40,000/- (Rupees Forty thousand only)** in the form of Demand Draft drawn on any scheduled bank payable at Annamalainagar in favour of <u>"The Registrar, Annamalai University,</u> <u>Annamalainagar - 608002"</u> along with the tender.

Tender Document fee is **Rs.2,100/- (Rupees Two thousand and one hundred only)** and document is available in Website <u>www.annamalaiuniversity.ac.in</u> & <u>www.tenders.tn.gov.in</u>.

> Registrar i/c, Annamalai University Contact No. 04144-238259

Part II

TENDER CONDITIONS

1. <u>Introduction</u>

1.1. This tender is for procurement of the following equipment for Annamalai University, Annamalainagar, Chidambaram, India.

| No. | File No. | Description | | |
|-----|--|---|--|--|
| 1. | AU/DRD/RUSA 2.0/ EMMC / Equipment/Tender/05/2020-21 | Equipment for establishing Educational Multimedia Centre | | |

The specification for the above mentioned equipment is given in Appendix VI.

1.2. Applicability of Tamil Nadu Transparency in Tenders Act and Rules: This tender will be governed by the Tamil Nadu Transparency in Tenders Act 1998 and Rules 2000 as amended from time to time.

2. Eligibility criteria

2.1. A tenderer will be eligible for tendering only if he satisfies the eligibility criteria as given below:

- a) A tenderer should be a manufacturer, possessing a valid manufacturing license from the competent authority for manufacturing the items quoted and should have at least three years experience. (Documentary evidence to be furnished)
- b) The manufacturer should be an ISO:9001 / Equivalent certified company. Documentary evidence should be enclosed.
- c) Authorized Dealer / Distributor / Supplier can also bid with authorization from the Manufacturer. (Documentary evidence to be furnished). A manufacturer shall not authorize more than one dealer / distributor/supplier for participating in this tender.
- d) In case a tenderer is participating as an authorized Dealer/Distributor/Supplier, the manufacturer of the item should satisfy the conditions mentioned at (a) and (b) above.

- e) The tenderer should have a GST Registration. Copy of the Registration Certificate should be enclosed.
- f) Documentary evidence for payment of income tax for past 3 years. The Profit and Loss Account and Balance Sheet for the latest year to be submitted

2.2 The tenderer should not have been blacklisted or debarred from participating in tenders by any Central / State Government agencies or autonomous bodies or universities/ institutions. (An undertaking to this effect should be furnished)

2.3 The tenderer submitting their offer must have supplied similar items to other Universities or institutions or Government agencies. <u>Copies of such order must be</u> enclosed with the offer.

3. Cost of Tendering

3.1 The Tender Document Fee is Rs.2,100/- and may download the application format from the University Web Site.

3.2 The Tenderer shall bear all costs associated with the preparation and submission of this Tender and the tender inviting authority will in no way be responsible or liable for these costs.

4. General Instructions

4.1. The tenderers are requested to go through the instructions, terms and conditions and specifications given in the tender. Failure to furnish all required information in every aspect will be at the tenderer's risk and may result in the rejection of the tender.

For any queries, tenderer may contact:

The Registrari/c, Annamalai University, Annamalainagar, Chidambaram – 608 002. Tamil Nadu, INDIA.

4.2. Clarification on the tender

A prospective tenderer requiring any clarification on the tender may request the Office of the Registrar, Annamalai University, by a letter or by fax or by e-mail. The Registrar, Annamalai University, will respond in writing to any request for clarification in the tender.

4.3. Amendments to the Tender

- i. Tender Inviting Authority may amend the tender wherever it is felt that such an amendment is absolutely necessary.
- ii. Amendment to tender may also be given in response to clarifications by prospective tenderers and it is solely the discretion of the Tender Inviting Authority. Any amendment to the tender will be uploaded on the website <u>http://www.annamalaiuniversity.ac.in</u> and <u>www.tenders.tn.gov.in</u>. It is the responsibility of the tenderer to verify the amendments if any and get the amendment documents before the submission of the tender provided no such change could be effected 48 hours prior to the time fixed for opening of the tender.
- **4.4.** The **Tender document is not transferable** under any circumstances.

5. <u>Earnest Money Deposit (EMD)</u>

5.1. The tenderer should furnish **Earnest Money Deposit (EMD) of Rs.40,000/-**(**Rupees Forty thousand only**) along with the tender by way of Demand Draft/Bankers cheque obtained from any Nationalized/ Scheduled Bank and drawn in favour of "The Registrar, Annamalai University" payable at Annamalainagar or Chidambaram.

5.2. Any tender without required EMD will be considered as NON-RESPONSIVE and will be summarily rejected.

5.3. The Tender Inviting Authority will arrange to refund the Earnest Money Deposit to the unsuccessful tenderers after publishing the list of successful tenderers, within a reasonable time.

5.4. No interest will be paid on the EMD.

- **5.5.** The EMD is liable to be forfeited if:
 - i. The Tenderer withdraws his tender at any stage after the last date and time fixed for submitting the tender.
 - ii. The Tenderer on becoming successful, fails to furnish the required security deposit or sign the agreement, within the stipulated time limit.

6. <u>Performance Security :</u>

i. Successful tenderer has to furnish Security Deposit equivalent to 5% of the tendered value in the form of Demand Draft drawn in favour of "The Registrar, Annamalai University".

ii. Security Deposit will be released only after the expiry of the warranty period as mentioned in Part – IV - clause 1.5.

9

PROCEDURE FOR SUBMISSION OF TENDER

1. Submission of Tender:

1.1 Due Date for Tender Submission

- i. The tender document duly filled in, signed on all pages shall be submitted in sealed cover to The Registrar, Annamalai University, at his office upto <u>5.00 p.m.</u> on <u>18.08.2021</u>, as per the procedure laid down herein. The tender can be submitted on all working days upto the above closing date. In the event of this day being declared as a holiday, the tenders can be submitted till 5.00 P.M. on the following working day.
- ii. The tender inviting authority will not be held responsible for any delay in the receipt of the Bank Draft or any delay in the receipt of the document by the tenderer including loss of the document in transit or delay in obtaining any document / certificate or on any other account. No extension of the date and time for the submission of the documents will be given for any such delay.
- iii. The tender inviting authority may extend the due date for submission of tender by issuing an amendment, in which case, all the rights and obligations of the Tender Inviting Authority and the Tenderers previously subject to the original due date for submission will then be subject to the new date for submission.
- iv. Any tender received by the Tender Inviting Authority after the due date and time will not be considered and will be returned to the tenderer.

1.2 Procedure for Submission of Tender

i. Tenderers are advised to go through the tender documents and understand all the provisions and stipulations contained therein before submitting the tender.

