



UNIVERSITY OF CALICUT
(EDUCATIONAL MULTIMEDIA RESEARCH CENTRE)

No. 123393/EMMRC-ASST-1/2017/Admn (2)

Calicut University P.O.,

Dated, 19.09.2017.

The Director, Educational Multimedia Research Centre (EMMRC), University of Calicut, invites e-tender for the Supply, Installation, Testing & Commissioning (SITC) of Professional Broadcast Video Equipment.

A Performance Security equivalent to 5% of the total value of the contract rounded to the nearest rupee should be submitted by the successful bidder for a contract value above Rs.1,00,000/-. The EMD and Performance Security are returnable.

Hard copies (only technical details) of the documents must be submitted to the Director, Educational Multimedia Research Centre (EMMRC), University of Calicut **on or before 13.10.2017 at 5 P.M.**

Tender No	123393/EMMRC-ASST-1/2017/Admn (2)
Last date for submission of bid	10.10.2017 at 5 P.M.
Date of pre-bid meeting	25.09.2017 at 11.00 AM.
Bid-opening date	16.10.2017 at 11 A.M.
Date up to which the rates are to be firm	120 days from opening of tender



CEC



University of Calicut

**Notice Inviting for e-Tender
for
Supply, Installation, Testing & Commissioning
(SITC)
of
Professional Broadcast Video Equipment**



**Educational Multimedia Research Centre (EMMRC)
University of Calicut, Thenjipalam
Kerala - 673 635
Phone : 0494 2407279, 7591
E mail: emmrccalicut@yahoo.co.in
Website: www.emmrccalicut.org**

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A. About EMMRC, Calicut

The Educational Multimedia Research Centre (EMMRC) at the University of Calicut is dedicated to harness the information and communication technologies for furthering the cause of higher education. The media centre produces a variety of products: educational video documentaries, e-contents and video lectures on college education.

B. General Information & Instructions to Bidders

1. This bid aims for Supply, Installation, Testing & Commissioning of Professional Broadcast Video Equipment at the EMMRC - Calicut. Therefore, The Director, Educational Multimedia Research Centre (EMMRC) invites e-tenders through [www. etenders.kerala.gov.in](http://www.etenders.kerala.gov.in). from eligible and qualified firms for **Supply, Installation, Testing and Commissioning (SITC) of Professional Broadcast Video Equipment** which includes,

- SD and HD switchable Tapeless Camcorder
- Accessories for Camcorder Unit
- Tapeless HD/SD Recorder/Player
- Portable Switcher
- Multi Format Switcher (HD/ SD Compatible)
- Broadcast Monitor
- Broadcast Lens for Camcorder.

Bidders are requested to quote their best possible prices with special discount, as the set-up is a non-commercial public service educational initiative supported by University Grants Commission (UGC) and Ministry of Human Resource Development (MHRD), Government of India (GOI).

Rate quoted should be in INR.

Against High Sea Sales transactions:

- Offers should be given separately for total cost of items inclusive of delivery charges up to EMMRC, Calicut and extra charges like Customs Duty, Customs Clearance Charges, Freight Charges etc. Payment / Reimbursement against these extra charges will be released on actual basis.
- Customs Clearance is the responsibility of the supplier and at the cost and risk of the supplier.

- Customs Duty Exemption Certificate and other relevant documents required for Customs clearance will be provided by EMMRC, Calicut.
- High Sea Sales Agreement furnished by the supplier in accordance with the terms and conditions of our purchase order will be signed and issued by EMMRC, Calicut.
- 100% payment will be made within 60 days after receipt and acceptance of the items at our site. (Details are given at points 12 - 15).

The bidders should remit tender cost as detailed below:

Cost of Item/s	Tender fee
Up to Rs. 50,000	Rs. 300/-
Above Rs. 50,000 - up to Rs.10 Lakh	0.2 % of cost of item (subject to a minimum of Rs. 500/- and maximum of Rs. 2,000/-)
Above Rs.10 Lakh - upto Rs.1 Crore	Rs. 2,500/-

Earnest Money Deposit (EMD) & Performance Security

Also 1% of the total cost of the articles tendered for (rounded to the nearest rupee) should be remitted as Earnest Money Deposit (EMD). The EMD should be drawn in favour of the **Finance Officer, University of Calicut**.

Detailed technical specifications (including catalogues and other details if any) should be uploaded under the heading Other Important Documents.

A Performance Security equivalent to 5% of the total value of the contract rounded to the nearest rupee should be submitted by the successful bidder for a contract value above Rs.1,00,000/-. It should be in the form of Performance Bank Guarantee for satisfactory performance for a period of 24 months. The EMD and Performance Security are returnable. No interest will be paid on earnest money / performance security deposited.

Tender documents and tender schedule may be downloaded free of cost from the website www.etenders.kerala.gov.in. All bid/tender documents are to be submitted online only and in the designated cover(s)/ envelope(s) on the website. Tenders/Bids shall be accepted only through online mode on the website and no manual submission of the same shall be entertained. Late tenders will not be accepted.

2. Further details can be had from the Deputy Registrar, Purchase Division, University of Calicut, Calicut University (P.O), Malappuram, Pin.673 635, Kerala (Or) Director, EMMRC, University of Calicut during working hours. (0494 - 2407130, 2407160) (2401143, 2407591).

3. No tender received after the specified date and time will be accepted on any account. The rates will be considered firm for acceptance till the date mentioned above. Tenders not stipulating period of firmness and tenders with price variation clause and/or 'subject to prior sale' condition are liable to be rejected.
4. The tenders will be opened on the appointed day and time in the office of the undersigned.
5. If any tenderer withdraws from his tender before the expiry of the period fixed keeping the rates firm for acceptance, the earnest money if any, deposited by him will be forfeited to EMMRC/ University or such action will be taken against him as EMMRC / University think fit.
6. The final acceptance of the tenders rests entirely with the University who do not bind themselves to accept the lowest or any tender. But the tenderers on their part should be prepared to carry out such portion of the supplies included in their tenders as may be allotted to them.
7. Communication of acceptance of the tender normally constitutes a concluded contract. Nevertheless, the successful tenderer shall also execute an agreement for the due fulfillment of the contract within the period to be specified in the letter of acceptance. The contractor shall have to pay all stamp duty, lawyer's charges and other expenses incidental to the execution of the agreement. Failure to execute the agreement within the period specified will entail the penalties set out in para below :
 - a. The successful tenderer shall, before signing the agreement and within the period specified in the letter of acceptance of his tender, deposit a sum equivalent to 5 percent of the value of the contract as security for the satisfactory fulfillment of the contract less the amount of money deposited by him along with his tender. The amount of security may be deposited in the manner prescribed in Store Purchase Manual (Revised Edition 2013) Government of Kerala. Letters of guarantee in the prescribed form for the amount of security from an approved bank will be considered enough at the discretion of the EMMRC / University. If the successful tenderer fails to deposit the security and execute the agreement as stated above, the earnest money deposited by him will be forfeited to the University and contract arranged elsewhere at the defaulter's risk and any loss incurred by EMMRC / University on account of the Purchase will be recovered from the defaulters who will however not be entitled to any gain accruing thereby. If the defaulting Firm is a registered firm, their registration is liable to be cancelled.

