No. A-04/004/2020-21/NISE/Admn/(EC)

NATIONAL INSTITUTE OF SOLAR ENERGY

(An autonomous Institute of Ministry of New & Renewable Energy, GOI)

Gwal-Pahari, Gurugram

*****

Minutes of Meeting of 57th Executive Committee Meeting of NISE

The 57th Meeting of the Executive Committee (EC) of National Institute of Solar Energy (NISE) was held on 10.02.2025 at 04:00 PM under the Chairmanship of Dr. Mohammad Rihan, Director General, NISE at office of DG NISE, Surya Bhawan, NISE Campus, Gurugram. The meeting was attended by following:

(i)	**Dr. Mohammad Rihan, DG,NISE**	**Chairman**
(ii)	Dr. Chandan Banerjee, DDG(Technical)	Member
(iii)	Dr. Jai Prakash, DDG(Technical)	Member
(iv)	Dr. Avadhesh Yadav, DDG(Technical)	Special Invitee
(v)	Shri Anil Kumar Yadav, Director (Admin)	Member
(vi)	Shri Sandeep Sehrawat, Dy. Director (Admin)	Member Convener
(vii)	Sqn Ldr Vijay Kumar(Retd), Dy. Director (Admin)	Special Invitee
(viii)	Dr. Vikrant Sharma, Dy. Director(Tech)	Special Invitee

DG, NISE welcomed all members of the Executive Committee in 57th Meeting of EC of NISE. Shri Sandeep Sehrawat, Deputy Director (Admin) commenced item wise agenda with the permission of chairman.

Agenda Item No.1.0: To grant leave of absence to the members, not present in the meeting.

All the members of Executive Committee were present.

Agenda Item No. 2.0: Proposal for consideration of MoU between NISE, Gurugram, Baud Resources Private Limited, New Delhi and Indian Institute of Technology Kanpur, Uttar Pradesh.

Dr. Vikrant Sharma, Dy. Director(Tech), NISE apprised the members that permission is required to enter into MoU with Baud Resources Private Limited, New Delhi and Indian Institute of Technology Kanpur, Uttar Pradesh in the area of energy storage sector and more specifically development and demonstration of gravity storage technology, especially for round the clock utilization of renewable sources of energy. The draft MoU as Annex I was presented before committee for further consideration.

Decision: The committee extensively deliberated on the issues of admissibility of MoU with NISE in light of technical outcome and accordingly accorded the approval for MoU with Baud Resources Private Limited, New Delhi and Indian Institute of Technology Kanpur, Uttar Pradesh.

Agenda Item No. 3.0: Approval for revised estimate of ₹ 4,79,93,598/- for renovation/repair of workshop (PVTF) and other works i.e. electrical works at NISE.

The committee was apprised by concerned division that the revised estimate has been received from CPWD Faridabad vide its letter no 1071 dated 23.12.2024. Therefore, TEPC-IV accordingly considered the proposal along with detailed justification provided by concerned division for additional approval required for an amount of Rs.1,36,88,098 as revised estimate was received in the tune of Rs.4,79,93,598 on account of earlier approved amount for said purpose was 3,43,05,500 only. Recommendations of TEPC IV dated 01.01.2025 are submitted at Annexure-II of agenda item no. 03. The approval of EC solicited for revised preliminary estimate of CPWD Faridabad Division at total cost amounting to ₹ Rs.4,79,93,598 /-

Decision: EC Discussed the proposal w.r.t. detailed justification provided by concerned division regarding escalation of rate and accordingly approved the additional cost of ₹ Rs 1,36,88,098 for renovation/repair of PVTF.

Agenda Item No. 4.0: Submission of draft policy for Cumulative Professional Development

In compliance to direction given by executive committee in its 55th meeting held on 24.10.2024 vide agenda item no. 04, the committee was constituted under Chairmanship of Dr. Avadhesh Yadav, DDG(Tech) to submit comprehensive policy on conference participation and professional society membership for NISE. The committee has submitted draft comprehensive policy as annexed at Annex III for further consideration of EC.

Decision: EC Discussed & reviewed the draft policy and suggested for further deliberations on various aspects of policy. The revised draft policy may be put-up before next EC.

Agenda Item No. 5.0: Any other item with the approval of Chairman:

EC has been intimated by F & A division regarding payment of license fee and electricity charge w.e.f. Date of Earmarking of VIP rooms as temporary DG residence/accommodation. EC noted the action taken by F&A division.

With no other matter to discuss, the meeting ended with a vote of thanks to the Chair.

(Sandeep Sehrawat)
Member Convener

26/02/2025
(Anil Kumar Yadav)
Member

(Dr. Jai Prakash)
Member

consent given via email.
(Dr. Chandan Banerjee)
Member

20/02/2025
(Dr. Mohammad Rihan)
Chairman

Re: Required concurrence via email for attached MoM

From : Dr. Chandan Banerjee <banerjee.mnre@gov.in> Thu, Feb 20, 2025 01:46 PM
Subject : Re: Required concurrence via email for attached MoM
To : Sandeep Sehrawat <sandeep.sehrawat@gov.in>

MoM is okay from my side

डॉ. चंदन बनर्जी/Dr. Chandan Banerjee
उप महानिदेशक / Deputy Director General
राष्ट्रीय सौर ऊर्जा संस्थान / National Institute of Solar Energy
(नवीन और नवीकरणीय ऊर्जा मंत्रालय, भारत सरकार का स्वायत्त संस्थान)
(An Autonomous Institute of MNRE, Government of India)
ग्वाल पहाड़ी, गुरुग्राम-फरीदाबाद रोड, गुरुग्राम -122003, हरियाणा
Gwal Pahari, Gurugram-Faridabad Road, Gurugram-122003, Haryana
दूरभाष / Tel: 0124-2853001, मो. / Mob: 09205504510

---- On Thu, 20 Feb 2025 13:44:25 +0530 Sandeep Sehrawat<sandeep.sehrawat@gov.in> wrote ----

Sir,

As discussed, please provide your concurrence for attached MoM of EC.