- ii. The tender shall be submitted as per the procedures and requirements stipulated herein.
- iii. Tender submitted by fax will not be accepted and will be summarily rejected.
- iv. The Commercial bid should be neatly typed. Handwritten offers will be rejected. Any deviation in the offer shall lead to rejection.

v. The tenderer who are supplying imported material, must be registered with the Competent Authority/Department of the Government of India.

- vi. The purchaser shall not be responsible for any postal delay in receipt of the offer. Any bid received by the Purchaser which does not fulfil the required terms and conditions shall be rejected outrightly and no communication in this regard shall be sent. Delayed/Late bids will not be accepted, at any circumstances.
- vii. All the bids will be opened in the presence of bidder's representatives, who, choose to attend the same as per the date and time specified in the Tender Document.
- viii. This tender is based on two-cover systems i.e. Technical bid and price bid. Therefore, the tender shall be submitted in two parts viz. Cover A and Cover B. Each part shall be placed in an independent sealed envelope and shall be superscribed as follows:

Cover-A : "TECHNICAL BID COVER"

"TENDER FOR SUPPLY OF EQUIPMENT FOR ESTABLISHING EDUCATIONAL MULTIMEDIA CENTRE IN ANNAMALAI UNIVERSITY"

TENDER No.:AU/DRD/RUSA 2.0 /EMMC/Equipment/Tender/05/2020-21

Cover-B : "PRICE BID COVER"

"TENDER FOR SUPPLY OF EQUIPMENT FOR ESTABLISHING EDUCATIONAL MULTIMEDIA CENTRE IN ANNAMALAI UNIVERSITY"

TENDER No.:AU/DRD/RUSA 2.0 /EMMC/Equipment/Tender/05/2020-21

The contents of each of the two covers shall be as described in the subsequent clauses. For all other references, these covers will be referred to briefly as "**Technical Bid Cover**" and "**Price Bid Cover**".

Both the covers i.e. Cover-A and Cover-B, shall be placed inside an outer cover and shall be superscribed as follows:

"TENDER FOR SUPPLY OF EQUIPMENT FOR ESTABLISHING EDUCATIONAL MULTIMEDIA CENTRE IN ANNAMALAI UNIVERSITY"

TENDER No.: AU/DRD/RUSA 2.0 /EMMC/Equipment/Tender/05/2020-21

ix. The sealed tender envelope shall be addressed to:

The Registrari/c, Annamalai University, Annamalainagar – 608 002, Chidambaram, Tamil Nadu, India

- x. The tender envelope shall carry the name and address of the Tenderer prominently with Phone No. / email ID / and FAX No.
- xi. The **Technical Bid Cover** (**Cover-A**) shall contain the following as per the sequence indicated below.

| 1. | Tender Document Fee of Rs.2,100/- as per clause- 3 of the Tender Document |
|----|--|
| 2. | Earnest Money Deposit (EMD) of Rs.40,000/-as per clause-5 of the Tender document |
| 3. | Application form for supply of equipment as per Appendix-1 |

| 4. | Documentary evidence for payment of income tax for past 3 years. The Profit and Loss Account and Balance Sheet for the latest year to be submitted | | |
|-----|---|--|--|
| 5. | Letter of Tender as per Appendix-2 | | |
| 6. | Documentary evidence for registration under GST. | | |
| 7. | The Document of ISO: 9001/ Equivalent Certified Company of various products quoted | | |
| 8. | A copy of Manufacturing license/Registration Certificate | | |
| 9. | Authorization from Manufacturer in case of Authorized Dealers/Distributors/Suppliers | | |
| 10. | Undertaking letter for not being block listed in any Government Organizations | | |
| 11. | Documentary evidence of supplying similar items to other Universities/Institutions/Govt. agencies. | | |
| 12. | In addition to the above any document or certificates, etc., mentioned anywhere in the tender document shall also be a part of the technical tender requirements. | | |

xii. The **PRICE BID COVER** (**Cover-B**) shall contain the Price Bid as per the format given in Appendix – III.

The tenderer shall not carry out any alteration in the format prescribed for Price Bid. The tenderer shall not enclose any other document or statement that will influence the price. In such an event, the tender inviting authority shall summarily reject the tender.

1.3. Signing of the Tender

The tender shall be signed by a person or persons duly authorized to sign on behalf of the Tenderer. All pages of the tender shall be signed by the person or persons signing the tender. <u>The tenderer shall enclose a certified copy of the</u> <u>power of attorney authorizing the signatory or signatories to sign the tender</u> <u>document.</u> This certification shall be from the Managing Director or the Legal Manager of the firm.

The tender shall contain no alterations or additions, except those to comply with instructions issued by the Tender Inviting Authority, or as necessary to correct errors made by the tenderer, in which case such corrections shall be signed by the person or persons signing the tender.

All the pages in the tender document should be signed by the tenderer, after filling the prices in figures & words.

Part IV

GENERAL TERMS AND CONDITIONS

1.1. Delivery Schedule:

The Price Quoted should be FOR CHIDAMBARAM/ ANNAMALAINAGAR

- i. Materials should be door delivered at Annamalai University, Annamalainagar, Chidambaram, Tamilnadu.
- Delivery must be made within a period of 45 days from the issue of the order either directly or through their dealer network unless otherwise specified.
- iii. If the supplier fails to deliver the equipment ordered within the allotted delivery period as specified above, the Purchaser may procure goods/ services similar to those un-delivered upon such terms and in such manner as it deems appropriate from any other firm at the risk and cost of the supplier.

1.2 Payment Terms:

- i. 75% of payment will be made within 30 days from the date of delivery of all items after verification. Balance 25% after installations, commissioning and training of personnel on the equipment and acceptance by concerned Department/ Section.
- ii. **Payment shall be made by Cheque/ PFMS or such other mode**/ electronic fund transfer offered by the Bank.

1.3 Taxes & Duties:

 Annamalai University is registered with the Department of Scientific and Industrial Research (DSIR) for the purpose of availing Customs Duty exemption in terms of Notfn. No. 51/96- Customs dt. 23.07.1996, Notfu. No. 28/2003 Customs cit. 01.03.2003, Notfu. No. 43/2017- Customs dt. 30.06.2017 & Notfn. No. 47/2017- Integrated Tax (Rate) dt. 14.11 .2017, Notfu. No. 10/2018-Integrated Tax (Rate) dt. 25.01.2018 and Notfn. No. 45/2017- Central Tax (Rate) dt. 14.11.2017, Notfu. No. 45/2017- Union Territory Tax (Rate) dt. 14.11.2017 & Notfn. No. 9/2018 Central Tax (Rate) dt. 25 .01.2018, Notfn. No. 9/2018- Union Territory Tax (Rate) dt. 25 .01.2018

- ii. As per Govt. of India Notification 51/96 Customs dated 23rd July 1996, Annamalai University, Chidambaram, is exempted from Custom duty for all research equipment. The University shall provide all the documents under this notification to enable the supplier to clear the goods without payment of Custom duty, whenever required. Supplier should state clearly that this certificate is required.
- iii. GST may be charged as applicable against DSIR Certificate. Any statutory variation will be paid to supplier on documentary evidence. Supplier should clearly indicate the percentage of GST applicable.
- iv. Clearing & forwarding charges should also be mentioned

1.4 Loss, Damage & shortage:

Annamalai University shall not be responsible for any loss, damages and shortage during transit. Payment shall be made for the ordered material received in good condition only.

