ICAR-CENTRAL INSTITUTE OF FISHERIES EDUCATION

(University under Sec. 3 of UGC Act, 1956)
Indian Council of Agricultural Research,
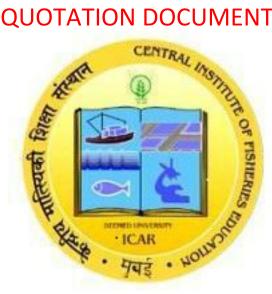**Panch Marg, Off Yari Road, Versova, Andheri (West), Mumbai-400061**

Tel. No. 022-26361446/7/8   **Fax No. 022-26361573**   **Web Site: www.cife.edu.in**

QUOTATION DOCUMENT

RE-QUOTATIONS FOR EQUIPMENTS

UNDER

National Agricultural Higher Education Project

F. No.36-67/Master file/18-19/NAHEP-PROJ.   Date: 15.02.2019

The Director, ICAR-Central Institute of Fisheries Education, Ministry of Agriculture and Farmers' Welfare, Government of India, invites most competitive quotations in sealed envelope under National Agricultural Higher Education Project "NAHEP" for the following equipments from the reputed Indian/Foreign manufacturers and/or their accredited/sole authorized distributors/dealers-

Item no. as per the document	Particular	QTY
03	Smart Classroom	1
10	Multiple Water Analyser	1
12A	Horizontal Gel Electrophoresis	1
12B	Auger	1
12F	Microscope	2
12G	Centrifuge	1

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TERMS & CONDITIONS OF QUOTATIONS

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1. The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.

2. Quotations must be submitted in the original prescribed form separately for each equipment with rates for delivery in the places mentioned in the document duly addressed to the Director, ICAR-CIFE, Mumbai-400061 in a sealed cover super scribing as QUOTATION FOR EQUIPMENT FOR THE YEAR 2018-2019 UNDER **NATIONAL AGRICULTURAL HIGHER EDUCATION PROJECT (NAHEP)** with the Item no. and Name of equipment.

3. All duties, taxes and other levies payable on the raw materials and components shall be included in the total price.

4. In case the date of issued/receipt of opening of quotation is declared as Holiday for unexpected reasons, the quotation will be issued /received/opened on the next working day at the same time. The quotation documents are non-transferable. Director of the institute reserves the right to accept/reject any or all the quotations without assigning any reason thereof.

5. Quotations received **after the DUE DATE and TIME** will not be accepted in any circumstances.

6. Prices for extended warranty for one year and two years should be given separately. However decision about the warranty will be taken by purchaser at later stage.

7. No EMD and Tender fee are applicable.

8. The schedule to the quotation form should be submitted in prescribed format only.

9. Only one quotation should be included in one cover. Where more than one quotation is included in a cover, all quotation so enclosed in one cover will be liable to be ignored.

10. **LATEST HOUR FOR RECEIPT OF QUOTATION**

    Unless otherwise specified in the schedule to quotation, your quotation must reach this office not later than 13.00 hrs. on the date of opening of the quotation. Quotation sent by hand delivery should be put in the quotation box kept in **NAHEP Office, 2nd floor, Room no. 225** located at Yari Road Campus of ICAR-CIFE, not later than 13.00 hrs. on the due date unless otherwise stipulated in the schedule to tender.

11. **OPENING OF QUOTATION**:

You are at liberty to be present or authorize a representative to be present at the time of opening of the quotation at the time and date as specified in the schedule. The name and address of the representative who would be attending the opening of the quotation on your behalf, should be indicated in your quotation. Please also state the name and address of your permanent representative, if any.

For and on behalf of

ICAR-Central Institute of Fisheries Education
Panch Marg, Off Yari Road, Versova ,
Andheri (West), Mumbai-400061

Signature

F. No.36-67/Master file/18-19/NAHEP-PROJ.   Date: 15.02.2019

1.	Issue of Quotation Document on	15.02.2019
2.	**Last date for issue of tender document on**	22.02.2019
3.	**Acceptance of sealed tenders 13.00 hrs on**	**22.02.2019**
4.	**Opening of tender at 15.00 hrs on**	**22.02.2019**

Name of the equipment: _____

Item No. : _____

QUOTATIONS FORM HAS TO BE SUBMITTED SEPARATELY IN SEALED ENVELOPES

To,

M/s. ………………………………………….