Thanks & Best Regards संदीप सहरावत / Sandeep Sehrawatउपनिदेशक (प्रशासन) / Deputy Director (Administration)राष्ट्रीय सौर ऊर्जा संस्थान / National Institute of Solar Energy(नवीन और नवीकरणीय ऊर्जा मंत्रालय, भारत सरकार)(Ministry of New & Renewable Energy, Government of India) ग्वाल पहाड़ी, गुरुग्राम-फरीदाबाद रोड, गुरुग्राम -122003, हरियाणा Gwal Pahari, Gurugram-Faridabad Road, Gurugram-122003, Haryana. दूरभाष / Tel: 0124-2853031

NISE

Annex-I

National Institute of Solar Energy

Memorandum of Understanding

Between

IIT Kanpur, Uttar Pradesh

and

Baud Resources Pvt. Ltd., New Delhi

and

National Institute of Solar Energy (NISE), Gurugram

This MoU made on this ____ day of 2024 at New Delhi

BETWEEN

Indian Institute of Technology Kanpur, Uttar Pradesh hereinafter referred to as IITK or IIT Kanpur having its Campus at Kanpur, Uttar Pradesh, represented by the DORD, Office of Dean of R&D, IIT Kanpur, Kanpur-208016 or by its duly authorized representative, (which expression unless it be repugnant to, or excluded by the context or meaning thereof be deemed to mean and include its successors, assignees) first part.

AND

Baud Resources Private Limited, New Delhi hereinafter referred to as Baud or Baud Resources having its registered Office (HQ} at DN 3 Plot No. 94 Sector 13 Dwarka, New Delhi-110078, represented by the CEO, Baud Resources or by its duly authorized representative, (which expression unless it be repugnant to, or excluded by the context or meaning thereof be deemed to mean and include its successors, assignees) second part.

AND

National Institute of Solar Energy, Gurugram hereinafter referred to as NISE, an Autonomous Institution of the Ministry of New and Renewable Energy (MNRE), Govt. of India, having its registered office and Headquarters at NISE Campus, Gurugram-Faridabad Highway, Gwal Pahari, Gurugram - 122003, Haryana, represented by the Director General or by its duly authorized representative (which expression unless it be repugnant to. or excluded by the context or meaning thereof be deemed to mean and include its successors, assignees) third part

WHEREAS

Indian Institute of Technology Kanpur (IIT Kanpur) is a premier engineering and technology institute located in the city of Kanpur in Uttar Pradesh, India. Established in 1959, it is one of the earliest IITs in the country and is recognized for its academic excellence and research contributions. The sprawling 1055-acre campus is home to state-of-the-art facilities, including research labs, classrooms, libraries, sports complexes, and student hostels. With a strong focus on engineering, science, and technology education, IIT Kanpur offers undergraduate, postgraduate, and doctoral programs in various disciplines, including Computer Science, Electrical Engineering, Mechanical Engineering, and Aerospace Engineering, among others. The institute is known for its rigorous academic curriculum, distinguished faculty, and innovative research, making it one of the top engineering colleges in India.

AND

Baud Resources Pvt. Ltd. is a Private Limited Indian Non-Government Company, incubated at IIT Kanpur. Working in the domain of renewable energy and R&D. The startup focuses on developing cutting-edge technology for energy storage technologies including solar, wind energy solutions. With a team of skilled researchers and engineers, the company is committed to finding sustainable solutions for energy generation, storage and its work is attracting attention from both academia and industry. With a strong foundation in research and development, this startup has the potential to make a significant impact in the renewable energy sector in the coming years.

AND

National Institute of Solar Energy (NISE) is the apex National R&D institution in the field of Solar Energy. The Government of India has transformed the 25 years old Solar Energy Centre (SEC) under MNRE in October, 2013 into an autonomous institution to assist the Ministry in implementing the National Solar Mission and to coordinate research & development, technology demonstration, capacity building and other related works. The institute is involved in conceptualization, technology demonstration, standardization, interactive research, training and testing of solar technologies and systems. NISE is aiming to be an effective interface between the Government and Institutions, industry & user organizations for development, promotion and widespread utilization of solar energy in the country and abroad.

WHEREAS,

ARTICLES I to IX

I. PURPOSE

The aim of this MoU is primarily to agree to work together in an integrated and collaborative manner in relation to the Renewable Energy and Energy Storage Sector and more specifically development and demonstration of gravity storage technology and other similar technologies, especially for Solar Energy covering Industry, Utilities and all others involved stakeholders.

II. AREAS OF COLLABORATION/STATEMENT OF WORK(SoW)

IIT Kanpur, Baud and NISE have identified the following areas of mutual interest:

1. **Technology Development:** Jointly work to focus on developing more efficient and cost-effective gravity storage systems. This will require research and development to identify and test new materials and designs.
2. **Capacity Building and Training Program for Industry for Energy Storage:** Jointly work as per predefined mutually agreed terms to build a skilled workforce capable of installing, operating, and maintaining gravity storage systems.
3. **Manpower Development:** Jointly work as per predefined mutually agreed terms to accelerate, expand and achieve the objectives of "Sanchay Mitra" and other associated skill development and capacity building programmes launched by IITK/NISE/Baud for better employability; enhanced job creation and entrepreneurship.
4. **Advanced Analytics for Energy Storage:** Jointly work to create algorithms and schedule methods for power as it is crucial for the successful integration of gravity storage into power grids as per predefined mutually agreed terms.
5. **Infrastructure Development for Energy Storage:** Jointly work to identify challenges and mitigate the approach for development of Infrastructure for Large Scale Energy Storage as per predefined mutually agreed terms..
6. **Workshops:** Jointly organize interactive sessions, workshops, round-tables, seminars and conferences, whenever and wherever feasible.
7. **Space/Land:** IITK and NISE to provide necessary space for setting up of Demonstration units required for the R&D activities/project, admin and training programmes to Baud for the period of 5 Years as per predefined mutually agreed terms on assignment to assignment basis.
8. **Marketing & Mobilization of the Participants:** Shall be carried out jointly as per predefined mutually agreed terms on assignment to assignment basis.
9. **Promotion for the Programmes Undertaken:** Shall be advertised/propagated through respective websites of the parties.