1.5 Warranty

The equipment supplied under the contract shall carry a warranty for at least Five years. Supplier shall extend free maintenance service during the warranty period.

1.6 Commissioning and Demonstration

The Supplier shall be responsible for commissioning of the equipment. Supplier should also arrange for demonstration of the equipment to the Staff of the University.

1.7 Annual Maintenance

The University reserves the right to entrust Annual Maintenance of the equipment supplied under this tender to the concerned supplier. Therefore the

tenderer shall mention the annual maintenance charges AMC/SMC in the price schedule after warranty period. Tenderer should also give a brief write up about the services to be covered under the Annual Maintenance.

1.8 General:

The acceptance of the offer will rest with the Annamalai University who reserves the right to reject/accept partially or wholly the tenders received, without assigning any reason.

- i. Mere submission of tender/ proposal does not imply acceptance of the same at this end and the firms will be finalised only after meeting the laid down qualifying parameters for which decision of the Tender Inviting Authority / Tender Accepting Authority shall be final and binding on the parties.
- ii. Printed terms and conditions of the applicant on their quotation Form/ Literature/ Letter etc. if any, will not be binding on the University.

1.9 Liquidated Damages:

Timely delivery is essence of the contract and hence should any consignment be delayed, liquidated damages at the rate 0.5% of the value of the delayed consignment, for each week or part there of shall be levied and recovered subject to maximum of 5% of total order value.

1.10 Acceptance / Rejection:

The Tender Accepting Authority reserves the right to accept a quotation in part or in full or to reject all quotations or any of the quotations received, for non-compliance of any of the above items, conditions or instructions or for any other reason without assigning any reason thereof.

Part V

17

OPENING OF TENDER

1.1 Tender Opening

- Tender will be opened in the presence of the tenderers or their authorized representative who choose to be present and the tender scrutiny committee at <u>10.30 a.m.</u> on <u>19.08.2021</u>. The representative of tenderer who attend the tender opening must produce their **identification proof** and **authorization letter** from the companies / tenderer.
- In the event of the specified date of Tender opening being declared a holiday, the tenders will be opened at the same time on the next working day.

iii. Cover-A containing "Technical Bid" shall be opened first.

- iv. On opening the tender, the details such as name of the tenderer, address,Tender Document Fee, EMD details, etc., will be read out.
- v. Tenders found without the Tender Document Fee and EMD or with an invalid or insufficient Tender Document Fee and EMD, will be summarily rejected. Unopened tenders will be returned to such tenderers.
- vi. On verifying the Tender Document Fee and EMD, the Technical bids will be examined to decide their service suitability for the said work. Tenderers whose Technical bids are not found acceptable will be advised of the same and their sealed covers containing the respective Financial Bids will not be opened. Their EMD will also be returned to them.
- vii. Price bids of only those tenderers whose Technical bids are substantively responsive, will be opened.

1.2 Process to be Confidential

- i. Information relating to the examination, clarification, evaluation and comparison of tenders and recommendations for the award of contract shall not be disclosed to tenderers or any other persons not officially concerned with such process until the award to the successful tenderer has been announced.
- ii. Any effort by a tenderer to influence the tender accepting authority, scrutiny / evaluation committee or its members in the processing of tenders or award decisions may result in the rejection of his tender.

1.3 Criteria for Technical Evaluation (Evaluation of Technical Bid)

- i. The tender accepting authority will determine whether the tenderer has fulfilled all the tender conditions as stipulated in the tender document and whether the tender is substantially responsive or not.
- A responsive tender is one which conforms to all the terms, conditions and specifications of the tender documents without material deviation or reservation. A material deviation or reservation is one:

a) Which affects in any substantial way the scope, quality or performance of the contract.

b) Which is a substantial way of inconsistent with the Tender conditions, the tender accepting authority's rights or the Tenderers obligations under the Contract, or

c) Whose rectification would affect unfairly the competitive position of other Tenderers presenting substantively responsive Tenders.

 iii. Tenderers who have not fulfilled the tender conditions shall be a nonresponsive tender and will not be taken up for further evaluation and Price Bid opening.

- iv. To assist the examination, evaluation and comparison of Tenders, the tender accepting authority may at its discretion, ask any tenderer for clarification on his Tender. The request for clarification and the response shall be in writing or by fax but no change in the substance of the Tender shall be so sought, offered, or permitted
- v. When a tender fails to be responsive, it will be rejected by the tender accepting authority and may not subsequently be made responsive by correction or addition / withdrawal of the non-conforming deviation or reservation.

1.4 Price Bid Opening and Evaluation of Price Bid

- The Tender inviting Authority will then proceed with opening of Cover-B,
 i.e., "PRICE BID COVER" of those tenderers whose technical bid has been found substantively responsive. The opening of the "Price Bid cover" will be done in the presence of those tenderers or their representatives who choose to be present. The Tender Inviting Authority will inform such tenderers in advance about the acceptance of their technical tender and the date and time of opening of the "Price Bid Cover".
- ii. The tender will be evaluated based on the prices offered by the tenderers for the concerned equipment.
- iii. The tender who has bid the lowest evaluated price will be determined considering the following factors:
 - a) the quoted price shall be corrected for arithmetical errors.
 - b) in cases of discrepancy between the prices quoted in words and in figures, lower of the two shall be considered.
- iv. The evaluation shall include all central duties such as customs duty (for the imported items), central excise duty, GST, as a part of the price, as detailed below:

- a) In evaluation of the price of an imported item, the price has to be determined inclusive of the customs duty.
- b) In evaluation of the price of articles which are subject to excise duty, the price has to be determined inclusive of such excise duty.
- v. Annual Maintenance charges will not be included while evaluating the tender.

2. Award of Tender

2.1 The award of the tender shall be made strictly in accordance with the "Tamil Nadu Transparency in Tenders Act 1998 and Rules 2000 and no deviation will be made.

2.2 Notwithstanding anything that is said herein, the Tender Accepting Authority reserves the right to accept or reject any tender or all tenders, and to cancel the tendering process and reject all tenders, at any time prior to the award of tender, without thereby incurring any liability to the affected tenderer or tenderers or any obligation to inform the affected tenderer or tenderers on the grounds for the tender accepting authority's action.

3. Notification of Award

3.1 The tenderer whose tender has been accepted will be notified by the Tender Accepting Authority, in writing.

3.2. Upon furnishing the security deposit by the successful tenderer or tenderers and upon signing the Agreement (Appendix-4), the EMD will be returned to the unsuccessful tenderer within a reasonable time period.

