

(An autonomous institute of Govt. of Odisha) Sarang, Dhenkanal, Odisha–759146

# TENDER DOCUMENT

For

Computer Science, Engineering & Application Department



(An autonomous institute of Govt. of Odisha) Sarang, Dhenkanal, Odisha-759146

# RECORD OF SALE OF TENDER DOCUMENTS

1. NAME OF THE WORK – (latest Version Research Licensesfor	Cloud Lab)	"Cloud Computing Platforn
2. CALL NOTICE NO: - IGIT/TE	QIP/189 Dated 13/10/2018	
3. COST OF TENDER DOCUM	ENTS: - Rs.1000.00 (One Thousand) only	y
4. DEMAND DRAFT NO & DAT	E:-	
5. DATE OF ISSUE OF TENDE	R DOCUMENTS: - 15/10/2018	
6. LAST DATE OF RECEIPT O <b>26/11/2018</b>	F FILLED TENDER DOCUMENTS AS	PER CALL NOTICE:-
7. TOTAL NUMBER OF PAGES	S IN THE TENDER DOCUMENTS:-	
Signature of Tenderer	Г	Director



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No. IGIT/TEQIP/189

Date: 13/10/2018

#### TENDER CALL NOTICE

Sealed tenders are invited in conformity with DTCN prescribed format from registered parties/firms having DGSD rate contracts/DIC registration or EPM rate contract /registered original equipment manufacturer (OEM)/ Authorized Distributers/dealers having valid tax clearance certificate for supply of equipment and accessories for set up of above labs in turnkey basis. Tenderers are advised to fill up the prices in the prescribed format only. The tender shall be submitted in two parts (Part:A- Technical bid &Part:B- Financial bid).

Sl.	Name of the	Approxi	EMD @1% of the Bid	Cost of Tender	Performance Security
No.	work	mate	amount in shape of	paper Nonrefundable	(To be deposited by the
		Estimate	DD in favor of Principal,	in Rs.	vendor after selection) -
		d	Indira Gandhi Institute of	as applicable	Refundable after
		cost	Technology Sarang	in shape of	completion of the
		in Lakhs	payable at SBI, IGIT Saranga	DD in favor of Principal, Indira	warranty period.
			(IFSC Code No.	Gandhi Institute of Technology	
		(Rupees).	SBIN0010246)	Sarang	
			Or Bank Guarantee	payable at SBI, IGIT Saranga	<u> </u>
				(IFSC Code No.SBIN0010246)	
1	Computer Science,	30.9	Rs. 0.309Lakh	Rs. 1000.00	@ 5% of the bid value
-	Engineering &		Or 1% of the bid value		as on the purchase order
	Application		Or Bank Guarantee		in the form of DD
ļ	Department		Jann Guarantee		or Bank Guarantee
	(As per the Appexures)				1

- 1. Date of sale of Tender Paper- 15.10.2018
- 2. Last date of Receipt of Tender Paper- On or before Dated: 26.11.2018 at 4:00 PM
- 3. Date & Time of opening of Technical bid- 27.11.2018, 11: AM. The Tender will be opened in the presence of bidders/Authorized nominees. Date & Time of opening of Financial bid- 7.12.2018 at 11 AM.
- 4. Tender in complete shape must be accompanied by attested copies of valid Registration certificate /PAN Card /GSTIN Certificate. Relationship certificate along with Original Money Receipt towards purchase of Tender paper & required EMD in the shape of D.D.
- 5. Tender is to be sent through registered post/speed post only through Indian Postal service.
- 6. The details of Tender can be obtained from the Institute website. Please visit our website www.igitsarang.ac.in.
- 7. The tender documents can also be down loaded from our website www.igitsarang.ac.in.
- 8. The authority reserves the right to accept or reject any or all the bids or parts without assigning any reason thereof.
- 9. The undersigned will not be held responsible for any postal delay.
- 10. Bids must be accompanied by Earnest Money in the shape of a Demand Draft (for an amount as mentioned in the Table) drawn in favour of "Principal, IGIT Sarang", and payable at IGIT Sarang or Bank Guarantee. Each Tender shall be accompanied with separate EMD. This Earnest Money in the shape of Demand Draft or Bank Guarantee must be enclosed inside the "Technical Bid". Bids without containing the required amount of Earnest Money/Tender cost in the shape of Demand Draft(s) inside the 'Technical Bid' will not be taken in to consideration.

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#### 2. Eligibility of Tenderer and General Instructions:

#### 2.1 Eligibility:

Those who fulfill the following criteria are eligible to participate in the tender.

- a. The Tenderer must be a reputed original equipment manufacturer and /or the authorized Dealer of a reputed manufacturer. Manufacturers should provide all documents relating to their manufacturing capabilities.
- b. The Tenderer should be an authorized dealer for IGIT Sarang of a reputed manufacturer for the item quoted. Necessary certificate to this effect from the manufacturer must be enclosed.
- c. All after sales support should be provided directly by the manufacturer only.
- d. The Tenderer must have the willingness for providing comprehensive maintenance support of the machine/equipments supplied by him.
- e. The Tenderer must provide evidence of successful execution of supply orders with installation and successful after sales support in at least 3 reputed organizations.
- f. The Tenderer must have cleared sales tax, Service tax and income tax payment up to date. Attested copies of sales tax clearance certificate or non-assessment certificate from the concerned sales tax authority valid up to date and attested copy of income tax clearance certificate or non-assessment certificate, as the case may be, from the competent authority, up-to-date and copy of PAN card must be enclosed along with the tender documents. The company registration no & GSTIN Certificate must be given along with the tender.
- g. The Tenderer should have prior experience of completion of turnkey project to execute this project.

