



**Indian Institute of Technology Kanpur**  
**Dean, Academic Affairs**

**Tender Enquiry**

Sealed quotations are invited from the reputed Manufacturer/Distributor/Dealer/Service provider by undersigned, for **“Providing Video Conferencing Facility for conducting Hybrid Mode Classes through Video Conferencing applications like Zoom/MS Team in 05 Lecture Rooms at IIT Kanpur with Installation, Commissioning, Programming and with 03 yrs on-site warranty support at IIT Kanpur”**

Enquiry No. : IITK/DOAA/LHC/21-22/01 Dated 02.02.2022  
Description of item : **Providing Video Conferencing Facility for conducting Hybrid Mode Classes through Video Conferencing applications like Zoom/MS Team in 05 Lecture Rooms at IIT Kanpur with Installation, Commissioning, Programming and with 03 yrs on-site warranty support at IIT Kanpur**

Bid publishing date : 02/02/2022  
Bid submission closing date, Time : 11/02/2022, 5:00 pm  
Date of Demonstration at IIT Kanpur : 14/02/2022 & 15/02/2022

All interested eligible bidders are requested to send their bids in sealed envelopes by Courier/Post/In-Person to the following address on or before the closing date and time as mentioned above:

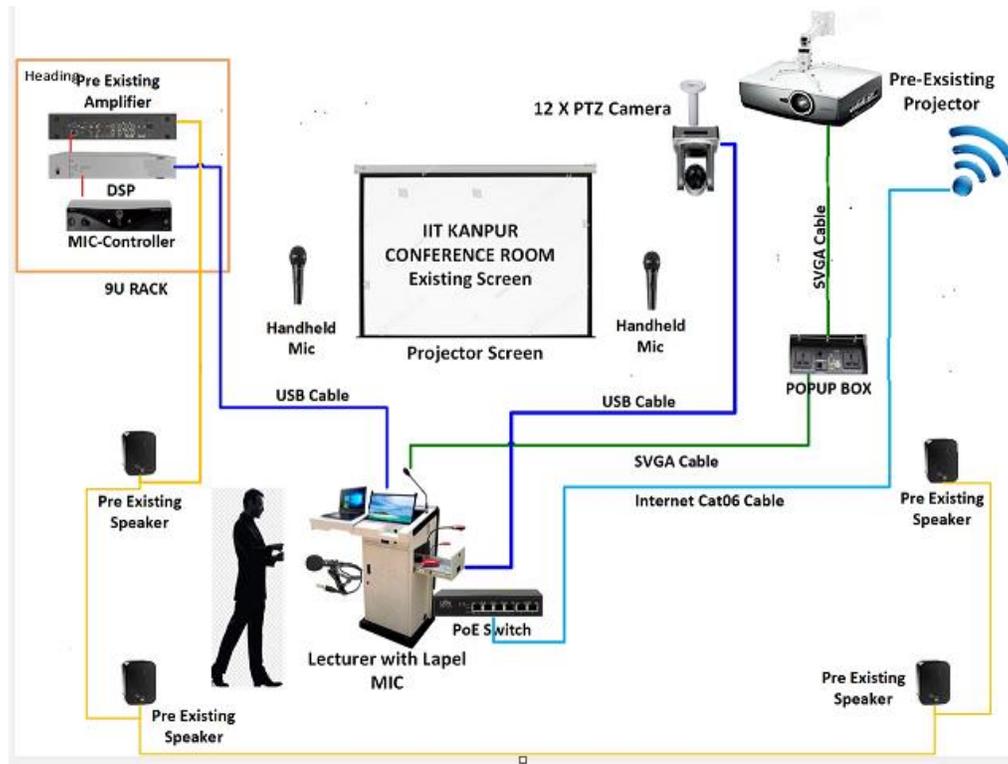
**Mr. M. K. Diwakar**  
**Joint Registrar, Dean Academic Affairs' Office**  
**Academic Affairs Building, Room No. 202**  
**Indian Institute of Technology Kanpur**  
**Kanpur, 208016 India**

Bid should be submitted in an envelope containing two other sealed envelopes. Sealed envelope 1 should contain a matrix showing the compliance to eligibility criteria and technical proposal. Supporting documents should be part of this envelope. Sealed envelope 2 should contain the Financial Bid only. Envelopes 1 and 2 should be clearly labelled as “Technical Bid” and “Financial Bid”. Prices of items should not be a part of “Technical Bid”. Envelope with the Financial Bid will be opened only for the bidders who fully satisfy the eligibility criteria, and fully satisfy the technical requirements.