4. Disputes and Jurisdiction:

Any legal disputes arising out of any breach of contract pertaining to this tender process shall be settled in the court of competent jurisdiction located within the **town of Chidambaram** in Tamil Nadu.

5. Acknowledgement:

It is hereby acknowledged that we have gone through all the conditions mentioned above and we agree to abide by them.

Date:

Signature of Tenderer

Place:

Official seal and address

Appendix-I

APPLICATION FORM FOR SUPPLY OF EQUIPMENT

1. NAME OF THE EQUIPMENT:

2. TENDER NUMBER:

| S.NO. | VENDOR DETAILS | |
|-------|---|--|
| 1 | Name and Address of the Manufacturer/Firm/Vendor | |
| | Phone Number | |
| | Fax | |
| | E-Mail | |
| | Contact Person Name | |
| | Mobile Number | |
| 2 | Name and Address of the Local Authorized Dealer/Distributors/ Supplier | |
| | Phone Number | |
| | FAX | |
| | E-Mail | |
| | Contact Person Name | |
| | Mobile Number | |
| 3 | GST No. of the Firm/Dealer (copy to be enclosed) | |
| 4 | PAN No. of the Firm/Dealer (Copy to be attached) | |
| 5 | Tender Document Fee (DD No., Date & Amount and issuing Bank) | |
| 6 | EMD (DD No., Date & Amount and issuing Bank) | |
| 7 | Name of the University/ Government Institutes who have purchased similar equipment from your concern (attach copies) | |

7. Declaration by the tenderer.

- i. We hereby declare that all the particulars given in this application are true and complete to the best of our knowledge and belief and we will produce all the relevant documents promptly, if necessary or as and when asked for by Annamalai University, Chidambaram. We understand that information provided by us will serve as Prequalification Criteria for supply of equipment under this tender and in the event of any information being found false or incorrect or ineligibility being detected even after the award of contract, our contract may be cancelled and all our claims may be forfeited by the Annamalai University, Annamalainagar. We have read and understood all the terms and conditions of the tender and we fully agree to it.
- ii. We also declare that we will not sell our products at a lesser price to other parties than those supplied to Annamalai University and in the event of happening of such situation, we will be bound to refund the difference and our contract may also be cancelled at the discretion of Annamalai University.
- iii. We also undertake that all the terms such as Product Range, Price, Discount, Delivery/other charges, Terms of Payment and also the name/s of the Dealer/ Distributor will remain unchanged during the contract period and no alteration will be done without the approval of Annamalai University.

| Date : | Signature | : |
|---------|------------------|---|
| Place : | Name | : |
| | Designation | : |
| | Seal of the firm | : |

Appendix – II

TENDER FOR SUPPLY OF EQUIPMENT FOR ESTABLISHING EDUCATIONAL MULTIMEDIA CENTRE IN ANNAMALAI UNIVERSITY

LETTER OF TENDER

То

The Registrar, Annamalai University, Annamalai Nagar, Chidambaram – 608 002.

Sir,

Sub: Tender for Supply of Equipment for establishing EMMC in AU.

1) I / We, the undersigned do hereby tender and undertake to Supply of ______ equipment to Annamalai University in strict accordance with and subject to the terms and conditions set forth or mentioned in the Tender documents and appendices.

2) I / We have gone through the instructions in the tender and carefully read all the conditions of tender and agree to abide by all the conditions mentioned there in.

| 3) | I / We hereby state that I/we have remitted | _ (Rupees |
|------|---|------------------------|
| | | only) in the form of |
| Dema | and Draft/Bankers Cheque No Dated : | drawn on |
| | | Bank |
| | Branch, in favo | our of the "Registrar, |
| Anna | malai University", as Earnest Money Deposit and agree to ha | ve it forfeited by the |

Annamalai University in case of my / our failure to supply the equipment.

4) I / We hereby certify that the price offered is final and I / We will not come forward for any revision or alteration in rates quoted subsequently due to hike in prices or any other reasons. However, I/We are aware of the University's right to negotiate the discount rate while evaluating the tender.

5) I / We confirm that our Tender is in conformity with the technical specifications and commercial terms & conditions as stipulated in the Tender Document and without any deviations whatsoever. I am / We are aware that our Tender is liable for disqualification in the event of technical and commercial deviations observed by the Tender Accepting Authority at a later date during the process of evaluation of our Tender.

6) I / We further declare that the information and documents furnished in the Tender submitted by us are correct and genuine. I am/We are aware of the Tender Inviting Authority's right to forfeit the Earnest Money Deposit and / or Security Deposit and blacklisting me/us if, any information furnished by us proved to be false at the time of inspection and not complying with the tender conditions.

7) I/We state that I/We have not been blacklisted or debarred from participating in tenders by any Central/State Government agencies or autonomous bodies or universities / institutions.

8) In the event of my/our tender becoming successful, I/We undertake and agree to forward to the Registrar, Annamalai University, in ten (10) days, after the notification of the acceptance of this tender has been received by us.

9) We undertake and agree that we will not withdraw this Tender during the period that will be required for intimation of acceptance or non-acceptance as stipulated in clause 1.10 of the Tender document. If I/We do so withdraw, I/We shall forfeit the Earnest Money Deposit to Annamalai University. I/We agree to execute at our cost the Agreement in ten (10) days after the notification of the acceptance of our Tender has been received by us. In the event of our failing to make the Security Deposit or to execute the Agreement in the said manner, the Earnest Money Deposit accompanying

this Tender shall be forfeited to the Annamalai University and this concluded Contract shall in such case be considered as having been cancelled or terminated and I/We agree to be liable, irrespective of the forfeiture aforesaid for all damages, losses, costs, charges and expenses arising from or by reason of such failure and arrangements.

As witness our hand this.....day of.....of 2021.

- Signature of the Tenderer :
 - Name & Address
 - Company Seal :

:

Appendix- III

PRICE BID OF EQUIPMENT FOR ESTABLISHING EDUCATIONAL MULTIMEDIA CENTRE IN ANNAMALAI UNIVERSITY

| S.No. | Items | Specifications | Qty | Rate/Unit (Rs) | Total Cost (Rs.) |
|-------|---------------------------------|--|-----|-------------------|---------------------|
| | BRANDED ITEMS ONLY TO BE QUOTED | | | | |
| 1. | Video Camera with Tripod | 4k Handheld Camcorder with all new 1/3 type 3CMOS with 4k 50p/60 recording capability ,25k zoom lens & advanced face detection AF Lithium – ion battery 64 GB Tough High-speed SF-G64T/T1 Card reader Video tripod kit(Load capacity 1Kg) Camera mounted wireless lavalier microphone system | 1 | | |
| 2. | Video camera - PTZ camera | • 1/2.5 Inch based 4K CMOS COLOR VIDEO CAMERA WITH 12x Optical, MIC Input, 3G- SDI, HDMI OUT and IP Stream, PoE, Optional 4K & NDI/HX upgrade | 1 | | |
| 3. | Handycam | 1080p, USB, Carl Zeiss Vario Tessar- Lens, Screen-2.7 inches, Face detection, Max. Focal Length- 57 millimetres, Minimum focal Length- 1.9 millimetres 10 MP video Handheld camcorder | 1 | | |
| 4. | Wireless Microphone | Camera mounted wireless lavalier microphone system with adjustable in 25 kHz steps 20 frequency banks, each with up to 12 factory-preset channels, no intermodulation 1 frequency bank with up to 12 programmable channels Frequency response (MicBandwidth: Up to 46 MHz vs up to 88 MHz) RF Output Power: Fixed 30 mW vs adjustable 10/30/50 mW Included Lavalier Mic: ME 2-II omni Audio Output: Unbalanced vs balanced | 2 | | |

| 5. | Wireless Hand-Held microphone | Camera mounted wireless Hand-held microphone system with adjustable in 25 kHz steps 20 frequency banks, each with up to 12 factory-preset channels, no intermodulation 1 frequency bank with up to 12 programmable channels Frequency response (MicBandwidth: Up to 46 MHz vs up to 88 MHz) UHF Frequencies: 1680 vs up to 3520 RF Output Power: Fixed 30 mW vs adjustable 10/30/50 mW | 1 | |
|----|-------------------------------------|---|---|--|
| 6. | Wired Hand-Held Microphone | High-quality dynamic cardioid microphone Sensitivity in free field, no load (1kHz) 2.0 mV/Pa Frequency response 40 - 18000 Hz Nominal impedance350 Ω Output Connector XLR-3 | 2 | |
| 7. | i-Mac system with acquisition cards | 27-inch iMac with retina 5k display 3.8ghz 8 core 10generation intel core i7 processor 8 GB RAM 512 GB FD Random pro 5500 graphics card Mac Operating system Multi I/O Docking Station For iMac(11 Multi I/O with 5k Display 2 Thunderbolt 3, Five USB) With required driver software | 2 | |
| 8. | Final Cut Pro | Professional post production software | 2 | |
| 9. | Audio – Video workstation | CPU AMD Ryzon 9 3900X Motherboard ASUS TUF X570 plus Graphics card NVIDIA GTX 1660 super Memory 2 x 16 GB DDR4 Slod State Drive F+GIGABYTE Aorous 1 TB M2BVMPCle Hard disk Drive WD Blue 4 TB Sound card ASUS sound card Essence STX I Power supply -Corsair RM850M 80 plusGols rated Case corsair 750D OS – WINDOWS 10 Professional 64 bit Display 27-inch full HD LED Backlit IPS panel monitor | 1 | |

| | | • Video editing software- Adobe | | |
|-----|--------------------|---|---|--|
| | | premiere | | |
| | | • Audio recording and editing | | |
| | | software -Adobe audition | | |
| | Desister commuter | • Intel core i7 (10 th generation) 32 Ch (1000 CP UDD/Win down 10 | | |
| 10. | Desktop computer | Gb/1000 GB HDD/Windows 10 | 1 | |
| | | professional With a second data and the second | | |
| | | • With required driver software | | |
| | | • Display: 14-inch Full HD (1920 x 1080) IPS WLED-backlit Touch screen | | |
| | | display 250 nits Anti-glare panel | | |
| | | Micro Edge display | | |
| | | Processor: 8th Gen Intel Core i7-8565U | | |
| | | Operating System: Pre-loaded Windows | | |
| 11. | Laptop | 10 | 1 | |
| 11. | | Memory & Storage: 16GB DDR4 RAM | 1 | |
| | | Storage: 512GB PCIeNVMe M.2 SSD | | |
| | | • Graphics: NVIDIA GeForce MX250 (2 | | |
| | | GB GDDR5 dedicated) | | |
| | | • With required driver software | | |
| | | • With carry case | | |
| | | • 100w LED soft panel light | | |
| | | 3200K/5600Kcolour temperature | | |
| | | • CRI,TLCI and R9Value above 95 | | |
| | | Control mode manual and DMX | | |
| | | Control mode through 5 pin/3pin | | |
| | Studio Cool Lights | xlr,Extreme soft illumination with | - | |
| 12. | with stand | diffuser | 3 | |
| | | • 0-100% linear dimming | | |
| | | • Black powder coated fabricated housing | | |
| | | with normal yoke and colour frame with | | |
| | | 4 leaf bandoor | | |
| | | • Stand for 100w panel light | | |
| | | • 8-channel Digital Video Mixer with 3G- | | |
| | | SDI, HDMI, Composite Video plus | | |
| | | dedicated DSK | | |
| | | • Built-in Multiviewer with Touch Control | | |
| | | - LICD Streaming out | | |
| 13. | Video mixer | • USB Streaming out | 1 | |
| | Video mixer | • Onboard Effects & Chroma key, | | |
| | | Overlay Logo | | |
| | | • Mix between 8 video sources + 1 Title | | |
| | | • Installation and Integration | | |
| | | - | | |
| | | • With carry case | | |

| 14. | Audio mixer | 8+2 channel frame size. Built-in 24 bit Lexicon digital effects processor. 32 FX settings. Tap Tempo and FX setting store function. 1 FX send on each channel. 1 configurable auxiliary bus. Installation and Integration With carry case | 1 | |
|-----|--------------------------|--|---|--|
| 15. | External hardisk 3 TB | • 3 TB wired portable Hard Disk | 3 | |
| 16. | Motorized chroma screen | 5x8 sized motorized chroma screen Mount Type -Wall mount Installation of chromo screen | 1 | |
| 17. | Studio Speakers | 2-way bass-reflex bi-amplified near field studio monitor, 5" cone woofer and 1" titanium dome high-frequency unit delivers 50Hz- 40kHz frequency response, 67 watts (LF 40W + HF 27W) dynamic bi-amplified power Installation of speakers | 2 | |
| 18. | USB audio recorder | With 8GB Internal Memory | 1 | |
| 19. | Web presenter | SDI Video Input 1 SDI Video Output 1x program out, 1x loop out. SDI Rates 1.5G, 3G, 6G, 12G HDMI Video Input 1 HDMI Video Output 1x loop out Analog Audio Inputs 1x XLR mic and line, 2x HiFianalog. Total Audio Outputs None, embedded audio only. USB Webcam 1 | 1 | |
| 20. | Video Recorder | HD/SD-SDI Hard Drive Video Recorder HD/SD-SDI, Time code & Audio Interface. SDI/HDMI outputs. Support up to 120Mbps I-frame recording, 4:2:2 sampling, record MOV/MXF. *c/w 2x 500GB Media Cartridge. (support 10-20 hours recording) | 1 | |