……………………………………………………

Sub: Supply of Quotation Form - reg.

Dear Sir,

    Please find enclosed herewith the quotation form along with detailed specifications for the supply of equipments mentioned in Annexure – 1.

        Kindly acknowledge the receipt of the same.

                                                                    Yours faithfully

                                                                    Senior Administrative Officer

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(To be returned by Bidders along with the quotation duly completed and signed)

Name of Equipment: _____

Item No. : _____

Sl. No.	Description of Goods	Specifications	Qty.	Unit	Quoted Unit Rate in Rs.	Total Amount	
						In Figures	**In Words**
	Please refer Annexure - 1	* **	*	*	*		
	Total						
	Sales Tax						

**Prices for extended warranty for one year and two years should be given separately

Gross   total cost _____(in figures)   (_____

_____ (in words).

    We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. _____(amount in figures) (Rs. _____amount in words) within the period specified in the Invitation for Quotations.

We also confirm that the normal commercial warrantee/guarantee of _____ months shall apply to the offered goods.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

We also confirm that the normal commercial warranty/guarantee of _____ months shall apply to the offered goods.

Supplier

Name : _____

Signature : _____

Date : _____

INVITATION FOR QUOTATIONS FOR SUPPLY OF GOODS UNDER NATIONAL SHOPPING PROCEDURES

To

_____

_____

_____

_____

Dear Sir,

Sub : INVITATION FOR QUOTATIONS FOR SUPPLY OF FOLLOWING EQUIPMENTS

1. You are invited to submit your most competitive quotation for the following goods:-

Brief description of the Goods	Specifications*	Quantity	Delivery Period	Place of Delivery	Installation Requirement if any
Smart class room (Package) * i) Ceiling Mount Remote Full HD PTZ camera for lecture capture ii) Short Throw Interactive WXGA 3LCD Projector iii) Portable professional live streaming device (one channel HD encoder) iv) USB dual video capture device		2 1 1 1	30 days	HQ CIFE, NEW CAMPUS	Yes
Multiple Water Analyser		1	30 days	CIFE, Rohtak Center, Haryana	Yes
Horizontal Gel Electrophoresis		1	30 days	HQ CIFE, NEW CAMPUS	Yes
Auger		1	30 days	CIFE, Rohtak Center, Haryana	Yes
Microscope		2	30 days	HQ CIFE, NEW CAMPUS	Yes
Centrifuge		1	30 days	HQ CIFE, NEW CAMPUS	Yes

*Package: items to be supplied together as package

TECHNICAL SPECIFICATION OF EQUIPMENTS

Item No. 3 SMART CLASS ROOM (To be delivered at HQ CIFE, NEW CAMPUS)

i. Ceiling Mount Remote Full HD PTZ camera for lecture capture (2 Nos.)

Camera

- **Image Sensor** 1/2.8 Exmor CMOS
- **Image Sensor (Number of Effective Pixels) minimum.** 2.1 Megapixels
- **Minimum Illumination (50IRE)** 1.8 lx (50IRE, F1.8, 30fps)
- **Shutter Speed** 1/1 to 1/10000 sec (59.94 Hz system), 1/1 to 1/10000 sec (50Hz system)
- **Optical Zoom** 12x
- **Digital Zoom** 12x
- **Horizontal Viewing Angle** 71 degree(Wide)
- **Focal Length** f=3.9mm(wide) to 46.8 mm(Tele) F1.8 to 2.0
- **Minimum Object Distance** 10 mm(Wide)~ 1500 mm(Tele)
- **Pan/Tilt Angle** Pan: ±100° Tilt: ±25°
- **Pan/Tilt Speed (Max.)** Pan 300°/sec; Tilt 126°/sec
- Should have Wide-D, Auto ICR, Image Stabilization, Image Flip
- White color model

Interface

- HDMI video output
- **Camera Control Interface** RS-232/RJ-45
- **Power Requirements** DC 12V (DC 10.8 to 13.2V)
- **Mountable Angle** ±15°

Accessories

Compatible ceiling mount, AC power adaptor, AC power cable, IR Remote Commander Unit, CD-ROM

ii. Short Throw Interactive WXGA 3LCD Projector (1 no.)