Quality cum Cost-Based Selection (QCBS) model will be followed and the bidding process is Single Stage.

## Details of the Required Items (Technical Requirements)

### Schematic of the requirement:



Solution will be installed in 05 lecture halls and use the pre-existing speakers, amplifier, Projector (VGA Connectivity only); See Annexure A.

### Specifications:

S No	Tender Technical Specifications	Preferred Makes [Any other reputed brands/makes are also permitted]	Qty	UoM
1.0	<b>12x PTZ Camera:</b> <ul style="list-style-type: none"> <li>• Full HD PTZ Camera supporting 1080p or a higher resolution</li> <li>• Min 12X Optical Zoom</li> <li>• Min 100 Pre-sets</li> <li>• USB 3.0 &amp; HDMI Out</li> <li>• RS232/422 Controls</li> <li>• -100° to +100° Panning angle (or larger panning angle range)</li> <li>• -30° to +30° Tilting angle (or larger titling angle range)</li> <li>• Should be CE, RoHS, FCC &amp; BIS Certified</li> <li>• Warranty 03 Years</li> </ul>	<b>Panasonic/ Lumens/ Sony /Canon</b>	5	Nos
2.0	<b>Ceiling/wall Mounting Kit</b> <ul style="list-style-type: none"> <li>• Ceiling/Wall Mount Kit as per the requirement</li> </ul>	<b>Std Make</b>	5	Nos
3.0	<b>8 Port POE switch;</b> <ul style="list-style-type: none"> <li>• 08-10/100/1000TX POE Switch</li> <li>• 16 Gbps switching capacity</li> <li>• Warranty 03 Years</li> </ul>	<b>Std Make</b>	5	Nos

4.0	<p><b>Handheld wireless Mic with Controller</b></p> <ul style="list-style-type: none"> <li>• Handheld Mic with Controller shall have XLR connector</li> <li>• Balanced with Battery recourse 08 Hours 1 AA Battery</li> <li>• 1 Reciever,1 Bodypack Transmitter,</li> <li>• 30 MHz selection bandwidth,</li> <li>• Gain control on handheld transmitter</li> <li>• Shall have Low battery indicator</li> <li>• Shall have suitable receiver</li> <li>• Bodypack transmitter- Rugged <ul style="list-style-type: none"> <li>• Minimum 8 Channels</li> <li>• Warranty- 03 Years</li> </ul> </li> </ul>	<p><b>Shure/AKG/ AudioTechnica/ Sennheiser / Beyerdynamic</b></p>	10	Nos
5.0	<p><b>Lapel Mic with Controller:</b></p> <ul style="list-style-type: none"> <li>• Lapel Mic with Controller shall have XLR connector</li> <li>• Balanced with Battery resource 08 Hours 1 AA Battery,</li> <li>• 1 Reciever,1 Bodypack Transmitter,</li> <li>• 30 MHz selection bandwidth,</li> <li>• Gain control on handheld transmitter</li> <li>• Shall have Low battery indicator,</li> <li>• Shall have suitable receiver,</li> <li>• Bodypack transmitter- Rugged <ul style="list-style-type: none"> <li>• Minimum 8 Channels</li> <li>• Warranty- 03 Years</li> </ul> </li> </ul>	<p><b>Shure/AKG/ AudioTechnica/ Sennheiser / Beyerdynamic</b></p>	5	Nos
6.0	<p><b>DSP ( Digital Signal Processor)</b></p> <p>Supply of 4x4 Digital Audio Matrix Processor with DSP capability:</p> <ul style="list-style-type: none"> <li>• 4 balanced mic inputs, 2 balanced Mic/Line inputs and 1 stereo unbalanced input</li> <li>• 2-channel USB audio interface for soft codec integration or playback from computer</li> <li>• Onboard acoustic echo canceler (AEC) processing</li> <li>• Full digital processing on inputs and outputs</li> <li>• 8 x 3 audio routing matrix</li> <li>• 6-channel Smart Mixer (gate or gain sharing)</li> <li>• Front panel direct operation and Web Remote functionality</li> <li>• IP control for third-party CCS administration</li> <li>• Up to at least 6 mixers can be linked using Cat5e cable</li> <li>• Must Supports adaptive echo cancellation (AEC).</li> <li>• Built-in automatic noise suppression (ANS)</li> <li>• Supports adaptive feedback control (AFC)</li> <li>• Support ducker, ANC, AM, and Gate Mixer.</li> <li>• Warranty- 03 Years</li> </ul>	<p><b>BXB / Biamp / Audio Technica/ Extron/ Clearone</b></p>	5	Nos
7.0	<p><b>USB Cables</b></p> <p>USB 3.0 cable 10 Mtrs</p>	<p><b>Std Make</b></p>	10	Nos
8.0	<p><b>HDMI Cable</b></p> <p>HDMI cable 5 Mtrs</p>	<p><b>Std Make</b></p>	5	Nos
9.0	<p><b>VGA Cable</b></p> <p>VGA cable 5 Mtrs</p>	<p><b>Std Make</b></p>	5	Nos