| 21. | Streaming Server Titler pro 7 software | H.264 Video Streaming Encoder 1x SDI / HDMI input RCA unbalanced audio input Streaming videos in RTMPS, RTMP, RTSP formats to Social media Record on SD card Professional Titles maker | 1 | |
|-----|--|---|---|--|
| 23. | DiskStation +5-Bay NAS Server | Maximum Internal capacity 15 TB External HDD Interface-USB 2.0 Port x 4, eSATA Port x 2 Access and share data with any Windows, macOS, and Linux computers or mobile device With carry case | 1 | |
| 24. | All-in-One Laser Printer | Printer Type - Laser ; Functionality - Single Function (Print Only); Printer Output - Mono Pages Per Minute - 34 ppm Page Size Supported - A4, Letter, A5, A5(Long Edge), A6, Executive, Legal, Folio, Mexico Legal, India Legal Compatible Laser Toner - TN-B021; Page Yield - 2600 pages (Black) | 1 | |
| 25. | UPS | Single phase, IGBT based, Online UPS 5.0KVA 230V±10% V AC, 50±5% Hz, Single phase-three wire (Phase+Neutral+Ground) with stand Installation of UPS | 1 | |
| 26. | UPS | Single phase, IGBT based, Online UPS 2.0KVA 230V±10% V AC, 50±5% Hz, Single phase-three wire (Phase+Neutral+Ground) with stand Installation of UPS | 1 | |
| 27. | 55 inch LED monitor | 55 inch 4K Ultra HD TV with 3 HDMI & 1 Composite Video Input with stabilizer Installation of Monitor | 1 | |
| 28. | 32 inch LED TV | 32 inch Full HD TV with 2 HDMI & 1 Composite Video Input Installation of TV | 1 | |
| 29. | 22 inch LED monitor | 22 inch 4K Ultra HD Monitor Installation of Monitor | 1 | |

| 30. | Air-condition | 1.5 Ton 5 Star Inverter Split AC with stabilizer Installation of AC | 1 | |
|-----|--|---|---|--|
| 31. | Air-condition | 1Ton 5 Star Inverter Split AC with stabilizer Installation of AC | 1 | |
| 32. | CCTV | 5MP 8 CCTV Cameras with Night Vision and 8 Channel NVR Standalone Kit with 1 TB Hard Disk Installation of 8 CCTV Cameras | 1 | |
| 33 | HD Visual Communications System – Full HD video conferencing end point | Multipoint (1+3) - Video Conferencing System Full HD 1080p image quality Multi-Device Camera Control USB Memory Recording Dual Monitor Interoperability with other manufacturers' videoconference units | 1 | |
| 34. | Interactive touch screen panel with required computer pen | WacomScreen size 80 cm 4K ultra HD Wacom pro pen Installation | 1 | |
| 35. | Networking components | I/O set -10 Nos RJ 45 1m patch cord -25 nos 4u Rack Cat 6 cable - One coil wire Pipe casing as required Gigabyte 24 port Ethernet Switch Switch capacity -200Gbps or higher Switch forwarding rates -300 Mbps or higher for both IPv4 and IPv6 10G SFP+ / 1G SFP Ports-2 no. 1G RJ-45 Ports-72 no. Support for at least 500 VLANs & 60k MAC address It should support IGMP snooping v1,v2 & v3 It should have advanced static IP routing,RIP,RIPnG,OSPF,OSPFv3, PIMandvrflitefromday1 Dynamic Host Configuration Protocol (DHCP) snooping Should support Secure Shell (SSH) Protocol and Simple Network | | |

| Management Protocol Version v1,v2,v3. console port for administration & management Management using CLI, GUI using Web interface should be supported FTP/TFTP for upgrading the operating System IEEE 802.1x support IEEE 802.1D Spanning-Tree Protocol IEEE 802.1p class-of-service (CoS) prioritization IEEE 802.1Q VLAN IEEE 802.3 10BASE-T specification IEEE 802.3u 100BASE-TX specification Should have modular OS and should support configuration roll back to recover mis-configured switch to last known good configuration Switch should be manageable through both IPv4 & IPv6. Switch should be FCCPart15, ICES 003, VCCIClassA, EN55022, EN55024, EN300386, CAN/CSA 22.2 No.60950-1, Reduction of Hazardous Substances (ROHS) 6 certified The Switch should be EAL3/ NDPP certified Installation of 10 networking points | | |
|--|--|--|
| IOTAL | | |

IMPORTANT NOTE:

- 1. The Price quoted above shall be inclusive of all taxes and charges except GST.
- 2. GST shall be mentioned separately. If not the price bid will not be considered.
- 3. FOR: Destination as given in the purchase order.
- 4. Warranty period for the above items must be at least 5 years from the date of installation.
- 5. All the purchased equipments should be installed as per requirement.

- 6. Annual Maintenance Charges (after expiry of warranty period).
- 7. The above mentioned equipment and accessories are to be installed as per the layout enclosed in the tender document.
- 8. Training must be provided to the faculty members for using the equipments and software, for six days after the successful installation of the equipment in two spells (3days + 3 days).

Payment Terms: 75% of payment will be made within 30 days from the date of delivery of all items after verification. Balance 25% after installations, commissioning and training of personnel on the equipment and acceptance by concerned Department/ Section.

Signature:

Name:

Designation:

Seal of the Firm:

Appendix – IV

CONTRACT AGREEMENT

THIS AGREEMENT made on the day of 2021 between The Registrar, Annamalai University, Annamalainagar – 608 002, Chidambaram. (Herein after "the Purchaser") of the one part and (Name of Supplier) of (Address of the Supplier) (herein after called "the Supplier) of the other part:

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 Tender referred to, and they shall be deemed to form and be read and construed as part of this agreement.
- **2.** The following documents shall be deemed to form, be read and construed as part of this Agreement, viz;
 - a) The letter of Acceptance issued by the purchaser.
 - b) The Notice Inviting Tender.
 - c) The supplier's bid including enclosures, appendixes, documents, Price Catalogue etc.
 - d) The Tender Document including various Terms and Conditions.
 - e) Any other document listed in the Tender document.
- **3.** In consideration of the payments 75% of payment will be made within 30 days from the date of delivery of all items after verification. Balance 25% after installations, commissioning and training of personnel on the equipment and acceptance by concerned Department/ Section
- **4.** The warranty period is ______ years.