10. **Advisors/Experts:** Invite each other's experts, faculty members; trainees and students and participate in various capacity building programmes, organized jointly or separately as per predefined mutually agreed terms or as per need basis.

11. **Extend Preferential Treatment:** In levy of participation fee; infrastructure/facility usage fee, hostel fee, Guest Housefee, etc to each other.

12. **Access to Resources:** Permit each other's faculty, trainees and students easy access to Campus, Library, Laboratory, Testing and other facilities as per predefined mutually agreed terms or as per need basis.

13. **Industry-Academia Interface:** Jointly work towards enhancing industry-academia interface.

14. **International engagement & promotion of export opportunities:** Jointly work towards enhancing and expanding the capacity, capability, facility and infrastructure through resource mobilization and aligning the capacity building, skill development and R&D programmes by forming national and international alliances and institutional partnerships to seize the opportunities that are expected from International Solar Alliance Plans, Programmes and Activities in its Member Countries to promote identified technologies.

III. AGREEMENT FOR COLLABORATION

Financial Implications & Sharing mechanism

i. There won't be any monetary transaction between IITK, Baud and NISE.
ii. The electricity generated in the project will be donated to NISE.
iii. The demonstration project and installation will be handed over to respective organisation on whose campus the particular project is being performed.

IV. NODAL AUTHORITY AND SIGNATORIES

The nodal office and signatory from the nodal officer and signatory from:

1. **IITK:** Dean of R&D (DORD), IIT Kanpur or any nominee for all the decision making and concurrence.
2. **Baud:** CEO, Baud Resources ~~of~~ Pvt. Ltd. or any nominee for all the decision making and concurrence.
3. **NISE:** Director General, NISE or any nominee for all the decision making and concurrence.

V. IMPLEMENTATION AND ACTION PLAN

i. IITK, Baud and NISE shall endeavor to finalize the details of implementation and action plan of collaborative initiatives to execute the parts of this MoU.
ii. Financial commitments related to joint initiatives will be decided mutually by IITK, Baud and NISE.

VI. TENURE & TERMINATION

The MoU shall be effective from the date of signing and the same shall remain in effect for **5 years** and may be renewed or discontinued thereafter by mutual consent, giving notice of 30 days by IITK, Baud and NISE.

VII. INTELLECTUAL PROPERTY

Neither party shall use the intellectual property, including logos, trademarks, service marks, trade names, service names, nor brand names of the other party, without obtaining prior written consent.

VIII. DISPUTE RESOLUTION & CONFIDENTIALITY

Any dispute arising due to misunderstanding in relation to terms & conditions of MoU to be resolved amicably by the executants of the MoU or by Head of IITK , Baud and NISE without resorting to the court of law. The decision of settlement of disputes arrived at shall be final and binding on IITK , Baud and NISE. At the same time, utmost confidentiality is maintained by IITK, Baud and NISE during the validity of MoU.

IX. FORCE MAJEURE

Neither party shall be made responsible for an unexpected or uncontrollable event.

The parties hereto have agreed and signed this document on this ____ day of 2025 as under as per above clauses.

IN WITNESS THEREOF, the undersigned duly authorized thereto have signed this Memorandum of Understanding.

FOR AND ON BEHALF OF IITK

(----------)
DORD
IITK

WITNESSED BY:

1.

2.

BAUD

(----------)
CEO
BAUD

WITNESSED BY:

1.

2.

(----------)
Director General
NISE

WITNESSED BY:

1.

2.

FOR AND ON BEHALF OF

Annexure-II

	Sub Group	Previous Estimate	Current Estimate	Difference
	A. Air conditioning and its component	₹ 1,12,00,000.00	₹ 50,47,647.85	-₹ 61,52,352.15
	B. Electrical Work like wiring, steel conduit,GI box,MCB,LED,ceiling fan,Bus Trunking	₹ 61,10,943.00	₹ 1,06,72,895.04	₹ 45,61,952.04
	C. Intelligent Fire Alarm System	₹ 11,30,000.00	₹ 16,59,221.00	₹ 5,29,221.00
	D. CCTV System	₹ 2,10,000.00	₹ 11,17,000.00	₹ 9,07,000.00
	E. Access Control System	₹ 2,10,000.00	₹ 5,32,858.00	₹ 3,22,858.00
	F. Earthing	₹ 21,232.00	₹ 53,080.00	₹ 31,848.00
	G. Miscellaneous item like MS cable trays Tee, Galvanised Iron cable tray,Refrigerent piping,(indoor and outdoor units,LT panel board, PVC conduit pipe, LED sign Board	**₹ 0.00**	**₹ 1,12,49,241.20**	(a) **11249241.2**
			Changes In Existing Category	(b) 200526.89
			New additional amount	(a+b) 11449768.09
			Previous Sanction Amount for Ele. Items	18315710
			Cost index charges 3 % On previous estimate	(c) 566465
			GST @ 6.33 on DSR Item (10418823.72)	(d) 659511.5415
			Grand Total	(a+b+c+d) **30991454.63**

Charges / Taxes	Previous	Current	Difference	
Civil Work Amount	₹ 1,14,50,417.00	₹ 1,14,50,417.00	(e)	0
Contingencies charges 3% on	₹ 8,92,984.00	₹ 12,73,256.00	(f)	380272
ASI &PF 3.938 on	₹ 12,65,060.00	₹ 17,21,501.68	(g)	418489.68
Department charges	₹ 23,81,290.00	₹ 25,56,970.00	(h)	175680
total Difference (a+b+c+d+e+f+g+h)				**₹ 1,36,88,138.31**

Minutes of Meeting

Sub: Technical Evaluation cum Purchase Committee (TEPC-IV) Meeting for Renovation / Repair of Workshop (PVTF) Building and other Works i.e. Electrical Works at NISE.

Meeting of Technical Evaluation cum Purchase Committee (TEPC-IV) was held on **01.01.2025** at **15:30 hrs** in Conference Room, 5Th Floor, Surya Bhawan under the Chairmanship of Dr. Avadhesh Yadav, Deputy Director General (Tech), NISE.