- b. In cases where a successful tenderer, after having made partial supplies fails to fulfill the contracts in full, all, or any of the materials not supplied may at the discretion of the Purchasing Officer, be purchased by means of another tender/quotation or by negotiation or from the next higher tenderer who had offered to supply already and the loss, if any caused to the EMMRC / University shall thereby together with such sums as may be fixed by the University towards damages be recovered from the defaulting tenderer.
 - c. Even in cases where no alternate purchases are arranged for the materials not supplied, the proportionate portion of the security deposit based on the cost of the materials not supplied at the rate shown in the tender of the defaulter shall be forfeited and balance alone shall be refunded.
8. The security deposit shall, subject to the conditions specified herein, be returned to the contractor within three months after the expiration of the contract, but in the event of any dispute arising between the Department concerned and the contractor, the Department shall be entitled to deduct out of the deposits or the balance thereof until such dispute is determined the amount of such damages, costs, charges and expenses as may be claimed. The same may also be deducted from any other sum which may be due at any time from University to the contractor. In all cases deposit will be released only after the expiry of the guarantee period.
9. Delivery schedule and commissioning:
 - Within 4 weeks from date of Purchase Order.
 - Installation, Testing and Commissioning has to be completed within two weeks of the delivery of the equipment.
10. In case of late delivery of the equipment, the supplier shall be liable to pay penalty @ 0.5% of the order value per week of delay, or part thereof, up to a maximum amount of 5% of order value, after which the order is liable to be cancelled.
11. The equipment shall be under warrantee for a period of 24 months from the date of commissioning.
12. The payment shall be done in **INR**.
13. All payments to the contractors will be made by Purchasing Officer in due course:
 - either by Departmental cheques payable at the Kerala Government Treasuries or

- by cheques or drafts on the Reserve Bank of India and State Bank of India (at any of their Principal Branches in India)
- in the case of supplies from abroad by drafts as may be arranged between the contracting parties.

14. All incidental expenses incurred by the University for making payments outside the district in which the claim arises shall be borne by the contractor.
15. Bank charges incurred in connection with payment against documents through Bank will be to the account of the contractor. The firms will produce stamped pre receipted invoices in all cases where payments (advance/final/for the release of railway receipts/shipping documents) are made through banks.
16. The contractor shall impart training to the staff of the EMMRC for its operation and maintenance.
17. In case if the supplier is not the manufacturer, then the supplier must furnish an Authorization Letter from the manufacturer claiming that they are the authorized suppliers and service provider of the manufacturer.
18. The supplier must have authorized service centres / representatives in South India/ India.
19. The contractor shall not assign or make over the contract of the benefits or burdens thereof to any other person or body corporate. The contractor shall not under let or sublet to any person or persons or body corporate the execution of the contract or any part thereof without the consent in writing of the Purchasing Officer who shall have absolute power to refuse such consent or to rescind such consent (if given) at any time if the is not satisfied with the manner in which the contract is being executed and no allowance or compensation shall be made to the contractor or the sub-contractor upon such rescission. Provided always that if such consent be given at any time the contractor shall not be relieved from any obligation, duty or responsibility under this contract.
20. In case the contractor becomes insolvent or goes into liquidation, or makes or proposes to make any assignment for the benefit of his creditors or proposes any composition with his creditors for the settlement of his debts, carries on his business of the contract under inspection on behalf of or his creditors, or in case any receiving order or orders for the which under any clause or clauses of this contract the contractor shall have rendered himself liable to damages amounting to the whole of his security deposits, the contract shall, thereupon, after notice given by the Purchasing Officer to the Contractor be determined and the EMMRC /

University may complete the contract in such time and manner and by such persons as the EMMRC / University shall think fit. But such determination of the contract shall be without non prejudice to any right or remedy of the EMMRC / University against the contractor or his sureties in respect of any breach of contract therefore committed by the contractor. All expenses and damages caused to EMMRC / University by any breach of contract by the contractor shall be paid by the contractor to EMMRC / University, and may be recovered from him under the provisions of the Revenue Recovery Act in force in state.

21. a) In case the contractor fails to supply and deliver any of the said articles and things within the time provided for delivery of the same, or in case the contractor commits any breach of any of the covenants, provided for delivery of the same, or in case the contractor commits any breach of any of the covenants, stipulations and agreements here in contained, and on his part to be observed and performed, then and in any such case, it shall be lawful for EMMRC / University (if they shall think fit to do so) to arrange for the purchase of the said articles and things from elsewhere or on behalf of the EMMRC / University by an order in writing under the hand of the Purchasing Officer put an end to this contract and in case the EMMRC / University shall have incurred, sustained or been put to any costs, damages or expenses by reason of such purchase or by reason of this contract having been so put an end to or in case any difference in price, compensation, loss, costs, damages, expenses of other moneys shall then or any time during the continuance of this contract be payable by the contractor to the EMMRC / University under and by virtue of this contract, it shall be lawful for the EMMRC / University from and out of any moneys for the time being payable or owing to the contractor from the EMMRC / University under by virtue of this contract or otherwise to pay and reimburse to the EMMRC / University all such costs, damages and expenses they may have sustained, incurred or been put to by reason of the purchase, made elsewhere or by reason of this contract having been so put an end to as aforesaid and also all such difference in price compensation, loss costs, damages, expenses and other money shall for the time being be payable by the contractor aforesaid.

b) In case any difference or dispute arises in connection with the contract, all legal proceedings relating to the matter shall be instituted in the Court within whose jurisdiction the purchasing officer voluntarily resides.

22. Every notice hereby required or authorized to be given may be either given to the contractor personally or left at his residence or last known place of abode or

business, or maybe handed over to his agent personally-mailed or may be addressed to the contractor by post at his usual or last known place of abode or business

and if so addressed and posted , shall be deemed to have been served on the contractor on the date on which, in the ordinary course of post, a letter so addressed and posted/e-mailed would reach his place of abode or business.

23. The tenderer shall undertake to supply materials according to the standard sample and /or specifications.
24. No representation for enhancement of rates will be considered.
25. Any attempt on the part of the tenderers or their agents to influence the Department/stores Purchase Department in their favour by personal canvassing with the officers concerned will disqualify the tenderers.
26. The prices quoted should be inclusive of all taxes, duties, cesses, etc., which are or may become payable by the Contractor under the existing or future laws or rules of the country of origin/supply or delivery during the course of execution of the contract.
27. Special Conditions, if any, of the tenderers attached with the tenders will not be applicable to the contract unless they are expressly accepted in writing by the purchaser.
28. Online Payment modes: The tender document fees can be paid in the following manner through e Payment:
 - i. State Bank of India Internet Banking: If a bidder has a SBI internet banking account, then, during the online bid submission process, bidder shall select SBI option and then select Internet banking option. The e-Procurement system will re-direct the bidder to SBI's internet banking page where he can enter his internet banking credentials and transfer the tender document amount.
 - ii. National Electronic Fund Transfer (NEFT): If a bidder holds bank account in a different bank, then, during the online bid submission process, bidder shall select NEFT option. An online remittance form would be generated, which the bidder can use for transferring amount through NEFT either by using internet banking of his bank or visiting nearest branch of his bank. After obtaining the successful transaction receipt no., the bidder has to update the same in e Procurement system for

completing the process of bid submission. Bidder should only use the details given in the Remittance form for making a NEFT payment otherwise payment would result in failure in e- Procurement system. As NEFT payment status confirmation is not received by e-Procurement system on a real time basis, bidders are advised to exercise NEFT mode of payment option at least 48 hours prior to the last date and time of bid submission to avoid any payment issues. NEFT payment should be done according to following guidelines:

- Single transaction for remitting Tender document fee and EMD: Bidder should ensure that tender document fees and EMD are remitted as one single transaction.
- Account number as per Remittance Form only: Account no. entered during NEFT remittance at any bank counter or during adding beneficiary account in Internet banking site should be the same as it appears in the remittance form generated for that particular bid by the e-Procurement system.
- Bidder should ensure that tender document fees and EMD are remitted only to the account number given in the Remittance form provided by eProcurement system for that particular tender.
- Bidders must ensure that the banker inputs the Account Number (which is case sensitive) as displayed in the Remittance form. No additional information like bidder name, company name, etc. should be entered in the account no. column along with account no. for NEFT remittance.
- Only NEFT Remittance Allowed: RTGS payments, Account to Account transfers, State Bank Group Transfers (GRPT) or Cash payments are not allowed and are treated as invalid mode of payments.
- Bidder must ensure that the banker does NEFT transaction only irrespective of the amount and specially instruct the banks not to convert the payment type to RTGS or GRPT.
- Amount as per Remittance form: Bidder should ensure that the amount being remitted is neither less nor higher than the amount shown in remittance form.