#### 2.2 General Instructions

- 1. Submission of more than one bid by a particular tenderer under different names is strictly prohibited. In case it is discovered later on that, this condition is violated, all the tenders submitted by such tenderer(s) would be rejected or the contract if assigned would be cancelled.
  - 2. All offers should be in English and the price quoted for each item should be firm.
- 3. Warranty period, Delivery period and after sale service conditions, etc. are also to be clearly indicated.
- 4. The rates and conditions of the offer will remain valid for three months from the date of opening of the tender and no change or alteration of the rate will be acceptable on any account.
- 5. Submitted tender forms with overwriting or erased or illegible specifications and rates will be rejected.
- 6. Request from tenderer in respect of addition, alterations, modifications, corrections, etc, of either terms or conditions or rate after opening of the bid may not be considered.
- 7. Tenderers shall carefully examine the bid documents and fully inform themselves of all the conditions, which may in any way effect the work of the cost thereof.
- 8. Should a Tenderer find discrepancies or omissions from the specification or other documents and any doubt as to their meaning, he should at once notify the purchaser and obtain clarification in writing.



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- 9. This, however, does not entitle the Tenderer to ask for time beyond the due date fixed for the receipt of tenders.
- 10. The tenderer must also specify minimum up time and maximum time to repair/replace in the event of a failure and penalty thereof.
- 11. Verbal clarification and/or information given by the purchaser or its employees or representatives shall not be binding on the purchaser.
- 12. Submission of sealed bid will carry with the implication that the tenderer agrees to abide by the conditions laid down in the detailed particulars of the bid notice.
- 13. Conditional offers and offers qualified by vague and indefinite expression, as 'subject to immediate acceptance' 'subject to prior sale', etc will not be considered.
- 14. While tenders are under consideration, tenderers and their representatives or other interested parties are advised to refrain from contacting by any means, to the purchaser's personnel or representatives on matter relating to the tenders under study.
- 15. The purchaser if necessary, will obtain clarification on tenders by requesting such information from any or all the tenderers either in writing or through personal contact as may be necessary.
- 16. The tenderer will not be permitted to change the substance of his offer after the tenders have been opened.
- 17. In the event of non compliance with this provision, the tender is liable to be disqualified.
- 18. The Tender shall submit the tender bid in two parts (Part –A & Part –B). In the case, where Part A of a bid fails to comply properly (i.e. the technical specifications/Make of the bid is not matching with the required technical specifications of each item and other Technical bid criterion as mentioned in the tender paper), the bid will not be considered for further processing. Such bids will be accounted as disqualified. In that case Part-B of the bid will not be opened. Wherever required, the decision of the tender committee in this regard is considered as final.

#### 2.3. Submission of Tenders;

Tenderers are advised to fill up the prices in the prescribed format only. The tender shall be submitted in two parts (Part -A & Part -B).

#### Part - A

It will cover the **Techical Bid** such as the Letter of Application, Commercial Terms and Conditions, **GST Regd.** Certificate, Income Tax Clearance Certificate / PAN, Documentary Proof of satisfying the required eligibility criteria specified in Tender Notice, Undertaking for registration in Odisha Sales Tax Department in case of order (for bidders not possessing OSTRC), Bank Draft towards cost of Tender Paper and EMD etc has to be submitted by the concerned vendor with the tender paper. This part will also include the required Drawings, General Conditions, Special Conditions, Technical Specifications, Guaranteed Technical Particulars and Deviations, if any. Any document the firm is willing to furnish other than the Financial Bid shall be submitted with this Technical bid.



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#### Part - B

It will cover only the **Financial bid**. No other documents except the Financial bid should be enclosed in this part-B.

Each envelope (one for Part-A, the Technical bid and the second for Part-B, the Financial bid) shall be duly sealed separately. The envelope containing documents for Part-A shall be super-scribed with "Technical bid," and the envelope containing documents for Part-B shall be super-scribed with "Financial bid". Both these sealed envelopes should be enclosed in a bigger envelope super-scribed with "Bids for Supply of Equipment for the Department of CSEA, IGIT Sarang, Parjang, Dhenkanal, Odisha-759146, Dates of Opening: (a)Technical bid: 27.11.2018 at 11:00AM and (b) Financial bid: 07.12.2018 at 11:00 AM and sealed properly. This sealed bigger envelope duly super-scribed as mentioned above should reach "The Principal, Indira Gandhi Institute of Technology, Sarang, Parjang, Dhenkanal, Odisha-759146" on or before the Tender Closing date: 26.11.2018 at 4.00 PM by Regd. Post/Speed Post only. No other mode of submission is accepted.

#### 3. Requirements by Tenderer before Supply:

#### 3.1 Rating Plate, Name Plate and Labels:

Each of the equipment supplied by the bidder must have permanently attached rating plate of non-corrosive material in a conspicuous position, upon which the total specifications along with the manufacturer's name, address, etc. are to be engraved.