5. The AMC/SMC for the subsequent year after the warranty period will be as follows.

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

Signed, Sealed and Delivered by the Said (For the Supplier) in the presence of

Signature

Name &Address

Signed, Sealed and Delivered by the Said (For the Purchaser)

in the presence of

Signature

Name &Address

Appendix - V

TENDER NO.:AU/DRD/RUSA 2.0/EMMC/Equipment/Tender/05/2020-21

EQUIPMENT FOR ESTABLISHING EDUCATIONAL MULTIMEDIA CENTRE

TECHNICAL SPECIFICATION

| S.No. | Equipment with Specifications (Branded Items only) |
|-------|---|
| | Video Camera with Tripod |
| | 4k Handheld Camcorder with all new 1/3 type 3CMOS with 4k 50p/6o recording capability ,25k zoom lens & advanced face detection AF Lithium – ion battery |
| 1. | • 64 GB Tough High-speed SF-G64T/T1 |
| | • Card reader |
| | Video tripod kit(Load capacity 1Kg) |
| | Camera mounted wireless lavalier microphone system |
| | Video camera - PTZ camera |
| 2. | 1/2.5 Inch based 4K CMOS COLOR VIDEO CAMERA WITH 12x Optical, MIC Input, 3G- SDI, HDMI OUT and IP Stream, PoE, Optional 4K & NDI/HX upgrade |
| | Handycam |
| | • 1080p, USB, Carl Zeiss Vario Tessar- Lens, Screen-2.7 inches, Face |
| 3. | detection, Max. Focal Length- 57 millimetres, Minimum focal Length- |
| | 1.9 millimetres |
| | • 10 MP video Handheld camcorder |
| | Wireless Microphone |
| | • Camera mounted wireless lavalier microphone system with adjustable in 25 kHz steps 20 frequency banks, each with up to 12 factory-preset channels, no intermodulation 1 frequency bank with up to 12 programmable channels |
| 4. | Frequency response (MicBandwidth: Up to 46 MHz vs up to 88 MHz) RF Output Power: Fixed 30 mW vs adjustable 10/30/50 mW |
| | Included Lavalier Mic: ME 2-II omni |
| | Audio Output: Unbalanced vs balanced |
| | Wireless Hand-Held microphone |
| | Camera mounted wireless Hand-held microphone system with |
| | adjustable in 25 kHz steps 20 frequency banks, each with up to 12 |
| 5 | factory-preset channels, no intermodulation 1 frequency bank with up to |
| 5. | 12 programmable channels |
| | • Frequency response (MicBandwidth: Up to 46 MHz vs up to 88 MHz) |
| | • UHF Frequencies: 1680 vs up to 3520 |
| | • RF Output Power: Fixed 30 mW vs adjustable 10/30/50 mW |

| | Wired Hand-Held Microphone |
|-----|---|
| | High-quality dynamic |
| | cardioid microphone |
| | Sensitivity in free field, no load (1kHz) |
| 6. | 2.0 mV/Pa |
| | Frequency response 40 - 18000 Hz |
| | Nominal impedance350 Ω |
| | Output Connector XLR-3 |
| | i-Mac system with acquisition cards |
| | 27-inch iMac with retina 5k display 3.8ghz 8 core 10generation Intel |
| | core i7 processor |
| | • 8 GB RAM 512 GB FD |
| 7. | Random pro 5500 graphics card |
| | Mac Operating system |
| | Multi I/O Docking Station For iMac(11 Multi I/O with 5k Display 2 |
| | Thunderbolt 3, Five USB) |
| | • With required driver software |
| 0 | Final Cut Pro |
| 8. | Professional post production software |
| | Audio – Video workstation |
| | • CPU AMD Ryzon 9 3900X |
| | Motherboard ASUS TUF X570 plus |
| | Graphics card NVIDIA GTX 1660 super |
| | • Memory 2 x 16 GB DDR4 |
| | • Slod State Drive F+GIGABYTE Aorous 1 |
| | TB M2BVMPCle |
| | • Hard disk Drive WD Blue 4 TB |
| 0 | • Sound card ASUS sound card Essence STX I |
| 9. | • Power supply -Corsair RM850M 80 plusGols |
| | rated |
| | • Case corsair 750D |
| | • OS – WINDOWS 10 Professional 64 bit |
| | • Display 27-inch full HD LED Backlit IPS |
| | panel monitor |
| | Video editing software- Adobe premiere |
| | • Audio recording and editing software -Adobe |
| | audition |
| | Desktop computer |
| 10 | • Intel core i7 (10 th Generation) 32 Gb/1000 GB HDD/Windows 10 |
| 10. | professional |
| | With required driver software |
| | Laptop |
| 11 | • Display: 14-inch Full HD (1920 x 1080) |
| | • IPS WLED-backlit Touchscreen display 250 nits Anti-glare panel |
| | Micro Edge display |
| | Processor: 8th Gen Intel Core i7-8565U Operating System: Pro loaded Windows 10 |
| | Operating System: Pre-loaded Windows 10 Memory & Storage: 16GB DDR4 RAM Storage: 512GB PCIeNVMe |
| | Memory & Storage: 16GB DDR4 RAM Storage: 512GB PCIeNVMe M.2 SSD |
| | Graphics: NVIDIA GeForce MX250 (2 GB GDDR5 dedicated) |
| | Graphics: NVIDIA Geroice MA250 (2 GB GDDR5 dedicated) With required driver software |
| | With required driver software With carry case |
| | |

| Studio Cool Lights with stand |
|---|
| 100w LED soft panel light 3200K/5600Kcolour temperature |
| CRI,TLCI and R9Value above 95 |
| Control more manual and DMX |
| • Control mode through 5 pin/3pin xlr,Extreme soft illumination with |
| diffuser |
| • 0-100% linear dimming |
| • Black powder coated fabricated housing with normal yoke and colour |
| frame with 4 leaf bandoor |
| Stand for 100w panel light |
| Video mixer |
| • 8-channel Digital Video Mixer with 3G-SDI, |
| HDMI, Composite Video plus dedicated |
| DSK |
| Built-in Multiviewer with Touch Control |
| USB Streaming out |
| Onboard Effects & Chroma key, Overlay |
| Logo |
| • Mix between 8 video sources + 1 Title |
| |
| Installation and IntegrationWith carry case |
| Audio mixer |
| 8+2 channel frame size. |
| |
| |
| processor. |
| • 32 FX settings. |
| • Tap Tempo and FX setting store function. |
| • 1 FX send on each channel |
| • 1 configurable auxiliary bus |
| Installation and Integration |
| With carry case |
| External hardisk 3 TB |
| • 3 TB wired portable Hard Disk |
| Motorized chroma screen |
| |
| 5x8 sized motorized chroma screen Mount Tung, Wall mount |

12.

13.

14.