10.0	<p><b>21 Inch Tablet (to be installed on the Podium)</b> Supply of Tablet with following specs-</p> <ul style="list-style-type: none"> <li>• Colour display</li> <li>• 21 Inch or larger display</li> <li>• Min Display Type- LCD, Display Panel Diagonal size (mm) 546,</li> <li>• Min Width of The Effective Display Area of The Panel (mm)- 476,</li> <li>• Min Height of The Effective Display Area of The Panel (mm)- 268,</li> <li>• Backlight Technology- LED,</li> <li>• Display Resolution (Pixels)- 1920 X 1080 (or higher)</li> <li>• Touch interface- Pen driven,</li> <li>• Touch Technology- Electromagnetic Resonance,</li> <li>• Number of touch points (Number)- 1,</li> <li>• Response time (milli seconds)- 22 or better</li> <li>• Operating System Compatibility- Windows &amp; Mac</li> <li>• Number of Input HDMI ports- 01 (minimum)</li> <li>• Number of Input USB ports- 01 (minimum)</li> <li>• Stylus type- Battery free with two side buttons and eraser at back side of the pen</li> <li>• Must be supplied be 3-in-1 cable for connectivity,</li> <li>• Warranty 03 Years</li> </ul>	<b>WACOM</b>	5	Nos
11.0	<p><b>Digital Podium</b> Supply of Digital Podium:</p> <ul style="list-style-type: none"> <li>• Free standing adjustable tilt and podium top opens on both sides. Free Standing, Floor Mounted with Wheels.</li> <li>• Display size area in the front for the ablet- must be suitable to install the tablet (Item 10 above) with size 21 inch or more.</li> <li>• Fully Metallic Podium powder coated made up from 1.6mm metallic sheet.</li> <li>• Dimensions (LxWxH in Inches)- 34x27x48 [Few inches of variation in size are permitted]</li> <li>• Must have ventilation fan</li> <li>• Metallic top tray for placing laptop as well as documents.</li> <li>• Lockable drawer for document camera opposite side of laptop tray.</li> <li>• All drawers, sliding trays and doors are lockable.</li> <li>• At least 8 Metallic power sockets inside the podium with central power control having MCB (Havells/ Anchor).</li> <li>• Drawer for keyboard &amp; mouse.</li> <li>• Central Controller panel and video scaler feature HDMI OUT(1) Audio out(1)USB 2.0 (2) AC IN (1), DC IN (1) BUTTONS :4 (Power)</li> <li>• Tilt Mechanism: - Motorized</li> <li>• AC 220V, 50Hz power operation.</li> </ul>	<b>AHA/ AdrTech/ Univeso/MTS</b>	5	Nos
12.0	UTP Cat6 cable	<b>Std Make</b>	100	Mtrs
13.0	<p><b>Supply of i5 PC</b></p> <ul style="list-style-type: none"> <li>• Supply of Intel Core i5 with minimum 4 Core,</li> <li>• 08 GB RAM,</li> <li>• 500 GB HDD,</li> <li>• 802.11N Wi-Fi Connectivity with Minimum following ports. 02XUSB 3.0 and 4 USB2.0,</li> <li>• Dual display Ports (1VGA/HDMI and 1 HDMI Port),</li> <li>• 10/100/1000TX LAN port</li> <li>• Pre-loaded Win10 -</li> <li>• 3 Years warranty</li> </ul>	<b>Lenovo/ HP/Dell</b>	5	Nos
14.0	Popup Box with HDMi & USB ports	<b>Std Make</b>	5	Nos
15.0	VGA to HDMI converter	<b>Std Make</b>	5	Nos
16.0	9 U Rack	<b>Std Make</b>	5	Nos
17.0	<p><b>INSTALLATION COMMISSIONING &amp; PROGRAMMING:</b></p> <p>a) The installation should be compatible with Zoom, MS Team video conferencing platforms.</p> <p>b) Remote audio and the local audio (which are captured by the microphones) must be mixed and audible through the speakers installed within the conference room.</p>		5	Jobs