#### 3.2 Packaging:

All the equipment are to be suitably protected, covered in water -proof packing and thermo cool / crated to prevent damage or deterioration during transit and storage till the time of installation or supply. The supplier shall be responsible for any loss or damage caused during transportation, handling or storage till their successful installation.

#### 3.3Inspection:

- a. All materials / equipment shall be inspected and tested for completeness, proper assembly, operation, cleanliness and state of physical condition and performance as per quoted specification.
- b. The test shall be conducted, reported and certifications to be provided by the tenderer. The tenderer shall provide all test and measuring equipment/tools required for inspection / testing. The cost of all such tests shall be borne by the tenderer.
- c. IGIT Sarang reserves the right to reject any equipment if it does not comply with the specifications during site testing, installation and commissioning stage. In case of rejection, the tenderer has to pay the expenses towards the return of the same equipment/ material.
- d. Inspection & testing would be conducted, jointly, at various stages as applicable during unpacking, installation and commissioning of respective equipment/ components at the manufacturing site.



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#### 3.4 Environmental Condition:

All the documents submitted must be in the papers showing the signature of the bidder and primed office name of the bidder on official seal.

All the equipment supplied shall be rugged and should operate without any deviation in quality, or degradation of equipment performance. All the specification/parameters shall be guaranteed over the following environmental conditions:

- a. Storage Temperature 0 to 70 degree Celsius
- b. Operating Temperature 0 to 50 degree Celsius
- c. Humidity 95% RH (non-condensing)

All the equipment are intended to operate under 220 V (Single Phase)/ 440V(Three Phase), 50 Hz power supply.

#### 4. Requirements by Tenderer after Supply:

#### 4.1 Supply:

- a. The material would be delivered by the supplier at Indira Gandhi Institute of Technology, Sarang, Dhenkanal, Odisha 759146.
- b. The items should be supplied directly from the manufacturing terminal having passed all tests successfully with Certifications as required.
- c. The equipment should conform to the latest relevant National/International standards and shall be completed in all respect.
- d. Any component, fitting etc. which may not have been specifically mentioned in the specifications but which are usual and necessary for the equipment, shall be supplied by the tenderer at no extra cost.
- e. In case, articles are found damaged in transit or found short at the time of delivery the full cost of the same will be deducted from the bill of the supplier in case the supplier does not replace the stock within two weeks from the date of the complain.
- f. The articles ordered must be supplied in one lot within 4 (four) weeks of placing of the order.
- g. In case of delay in delivery or successful installation, a penalty @ 1% (one per cent) of the bid value per week shall be levied.
- h. IGIT Sarang reserves the right to procure the materials from alternative sources at the risk and cost of the successful tenderer giving 15 days notice.
- i. Any increase in tax and duties after expiry of delivery period will be to the seller's account.
- j. In case the items supplied by the supplier are found not up to the specification shall be rejected.
- k. The supplier will be intimated to take back the stocks at his own cost within three days from the date of rejection and to replace the same within 15 days, failing which the EMD will be invoked in addition to taking legal actions.



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- 1. Imported consignment, if any, should be destinated to IGIT Sarang, Dhenkanal, Odisha, India through Bhubaneswar Air Port.
- m. The suppliers shall be responsible for releasing the consignments from the carriers/transporters.
- n. The equipment/machineries shall be delivered and installed at site at the cost of the tenderer.
- o. All taxes, levies, surcharges including the customs clearance and handling freight and insurance should be paid and handled by the tenderer.

#### 4.2 Installation and Commissioning:

Installation and Commissioning shall include the following:

- a) Installation and Testing of the Equipment, Machineries etc. should be supplied by the tenderer.
- b) It will be the responsibility of the tenderer to provide all necessary spares and consumables, which may be required during installation and commissioning, at no extra cost to IGIT Sarang
- c) The tenderer is to bring their own testing and measuring instruments required for installation, testing, commissioning, which can be taken back after completion.
- d) Installation must complete within a week after delivery on site.
- e) The tenderer should provide all necessary raw materials for running of the machine during commissioning and provide training to our laboratory personnel free of cost.

#### 4.3 Documentation:

- a. Detailed technical manuals, handbooks, drawings, Warranty card and Factory Quality Assurance checklist, test results and any other certifications mentioned in the Technical specifications shall be supplied along with the consignment.
- b. Supplied manuals/handbooks must cover detailed technical specifications and installation, operation, maintenance and System Safety procedures.
- c. For Experimental setups details of theory, procedure and methods of taking measurements etc. should be provided in the form of hand books for each experiment.
- d. The receipts for taxes paid, if any, for the supplied materials should also be submitted.

#### 4.4 Trial Operation and Performance Guarantee Test:

- a. After successful completion of Installation and Commissioning of the equipment, a 7-day continuous trial operation putting those on optimum use shall be conducted by the tenderer at site, during which the performance of the equipment shall be demonstrated for trouble-free continuous operation, meeting the specified standards.
- b. During trial operation, tenderer shall do all necessary adjustments required to ensure the performance as per the acceptable level.



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c. In case, guaranteed performance is not established, the tenderer shall be given opportunity to rectify/replace the equipment/components, and restart the 7 days continuous trial operation, at the risk and cost of the tenderer.