- UTR Number: Bidders should ensure that the remittance confirmation (UTR number) received after NEFT transfer should be updated as it is, in the e-Procurement system for tracking the payment.
- One Remittance Form per Bidder and per Bid: The remittance form provided by e- Procurement system shall be valid for that particular bidder and bid and should not be re-used for any other tender or bid or by any other bidder. Any transaction charges levied while using any of the above modes of online payment has be borne by the bidder. The supplier/contractor's bid will be evaluated only if payment status against bidder is showing
“Success” during bid opening

For details logon to www.etenderskerala.gov.in

C. Technical Specifications & Description of the item

Supply, installation and commissioning of the following Professional Broadcast Video and other equipments

1. Specifications for SD and HD switchable Tapeless Camcorder (1 Unit)

General Specifications	Details
Mass	Approx. 4.3 kg (9 lb 8 oz) (body) Approx. 6.0 kg (13 lb 4 oz) (w/ VF, Mic, Disc, BP-GL95 batteries)
Power Requirements	DC 12 V +5.0 V/-1.0 V
Power Consumption	Approx. 40 W (while recording, w/o options, color LCD On) Approx. 44 W (while recording, w/viewfinder, color LCD On, manual lens, microphone)
Operating Temperature	-5 to +40 °C (+23 to +104 °F)
Storage Temperature	-20 to +60 °C (-4 to +140 °F)
Humidity	10 to 90% (relative humidity)
Continuous Operating Time	Approx. 120 min. w/BP-GL95 battery
Video Recording Format	MPEG HD422 (MPEG-2 422P@HL) (CBR: 50 Mb/s) MPEG HD (MPEG-2 MP@HL): HQ mode (VBR, maximum bit rate: 35 Mb/s) SP mode (CBR, 25 Mb/s) LP mode (VBR, maximum bit rate: 18 Mb/s) - playback only MPEG IMX (MPEG-2 422P@ML) (50/40/30 Mb/s) DVCAM (CBR, 25 Mb/s)
Proxy Video	MPEG-4
Audio Recording	MPEG HD422: 4 ch/24 bits/48 kHz MPEG HD: 4 ch/16 bits/48 kHz MPEG IMX: (4ch, 16-bit or 24-bit, 48 kHz)

	DVCAM: 4 ch/16 bits/48 kHz
Audio Proxy	A-law (2 ch/4 ch, 8 bit, 8 kHz)
Recording Media	23GB Optical Disc model PFD23A 50GB Optical Disc model PFD50DLA
Recording Frame Rate NTSC model	MPEG HD422 mode: 1920 x 1080/59.94i/29.97P/23.98P 1280 x 720/59.94P MPEG HD mode: 1920 x 1080/59.94i/29.97P/23.98P 1280 x 720/59.94P MPEG IMX: 59.94i DVCAM: 59.94i
Recording Frame Rate PAL model	MPEG HD422: 1920 x 1080/50i, 25P 1280 x 720/50P MPEG HD: 1920 x 1080/50i, 25P 1280 x 720/50P MPEG IMX: 50i DVCAM: 50i
Recording/ Playback time	MPEG HD422: 50 Mb/s: Approx. 95 min. (PFD50DLA), Approx. 43 min. (PFD23A) MPEG HD: 35 Mb/s, 4-ch audio: More than 145 min. (PFD50DLA), More than 65 min. (PFD23A) 35 Mb/s, 2-ch audio (playback only): More than 150 min. (PFD50DLA), More than 68 min. (PFD23A) 25 Mb/s, 4-ch audio: Approx. 190 min. (PFD50DLA), Approx. 85 min. (PFD23A) 25 Mb/s, 2-ch audio (playback only): Approx. 200 min. (PFD50DLA), Approx. 90 min. (PFD23A) 18 Mb/s, 4-ch audio (playback only): More than 248 min. (PFD50DLA), More than 112 min. (PFD23A) 18 Mb/s, 2-ch audio: More than 265 min. (PFD50DLA), More than 122 min. (PFD23A) MPEG IMX (Option: CBKZ-MD01): 50 Mb/s: Approx. 100 min. (PFD50DLA), Approx. 45 min. (PFD23A) 40 Mb/s: Approx. 120 min. (PFD50DLA), Approx. 55 min. (PFD23A) 30 Mb/s: Approx. 150 min. (PFD50DLA), Approx. 68 min. (PFD23A) DVCAM (Option: CBKZ-MD01): 25 Mb/s: Approx. 185 min. (PFD50DLA), Approx. 85 min. (PFD23A)
Inputs/Outputs Specifications	Detail
Genlock In	BNC x1, 1.0 Vp-p, 75
TC IN	BNC x1, 0.5 to 18 Vp-p, 10 k
SDI IN	BNC x 1 (HD/SD switchable) HD-SDI: SMPTE 292M (w/embedded audio) SD-SDI: SMPTE 259M (w/embedded audio)
Audio In	CH-1/CH-2: XLR 3-pin (female) x 2, line/mic/mic +48 V

	selectable
AES/EBU Input	CH-1/CH-2: XLR 3-pin (female) x 2, AES/EBU selectable
MIC In	XLR 5-pin (female, stereo) x 1
Test Out	BNC x 1 (switchable) HD Y/SD composite SD composite (character On/Off)
SDI Out	BNC x 2 1 (HD/SD switchable) HD-SDI: SMPTE 292M (w/embedded audio) SD-SDI: SMPTE 259M (w/embedded audio) 2 (HD/SD switchable, character On/Off) HD-SDI: SMPTE 292M (w/embedded audio) SD-SDI: SMPTE 259M (w/embedded audio)
Audio Out	CH-1/CH-2: XLR 5-pin (male, stereo) x 1
TC Out	BNC x 1, 1.0 Vp-p, 75
Earphone	Mini-jack x 2
Monitor Speaker	YES
DC In	XLR 4-pin (male) x 1, 11 to 17 V
DC Out	4-pin (Female) (for wireless microphone receiver), 11 to 17 V DC, MAX. 500 mA
Lens Connector	12-pin
Remote	8-pin
Light	2-pin, DC 12 V, max. 50 W
Camera Adaptor	50-pin
i.Link	IEEE 1394, 6 pin x 1, File Access Mode
Memory Stick	x 1 (for camera setup files)
Gigabit Ethernet	RJ-45 x 1, 100Base-Tx: IEEE802.3u, 10Base-T: IEEE802.3
USB	x 1 (for version-up)
Audio Performance Specifications	Details
Frequency Response	20 Hz to 20 kHz, +0.5/-1.0 dB
Dynamic Range	More than 93 dB
Distortion	Less than 0.08% (at 1 kHz, reference level)
Crosstalk	Less than -70 dB (at 1 kHz, reference level)
Wow & Flutter	Below measurable limit
Headroom	20/18/16/12 dB (selectable)
Camera Section Specifications	Detail
Pickup Device	3-chip 2/3-inch type HD Power HAD FX CC
Effective Picture Elements	1920(H) x 1080(V)
Optical System	F1.4 prism
Built-In Optical Filters	1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND A: CROSS, B: 3200K, C: 4300K, D: 6300K
Shutter Speed (Time)	59.94i: 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 50i: 1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 25p: 1/33, 1/50, 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000
Slow Shutter	1- to 8- and 16-frame accumulation
Slow & Quick Motion Function	23.98p/30p
Sensitivity (2000 lx, 89.9% reflectance)	F11 @ 59.94i, F12 @ 50i (typical)
Minimum Illumination	Approx. 0.016 lx (F1.4 lens, +42 dB, with 16-frame accumulation)