	<p>c) The local audio captured by the microphones must be available to the remote participants through Zoom/ MS Team/ Skype video conferencing platforms.</p> <p>d) Solution should be compatible with the existing audio amplifier, speakers, projector (only VGA compatible); See Appendix.</p> <p>e) High audio/video quality and easiness in operation is expected. Echo should be minimized.</p> <p>f) Provisions should be provided for Instructors to connect Laptop/Tablet to the podium for projection on the screen.</p> <p>g) Tablet display can be projected on the projector screen and visible to remote participants through Screen Share option enabled by the presenter using the videoconferencing software.</p> <p>h) Installation should be done in a neat fashion and all the wires must be concealed appropriately.</p> <p>i) Any additional items required to complete the installation may be quoted separately.</p>			
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**Grading Scheme Followed under the Quality cum Cost-Based Selection (QCBS) model:**

**Technical Score – Part 1 & 2 (out of 100):**

- Part 1:** All the vendors must install the solution in one of the allotted lecture rooms on Feb 14, 2022. Technical score will be zero if a bidder is absent for the demonstration.

Technical Committee members will be testing the demonstration on Feb 15, 2022, and assign marks as follows:

- Qualify of Sound and working of two-way audio (20 marks)
- Quality of Video (20 marks)
- Easiness of operation (20 marks)
- Quality of tablet and pen (20 marks)

Demonstration should be using the same products that are proposed as the technical solution under Items Nos. 1, 3, 4, 5, 6, 10, 13 submitted along with the bid. Any deviation in this may lead to rejection of the submitted bid and the vendor will be considered ineligible. Vendors are requested to bring their own amplifier, speakers, projector, and all required connectors/cables/components for the demonstration. Demonstration should be done using Zoom and MS Teams.

- Part 2:** 20 marks is based on the number of days required for complete installation & commissioning from the date of award of the work. If **LT** is lowest number of days required for complete installation & commissioning after the issue of award of the work by any vendor and **T** (in days) is the same specified by the bidder, then the marks allotted to the bidder is calculated as  $(LT \times 20 / T)$ .