#### 4.5 On-Site Warranty:

- a) The entire materials may be used continuously. The reliability and safety of the total installed system and trouble-free operation are, therefore, of prime importance. The supplied devices/equipment and components shall be covered under two-years or more comprehensive on-site warranty from the date of successful completion of Performance Guarantee Report.
- b) During the period of warranty, it shall be the responsibility of the tenderer to provide all essential spares and consumables, which may be required for maintenance and trouble-free operation of the devices / components at the tenderer's cost.
- c) Software, if any, has to be tested with at least one-year warranty for trouble free operation.

#### 4.6 Comprehensive Maintenance Contract:

- a. The tenderer shall be under the obligation of entering into a Comprehensive Maintenance Contract (CMC) with IGIT, Sarang for a minimum period of two years, renewable if felt necessary, on mutually acceptable rates, terms and conditions. CMC shall start after the completion of Warranty.
- b. The scope of CMC shall cover maintenance and supply/replacement of materials and components, for smooth and reliable operation of the systems without trouble.
- c. Accordingly, the tenderer has to offer rates for the CMC structure per equipment along with the price for the Systems and other associated Equipment supplied.

#### 4.7 After Sales Service:

- a. During the warranty period and subsequently, after signing of Agreement for CMC the tenderer shall attend to the problems reported by the users of IGIT Sarang on a priority basis.
- b. For any problem reported the tenderer shall attend and rectify the problem within 7 (seven) days or provide a standby system of the similar configuration.
- c. The report on any problem will be informed through phone or fax number of which shall be given by the tenderer.
- d. The branch office of the concerned manufacturing firm will be fully responsible to provide maintenance service, in case of any negligence, in providing the service by the tenderer.
- e. On failure to comply with those instructions, the Bank Guarantee provided for the warranty period shall be invoked.

#### 5. Financial Terms:



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#### 5.1 EMD (Refundable)

- a. The tenderer has to submit a Demand Draft / Banker's Cheque / Pay order as detailed mentioned above in favour of DD in favour of Principal, Indira Gandhi Institute of Technology Sarang payable at SBI, IGIT Saranga (IFSC Code SBIN0010246) towards EMD.
- b. There will be no interest paid to the tenderer towards EMD money.
- c. In no case, the EMD Money in cash or other forms will be accepted at the time of opening of the bid.
- d. No request for adjustment of claims, if any, will be accepted.
- e. The EMD of unsuccessful tenderers will be refunded as soon as possible after the tenders are finalized. The EMD must be claimed by the tenderer personally or by authorized letter addressed to the Principal and Secretary IGIT, Sarang, within one year.

#### 5.2 PRICES:

- a. Price quoted should be FOR IGIT Sarang only.
- b. Price should be quoted for unit item; however, the actual system requirements may be much more.
- c. Purchase order will be placed as a single lot for each type of item or for all the items together, as the case may be.
- d. In case of items of import, the tenderer should take full responsibility for customs clearance, handling, tax payment, etc. And specify the charge for the same in the Financial bid.

#### 5.3 Sales Tax Concession:

Central Sales Tax/ GST Concession (if any) is to be availed on production of the required certificates applicable to Educational Institution.

#### 5.4 Discount:

- a. Our Institute is a pioneer Institution in the field of Teaching and Research in Engineering and allied disciplines and do no trun with profit motive.
- b. As such we are availing price discount for purchase of equipment/instruments/chemicals.
- c. The rate of discount or any other Institutional benefit arising out of Govt. Policy etc./ company's own policy on each item may also be indicated in the Financial bid specifically.

#### 5.5 Payments:

In case of imported items, payment will be made by opening LC in the name of the manufacturer subject to the condition that aBank Guaranty for an equal amount will be submitted by the selected Tenderer to IGIT Sarang for the period of completion of installation and commissioning. In case of purchase in Indian Rupees, payment of 100 % (percent) of the ordered value will be made after successful installation and commissioning of the equipment subject to submission of satisfactory performance report by our Professor-in-Charge.

#### 5.6 Penalty:



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If the delivery, installation and commissioning is not carried out in time as specified in other part of the tender document, the Tenderer/manufacturer will be charged @1 % (one percent) per week of the total value of the concerned system / equipment.

#### 5.7 Rate Contract with DGS&D or any other Government Organization:

In case the Tenderer has entered into a Rate Contract with DGS & D or any other Government Organization such as EPM, rate contract preference, number & copy of rate contract have to be submitted along with tender.

#### 6. Technical Specifications:

- a. Following are the minimum specifications of the equipment/ Machineries.
- b. The minimum specifications are indicative and not exhaustive.
- c. The models with higher specifications may be quoted.
- d. The quoted materials should be of latest trend and technology & software if any should be compatible to all versions of windows.
- e. Each equipment should be complete in itself without needing any extra requirements except the requirement of general test and measuring instruments.
- f. One can submit the tender for all the groups as per item description or individual group.
- 7. IGIT, the tenderer and the manufacturer shall make all efforts to resolve amicably by direct informal negotiations on any disagreement or dispute arising then under or in connection with this contract. All disputes arising out of the contract should be referred to courts under the Jurisdiction of the Talcher Court only. The authority reserves the right to reject/ accept tender without assigning any reason thereof.