2. The following members of TEPC-IV were present in the meeting: -

i) Dr. Avadhesh Yadav, Deputy Director General (Tech) - Chairman
ii) Shri Anil Kumar Yadav, Director (Admin) - Member
iii) Shri Sandeep Sehrawat, Deputy Director (Admin) - Member
iv) Shri Dhananjay Pandey, Assistant Director (Admin) - Member
v) Dr. Birinchi Bora, Deputy Director (Tech) - Member
vi) Shri Raju Kushwaha, JE(El) - Member Secretary

3. **Agenda Item No 1: Approval for revised estimate of Rs 4,79,93,598/- for Renovation / Repair of Workshop (PVTF) Building and other Works i.e. Electrical Works at NISE.**

Mode of Procurement: Through CPWD, Faridabad division.
Budget Head: C-01
Cost: Rs. 4,79,93,598/- (Amount approved earlier is Rs. 3,43,05,500/-. Present approval required for Rs 1,36,88,098 (i.e. Rs 4,79,93,598 minus Rs 3,43,05,500)

Proposal: - The TEPC IV was apprised about the revised preliminary estimate received from CPWD Faridabad vide letter No. 23(1)(5) SE-Cum-PD/FPC/2024-25/1071 dated 23.12.2024 (**Annexure-I**) and Justifications submitted by respective division for additional work in PVTF workshop (**Annexure-II**).

Recommendation: - The committee examined preliminary estimate, revised preliminary estimate and Justifications submitted by respective division for additional work in PVTF workshop. After detailed assessment and discussions, the committee observed that the above said renovation is essential for smooth functioning of Workshop (PVTF) Building.

Further, TEPC observed that Executive Committee of NISE has full powers for repair & Maintenance of civil work including electrical fittings/installation. Therefore, after assessing the relevant documents and after detailed discussion the committee unanimously recommended that approval of Executive Committee may be obtained for revised preliminary estimate of Rs. 4,79,93,598/- (Amount approved earlier is Rs. 3,43,05,500/-. Present approval required for Rs 1,36,88,098 (i.e. Rs 4,79,93,598 minus Rs 3,43,05,500) received from CPWD Faridabad vide letter No. 23(1)(5) SE-Cum-PD/FPC/2024-25/1071 dated 23.12.2024.

The Meeting ended with vote of thanks to the Chair.

(Raju Kushwaha)
JE, El.

(Birinchi Bora)
D.D. (Technical)

(Dhananjay Pandey)
A.D. (Admin)

(Sandeep Sehrawat)
D.D. (Admin)

(Anil Kumar Yadav)
Director (Admin)

(Avadhesh Yadav)
DDG(Technical)

केन्द्रीय लोक निर्माण विभाग
CENTRAL PUBILIC WORKS DEPARTMENT

कार्यालय अधीक्षण अभियंता-सह-परियोजना निदेशक,
फरीदाबाद परियोजना परिमंडल, के.लो.नि.वि.,
लेवल-4, ब्लॉक-1, ओल्ड सी.जी.ओ., कॉम्प्लैक्स,
एन.एच.-4, फरीदाबाद-121001
ई-मेल: secumpd.fpc@gmail.com

Office of Supdg. Engineer-cum-Project Director.
Faridabad Project Circle, CPWD
Level – IV, Block – I, Old CGO Complex,
NH-IV, Faridabad-121001
Email: secumpd.fpc@gmail.com

पत्रांकः 23(1)15/एसई-कम-पीडी/एफपीसी/2024-25/1077 दिनांकः- 23/12/24

सेवा में,

Director (Admin),
National Institute of Solar Energy,
(An Autonomous Institute of MNRE, Government of India)
Gwal Pahari, Gurugram-Faridabad Road,
Gurugram, Haryana-122003
Email ID :- dgnise.mnre@gmail.com, nise.mnre@gmail.com

विषयः- संशोधित प्रारंभिक अनुमान।

कार्य का नामः-Renovation / Repair of Workshop Building and other works i/c Electrical works at NISE Campus, Gwal Pahari, Gurugram.(SH :- Balance Electrical & Civil Works)

महोदय,

उपरोक्त कार्य का संशोधित प्रारंभिक अनुमान रू० 4,79,93,598/- (For Electrical & Civil Works) (रुपये चार करोड़ उनासी लाख तिरानवे हजार पाँच सौ अट्ठानबे मात्र) जिसमें से Rs. 3,43,05,500/- के लिये पहले ही आपके द्वारा स्वीकृति प्रदान कर दी गई है। अतः संशोधित प्रारंभिक अनुमान के लिए शेष रुपए 4,79,93,598/- (-) Rs.3,43,05,500/- = Rs.1,36,88,098/- की आवश्यकता है। अतः शेष राशि Rs.1,36,88,098/- के लिये सक्षम अधिकारी को प्रशासनिक अनुमोदन एवं व्यय स्वीकृति प्रदान करने हेतु प्रेषित किया जाता है।

आपसे अनुरोध है कि विद्युत एवं सिविल कार्य के लिये समेकित किये गये संशोधित प्रारंभिक अनुमान की स्वीकृति प्रदान करने के पश्चात एक प्रति इस कार्यालय में भेजने की कृपा करें ताकि कार्य को कराया जा सके।

अनुमान बनाने की आवश्यकता हिस्ट्री में दशाई गई है।

संलग्नः- उपरोक्तानुसार।

23/12/24

अधीक्षण अभियंता-सह-परियोजना निदेशक
फरीदाबाद परियोजना परिमंडल, के.लो.नि.वि.,
एन.एच.-4, फरीदाबाद।

प्रतिलिपिः-

1. कार्यपालक अभियंता (वै०), फरीदाबाद वैद्युत मंडल, के.लो.नि.वि., एन.एच-4, फरीदाबाद को सूचनार्थ प्रेषित।
2. कार्यपालक अभियन्ता, मानेसर मंडल, के०लो०नि०वि०, एनएसजी कैंप मानेसर, गुरुग्राम को सूचनार्थ प्रेषित।

Received
Received on
By Hand through CPWD
23/12/2024

454
24-12-2024
24/12/2024

अधीक्षण अभियंता-सह-परियोजना निदेशक

GOVERNMENT OF INDIA

CENTRAL PUBLIC WORKS DEPARTMENT

State: Haryana
Branch: E&M

Division: Faridabad Electrical Division
Sub-Division: FESD-I

Name of Work:- Renovation/ Repair of Workshop Buildings and other works i/c Electrical works at NISE Campus, Gwal Pahari, Gurugram.