Gain Selection	-6, -3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42 dB
Smear Level	-135 dB (Y-typical)
S/N Ratio	59 dB (54 dB w/o Noise Suppressor)
Horizontal Resolution	1000 TV lines or more (1920 x 1080i mode)
Registration	Less than 0.02%
Modulation Depth	45% or more at 27.5MHz (typical)
Monitoring Specifications	Details
Viewfinder	Option
Built-In LCD Monitor	3.5-inch type color LCD monitor
Lens Specifications	Details
Lens Mount	2/3-inch type bayonet mount

2. Accessories for Camcorder Unit

Color Viewfinder for TV	W/o. 7 inch OLED and 3.5 inch LCD	1 Unit
Battery charger for Camera	220 W	1 Unit
Tripod Adaptor	With Aluminium fixing bracket for video camera	1 Unit
Soft carry case	For video camera	1 Unit

3. Tapeless HD/SD, Recorder/Player (2 Nos.)

General Specifications	Details
Power Requirements	AC 100 V to 240 V, 50/60 Hz, DC 12 V
Power Consumption	AC: 80 W, DC: 65 W, SAVEMODE(DC): 55 W
Operating Temperature	+5 to +40°C (+41 to +104°F)
Storage Temperature	-20 to +60°C (-4 to +140°F)
Humidity	25 to 90% (relative humidity)
Mass	6.5 kg (14 lb 5 oz)
Dimensions (W x H x D) (Excluding Protrusions)	210 x 132 x 396 mm (8 3/8 x 5 1/4 x 15 5/8 inches)
Recording/Playback Format	Video: MPEG HD422 (CBR: 50 Mb/s) MPEG HD: HQ mode (VBR, maximum bit rate: 35 Mb/s) SP mode (CBR, 25 Mb/s) LP mode (VBR, maximum bit rate: 18 Mb/s) (Playback only) MPEG IMX (CBR, 50/40/30 Mb/s) DVCAM (25 Mb/s) Proxy Video: MPEG-4 Audio: MPEG HD422: 8 ch/24 bits/48 kHz MPEG HD: 4 ch/16 bits/48 kHz MPEG IMX: 4 ch/24 bits/48 kHz or 8 ch/16 bits/48 kHz DVCAM*: 4 ch/16 bits/48 kHz Proxy Audio: A-law (8 ch/8 bits/8 kHz)
Recording/Playback Time	MPEG HD422: 50 Mb/s: Approx. 95 min. (PFD50DLA), Approx. 43 min. (PFD23A)

	<p>MPEG HD: 35 Mb/s, 4-ch audio: More than 145 min. (PFD50DLA), More than 65 min. (PFD23A) 35 Mb/s, 2-ch audio (playback only): More than 150 min. (PFD50DLA), More than 68 min. (PFD23A) 25 Mb/s, 4-ch audio: Approx. 190 min. (PFD50DLA), Approx. 85 min. (PFD23A) 25 Mb/s, 2-ch audio (playback only): Approx. 200 min. (PFD50DLA), Approx. 90 min. (PFD23A) 18 Mb/s, 4-ch audio (playback only): More than 248 min. (PFD50DLA), More than 112 min. (PFD23A) 18 Mb/s, 2-ch audio (playback only): More than 265 min. (PFD50DLA), More than 122 min. (PFD23A)</p> <p>MPEG IMX: 50 Mb/s: Approx. 100 min. (PFD50DLA), Approx. 45 min. (PFD23A) 40 Mb/s: Approx. 120 min. (PFD50DLA), Approx. 55 min. (PFD23A) 30 Mb/s: Approx. 150 min. (PFD50DLA), Approx. 68 min. (PFD23A)</p> <p>DVCAM: 25 Mb/s: Approx. 185 min. (PFD50DLA), Approx. 85 min. (PFD23A)</p>
Search Speed Range	Jog mode: -1 to +1 times normal speed Variable mode: -2 to +2 times normal speed Shuttle mode: -20 to +20 times normal speed: F.Fwd/Rev: -35 to +35 times normal speed
Inputs/Outputs Specifications	Details
Reference Input	BNC x 2 (including loop through), HD/SD HD Tri-level sync (0.6 Vp-p/75 /negative), HD/SD or SD blackburst/composite sync (0.286 Vp-p/75 /negative), HD/SD
SDI Input	BNC x 1, HD (HD/SD switchable) SMPTE 292M (w/embedded audio), HD SMPTE 259M (w/embedded audio), HD
Analog Audio Input	XLR 3-pin (female) x 2 (channel selectable) +4/0/-3/-6 dBu (selectable) 10 k Ω , balanced
Digital Audio Input (AES/EBU)	BNC (x2) - 4 ch (2 ch each, 1/2 ch and 3/4 ch) AES-3id-1995
Time Code Input	BNC x 1, SMPTE time code, 0.5 to 18 Vp-p/3.3 k Ω /unbalanced
Composite Output	BNC (x2) 1: 1.0 Vp-p/75 /negative, SMPTE 170M 2: 1.0 Vp-p/75 /negative, SMPTE 170M ,character On/Off
SDI Output	BNC (x 2), HD 1: SMPTE 292M (w/embedded audio), HD 2: SMPTE 292M (w/embedded audio), character On/Off, HD

	BNC (x 2), SD 1: SMPTE 259M (w/embedded audio), SD 2: SMPTE 259M (w/embedded audio), character On/Off, SD
Analog Audio Output	XLR 3-pin (male) x 2 (channel selectable) +4/0/-3/-6 dBu (selectable), 600 Ω , Lo-Z, balanced
Monitor Audio	XLR 3-pin (male) x 2, +4 dBu, 600 Ω , Lo-Z, balanced
Digital Audio Output (AES/EBU)	BNC (x2) - 4 ch (2 ch each, 1/2 ch and 3/4 ch) AES- 3id-1995
Headphone Output	JM-60 Stereo phone jack x 1 -13 dBu, 8 Ω , unbalanced
Time Code Output	BNC x 1, SMPTE time code, 1.0 Vp-p/75 Ω /unbalanced
Video Control	D-sub 9-pin (female) x 1, EIA RS-423
i.LINK	IEEE 1394 6-pin x 1* File Access Mode (Option: PDBK-201) HDV 1080i/720P IN/OUT *AV/C (DV) stream is NOT supported
Ethernet	RJ-45 x 1 1000Base-T: IEEE802.3ab 100Base-TX: IEEE802.3u 10Base-T: IEEE802.3
Remote (9P) Input	D-sub, 9-pin (female) (x1), RS-422A
DC Input (12 V)	XLR 4-pin (male) x 1
DC Output (12 V)	4-pin (female) x 1, DC 12 V, 7.5 W
Maintenance	USB x 2
AC Input	x 1, 100 to 240 V, 50/60 Hz
Video Performance Specifications	Details
Sampling Frequency	Y: 74.25 MHz, Pb/Pr: 37.125MHz
Quantization	8 bits/sample
Error Correction	Reed Solomon Code
Processor Adjustment Range Specifications	Details
Video Level	- to +3 dB
Chroma Level	- to +3 dB
Setup/Black Level	± 30 IRE/ ± 210 mV
Chroma Phase	$\pm 30^\circ$
System Sync Phase	$\pm 15 \mu s$
System Sync Phase (Fine)	0 to 400 ns
System SC Phase	0 to 400 ns
Audio Performance Specifications	Details
Sampling Frequency	48 kHz
Quantization	24 bits
Frequency Response	20 Hz to 20 kHz +0.5/-1.0 dB (0 dB at 1 kHz)
Dynamic Range	More than 90 dB
Distortion	Less than 0.05% (at 1kHz)
Headroom	20/18/16/12 dB (selectable)
Built-In Display Specifications	Details
Built-In Display	4.3-inch type color LCD monitor
Built-In Audio Speaker Specifications	Details
Built-In Audio Speaker	x1, monaural