Essential Features

- Throw Ratio 0.48 - 0.65 (Wide - Tele) projection; Projection technology: RGB liquid crystal shutter projection system (3LCD); Focal Length 6.4mm; Zoom Ratio 1.0 - 1.35 (Digital Zoom); **PC-free Interactive Functionality; On-screen Projector Operation;** Zoom: Wide / Zoom: Tele 50" - 110"/ 40" - 80"; Sound Output 16W Monaural; Keystone correction : Vertical / Horizontal ±7º / ±5º; long lamp life of 10,000 hours in eco-mode; ***Wireless projection option*** from a smart device (android/iPhone) - to present smartphone contents with ease
- **Multi-PC Projection capability** media from up to four PCs/ smart devices for same time projection.
- **Input and output:** Digital Input HDMI 1**,** Stereo Mini Jack 2**,** USB Input USB Type A (for USB Memory/ USB Document Camera/ Wireless LAN), USB Type B (for USB Display, Mouse, K/B, Control, Firmware Update, Interactive, Copy OSD Settings)
- **Interactive Unit:** Supported Screen Size 50" - 110"/ 40" - 80"; Input Devices- Digital Pen
- **Network Wired LAN (100Mbps) & Wireless LAN support**
- **Power Supply Voltage** 100 - 240 V AC ±10%, 50/60 Hz

Accessories: Compatible Short-throw Wall Mount (arm Length about 5 metre, Load Capacity about 5 kg & Support Projection Screen Size of 70" - 100" (WXGA model)**,** Wireless LAN Adaptor (should Support 802.11 b/g/n connection; Compatible with the wireless-enabled projectors)**,** Power Cable: 4.5m**,** Remote Control, Computer Cable (VGA Cable): 1.8 m, Interactive Pen x 1 (EB-536Wi), USB cable: 5m, Quick Wireless Connection USB Key, USB Extension Cable

iii. Portable professional live streaming device (one channel HD encoder) (1 no.)

Essential Features

- A stand-alone device (shall not require computer) that can record and stream 1 channel of HDMI + embedded audio; can also loop-through HDMI + embedded audio
- Supports live streaming (live broadcast) of lectures/events to online social media platforms like YouTube Live, Facebook Live, Twitter and/or customized RTMP server (e.g. CIFE web server or any cloud servers) using RTMP protocol
- Support for streaming to 2 servers simultaneously is desirable
- Shall support cable free control of the device via on-device buttons or intuitive Android/iPhone smartphone app
- HDMI IN/OUT, Mic IN, HD Audio, AV OUT, Headphone OUT, H.264/AAC encoding 1080p @5Mbps.
- Live broadcast for 2.5+ hours with internal rechargeable Li-ion battery
- Live stream using WiFi and/or Ethernet
- **Input:** HDMI Input: Dual 1080p/60Hz HD HDMI signals (HDMI 1.4a is desirable)
- **Output Interface:** USB3.0 / USB 2.0**;** HDMI; HDMI loop-through**;** 3.5mm audio jack for Headphone interface/ Extraction of stereo embedded HDMI audio for recording
- **Network Interfaces:** Wired Ethernet - 10/100/1000Mbps Ethernet**,** Inbuilt Wi-Fi feature - 802.11 a/b/g/n/ac**,** Bluetooth 4.0 BLE
- **HDMI Specific Feature:** Support for up to 4096x2160 4:4:4/4:2:2 30fps or 4096x2160 4:2:0 60fps input and loopthrough signals