Technical Grading Scheme to be used (Marks out of 20 for each item under Part 1 above):

<b>Grade</b>	<b>Marks</b>
Outstanding	20
Excellent	18
Very Good	16
Good	14
Very Fair	12

Fair	10
Average	08
Below Average	06
Poor	04
Very Poor	02
Unacceptable	00

**Financial Score (out of 100):**

If **LFB** is the lowest financial bid in INR by any eligible bidder, and **F** is the quoted amount by the bidder in INR, then financial score is calculated as  $(LFB \times 100 / F)$ .

**Combined Technical and Financial Score:**

Weightage for Technical = 50%  
Weightage for Financial = 50%

**Eligibility for Financial Bid:**

Bidder should have a technical score of 70 & above to be eligible for financial bid.

**Other Eligibility Criteria:**

1. Bidder should sign and seal each document submitted by the bidder, including the envelopes of the bids.
2. Firm must be registered and should have authorization for major items as mentioned in Technical Specifications at 1,4,5, and 6 in case of Distributor/Dealer/Service Provider etc. Relevant authorization letter must be enclosed with.
3. Firm must have valid GSTN/PAN Number.
4. Firm must submit Bid security declaration in leu of EMD declaration form as enclosed in annexure B. . The firm which will be awarded the work will have to submit a performance guarantee in shape of BG/DD in favour of “Registrar IIT Kanpur” of 3% of the Contract value which will be refunded after 1 year of the installation.
5. Firm should have completed *at least one similar work of value 28 lac or two works having value more than 21 Lakhs each in any government department(s)/CFTI(s) or reputed educational Institute. Certificate(s) of completion along with the satisfactory performance certificate issued by the user organization must be enclosed with the bid.*
6. Firm should have sound financial position and yearly turnover should not be below 70 lac
7. during last two years. Balance sheet of last two years must be submitted with the Technical Bid.
8. Technical Bid should contain a detailed compliance matrix and specify any deviation clearly.
9. Technical Bid should also clearly mention the number of days required for complete installation & commissioning from the date of award of the work.

**Instruction to the bidder of countries which share land border with India (Rule 144(xi) GFRs)**

1. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Department for Promotion of Industry and Internal Trade (DPIIT).

- II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company , including any member of a consortium or joint venture (that is an association of several persons, or firms or companies) , every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- III. "Bidder from a country which shares a land border with India" for the purpose of this Order means: -
- a. An entity incorporated, established, or registered in such a country; or
  - b. A subsidiary of an entity incorporated, established, or registered in such a country; or
  - c. An entity substantially controlled through entities incorporated, established, or registered in such a country; or
  - d. An entity whose beneficial owner is situated in such a country; or
  - e. An Indian (or other) agent of such an entity; or
  - f. A natural person who is a citizen of such a country; or
  - g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- IV. The beneficial owner for the purpose of (iii) above will be as under:
1. In case of a company or Limited Liability Partnership , the beneficial owner is the natural person(s), who , whether acting alone or together , or through one or more juridical person, has a controlling ownership interest or who exercises control through other means .

**Explanation-**

- a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company.
  - b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements.
2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
  3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who , whether acting alone or together , or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals ;
  4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official.
  5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee , the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership .
- V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

- VI. In case of tenders for Works contracts, including Turnkey contracts, The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority .

### **PPLC Clause**

As per the Ministry of Commerce and Industry Order No. P-45021/2/2017-PP(BE-II) dated 04.06.2020 preference shall be given to Make in India products for which it is mandatory for bidders to declare Country of Origin of goods and percentage of Local contents in the product.

#### **Definitions:**

“Local Content” means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

“Class-I local supplier” means a supplier or service provider, whose goods, services or works offered for procurement, has local content to or more than 50%, as defined under this order.

“Class-II local supplier” means a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%, as defined under this order.