4. Portable Switcher (1 No.)

General Specifications	Details
Dimensions	16.34 x 3.74 x 13.23 in (415 x 95 x 336 mm)
Operating Temperature	5 to 35 °C (42 to 95 °F)
Power Consumption	160 W
Power Requirements	DC 19.5V 7.5A
Weight	13.68 lbs (6.2 kg)
Image Effect Specifications	Details
Effect	2 Titles
	2 Logos
	2 PinP
Inputs and Outputs Specifications	Details
Reference Outputs	BNC Type x 1 Analog black burst signal NTSC: 0.286 Vp-p x/- 2dB, 75 , negative sync PAL: 0.3 Vp-p x/- 2dB, 75 , negative sync
Video Input	HD/SD-SDI (BNC) x 4 HDMI (Type A) x 2 * HDCP not supported RGB (D-Sub 15-pin Female)x 2 Composite (RCA) x 2
Video Output	PGM HD/SD-SDI (BNC) x 2 PGM/AUX HD-SDI (BNC) x 1 HDMI (Type A) x 1 RGB (D-Sub 15-pin Female) x 1
Interface Specifications	Details
GPI/TALLY Output	9 pin in-line connector Input x 4: TTL Output x 4: Open connector
LAN	RJ45 Type x 2 100/1000 base-TX
VISCA Camera Control	Up to 7 Cameras Sony VISCA Camera commands are supported. 5 pin in-line connector / RS-422 equivalent
System Specifications	Details
Video Formats	1080i/59.94Hz 1080i/50Hz 480i/59.94Hz 576i/50Hz
Video Processing	10 bit

5. Multi Format Switcher (HD/ SD Compatible) (1 No.)

Video format	1080i 50/59.94i 1080PsF 23.98/24/25/29.97 720p 50/59.94 525/60 (NTSC) 625/50 (PAL)
Video Input	8 x SD/HD-SDI, 75 , BNC (FSs on 8 inputs, resize engines on 4 inputs) HD-SDI: 1.5 Gb/s or SD-SDI: 270 Mb/s, 4 x 75 , BNC (FSs and resize engines on

	4 inputs) Using optional HVS-XT100AI Input Card: HD analog component, SD analog component, analog composite Using optional HVS-XT100PCI Input Card: HDMI: XGA to WUXGA/HDTV (1080i), XGA to WUXGA (720p), VGA to XGA (SD) RGB: XGA to WUXGA/HDTV (1080i), XGA to WUXGA (720p), VGA to XGA (SD) Analog input cards-1 two channels of analog input card PC (HDMI/VGA) input card -1 HDMI and VGA Input boards
Video Out put	4 x SD/HD-SDI, 75 , BNC 1 x HDMI HD analog component, SD analog component, analog composite HDMI: XGA to WUXGA/HDTV (1080i), XGA to WUXGA (720p), VGA to XGA (SD) RGB: XGA to WUXGA/HDTV (1080i), XGA to WUXGA (720p), VGA to XGA (SD) PC (HDMI/VGA) output card -1 HDMI and VGA output boards
Signal Processing	4:2:2:4, digital component
Quantization	SD/HD-SDI: 10-bit
Effect	WIPE: 100 patterns, border and softness 2.5D DVE: 56 patterns or more DVE WIPEs
Transitions	Available Controller: Fader controller, AUTO or CUT button Type: MIX or WIPE (DVE included)
Still Store	2 channels (with backup feature)
Keyer/DSK	4 channels (2 x KEYER and 2 x DSK), includes 2D DVE that can be freely assigned KEYER: Chroma key and Edge effect
Multi-viewer	Quad-, 10- or 16-way split views with title, tally, and audio level meter display and 1 frame delay for PGM output
Proc Amp	Equipped with all inputs
Event Memory	100 events (complementary transition available when loading events)
Macro	30 commands (up to 230 series of operations can be registered per command)
Genlock Input	Black Burst (NTSC): 0.429 Vpp Black Burst (PAL): 0.45 Vpp Tri-level Sync: 0.6 Vpp, 1 x 75 , BNC, loop-through (to be terminated with 75 terminator, if unused)
Genlock Output	Black Burst (NTSC): 0.429 Vpp Black Burst (PAL): 0.45 Vpp Tri-level Sync: 0.6 Vpp, 1 x 75 , BNC
System Phase Adjust	-1/2 to +1/2 Horizontal
I/O Delay	1H (minimum delay) 1 to 2 frames +1H (when FS or re-size engine used) 2 to 3 frames +1H (when FS or re-size engine plus DVE used) 3 to 4 frames +1H (when FS or re-size engine plus output resize engine and DVE used)
External	USB flash drive

Memory	
Interface	Ethernet (10/100Base-TX): 1 x RJ-45 TO OU: 1 x RJ-45 GPI-IN/OUT: 1 x 25-pin D-sub (female) (24 inputs/24 outputs), TTL negative logic pulse or Make-contact RS-422: 1 x 9-pin D-sub (female) (for the HVS-30RU Remote Front Panel with Remote Cable and tally unit connection) EDITOR: 1 x 9-pin D-sub (female), BVS-3000 and GVG-100 protocols ARCNET: 2 x 75 , BNC, loop-through (to be terminated with 75 terminator, if unused)(for control panel an dAUX remote panel connection)
Temperature	32 to 104°F (0 to 40°C)
Humidity (Non-condensing)	10 to 90%
Power / Consumption	HVS-XT100 Switcher: 100 to 240 VAC $\pm 10\%$, 50/60 Hz / approximately 240 W HVS-XT100OU Control Panel: 100 to 240 VAC $\pm 10\%$, 50/60 Hz / approximately 23 W
	Redundant power supply for main unit

6. Broadcast Monitor (1 No.)

Picture Size (Diagonal)	547 mm 21 5/8 inches
Effective Picture Size (H x V)	447.0 x 268.0 mm 18 7/8 x 10 5/8 inches
Resolution (H x V)	1920 x 1080 pixels (Full HD)
Aspect	16:9
Pixel Efficiency	0.9999
Colors	Approx.16.7 million colors
Viewing Angle (Panel Specification)	80°/80°/85°/85° (typical) (up/down/left/right contrast)
Input	
HD/ SDI board	1 no
Composite Input	BNC (x1), 1 Vp-p ± 3 dB, negative synchronization
Y/C Input	Mini DIN 4-pin (x1) Y: 1 Vp-p ± 3 dB sync negative C: 0.286 Vp-p ± 3 dB (NTSC burst signal level), 0.3 Vp-p ± 3 dB (PAL burst signal level) BNC (x3) RGB: 0.7 Vp-p ± 3 dB (Sync On Green, 0.3 Vp-p neg
RGB, Component Input	BNC (x3) RGB: 0.7 Vp-p ± 3 dB (Sync On Green, 0.3 Vp-p negative sync.) Component: 0.7 Vp-p ± 3 dB (75% chrominance standard color bar signal)
HDMI Input	HDMI (x1) (HDCP correspondence)
Audio Input	Phono jack (x2), -5 dBu 47 k or higher
External Sync Input	BNC (x1), 0.3 to 4.0 Vp-p negative polarity binary
Option Input	D-sub 9-pin (x1), female
Parallel Remote	Modular connector 8-pin (x1) (Pin-assignable)
Output	

Composite Output	BNC (x1), Loop-through, with 75 automatic terminal function
Y/C Output	Mini DIN 4-pin (x1), Loop-through, with 75 automatic terminal function
RGB, Component Output	BNC (x3), Loop-through, with 75 automatic terminal function
External Sync Output	BNC (x1), Loop-through, with 75 automatic terminal function
Audio Monitor Output	Phono jack (x2) , Loop-through
Speaker (Built-in) Output	0.5 W (mono)

7. Broadcast Lens for Camcorder

ENG Style Lens (1 No.)