This Revised Preliminary estimate framed by Er. Rajeev Prasad Gupta, Assistant Engineer(E)-I, and processed in the office of Er. Ranjan Paul, Executive Engineer (E), Faridabad Electrical Division, CPWD, NH-IV, Faridabad for probable cost of Rs.4,79,93,598/- including 3% contingencies, GST MF @0.0633 on DSR 2022, items, ESI & EPF 3.938%, Departmental Charge and labour Cess 1%.

REPORT

History:- This Revised Preliminary estimate amounting to Rs. 4,79,93,598/- including 3% contingencies, GST MF @0.0633 on DSR 2022 items, ESI & EPF 3.938%, Departmental Charge and labour Cess 1%, has been framed to cover the probable cost of above noted work.

Hence, this Revised Preliminary estimate has been prepared for Administrative Approval & Expenditure Sanction from the competent authority. This Revised Preliminary estimate because increase in quantity of given below items. In this work of Rs.3,43,05,500/- is already sanctioned vide your file No. Adm2-CWOMW/8/2020-F/A/829 dt.04.02.202. So, A/A and E/S balance of Rs.4,79,93,598/- (-) Rs.3,43,05,500/-=Rs.1,36,88,098/- is required for the revised preliminary estimate.

Design & Scope:- The following Provisions have been kept in this estimate.

A) Civil Works:-

DESIGN & SCOPE: -The following provisions have been made in this estimate:-

1. Making plinth protection 50mm thick.
2. Providing and fixing factory made UPVC white colour sliding glazed window.
3. Providing & fixing glass panes with putty.
4. Providing and laying Vitrified tiles in floor with different sizes.
5. Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling.
6. Removing dry or oil bound distemper.
7. Painting with synthetic enamel paint.
8. Finishing walls with Acrylic Smooth exterior paint.
9. Providing and laying 60mm thick faciory made cement concrete interlocking paver block.
10. Providing and fixing aluminium work for doors, windows, ventilators and partitions.

a. For fixed portion
b. For shutters of doors, windows.

11. Providing & fixing full height 12mm thick toughened glass.
12. Providing and fixing 6.00 mm thick PVC Vinyl sheet.
13. Supplying and placing in position of sliding tile base modular Workstation as per image (Curvilinear Workstations (Cluster of 2 seats) Size: L-1500mm x L-1500mm x D-600mm x H-1200mm).

(B) Electrical Works:-

1. Providing Air-conditioning
2. Replacement of Feeder Pillar
3. SITC of Fire Alarm system.

6. Providing & fixing of different rating Fire Extinguishers.
7.SITC of Earthing.
8.Supplying and lying cable.
9. Supplying and installing of M.S cable trays Tee.
10. Supplying and installing of Iron cable tray.
11. Supply and fixing of Refrigerent piping Y joints.
12.SITC of LT panel.
13.Suppling and lying of copper conductor cable.
14.SITC of MCB.
15.SITC of LED Sign Board and Solar panel.

"Obligations of the Client Department" (No. DG/MAN/Misc/41 dated:- 18.12.2019)

1. After receipt of A/A & E/S from the client department, the CPWD will prepare and submit various detailed architectural drawings and service plants to local bodies (including environment clearance) whose approvals are required before taking up the construction work. These local bodies are independent organizations and CPWD has no control over them. The time required to get such approvals is not included in the time of construction indicated in the estimate. Although CPWD will make all efforts to get such approvals early. It may be necessary for the client department also to purpose with local bodies for early approval.

2. CPWD does not bind itself to complete the work within the estimated cost. Necessary revised estimate will be submitted when scope of work is increased/changed or there is deviation in quantities executed.

3. Any dispute arising out of the operation of the contract(s) for the subject work will be subject or arbitration proceedings as best as it can and get the Arbitrator's award examined by the appropriate authority. The decision of the competent authority in CPWD to accept the award or to challenge the same in a Court of Law will be binding on the client department.

4. The CPWD has no funds of its own for investing in the work. The client department should, therefore, ensure that adequate funds are available with CPWD for executing the work. In case the client department fails to provide funds as per requirements, it may be necessary for CPWD to suspend/abandon the work. In such eventuality, the client department shall be solely responsible for all the consequences arising out of such stoppage/abandonment of work including claims of contractors for compensation/damages. If additional funds are required, the same will have to be provided by the client department on the revised estimates submitted by CPWD.

5. Funds for making payment of all amounts which may be decreed by a Court of Law, Tribunal or by award of an Arbitrator in relation to the work will be made available by the client department promptly irrespective of it not being a party before the Court, tribunal or arbitrator. Such payments will be in addition to the payments made to the contractors for execution of work.

6. The client department will help CPWD in-
a. Providing site for labour huts for the contractor's labour free of cost.
b. Providing free access to contractor's materials and labour to the site of work.
c. Providing electricity connection for execution of work on payment of usual charges.
d. Sanction and release of load form the concerned Electricity Board/Authority.

7. The cost and time of the project is liable to revision due to probable escalation in cost of construction apart from reasons such as change in scope, area, design and specifications etc. if so desired by the client at a later date. The PE submitted by CPWD is valid upto one year from the date of submission of PE.

SPECIFICATIONS:- (1) As per CPWD specification 2019 vol-1 & II with upto date correction slips and as per direction of Engineer in Charge.

specification 2013 and AC work during 2017 and Fire Alarm System specification 2013 amended up to date and as per direction of Engineer in Charge.