#### Annexure- I (Cloud Computing Lab)

Sl.No	Name of the	no of	Specifications
	instruments	units	
1	ANEKA <sup>TM</sup> .NET	1	ANEKA <sup>TM</sup> .NET Cloud Computing Software Latest Version(Enterprise
	Cloud Computing		Edition license)
	Software Latest		Includes different Tool With Protocol Source Codes & 05 Years Free
	Version(Enterprise		unlimited Technical Support permanent Licenses
	Edition license)		Includes:
			Software Development Kits (SDK"s) with APIs for:
			* Task Programming Model
			- Quickly prototyping and implementing an independentbag of task
			applications.
			* Thread Programming Model
			- Leveraging the computing capabilities of multi corenodes in a cloud of
			computers.
			* Map Reduce Programming Model
			- A new SDK with APIs and tools to enable users to rapidly develop



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applications.
* Allows users to build different runtime environments:
- Such as enterprise/private clouds and hybrid clouds.
5years USER LICENSE(S)
One time free of Cost.
Minimum 30 Nodes / PC"s.
Five Year warranty/guaranty against Manufacturing defects from the date of
delivery.
SOFTWARE UPGRADES
Upgrade is provided for One year free of cost.
Training Free of Cost 2 days
TECHNICAL SUPPORT
All related Certificate(s) are highly required from different standard
organization(s)

# Annexure – (IOT Lab)

Sl.No	Name of the	no of	Specifications
	instruments	units	•
	Supply of EEG 32 channel Digital Video EEG and long Term Monitoring System		Supply of EEG 32 channel Digital Video EEG and long Term Monitoring System with following features & Specifications:  - Specification with Facility to record/service of 32-Channels  - Amplifier with USB, Remote controller video CAMERA FOR Still photo, Video Recording, Analysis/ Review Software, Recording input for 32 Channel (Analog, Digital and Automatic), LED based Photic simulator reduce the acoustic electrical interferences,  - 48 EEG,8 (bipolar 2 EKG 6 DC Channels), 2D/3D brain mapping with different colour, USB interface, Brain Mapping with multiple options, Online/Offline split video(half, double size default size screen), Dual monitor option for video Various options for EEG scrolling in different sides and Automatic paging facility for quick review and analysis, Highly Synchronized raw EEG with audio & video frame rate of minimum 30 frames/sec,multi picture size, Resolution independent user interface, Coherence, FFT Graph and tabular data,Simultaneous Analysis & Acquisition of EEG data, User programmable acquisition and photic sequences protocols, Edit Facility to mark event and write comment in analysis mode (editing of deletion and edition the events and comment online and offline), Complete EEG data transfer from CD/DVD hard disc/Pen drive, Online impedance check with displays of numeric values of all Electrodes. Thumbs nailing facilities, -data can be anylysed and stored in Matlab software and excel sheet/ Word / PDF files and also excel sheet can be transferred



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through email. Online data transmission through internet/intranet, Reports can be emailed or transferred across a network, Data Transmission through high speed USB (minimum 2.0),

connectivity with Laptop/Desktop/Terminal, -Easy Online/offline reformatting of filters, low filters, sensitivity and channels. Use define photic stimulate sweep on protocols, Advanced top graphic brain mapping with spectral arrary (CSA) & Density Spectral Array (DSA), Split screen facility to study and event/montage carefully during Acquisition, Auto backup of patient data for easy recovery, Long distance modular amplifier design with flexibility and reliability, Remote control video tracking device, Day/night digital video canvas with high resolution zoom facility, Simultaneous analysis and recording.

- High advanced database management system with different searching options.

#### TECHNICAL SPECIFICATIONS

NO. OF CHANNELS: 32 Channels A/D CONVERSION: 16 bit

SENSTIVITY:1 uV/mm and 1000 uV/mm & user definable

LOW PASS FILTER: 0.1,0.3,1& 5 Hz

HIGH PASS FILTER: 15,30, 70 Hz & user definable

NOTCH FILTER: 50 /60 Hz ON/OFF. SWEEP SPEED: 7.5, 15, 30 & 60 mm/Sec

INPUT IMPEDANCE: >20 M ohm CMRR : >110db

NOISE LEVEL: <Less than 1uv FLASH RATE: 1 to 60 Hz

POWER SUPPLY : USB Powered.

#### STANDARD ACCESSORIES:-

Disc Electrode (Gold Plated) -50Nos (Minimum)

• EEG Paste Jar, Ground wire, USB- Interface Cable,

Photic Flash with proper specification,

· Electrode Board with proper compatible specification with EEG Machine,

EEG Software backup CD/DVD/Pen drive

Colour Camera with proper compatible specification with EEG Machine,

EEG STAND

• EEG Trolley

• Electrode Cap (for 50nos).

Free Training and installation

WARRANTY: 03 year(s) i.e. assurance for proper performance after installation/commissioning. During warranty period repairing/servicing, will be done free of cost charge.