Focal length	
1x	7.6-167mm
2x	15.2-334mm
Zoom ratio	22x
Extender	2x
Maximum relative aperture (F-no.)	1 : 1.8 (7.6-120mm) / 1 : 2.5 (167mm)
Minimum object distance (M.O.D.) from front lens	0.8m
Object dimensions at M.O.D. 16 : 9 Aspect ratio	
1x	7.6mm 915 x 514mm 167mm 43 x 24mm
2x	15.2mm 473 x 266mm 334mm 22 x 12mm
Angular field of view 16 : 9 Aspect ratio	
1x	7.6mm 64°30' x 39°03' 167mm 3°17' x 1°51'
2x	15.2mm 35°01' x 20°07' 334mm 1°39' x 0°55'
Filter thread	M95 x 1 / M107 x 1 (Filter attaches to the lens hood.)
Size (x Length)	100 x 220.4mm
Mass (without lens hood)	1.85kg (RM) / 1.92kg (RD)

Note: Technical specifications as above are for reference purpose only, an indication of our requirement and preference will be given to the bidders, who offer better /latest specifications/

technology from reputable brands compatible with the tendered items.

D. Evaluation Procedure

Proposals will be evaluated for meeting all technical requirements and system completeness as per Bid document. All bids, which are technically qualified, shall be shortlisted and financial bids of qualified bidders shall be opened. EMMRC is not bound to select the qualified bidder with least cost. EMMRC will make its decision based on the ability of the

Bidder(s) to meet our specific needs, technical expertise of the bidder(s), delivery capabilities, customer references, past satisfactory performance experience, system completeness etc. besides cost. Factors which will be considered as part of evaluation amongst others will include the following:

1. Product Quality: Only reputed industry tested equipment and solutions with reliability will be accepted, non-standard make/model of equipment will disqualify the proposal technically.
2. Compatibility: System is envisaged to be compatible with the existing set up at the Centre as well as other quoted equipment's/items.
3. Up-gradation/ Modular design: System/equipment's should be future looking and open to technology up-gradation besides being capable of add-on facility and features in phased manner.
4. Assurance of supply: System Integrator's (S.I.) technical capability, Organizational stability, reliability of equipment and ability to meet timelines.
5. Assurance of Spares: The bidder has to certify that the Software up- gradation and spares for Hardware shall be available for a minimum period of 10 years after completion of Project.
6. Service: The OEM should have authorized service Centre in Kerala / South India, whose address details must be mentioned. Promptness & Quality of after-sales service, availability of spare parts/technical support.
7. Cost: Cost of the system as proposed and the apparent future financial implications, future AMC provisions and total cost of ownership.
8. Delivery Schedule: Delivery timeline will be critical parameter for evaluation and final decision.
9. Scalability & Redundancy: The offered equipment's should be scalable and redundant.
10. Guarantee /Warranty: Guarantee/ Warranty of the equipment's and provision for extended warranty thereof.
11. Regulatory: Should meet the Regulatory compliance, Safety requirements, and Environmental objectives.

E. Customer Reference

Provide at least THREE references with compatible network size and complexity to whom you have provided similar implementation and/or integration services. Please use this format for your response.

Company / Institution Name	
Address	

Scope of Project	
Dates of Engagement	
Contact Name and Title	
E-mail & Telephone	

F. Declaration Form

To,
Director,
Educational Multimedia Research Centre
University of Calicut, Kerala - 673 635

Subject: Supply, Installation, Testing, Commissioning (SITC) of Professional
Broadcast
Video Equipment at Educational Multimedia Research Centre (EMMRC),
University of Calicut including training with standard OEM warranty.

1. We solemnly declare that we have visited the site of the above work and have familiarised ourselves with the conditions of the site and the local working conditions in all respects.
2. We have read and understood fully the various conditions of Bid document and hereby agree to abide by the said conditions. We also agree to keep this Bid open for acceptance for a period of 180 days from the date fixed for technical opening the same and in default thereof we will be liable to forfeiture of our Earnest Money. We offer to do the above works of EMMRC Calicut at the rate quoted in the BOQ and hereby bind ourselves to complete the works in all respects within 10 (Ten) weeks from the date of issuance of Purchase Order (PO) by EMMRC. We also hereby agree to carry out the work according to the specification for materials and as laid down by EMMRC Calicut.
3. A sum of Rs. (Rupees only) is herewith forwarded as Earnest Money. The full value of the Earnest Money of Rs./- (Rupees only) shall be forfeited without prejudice to any other rights or remedies in case we do not execute the work as per the PO.
4. Any State Government or Government of India Organization / Department has not blacklisted us.
5. We do not have any record of poor performance, abandoned work, having inordinately delayed completion and having faced Commercial failures etc. for any State Government or Government of India Organization / Department during last 3 years.

Signature of the witness:

Signature of the Bidder

Place:

Date:

General Conditions:

1. No tender received after the specified date and time will be accepted on any account. The rates will be considered firm for acceptance till the date mentioned. Tenders not stipulating period of firmness and tenders with price variation clause and/or 'subject to prior sale' condition are liable to be rejected.

2. (a) Every tenderer who has not registered his name with the State Government (Stores Purchase Department), should send along with his tender, an earnest money of one per cent of the total cost of the articles tendered for (rounded to the nearest rupee) subject to a minimum of Rs. 1500, if the amount calculated at one per cent of the value of the articles tendered for falls below Rs.1500. No interest will be paid for the earnest money deposited.

(b) Tenderers whose names are registered with Government (Stores Purchase Department) are generally exempted from furnishing earnest money for such articles for which they have registered their names. If they tender for stores other than those for which they have registered their names, they will have to furnish earnest money as in the case of unregistered firms. Registered firms will have to quote invariably in every tender they submit, the registration number assigned to them by the Stores Purchase Department.

(c) (i) Micro, Small & Medium Enterprises and Cottage Industries and Industrial co-operatives within the State which are certified as such by the Director of Industries and commerce or by the Regional Joint Directors of Industries and Commerce will be exempted from furnishing earnest money deposits in support of tenders submitted by them. The Khadi and village Industries Co-operative Societies and the institutions registered under the Literary, Scientific and Charitable Societies Act and financed by the Kerala Khadi and Village Industries Board within that State which are certified as such by the Secretary, Kerala Khadi Village Industries Board will be exempted from furnishing earnest money deposits in support of tenders submitted by them. Government Institutions/State Public Sector Industries which manufacture and supply stores will also be exempted from furnishing earnest money for tenders submitted by them.

(ii) Micro and Small Enterprises and Industrial Co-operatives within the State which have been registered as such with the Industries Department (Department under the control of the Director of Industries and Commerce) on furnishing proof of such registration will be exempted from furnishing security deposit against contracts for supply of stores manufactured by them provided that an officer of and above the rank of Deputy Director of Industries and commerce having jurisdiction over the area also certifies to the soundness and reliability of the concerns to undertake the contracts. The Khadi and Village Industries Co-operative Societies within the State which have been registered as such with the Kerala Khadi and Village Industries Board and the institutions registered under the Literary, Scientific and Charitable Societies Act and which are financed by the Board within the State on furnishing proof of such registration will be exempted from furnishing security deposits against contracts for supply of stores manufactured by them provided that the Secretary, Kerala Khadi and Village Industries Board also certifies to the soundness and reliability of the concerns to undertake the contracts.