RATES:-	Based on DSR-2018 and Market rate.
COST:-	Rs. 4,79,93,598/- including Contingencies @ 3%, ESI & EPF @ 3.938%
T & P:-	To be arranged by the contractor.
METHOD: -	By contract after call of tenders.
W.C.Estt: -	Shall be met out from 5% contingencies.
LAND: -	Available.
TIME: -	3 Months after award of works

Assistant Engineer (E)-I
FESD, CPWD
NH-IV, Faridabad

Assistant Engineer (E)-P
FED, CPWD, NH-IV,
Faridabad.

Executive Engineer (E)
FED, CPWD, NH-IV,
Faridabad

GENERAL ABSTRACT OF COST			
Name of work:- Renovation/Repair of Workshop Buildings and other works i/c Electrcial works at NISE Campus, Gwal Pahari, Gurugram.			
SL. No.	Paritcular	Amount	Remarks
1	Electrical Work	309,91,454.63	Annexure-I
2	Civil Work	114,50,416.00	Annexure-II
	Total 'A'	424,41,870.63	
	Add Contigencies @3% on 'A'	1273256	
	Total 'B'	437,15,126.63	
	Add ESI & EPF @3.938% on 'B'	1721501.687	
	Total 'C'	454,36,628.32	
	Deparmental Charge Taken in previous PE	25,56,970.00	
	Total 'D'	479,93,598.32	
	Grand Total	**479,93,598.32**	
	Say Rs.	**479,93,598.00**	

SE(E)

सहायक अभियन्ता (वै०)-यो.
फ०वै०मं० के०लो०नि०वि०,
एन० एच०-4, फरीदाबाद।

कार्यपालक अभियन्ता (वै०)
फ०वै०मं०, के०लो०नि०वि०,
एन० एच०-4, फरीदाबाद।

[illegible] यादव
[illegible]
के.ला. नि. वि., फरीदाबाद

Revised Preliminary Estimate

Name of work: - Renovation / Repair of Workshop Building and other works i/c Electrical works at NISE Campus, Gwal Pahari, Gurgaon. (SH: Balance Electrical Works).

S. No.	Description of Items	Qty		Unit	Rate		Amount	
		Previous	Revised		Previous	Revised	Previous	Revised
	(A) AIR CONDITIONING							
1	SITC of modular type Variable Refrigerant Flow/Variable Refrigerant Volume	200	200	HP	55000	16415	11000000	3283000.00
2	SITC of VRV/VRF Cassette Type Indoor							
a)	4 TR	8	38	Each	25000	33981	200000	1291278.00
3	SITC VRV/VRF High wall type Indoor unit						0	
a)	1 TR	0	4	Each		19700	0	78800.00
4	SITC of copper refrigerant piping for VRV/VRF system,						0	
a)	6.4mm dia (OD) (Soft drawn) with tube thickness 1.2mm with 19mm thick insulation	0	22.70	Mtr		245	0	5561.50
b)	12.7mm dia (OD) (Soft drawn) with tube thickness 1.2mm with 19mm thick insulation	0	78.10	Mtr		466	0	36394.60
c)	15.86mm dia (OD) (Soft drawn) with tube thickness 1.2mm with 19mm thick insulation	0	205.60	Mtr		588	0	120892.80
d)	19mm dia (OD) (Soft drawn) with tube thickness 1.2mm with 19mm thick insulation	0	60.85	Mtr		707	0	43020.95
e)	22.2mm dia (OD) (Soft drawn) with tube thickness 1.2mm with 19mm thick insulation	0	100.00	Mtr		865	0	86500.00
f)	25.4mm dia (OD) (Soft drawn) with tube thickness 1.2mm with 19mm thick insulation	0	100.00	Mtr		1022	0	102200.00
	TOTAL OF SH-A: AIR CONDITIONING						**11200000**	**5047647.85**
	(B) Electrical Work							
1	Group C	62	325	point	1213	1213	75206	394225.00
a	Group C (group controlled)	168	160	point	707	707	118776	113120.00
3	Wiring for light/ power plug with 2X4 sq. mm	0	3011	Mtr		265		797915.00
4	Wiring for light/ power plug with 4X4 sq. mm	0	1000.00	Mtr		392		392000.00
5	Supplying and fixing of steel conduit							
a	25 mm	0	200	Mtr		165		33000.00
b	32 mm	0	100	Mtr		203		20300.00
6	Wiring for circuit/ submain wiring alongwith earth wire							
a	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire		800	Mtr		208		166400.00
b	2 X 6 sq. mm + 1 X 6 sq. mm earth wire		800	Mtr		356		284800.00
c	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	LS	1400	Mtr		529	50000	740600.00
7	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess,		50	Each		495		24750.00
a	5/6 A switch		200	Each		85		17000.00
9	Supplying and fixing GI box							0.00
a	3 Module (100mmX75mm)		50	Each		267		13350.00
b	6 Module (200mmX75mm)		20	Each		333		6660.00
c	8 Module (125mmX125mm)		10	Each		383		3830.00
d)	12 Module (200mmX150mm)		180	Each		434		78120.00
10	SITC of 20 A, 240 V, SPN Industrial type socket outlet		30	Each		1232		36960.00
11	SITC of 30 A, 415 V, TPN Industrial type socket outlet	230	27	Each	5000	3048	1150000	82296.00
12	Supplying and fixing of surface/ recess mounting, vertical type, 415 V, TPN MCCB distribution board of sheet steel							
a	12 way (4 + 36), Double door	LS	LS	Each			200000	250000
13	SITC of 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable							
a	single pole		432	Each		199		85968.00
14	SITC of MCCB							
a	63 Amp FP, 16/18 KA MCCB		55	Each		8920		490600.00