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All related Certificate(s) are highly required from different standard
organization(s)

# Annexure -III (Sensor Network Lab)

Sl.No	Name of	no of	Specifications
	the	units	
	instruments		
1	NetSim		Supply of Upgrading of NetSim <sup>TM</sup> Simulator Standard Version10.2 or Latest(15 Users) with
	Latest		existing one
	Version		(ResearchLicenses)Complete SuiteIncludes09 Tool BoxesWithProtocol SourceCodes&03
			YearsFree unlimitedTechnicalSupportPerpetualLicenses
			Modeling & Simulation of Wireless & Computer Networks for R&D.
			Tool Box 1: Internetworks: Ethernet - Fast & Gigabit, ARP, Routing - RIP, OSPF, WLAN -
			802.11 a / b / g /p / n / ac & e,Propagation models - HATA Urban / Suburban,
			COST 231 HATA urban / Suburban, Indoor Home / Office / Factory, Friis Free Space, LogDistance. Shadowing - Constant, Lognormal. Fading - Rayleigh, Nakagami
			IPv4, Firewalls, Queuing - Round Robin, FIFO, Priority, WFQ, TCP - Old Tahoe, Tahoe, Reno,
			New Reno, BIC, CUBIC, Window Scaling, SACK, UDP
			Traffic Generator: Voice, Video, FTP, Database, HTTP, Email, Peer-to-peer andCustom,
			Virtual Network Stack, Simulation Kernel, Command Line Interface (CLIMode), Metrics
			Engine. Plot Generator, Packet Encryption, External Interfaces.
			Tool Box 2: Legacy Networks, Aloha (Pure & Slotted), CSMA/CD, Token Ring, TokenBus,
			ATM, X.25, Frame Relay, MPLS.
			Tool Box 3: BGP Networks.
	ļ		Tool Box 4: Advanced Wireless Networks: MANET - DSR, AODV, OLSR, ZRP, Wi-Max
			Tool Box 5: Cellular Networks GSM, CDMA, UMTS etc.
			Tool Box 6: Internet of things: IOT with RPL protocol, Wireless Sensor Networks
			(WSN), Personal Area Networks - ZigBee
			Tool Box 7: Cognitive Radio Networks: WRAN, IEEE 802.22.
			Tool Box 8: Long-Term Evolution Networks: LTE (4G), LTE – Advanced (4.5G),LTE Device to
			Device (LTE D2D), LTE Femto Cell (5G)
			Tool Box 9: VANET - IEEE 1609 WAVE, Basic Safety Message (BSM) protocol per J2735DSRC, Interface with SUMO for road traffic simulation
		<u>.</u>	MATLAB Interface – Co-Simulation, Integration & Compatibility.
			WireShark Interface – Real Time Packet Capture & Analysis
			SUMO (VANET) Interface – Integration & compatibility.
			Packet Trace & Event Trace – For easy post processing research analysis.
1			Protocol Library Source Codes in 'C' language for all technologies.
			Network Programming Exercises: 26+ exercises in C / C++ / Java.
			Analytics – Inter & Intra protocol comparison, Graphing & Export to CSV.
			Development Environment - Write, Modify & Link Protocol Source codes.
			Dynamic Metrics – Plot the values of parameter (graphs) over time stamp.
			Integrated Debugging - Simulation-in-the-loop debug facility.
			* Network Emulator (An Add-on Module For Research Version Only)- 1 SET/ User
			Connect real devices & run live applications.
	1		Best suited for Test-bed research / patent validation.
			Support up to 50 emulation clients with real time synchronization. Displays simulation



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scenario information in all clients. Results include network statistics along with packet and event trace
Installation: One time onsite installation free of cost.  Training: Two (02) days free of cost training at your institute for students & faculty members.  License Type: Perpetual & Network Licenses on Windows Platform.
Support: Free unlimited technical support for three (03) years.
Warranty: One (02) year against manufacturing defects from the date of acceptance of the goods by the IGIT Sarang,
All related Certificate(s) are highly required from different standard organization(s)

# Annexure – IV (IOT Simulation Lab)

Sl.No	Name of th instrument		no of units	Specifications
1	Carriots: Platform	IoT	1 set	Devices sending up to 1 MB per day and making lots of connections  a. API KEYS 100 b. Max. accepted streams 1500 x device number per day c. 50 x device number per minute d. Max. stream size 10 KB e. Max. stream data storage 1 MB x device number per day f. Data retention 1 year g. Max. API requests 1000 x device number per day 100 x device number per minute h. SMS API Free 5 SMS per day i. Email API Free 100 email per day j. SDK Http Request (outbound) 1000 req. x device number per Day  Location of the Platform Hosted in Cloud No of User minimum 50 No of Devices minimum 100 Other Features Offered with the Platform Device management Unlimited use of rules Unlimited use of triggers SDK Application Engine Data export