(d) In the matter of purchase of stores Small Scale Industrial Units sponsored by the National Small Scale Industries Corporation Limited, New Delhi and in respect of which competency certificates are issued by the Corporation will be exempted from payment of Earnest Money Deposits and Security Deposits.

(e) The exemption stipulated in clauses (b), (c) and (d) above will not however, apply to tenders for the supply of raw materials or dietary articles or stores on rate or running contract basis.

3. The tenders will be opened on the appointed day and time in the office of the undersigned.
4. If any tenderer withdraws from his tender before the expiry of the period fixed for keeping the rates firm for acceptance, the earnest money if, any, deposited by him will be forfeited to University or such action taken against him as University think fit.

5. Tenderers shall invariably specify in their tenders the delivery conditions including the time required for the supply of articles tendered for.

6. (a) The tenderer shall clearly specify whether the articles offered bear Indian Standards Institution Certification Mark or not. In such cases, they shall produce copies of Certification mark along with their tender in support of it.

(b) Tenderers shall clearly specify whether the goods are offered from indigenous sources, from imported stocks in India or from foreign sources to be imported under a license. The University reserves the right to reject offers for import of goods if the Import Trade Control Policy in force at the time of award of the contract prohibits or restricts such imports.

7. The final acceptance of the tenders rests entirely with the University who do not bind themselves to accept the lowest or any tender. But the tenderers on their part should be prepared to carry out such portion of the supplies included in their tenders as may be allotted to them.

8. In the case of materials of technical nature the successful tenderer should be prepared to guarantee satisfactory performance for a definite period under a definite penalty.

9. Communication of acceptance of the tender normally constitutes a concluded contract. Nevertheless, the successful tenderer shall also execute an agreement for the due fulfillment of the contract within the period to be specified in the letter of acceptance. The contractor shall have to pay all stamp duty, lawyer's charges and other expenses incidental to the execution of the agreement. Failure to execute the agreement within the period specified will entail the penalties set out in para 12 below.

10. (a) The successful tenderer shall, before signing the agreement and within the period specified in the letter of acceptance of his tender deposit a sum equivalent to 5 per cent of the value of the contract as security for the satisfactory fulfillment of the contract. The amount of security may be deposited in Government Treasury Savings Bank and the Pass Book pledged to Purchasing Officer or in Fixed Deposit Receipts of State Bank of India endorsed in favour of the above officer. Letters of guarantee in the prescribed form for the amount of security from an approved Bank will also be considered enough at the discretion of University. If the successful tenderer fails to deposit the security and execute the agreement as stated above, the earnest money deposited by him will be forfeited to University and contract arranged elsewhere at the defaulter's risk and any loss incurred by University on account of the purchase will be recovered from the defaulter who will, however, not be entitled to any gain accruing thereby. If the defaulting firm is a registered firm their registration is liable to be cancelled.

(b) In cases where a successful tenderer, after having made partial supplies fails to fulfil the contracts in full, all or any of the materials not supplied may at the discretion of the Purchasing Officer, be purchased by means of another tender/ quotation or by negotiation or from the next higher tenderer who had offered to supply already and the loss, if any, caused to the University shall thereby together with such sums as may be fixed by the Univeristy towards damages be recovered from the defaulting tenderer.

(c) Even in cases where no alternate purchases are arranged for the materials not supplied, the proportionate portion of the security deposit based on the cost of the materials not supplied at

the rate shown in the tender of the defaulter shall be forfeited and balance alone shall be refunded.

(d) If the contractor fails to deliver all or any of the stores or perform the service within the time/period(s) specified in the contract, the purchaser shall without prejudice to its other remedies under the contract, deduct from the contract price as liquidated, damages, a sum equivalent to 0.5% or 1% of the delivered price of the delayed stores or unperformed services for each week of delay until actual delivery or performance, upto a maximum deduction of 10% of the contract prices of the delayed stores or services. Once the maximum is reached, the purchaser may consider termination of the contract at the risk and cost of the contractor.

11. The security deposit shall, subject to the conditions specified herein, be returned to the contractor within three months after the expiration of the contract, but in the event of any dispute arising between the Department concerned and the contractor, the Department shall be entitled to deduct out of the deposits or the balance thereof, until such dispute is determined the amount of such damages, costs, charges and expenses as may be claimed. The same may also be deducted from any other sum which may be due at any time from University to the contractor. In all cases where there are guarantee for the goods supplied the security deposit will be released only after the expiry of the guarantee period.

11. (a) All payments to the contractors will be made by the Purchasing Officer in due course:-

(i) by cheques or drafts on the Reserve Bank of India, State Bank of India (at any of their Principal Branches in India).

(ii) In the case of supplies from abroad by drafts as may be, arranged between the contracting parties.

(b) All incidental expenses incurred by the University for making payments outside the district in which the claim arises shall be borne by the contractor.

12. The tenderers shall quote also the percentage of rebate (discount) offered by them in case the payment is made promptly within fifteen days/within one month of taking delivery of stores.

13. Ordinarily payments will be made only after the supplies are actually verified and taken to stock but in exceptional cases, payments against satisfactory shipping documents including certificates of Insurance will be made up to 90 percent of the value of the materials at the discretion of University. Bank charges incurred in connection with payment against documents through bank will be to the account of the contractor. The firms will produce stamped pre-receipted invoices in all cases where payments (advance/final) for release of railway receipts/shipping documents are made through banks. In exceptional cases where the stamped receipts of the firms are not received for the payments (in advance) the unstamped receipt of the Bank (i.e., counterfoils of pay-in-slips issued by the Bank) alone may be accepted as a valid proof for the payment made.

14. The contractor shall not assign or make over the contract on the benefits or burdens thereof to any other person or body corporate. The contractor shall not underlet or sublet to any person or persons or body corporate the execution of the contract or any part thereof without the consent in writing of the purchasing officer who shall have absolute power to refuse such consent or to rescind such consent (if given) at any time if he is not satisfied with the manner in which the contract is being executed and no allowance or compensation shall be made to the contractor or the sub-contractor upon such rescission. Provided always that if such consent be given at any time, the contractor shall not be relieved from any obligation, duty or responsibility under this contract.

15. (a) In case the contractor becomes insolvent or goes into liquidation, or makes or proposes to make any assignment for the benefit of his creditors or proposes any composition with his creditors for the settlement of his debts, carries on his business or the contract under inspection on behalf of or his creditors, or in case any receiving order or orders, for the administration of his estate are made against him or in case the contractor shall commit any act of insolvency or case in which under any clause or clauses of this contract the contractor shall have rendered himself liable to damages amounting to the whole of his security deposits, the contract shall, thereupon, after notice given by the Purchasing Officer to the contractor, be determined and the University may complete the contract in such time and manner and by such persons as the University shall think fit. But such determination of the contract shall be without any prejudice to any right or remedy of the University against the contractor or his sureties in respect of any breach of contract therefore committed by the contractor. All expenses and damages caused to University by any breach of contract by the contractor shall be paid by the contractor to University, and may be recovered from him under the provisions of the Revenue Recovery Act in force in the State.