Recording Features (to USB Flash Drive)

- Support for H.264 High Profile (video) and AAC High Quality (audio) encoding
- Support for 60fps to 15fps frame rates & upto 2948*1080 resolution
- Support for recording as MP4 files

Recording Features (to Mobile Device): Support for recording at up to 1280x720, 30fps, Support for recording as MP4 files, Taking still image snapshots during recording

Remote Control Features in App- Support for setting volume, network, recording and live streaming parameters

- Simultaneous main stream and sub stream encoding with customizable parameters
- The bitrate for main stream is up to 4 Mbps while for sub stream is 1 Mbps

Accessories: Power adapter, USB cable, manual, etc.

iv. USB dual video capture device (1 no.)

- **Supported OS** *(minimum):* Windows XP Professional/Vista/7/8/8.1/10/Server 2003/Server 2008/Server 2008 R2 (x86/x64)
- **Supported Software** *(minimum):* Windows Media Encoder, Adobe Flash Media Live Encoder, Real Producer Plus, VideoLAN for Windows
- ***Onboard Memory:*** minimum. 128MB DDR2, working rate is 160 Mhz, bus width is 32 bits

Input: Input interface: 2 DVI-I (can connect to HDMI, VGA, YPbPr); DVI Input Dual: 1080p/60Hz HD DVI signals; HDMI Input: Dual 1080p/60Hz HD HDMI signals; VGA Input: Dual VGA; YPbPr Input: Dual YPbPr; CVBS Input: Dual SD video signals; HDMI Audio Input: Dual LPCM audio signals

Host Interface: USB3.0

Standards

- DVI Input Format: It meets DVI 1.0 standard, single connection (480i, 576i, 480p, 576p, 720p, 1080i, 1080p)
- HDMI Input Format: It meets HDMI 1.3 standard and supports 36 bits DeepColor.
- YPbPr Input Format: 480i, 576i, 480p, 576p, 720p, 1080i, 1080p

- VGA Input Format: 640×400–2048×1536 when the pixel rate is below 170MH. It shall provide safe mode to VGA and can capture irregular resolutions.
- CVBS Output Standard: PAL/ NTSC
- HD Output Format: 40×30–2048×1536, frame rate: 1–100 fps
- SD Output Format: 176×144–768×576, frame rate: 1–30 fps
- Video Sampling Rate: RGB/YPbPr: 170MHz; HDMI/DVI: 225MHz
- Video Sampling Precision Rate: 10 bits
- Color Space: YUYV, UYVY, I420, NV12, RGB 24 Bits, RGB 32 Bits

Video Processing
- Hardware Color Switch, Video de-interlacing, Vertical filter de-interlacing, Motion-adaptive de-interlacing
- Video scaling: Hardware 5-Tap Scale; Image Mirror: Horizontal & vertical
- Editing features: Image cropping, Image Adjustment, Brightness/contrast/hue adjustment, Saturation adjustment/control of monochrome and color, Gamma adjustment, shall separately be able to adjust the brightness and contrast of R/G/B

Installation
It can connect to computer by USB 3.0 interface, and is compatible with USB 2.0 interface (with relatively low frame rate).

Item No.: 10-Multiple water analyser (1 No.) (To be delivered at CIFE Centre Rohtak, Haryana)

- Wave length range: 200-1100 nm
- Lamp source: Preferably tungsten (visible range), deuterium (UV range)
- Operating mode: Transmittance, absorbance, concentration
- Wavelength resolution: 0.1 nm
- Wavelength selection: Automatic and based on input
- Scanning speed: 900nm/min with 1 nm Step
- Photometric range: ±3 Abs
- Spectral band width: 2 nm
- Display: TFT WVGA Color touch
- Programmed methods: To select at least for 250 parameters
- Sample cell compatibility: Rectangular 10, 20, 30, 50 mm and preferably 100 mm also, Round 16 mm, 1 inch and preferably both
- Operating condition: Compatible for use up to 40°C and 80% relative humidity
- Data logging: For minimum 2000 samples and maximum up to 5000 samples with date and time and sample ID
- Compatible for conventional and kit based methods
- Warranty 2 years against any defects

Item No.: 12 (A) Horizontal Gel Electrophoresis Apparatus (1 No.) (To be Delivered at HQ CIFE, New campus)

- Should be able to separate of DNA and RNA fragments fast in agarose gel.
- Sample load capacity- 13-30 samples.
- Should have in-built power pack.
- Should have digital display.
- Overall dimension- 30x19x9cm approx.