“Margin of purchase preference” means the maximum extent to which the price quoted by a Class-I local supplier may be above the L1 for the purpose of purchase preference. (shall be 20%)

#### **Purchase Preference:**

- (a) Subject to the provisions of this Order and to any specific instructions issued by the Nodal Ministry or in pursuance of this Order, purchase preference shall be given to 'Class-I local supplier' in procurements undertaken by procuring entities in the manner specified here under.
- (b) In the procurements of goods or works, which are covered by para 3(b) above and which are divisible in nature, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:
  - i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class local supplier', the contract for full quantity will be awarded to L1.
  - ii. If L1 bid is not a 'Class-I local supplier', 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class-I local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class-I local supplier' subject to matching the L1 price. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-I local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on Class-I local suppliers, then such balance quantity may also be ordered on the L1 bidder.
- (c) In the procurements of goods or works, which are covered by para 3(b) above and which are not divisible in nature, and in procurement of services where the bid is evaluated on price alone, the 'Class-1 local supplier' shall get purchase preference over 'Class-ul local supplier' as well as 'Non-local supplier', as per following procedure:
  - i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-1 local supplier', the contract will be awarded to L1.

- ii. If L1 is not 'Class-1 local supplier', the lowest bidder among the 'Class-I local supplier', will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price.
  - iii. In case such lowest eligible 'Class-1 local supplier' fails to match the L1 price, the 'Class-1 local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-1 local supplier' within the margin of purchase preference matches the L1 price, the contract may be awarded to the L1 bidder.
- (d) "Class-II local supplier" will not get purchase preference in any procurement, undertaken by procuring entities.

7. Bidder will get all benefits under Rule 153 GFR-2017.

**Terms & Conditions of the quotations are as under:**

1. The currency of all quoted rates shall be Indian Rupees. All payment shall be made in Indian Rupees.
2. 100% payment after installation and commissioning.
3. Firms will mention clearly the chargeable & non chargeable items/services.
4. Other charges, duty, taxes should be clearly mentioned.
5. Current rate of tax and other statutory levies must be mentioned.
6. The rates offered should be exclusive of taxes.
7. Liquidity damage (LD) at the rate of 1% of the cost per week upto maximum 10% will be deducted in case of delay of work beyond 2 weeks.
8. Quotation should have validity of at least 90 days from the date of opening.
9. Installation & commissioning must be completed within 2 weeks from the date of award of work.
10. The right to reject all or any of the quotations and to split up the requirements or relax any or all the above conditions without assigning any reason is reserved to IIT Kanpur.
11. The bid submitted shall become invalid if: a) The bidder is found ineligible due to any of the reasons mentioned in this document, b) The bidder does not provide all the documents as stipulated in the bid document.
12. Subletting of the contract will not be acceptable.
13. Any dispute is subject to Kanpur jurisdiction.

**Sd/-**  
**Joint Registrar, Academic Affairs**  
**IIT Kanpur-208016**

**List of Pre-existing Equipment in the Lecture Rooms Conference Room**

<b>Sr. No</b>	<b>Lecture Room</b>	<b>Room capacity</b>	<b>Speakers</b>	<b>Amplifier</b>	<b>Projector With Screen</b>
1	L-1	225	Pre-Exist	Pre-Exist	Pre-Exist
2	L-2	225	Pre-Exist	Pre-Exist	Pre-Exist
3	L-13	100	Pre-Exist	Pre-Exist	Pre-Exist
4	L-16	320	Pre-Exist	Pre-Exist	Pre-Exist
5	L-17	320	Pre-Exist	Pre-Exist	Pre-Exist

**Bid Security Declaration**  
**(To be given on Company Letter Head)**

Date: \_\_\_\_\_

To,  
The Assistant Registrar  
Central Stores  
IIT Kanpur-208016

**Sub: Certificate for bid security declaration**

Tender Reference No : \_\_\_\_\_

Tender ID : \_\_\_\_\_

Name of Tender / Work: - \_\_\_\_\_

"I/We have read the clause regarding Bid Security Declaration/Earnest Money Deposit and I/We are fully aware that if I/We withdraw or modify the bid during the period of validity I may be suspended for a period of 3 years ."

**Yours Faithfully,**  
**(Signature of the Bidder, with Official Seal)**