16. (a) In case the contractor fails to supply and deliver any of the said articles and things within the time provided for delivery of the same, or in case the contractor commits any breach of any of the covenants, stipulations and agreements herein contained, and on his part to be observed and performed, then and in any such case, it shall be lawful for University (if they shall think fit to do so) to arrange for the purchase of the said articles and things from elsewhere or on behalf of the University by an order in writing under the hand of the Purchasing Officer put an end to this contract and in case the University shall have incurred, sustained or been put to any costs, damages or expenses by reason of such purchase or by reason of this contract having been so put an end to or in case any difference in price, compensation, loss, costs, damages, expenses or other money shall then or any time during the continuance of this contract be payable by the contractor to the University under and by virtue of this contract, it shall be lawful for the University from and out of any moneys for the time being payable or owing to the contractor from the University under or by virtue of this contract or otherwise to pay and reimburse to the University all such costs, damages and expenses they may have sustained, incurred or been put to by reason of the purchase made elsewhere or by reason of this contract having been so put an end to as aforesaid and also all such difference in price, compensation, loss, costs, damages, expenses and other moneys as shall for the time being be payable by the contractor aforesaid.

(b) In case any difference or dispute arises in connection with the contract, all legal proceeding relating to the matter shall be instituted in the Court within whose jurisdiction the Purchasing Officer voluntarily resides.

17. Any sum of money due and payable to the contractor (including security deposit returnable to him) under this contract may be appropriated by the Purchasing Officer or University or any other person authorized by University and set off against any claim of the Purchasing Officer or University for the payment of a sum of money arising out of or under any other contract made by the contractor with the Purchasing Officer or University or any other person authorized by University. Any sum of money due and payable to the successful tenderer or contractor from University shall be adjusted against any sum of money due to University from him under any other contracts.

18. Every notice hereby required or authorized to be given may be either given to the contractor personally or left at his residence or last known place of abode or business, or may be handed over to his agent personally, or may be addressed to the contractor by post/e-mail at his usual or last known place of abode or business and if so addressed and posted/e-mailed, shall be deemed to have been served on the contractor on the date on which, in the ordinary course of post, a letter so addressed and posted would reach his place of abode or business.

19. The tenderer shall undertake to supply materials according to the standard sample and/or specifications.

20. (a) No representation for enhancement of rates once accepted will be considered. However, in exceptional cases if University is convinced of any compelling need for enhancement of rate, it may do so.

(b) In the case of imported goods, when the price accepted is the ex-site price quoted by the tenderer, the benefit of any reduction in the C.I.F . price should accrue to the University.

21. Any attempt on the part of the tenderers or their agents to influence the University in their favour by personal canvassing with the Officers concerned will disqualify the tenderers.

22. Tenderers should be prepared to accept orders subject to the penalty clause for forfeiture of security in the event of default in supplies or failure to supply within the stipulated period.

23. Samples should be forwarded if called for and unapproved samples go back by the tenderers at their own cost. Samples sent by V.P. Post or 'freight to pay' will not be accepted. The approved samples may or may not be returned at the discretion of the undersigned. Sample sent by post, railway or plane should be so despatched as to reach the Purchasing Officer not later than the date on which the tenders are due. In the case of samples sent by railway the receipt should be sent separately and not along with the tender since the tender will be opened only on the appointed day and demurrage will have to be paid if the railway parcels are not cleared in time University will not be responsible if any sample is found missing at any time due to the non-observance of the provisions of this clause. Tenderers whose samples are received late will not be considered. Samples should be forwarded under separate cover duly listed and the corresponding number of the item in the tender schedule should also be noted in the list of samples. Tenders for the supply of materials are liable to be rejected unless samples, if called for, of the materials tendered for are forwarded.

24. (a) The prices quoted should be inclusive of all taxes, duties cesses, etc., which are or may become payable by the contractor under existing or future laws or rules of the country of origin/supply or delivery during the course of execution of the contract.

(b) In case payment of customs/excise duty is to be made by the Purchasing Officer, the Purchasing Officer will pay the duty on the "unloaded invoice price" only in the first instance, any difference being paid when the tenderer produces, the final assessment orders later.

25. Special conditions, if any, of the tenderers attached with the tenders will not be applicable to the contract unless they are expressly accepted in writing by the purchaser.

Tender documents and tender schedule may be downloaded from the Website www.etenders.kerala.gov.in. All bid/tender documents are to be submitted online only and in the designated cover(s)/envelope(s) on the website. Tenders/Bids shall be accepted only through online mode on the website and no manual submission of the same shall be entertained. Late tenders will not be accepted. Detailed technical specifications (including catalogues and other details if any) should be uploaded under the heading Other Important Documents.

Further details can be had from the **Director, Educational Multimedia Research Centre, University of Calicut, Calicut University (P.O), Malappuram, Pin.673 635, Kerala** during working hours. (0494 – 2407279, 2407591).

1. **Online Payment modes:** The tender document fees can be paid in the following manner through e-Payment:
 - i. **State Bank of India (SBI) Internet Banking:** If a bidder has a SBI internet banking account, then, during the online bid submission process, bidder shall select SBI option and then select Internet banking option. The e-Procurement system will re-direct the bidder to SBI's internet banking page where he can enter his internet banking credentials and transfer the tender document amount.
 - ii. **National Electronic Fund Transfer (NEFT):** If a bidder holds bank account in a different bank, then, during the online bid submission process, bidder shall select NEFT option. An online remittance form would be generated, which the bidder can use for transferring amount through NEFT either by using internet banking of his bank or visiting nearest branch of his bank. After obtaining the successful transaction receipt no., the bidder has to update the same in e-Procurement system for completing the process of bid submission. Bidder should only use the details given in the Remittance form for making a NEFT payment otherwise payment would result in failure in e- Procurement system.

As NEFT payment status confirmation is not received by e-Procurement system on a real time basis, bidders are advised to exercise NEFT mode of payment option at least 48 hours prior to the last date and time of bid submission to avoid any payment issues. NEFT payment should be done according to following guidelines:

- i. **Single transaction for remitting Tender document fee and EMD:** Bidder should ensure that tender document fees and EMD are remitted as one single transaction.
- ii. **Account number as per Remittance Form only:** Account no. entered during NEFT remittance at any bank counter or during adding beneficiary account in Internet banking site should be the same as it appears in the remittance form generated for that particular bid by the e-Procurement system. Bidder should ensure that tender document fees and EMD are remitted only to the account number given in the Remittance form provided by e- Procurement system for that particular tender. Bidders must ensure that the banker inputs the Account Number (which is case sensitive) as displayed in the Remittance form. No additional information like bidder name, company name, etc. should be entered in the account no. column along with account no. for NEFT remittance.
- iii. **Only NEFT Remittance Allowed:** RTGS payments, Account to Account transfers, State Bank Group Transfers (GRPT) or Cash payments are **not** allowed and are treated as invalid mode of payments. Bidder must ensure that the banker does NEFT transaction only irrespective of the amount and specially instruct the banks not to convert the payment type to RTGS or GRPT.

- iv. **Amount as per Remittance form:** Bidder should ensure that the amount being remitted is neither less nor higher than the amount shown in remittance form.
- v. **UTR Number:** Bidders should ensure that the remittance confirmation (UTR number) received after NEFT transfer should be updated as it is, in the e-Procurement system for tracking the payment.

vi. **One Remittance Form per Bidder and per Bid:** The remittance form provided by e-Procurement system shall be valid for that particular bidder and bid and should not be re-used for any other tender or bid or by any other bidder.

Any transaction charges levied while using any of the above modes of online payment has to be borne by the bidder. **The supplier/contractor's bid will be evaluated only if payment status against bidder is showing “Success” during bid opening.**

**DIRECTOR,
EDUCATIONAL MULTIMEDIA RESEARCH CENTRE
UNIVERSITY OF CALICUT
MALAPPURAM, KERALA STATE**