	Fan & fittings							
15	SITC of 600mm sweep Vortex Wall Mount	20	20	Each	5000	9060	100000	181200.00
16	SITC of LED Luminarie of size 600mm x 600mm	0	442	Each		5101		2254642.00
17	SITC of LED downlighter Luminarie	0	16	Each		1676		26816.00
18	SITC of 600 mm long, 440 lumens bollard Fitting	25	30	Each	6000	6657	150000	199710.00
19	SITC of 100 watt LED flood light	0	10	Each		9648		96480.00
20	Supplying & erection of factory fabricated decorative streetlight pole	0	10	Each		26443		264430.00
21	SITC 1200mm sweep ceiling fan	0	10	Each		2262		22620.00
22	SITC of fan regulator	0	10	Each		342		3420.00
23	laying of one number XLPE insulated and PVC / XLPE							
a)	3x6 sqmm	0	600.60	Mtr		136.40		81921.84
b)	3x10sqmm	0	1200.00	Mtr		210		252000.00
24	Supplying and laying of following size DWC HDPE pipe							
a)	63 mm dia (OD-63 mm & ID-51 mm nominal)	0	420	Mtr		209		87780.00
b)	160 mm dia (OD-160 mm & ID-135 mm nominal)	0	377.60	Mtr		458		172940.80
25	Laying of one number PVC insulated and PVC / XLPE cable							
a)	2x10 Sqmm	150	550	Mtr	421	56	63150	30800.00
b)	3.5x300sqmm	800	626	Mtr	1863	660.40	1490400	413410.40
	LT panel							
27	SITC of Air Insulated Compact							
a)	630 A Isc = 50kA for 1 second	1	1	Each		12152	711609	12152.00
28)	SITC of capacity Plug In/ tap off box							
(a)	125 A 25kA SC for 1 sec	10	5	Each	6350	6358	63500	31790.00
(b)	200 Amp	10	6	Each	8048	6358	80480	38148.00
29)	SITC of capacity End Feed Unit							
(a)	630 A 50kA SC for 1 sec	0	0	Each		9344		0.00
(b)	400 Amp	1	0	Each	7307	7307	7307	0.00
(c)	800 Amp	1	0	Each	11017	11017	11017	0.00
30	Providing and fixing following rating and breaking capacity and pole MCCB							
a)	63 Amp FP, 16/18 KA MCCB (O/L - 0.8x1 In)	0	30	Each		8920		267600.00
b)	125 Amp FP, 16/18 KA MCCB (O/L - 0.8x1 In)	0	3	Each		7504		22512.00
c)	630 Amp FP, 50 KA MCCB (O/L - 0.8x1 In)	0	3	Each		32506		97518.00
31	SITC of TTA Type, powder coated,compartmentalised floor mounted, Double door type cubical electrical panel	0	1	Job		1753093		1753093.00
32	Fabrication, SITC of feeder pillar	1	1	Set	118478	107517	118478	107517.00
34	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.		250	Mtr		206		51500.00
35	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.		3000	Mtr		57		171000.00
36	Bus Trunking							
a)	800 Amp	70	0	Mtr	15653	15653	1095710	0.00
b)	400 Amp	70	0	Mtr	8933	8933	625310	0.00
	Total of SH-B EI work						**6110943**	**10672895.04**
	(C) INTELLIGENT FIRE ALARM SYSTEM)							
1	SITC of AFAS							
a)	Two Loop Panel.		1	Each		238907		238907.00
2	SITC of intelligent analog addressable photothermal detector		82	Each		2846		233372.00
3	SITC of response indicator on surface/recessed MS/ ABS/ PVC		20	Each		263		5260.00
4	SITC of intelligent addressable programmable sounder		2	Each		2638		5276.00
5	SITC of addressable fire control module		2	Each		2990		5980.00
6	SITC of addressable manual call point		2	Each		3859		7718.00
7	SITC of addressable strobe		2	Each		3354		6708.00
8	Supplying & laying of fire survival armoured cable.	1050	2000	Mtr		328	630000	656000.00
9	SITC of portable fire extinguisher	LS	LS	Each			500000	500000
	Total of SH-C INTELLIGENT FIRE ALARM SYSTEM)						**1130000**	**1659221.00**

	(D) CCTV System							
1	SITC of 3 MP Dome Camera		12	Each		41305		495660.00
2	SITC of ONVIF profile		1	Each		56060		56060.00
3	SITC of Surveillance Class		1	Each		39900		39900.00
4	SITC of the workstion		1	Each		189900		189900.00
5	SITC of 43" LED with 3840 X 2160 (UHD) Resolution		2	Each		61470		122940.00
6	SITC of Network Switch Layer		1	Each		28000		28000.00
7	Installation of 19 inch 1U Patch Panel		1	Each		4480		4480.00
8	SITC of 15 U Wall Mountable Network Steel Rack with Glass Door and Lock		1	Each		24360		24360.00
9	Drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.							
a)	1 run of cable		1000	mtrs		19.60		19600.00
b)	2 run of cable		2000	mtrs		32.80		65600.00
10	SITC of RJ 45 Termination Plug for Cat 6 end point Termination.		100	Each		306		30600.00
11	Installation, Testing & Commissioning Cat6 UTP Patch Cord		150	Each		266		39900.00
	Total of SH:- D	**1050**			**200**		210000	
	(E) Access Control System						**210000**	**1117000.00**
1	ITC of IP Based 2 Reader Controller with TCP/IP Ethernet or RS-485 supervised, 5 Card Formats per panel		1	Each		27578		27578.00
2	ITC of Universal 2 Reader/2 Door Controller		1	Each		17220		17220.00
3	ITC of smart card reader with operating frequency		3	Each		5800		17400.00
4	SITC of NO/NC base based stainless steel exit push button,		3	Each		1400		4200.00
5	ITC of clonoble, Non Copiable Data Stream Proximity card		50	Each		86		4300.00
6	SITC g of 600 LBS EM lock single leaf		12	Each		7885		94620.00
7	SITC of suitable type of Bracket (as per the Door Type)		12	Each		2920		35040.00
8	Supplying & laying of cable							
a)	4 core 1 Sqmm Copper Flexible (2-conductor)		250	mtrs		245		61250.00
b)	8 core x 1 sq-mm Flexible coper shielded cable		250	mtrs		585		146250.00
9	SITC of 5 KVA		1	Each		125000		125000.00
		1050	583		200	188719	210000	
	TOTAL OF SH:- E						**210000**	**532858.00**
	(F)Earthing							
1	Earthing with G.I. earth pipe	4	10	Each	5308	5308	21232	53080.00
	TOTAL OF SH:- F						**21232**	**53080.00**
	Sub Head:- G							
1	Supplying and installing of perforated painted with powder coating M.S cable trays Tee							
a)	300 mm width X 50 mm depth X 1.6 mm thickness		527	Mtr.		1708.00		900116.00
2	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray							
a)	300 mm width X 50 mm depth X 1.6 mm thickness		150	Mtr.		963.00		144450.00
b)	150 mm width X 50 mm depth X 1.6 mm thickness		250	Mtr.		716.00		179000.00
3	Supply and fixing of Refrigerent piping Y joints or Refnets as required to connect the indoor units		50	Nos.		13846.00		692300.00
4	Supply and fixing of Refrigerent piping Y joints or Refnets as required to connect the outdoor units		10	Nos.		23682.00		236820.00
5	SITC of al LT panel board minimum Height 1575 mm x Width 1700mm x Depth 350mm		3	Job		460587.00		1381761.00
6	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) 50x50x8							
	Hot finished welded type tubes		3356.5	Kg.		194.40		652503.60