- Gel tray dimension (WxL cm)- 12X12, 12X6, 6X6 approx.
- Should have multiple combs and trays.
- Power supply- 5-240V.
- Should have alarm for time consumption.
- Type of output: constant voltage or current with automatic crossover.
- One-year warranty should be provided.

Item No. 12 (B) Auger (1 No.) (To be Delivered at CIFE Center, Rohtak, Haryana)

Ergonomical handle: An ergonomically shaped handle with ball shaped hand grips on either end

- Material: Iron Manganese steel
- Handle ends: Rounded
- Ratchet type: adjustable for left and right turning
- Should be provided with halt knob to adjust height working height: adjustable in 25/50 cm stages
- Coupling type: bayonet type
- Handle weight: <4 kgs
- Tubing shape: square
- Drilling depth capacity: up to 5 meters
- Other features: compatible for operation by single man
- Should be supplied with following augers

Type of the auger	Diameter at the widest point (mm)	Blade width (mm)	Material
Edelman auger clay type	70	30	Iron-manganese steel
Auger for Stony soil	70	-	
Riverside auger	70	-	
Spiral auger	40	-	

Accessories:
- Extension rod of 1m in length and coupling sleeves of cylindrical shape
- Utility probe-capable of testing the auguring spots for various types of cables and underground pipes.

Item No. 12 (F) Microscope (2 Nos.) (To be Delivered at HQ CIFE, NEW CAMPUS)

- Nose piece: revolving quadruple.
- Objective lens: 4X, 10X, 40X and 100X oil immersion.
- Focussing Range: Co-axial Coarse and fine adjustment.
- Stage: mechanical double layer size.
- Condenser and diaphragm Abbe condenser NA 1.25 with iris diaphragm.
- Transmitted (lower) illuminator: LED light, intensity adjustable.
- Focus adjustment: Co-axial coarse and fine knobs on both the sides.
- Power supply: AC/DC adapter, 7.5 V/ 7.5W, input:100-200V (Suitable for Indian conditions).
- Digital camera: true colour 640x480 pixels (approximately) reduction lens to get larger field of view- Software compatible with Windows XP/Vista/7/8/10, and capturing microscope images, recording live video, measuring lengths, angles, areas, editing images.
- One- year warranty against manufacturing defects.

Item No. 12 (G) Centrifuge (1 No.) (To be Delivered at HQ CIFE, NEW CAMPUS)

- Rotor capacity- 8 place rotor for 1.5/2.0 ml microtubes.
- Maximum RPM/RCF (G): 6000/2000g
- Digital display
- Imbalance detection: Yes
- Accuracy/ Calibration: Adjust to varying load (self-calibrates) to give accuracy as ± 25 RPM.

- Noise level: <55 db.
- Quick Spin: Yes, Lid activated on/off
- Variable Speed: 500-6000 RPM in steps of 100 RPM.
- Timer: 1 to 25 mins and infinite
- Dimensions (WxDxH): (162x 157x 115) mm
- Rotors and Adaptors (included in standard pack): 8 slots x 1.5/ 2.0 ml closed rotor.
- PCR strip rotor: 2x8x 0.2 ml
- Reduction adaptors for 0.2/ 0.5 ml microtubes.

Address of Delivery location:

- ICAR-Central Institute of Fisheries Education (New Campus), Panch Marg, Off Yari Road, Versova, Andheri (West), Mumbai-400061

- **Centre In charge**
  ICAR-CIFE, Rohtak Centre, Lahli, Via Anawal, Rohtak – 124 411, Haryana