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Custom alarms Debug logs Customer hierarchy level API KEY management	
Customer hierarchy level API KEY management	
API KEY management	
Licor management	
User management User management	
2 Altair sTEmbed Research & Development Paid-up/Perpetual License (F	eature
with sensors Based)	
solidThinkings TCAE Suite Provides a visual environmer	nt for
Model-Based development, dynamic simulation of com	nplex
avionics systems such as Autonomous vehicle, Embedd	ed
Motor Controls, Control, Digital Power, etc.	
Altair sTEmbed: Model Based Embedded Design and Al	uto Code
Generation Tool	
sT Embed is an efficient model-based embedded devel	opment
tool, which, with the help of diagram to code (converts	
models into C-code) capability shortens the developme	
and increases product quality.	
ST-EMB-EDU-SU-PDUP	
sT Embed Educational Paid-up License	
Includes ST-EMB-EDU-SU-SUB	
sT Embed Educational Paid-up License Annual Maint.	
Subscription Subscription	
please mentioned the price for individual Sensors with	n modules
for one set	iniodaics
1x Dual	
-Color LED Module	
• 1x RGB LED Module	
• 1x Auto Flash LED Module	
1x Relay Module     1x Laser Emitter Module	
i	
• 1x Button Module	
• 1x Tilt	
-Switch Module	
• 1x IR Receiver Module	
• 1x Active Buzzer Module	
• 1x Passive Buzzer Module	
• 1x Reed Switch Module	
• 1x Photo	
-interrupter Module	
• 1x AD/DA Converter PCF8591 Module	
• 1x Rain detection board Module	
• 1x Joystick PS2 Module	
• 1x Potentiometer Module	
• 1x Analog Hall Sensor Module	
• 1x Switch Hall Module	
• 1x Analog Temperature Sensor Module	
• 1x Thermistor Module	
• 1x Sound Sensor Module	



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	<u> </u>
	• 1x Photoresistor Module
	• 1x Flame Sensor Module
	• 1x Gas Sensor Module
	• 1x IR Remote Control Module
	• 1x Touch Switch Module
	1x Ultrasonic Ranging Module
	• 1x Temperature DS18B20 Module
	• 1x Rotary Encoder Module
	• 1x Humiture Sensor Module
	• 1x IR Obstacle Module
	• 1x I2C LCD1602 Module
	• 1x Barometer
	-BMP180 Module
	• 1x MPU6050 Module
	• 1x RTC
	-DS1302 Module
1	• 1x Tracking Module
	• 1x Breadboard
	• 1x T
	-Cobbler
	• 1x 40
	-pin Ribbon Cable for T
	-Cobbler
- Anna Anna Anna Anna Anna Anna Anna Ann	• 2x 2
	-Pin Anti
	-reverse Cable
	• 5x 3
ALIVE TO THE PROPERTY OF THE P	- Pin Anti
	-reverse Cable
	• 5x 4
	-Pin Anti
	<b>\</b>
	-reverse Cable
	• 5x 5
	-Pin Anti
	-reverse Cable
	• 1x 2
	-Pin Ribbon Cable (Female to Female)
	20x Jumper wires (Male to Female)
	FingerPrint Sensor
	Operating voltage: 3.3V to 6V
	Operating current: <130mA
	Operating temperature: -20°C to +60°C
	Humidity: 20% ~ 80%
	Identification time: <1.0sec (200 fingerprints)
	Enrollment time: <3sec (3 fingerprints)
	Imaga siza: 202 v 259 Bivols

Image size: 202 x 258 Pixels



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	Resolution: 450dpi
	Matching mode: 1:1,1:N
	Vibration Sensors (Using Accelerometer)
	ADXL355 Low Noise, Programmable ±2g, ±4g, and ±8g
	Accelerometer PMOD
	Sensors for Smart Home including surveillance camera for theft
	(1) Face recognition sensor
	1) Face Detection:
	a) The HVC sensor can detect faces of various sizes quickly
	and accurately
	2) Face Recognition:
	a) A person in various facial poses, expressions, and
	illumination conditions can be
	recognized by the sensor by comparing his or her face with
	faces already registered in a
	database
	3) Age / Gender Estimation:
	a) The sensor can estimate the age and gender of a face in
	various expressions and
	illumination conditions.
	mummation conditions.
	4) Facial Pose, Gaze, and Blink Detection:
	a) The facial pose and gaze direction of a face can be
	estimated by the sensor, along with
	blink estimations in various illumination conditions
	5) Facial Expression Estimation:
	a) The HVC sensor can estimate, automatically, various
	facial expressions (Neutral,
	Happy, Sad, Angry and Surprised)
	6) Hand Detection:
	a) Can detect the human hand when displayed in front of
	the sensor
,	7) Human Body Detection:
	a) The sensor can detect the human body when a face is not
	clearly visible
	(1) Ultrasonic Sensor Sonar
	(3) Barometric Pressure/Temperature/Altitude:
	Technical Details
	Vin: 3 to 5VDC
	Logic: 3 to 5V compliant
Approximation of the control of the	I2C 7-bit address 0x77
	Pressure sensing range: 300-1100 hPa (9000m to -500m above
	sea level)
	Up to 0.03hPa / 0.25m resolution
	-40 to +85°C operational range, 22°C temperature accuracy
	Anemometer Kit

Dimensions:



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Height (base to center): 105mm / 4.1"

Center out to Cup: 102mm / 4"

Arm Length: 70mm / 2.8"

Weight: 111.8g Wire Dimensions:

Wire Length: 99cm / 39" Plug Length: 30mm / 1.2"

Diameter (thickness): 4.8mm / 0.2"

Specifications
Output: 0.4V to 2V

Testing Range: 0.5m/s to 50m/s Start wind speed: 0.2 m/s

Resolution: 0.1m/s

Accuracy: Worst case 1 meter/s

Max Wind Speed: 70m/s

Connector details: Pin 1 - Power (brown wire), Pin 2 - Ground

(black wire), Pin 3 -

Signal (blue wire), Pin 4 not connected

#### (5) 5-Channel Flame Sensor Module

1. Board Diameter: 40mm

2. Total Dia: 57 mm.

3. Height: 15 mm.

4. Weight: 8 gm.

5. Detecting range: >120 degree

6. Analog and digital outputs

7. On-board potentiometer and indicators

8. 1% resistors to make this module more reliable and precise

9. Operating Voltage: 3.3V – 9V 10. Board Diameter: 40 mm.

Communication Module such as WiFi, RFID, Bluetooth, GSM,

ZigBee, GPS Features:

1. Reader mode, support ISO/IEC 14443A/MIFARE mechanism

2. Reader mode, support FeliCa mechanism

3. Reader mode, support ISO/IEC 14443B/MIFARE mechanism

4. Card Operation mode, support ISO 14443A/MIFARE mechanism

5. Card Operation mode, support FeliCa mechanism

6. ISO/IEC18092, ECM340 Point to point

Performance Parameters:

1. In the reader mode, supports Mifare Classic encryption

2. Supports 212 kbit/s and 424 kbit/s data transfer rate

3. Under FeliCa mode, support 106kbit/s,212kbit/s and

424kbit/s communication



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	Sai	baudrate				
		4. Integrates the RF interface of NFCIP-1 the transmission rate				
		up to 424kbit/s				
		•				
***		5. Support Host Interface: SPI interface, I2C interface, serial				
		UART				
		6. Power supply: 2.7V~5.5V				
		7. Board size: 50mmx120mm				
		8. Four positioning holes is M3, hole diameter is 3.25mm				
		XBee Wi-FI Embedded Through Hole Wi-Fi Module with a Wire				
		Antenna				
		Gps Module Neo-6m Ublox With Micro Usb Interface				
		1. U-BLOX NEO-6M module, compact and excellent				
		performance.				
		2. With amplifier module, promote the fast search of ceramic				
		antenna				
		3. Parameter can be set via serial port and saved in EEPROM,				
		easy to use.				
i		4. With SMA interface, you can connect a variety of antenna,				
		strong adaptability.				
		5. Compatible with 3.3V / 5V level for easy connection to a				
		variety of microprocessor				
		systems.				
		6. Back-up rechargeable battery.				
1 1		7. 9600 baud				
		8. Supply voltage: 3.3-5V				
		9. With micro USB, no need for USB-TTL tools				
		10. With TTL interface				
		11. On-board ceramic antenna				
		11. On board ceramic unterma				
		(4) SIM7600E 4G/GSM/GPRS/GPS UART modem				
		Features of SIM7600E modem 4G/GSM/GPRS/GPS UART				
	1	modem				
		1. High Quality Product (Not hobby grade)				
		2. Professionally Designed Modem with Impedance Matching				
		Layout.				
		3. Works in 4G/3G/2G GSM Networks				
		4. On-board SMA connector for GSM antenna				
	ļ	5. On-board UFL connector for External GSM Antenna				
		6. On-board SMA & UFL connector for GPS Antenna				
		7. On-board UFL connector for Auxiliary antenna				
		8. Option to Connect Patch antenna or Active Antenna for GPS				
		9. On-board 3V3 Voltage regulator for GPS External Active				
		Antenna				
		10. On-board Micro USB Connector for module firmware				
		13. 3. Bould Wild out Comments for module minward				

updation

Specifications of SIM7600E module



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TDD-LTE B38/B40/B41

FDD-LTE B1/B3/B5/B7/B8/B20

WCDMA/HSDPA/HSPA+ B1/B5/B8

GSM/GPRS/EDGE 900/1800 MHz

Control Via AT Commands

Supply voltage range: 3.4V~ 4.2V Operation temperature: -40°Cto +85°C

GNSS gps One Gen 8B; standalone; assisted, XTRA

Specifications for Data transfer

LTE CAT1

Uplink up to 5Mbps Downlink up to 10Mbps

HSPA+

Uplink up to 5.76 Mbps Downlink up to 42 Mbps

**UMTS** 

Uplink/Downlink up to 384Kbps

**EDGE Class** 

Uplink/Downlink up to 236.8Kbps

**GPRS** 

o Uplink/Downlink up to 86 kbps

(5) Bluetooth Module

Radio Modem

Extremely small radio - 0.15x0.6x1.9"

Very robust link both in integrity and transmission distance

(100m)

no more buffer overruns!

Low power consumption: 25mA avg

Hardy frequency hopping scheme - operates in harsh RF

environments like WiFi, 802.11g, and Zigbee Encrypted connection

Frequency: 2.402~2.480 GHz Operating Voltage: 3.3V-6V

Serial communications: 2400-115200bps Operating Temperature: -40 ~ +70C

Built-in antenna Wifi Module

Sensors for Smart Agriculture including surveillance camera for outside animals and snake Robotic ARM with different motor

which is used to run in different angular form

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FORMAT FOR TECHNICAL BID



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Sl.No	Name Of The Equipments/ Items	Make	Specification/Description Including Warranty/ Guarantee Periods

Sign of Bidder

#### **FORMAT FOR FINANCIAL BID**

SI.No	Name Of The Equipments/ Items And Its Specification	Make	No. Of Units	Cost Per Unit In Indian Rupees Only	Total Cost For Individual Items(Including All Taxes, Freight Charges, Installation Charges, Manual, Training/Demo)

Sign of Bidder