15.

| 15. | • 3 TB wired portable Hard Disk |
|------|---|
| | Motorized chroma screen |
| 1.6 | • 5x8 sized motorized chroma screen |
| 16. | • Mount Type -Wall mount |
| | Installation of Chromo screen |
| | Studio Speakers |
| | • 2-way bass-reflex bi-amplified near field studio monitor, 5" cone |
| 17. | woofer and 1" titanium dome high-frequency unit delivers 50Hz- |
| 17. | 40kHz frequency response, 67 watts (LF 40W + HF 27W) dynamic bi- |
| | amplified power |
| | Installation of speakers |
| .18. | USB audio recorder |
| .10. | • With 8GB Internal Memory |

| | Web presenter |
|-----|---|
| 19. | • SDI Video Input 1 SDI Video Output 1x program out, 1x loop out. SDI Rates 1.5G, 3G, 6G, 12G HDMI Video Input 1 HDMI Video Output 1x loop out Analog Audio Inputs 1x XLR mic and line, 2x HiFianalog. Total Audio Outputs None, embedded audio only. USB Webcam 1 |
| | Video Recorder |
| | HD/SD-SDI Hard Drive Video Recorder |
| 20. | • HD/SD-SDI, Time code & Audio Interface. SDI/HDMI outputs. |
| | • Support up to 120Mbps I-frame recording, 4:2:2 sampling, record |
| | MOV/MXF. |
| | *c/w 2x 500GB Media Cartridge. (support 10-20 hours recording) Streaming Server |
| | H.264 Video Streaming Encoder |
| | 1x SDI / HDMI input |
| | RCA unbalanced audio input |
| 21. | * |
| | • Streaming videos in RTMPS, RTMP, RTSP |
| | formats to Social media |
| | Record on SD card |
| 22. | Titler pro 7 software |
| | Professional Title maker |
| | Disk Station +5-Bay NAS Server |
| | Maximum Internal capacity 15 TB |
| 23. | External HDD Interface-USB 2.0 Port x 4, eSATA Port x 2 |
| 23. | Access and share data with any Windows, macOS, and Linux computers |
| | or mobile device |
| | • With carry case |
| | All-in-One Laser Printer |
| | • Printer Type - Laser ; Functionality - Single Function (Print Only); |
| | Printer Output - Mono |
| 24. | • Pages Per Minute - 34 ppm |
| | • Page Size Supported - A4, Letter, A5, A5(Long Edge), A6, Executive, |
| | Legal, Folio, Mexico Legal, India Legal |
| | Compatible Laser Toner - TN-B021; Page Yield - 2600 pages (Black) UPS |
| | Single phase, IGBT based, Online UPS |
| 25. | 5.0KVA 230V±10% V AC, 50±5% Hz, Single phase-three wire |
| 23. | (Phase+Neutral+Ground) with stand |
| | Installation of UPS |
| | UPS |
| | • Single phase, IGBT based, Online UPS |
| 26. | • 2.0KVA 230V±10% V AC, 50±5% Hz, Single phase-three wire |
| | (Phase+Neutral+Ground) with stand |
| | Installation of UPS |

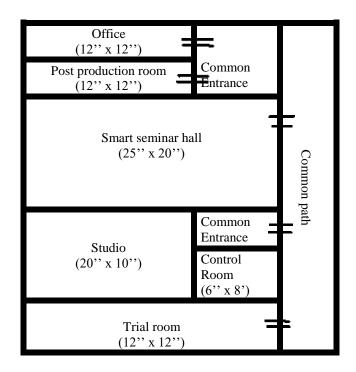
| | 55 inch LED monitor |
|-----|--|
| 27. | • 55 inch 4K Ultra HD TV with 3 HDMI & 1 Composite Video Input |
| 27. | with stabilizer |
| | Installation of Monitor |
| | 32 inch LED TV |
| 28. | • 32 inch Full HD TV with 2 HDMI & 1 Composite Video Input |
| | Installation of TV |
| | 22 inch LED monitor |
| 29. | • 22 inch 4K Ultra HD Monitor |
| | Installation of Monitor |
| | Air-condition |
| 30. | • 1.5 Ton 5 Star Inverter Split AC with stabilizer |
| | Installation of AC |
| | Air-condition |
| 31. | • 1Ton 5 Star Inverter Split AC with stabilizer |
| | Installation of AC |
| | • 5MP 8 CCTV Cameras with Night Vision and 8 Channel NVR |
| 32. | Standalone Kit with 1 TB Hard Disk |
| | Installation of 8 CCTV Cameras |
| | HD Visual Communications System – Full HD video conferencing end |
| | point |
| | |
| | • Multipoint (1+3) - Video Conferencing System |
| 22 | • Full HD 1080p image quality |
| 33. | • Multi-Device |
| | Camera Control |
| | USB Memory Recording |
| | Dual Monitor |
| | • Interoperability with other manufacturers' videoconference units |
| | Interactive touch screen panel with required computer pen |
| | • Wacom Screen size 80 cm |
| 34. | • 4K ultra HD |
| 54. | Wacom pro pen |
| | • Installation |
| | |
| | Networking components |
| | • I/O set -10 Nos |
| | • RJ 45 1m patch cord -25 nos |
| | • 4u Rack |
| | • Cat 6 cable - One coil wire |
| | Pipe casing as required |
| | Gigabyte 24 port Ethernet Switch |
| | • Switch capacity -200Gbps or higher |
| 35. | • Switch forwarding rates -300 Mbps or higher for both IPv4 and IPv6 |
| | • 10G SFP+ / 1G SFP Ports-2 no. |
| | • 1G RJ-45 Ports-72 no. |
| | • Support for at least 500 VLANs & 60k MAC address |
| | • It should support IGMP snooping v1,v2 & v3 |
| | • ItshouldhaveadvancedstaticIProuting,RIP,RIPnG,OSPF,OSPFv3,PIMan |
| | dvrflitefromday1 |
| | Dynamic Host Configuration Protocol (DHCP) snooping |
| | Should support Secure Shell (SSH) Protocol and Simple Network |

| Management Protocol Version v1,v2,v3. |
|--|
| • console port for administration & management |
| • Management using CLI, GUI using Web interface should be |
| supported |
| • FTP/TFTP for upgrading the operating System |
| • IEEE 802.1x support |
| IEEE 802.1D Spanning-Tree Protocol |
| • IEEE 802.1p class-of-service (CoS) prioritization |
| • IEEE 802.1Q VLAN |
| • IEEE 802.3 10BASE-T specification |
| • IEEE 802.3u 100BASE-TX specification |
| • Should have modular OS and should support configuration roll back to |
| recover mis-configured |
| switch to last known good configuration |
| • Switch should be manageable through both IPv4 & IPv6. |
| • Switch should be FCCPart15,ICES- |
| 003,VCCIClassA,EN55022,EN55024,EN300386, |
| • CAN/CSA 22.2 No.60950-1, Reduction of Hazardous Substances |
| (ROHS) 6 certified |
| • The Switch should be EAL3/ NDPP certified |
| Installation of 10 networking points |
| • • |

Appendix - VI

Layout of EMMC

.



NOTE: Data Networking between: 1 Studio – Control room – Post production room – Office 2 Control room – Smart seminar hall – Post production room Monitor networking: Trail room – studio – Office

CCTV Cameras Points: 1 main entrance 2. Commonpath 3. Studio 4. Control room 5. Smart seminar hall 6. Post production room 7. Office entrance 8.Rear side of EMMC