7	Steel work in built up tubular 50x50x6							
	Hot finished welded type tubes		299.25	Kg.		194.40		58174.20
8	Supplying & laying/fixing of 2 core 1.5 sq.mm shielded copper conductor flexible cable		600	Mtr.		465.00		279000.00
9	Supplying & laying/fixing of 25 sq.mm copper conductor flexible cable		1280	Mtr.		1071.00		1370880.00
10	Providing and Fixing of Gel -Chemical Earthing Electrode of GI made as K-Type GI tube as per		30	Nos.		36805.00		1104150.00
11	Supplying and Laying and fixing of 3.5 x 70 sq.mm Aluminium Armored Cable		550	Mtr.		1254.00		689700.00
12	Supplying and Laying and fixing of Coppper Armored Cable							
a)	3 x 6 Sq.mm		600	Mtr.		274.00		164400.00
b)	3 x 10 Sq.mm		1023	Mtr.		1198.00		1225554.00
c)	4 X 10		300	Mtr.		1547.00		464100.00
d)	4 X 16		200	Mtr.		2385.00		477000.00
13	Supplying and Laying and fixing of Alluminium Armored Cable one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required.							
a)	2 X 10		370	Mtr.		285.00		105450.00
14	Supplying and fixing horizontal type three pole and neutral,sheet steel, MCB distribution board							
a)	8 way (4 + 24), Double door		18	Nos.		5970.00		107460.00
15	Supplying and fixing of medium class PVC conduit along							
a)	25 mm		470	Mtr.		145.00		68150.00
16	SITC of vaccumiazation and Nitrogen testing							
a)	28.58mm dia (OD) (Harddrawn) with tube thickness 1.2mm with 19 mm thick insulation		70.7	Mtr.		1108.00		78335.60
b)	34.9mm dia (OD) (Harddrawn) with tube thickness 1.62mm with 19 mm thick insulation		27.8	Mtr.		1230.00		34194.00
c)	41.27mm dia (OD) (Harddrawn) with tube thickness 1.2 mm with 19 mm thick insulation		12.8	Mtr.		1309.00		16755.20
d)	9.5 mm dia (OD) (soft drawn) with tube thickness 1.62 mm with 19 mm thick insulation		240	Mtr.		331.00		79440.00
16	Supplying and fixing of drain pipe 32 mm for ac water drain		276	Mtr.		217.00		59892.00
17	Supplying and fixing of drain pipe 25 mm for ac water drain		51	Mtr.		153.00		7803.00
18	Supply and fixing of SMC pole box (IP 65)Surface box, for out door main cable joint. etc complete as required.		10	Nos.		600.00		6000.00
19	Supply and fixinx of PVC Conduit Flexible Pipe 20 mm etc complete as required.		500	Mtr.		13.00		6500.00
20	Supply and fixinx of PVC Conduit Flexible Pipe 25 mm		400	Mtr.		18.00		7200.00
21	Supply and fixing of 3 Pin 16A Top Plug for AC indoor unit		42	Nos.		132.00		5544.00
22	Supply and fixing of 2 Module PVC Surface box		20	Nos.		4.33		86.60
23	Supplying and making end termination with brass compression gland and aluminium lugs							0.00
a)	3½ X 300 sq. mm (70mm)		8	Sets		1195.00		9560.00
b)	3½ X 70 sq. mm (38mm)		22	Sets		468.00		10296.00
c)	2 X 10 sq. mm (19mm)		4	Sets		241.00		964.00
d)	4 X 10 sq. mm (25mm)		12	Sets		269.00		3228.00
e)	4 X 16 sq. mm (28mm)		24	Sets		309.00		7416.00
f)	3 X 10 sq. mm (22mm)		54	Sets		257.00		13878.00
24	Supplying & laying/fixing of 3 x 2.5 sq.mm copper conductor flexible cable		126	Mtr.		233.00		29358.00
25	Supplying and fixing of PVC conduit							
a)	25 mm		612	Mtr.		29.00		17748.00
26	SITC of 250 mm sweep plastic body fresh air fan		2	Nos.		2037.00		4074.00
27	LED Sign Board		40	Sq.ft		2500.00		100000.00

28	Shifting of solar Panel and the roof top(300 Panel) (lump sum)		1	Job		200000.00		200000.00
29	Interconnection of Solar Panel i/c 4 X 6C fexible Wire and male female connector(lump sum)		1	Job		250000.00		250000.00
						Total of SH G:-		**11249241.20**
						TOTAL OF (SH A+ SH B+ SH C+ SH D+	**18882175**	**30331943.09**
						Total	**18882175**	**30331943.09**
						Less cost index 3%	**566465**	
						Add Gst 6.33% on DSR Item(10418823.72)		**659511.54**
						Grand Total	**18315710**	**30991454.63**

Assistant Engineer (E)
FESD-I, CPWD, NH-IV,
Faridabad

सहायक अभियन्ता (वै०)-यो.
फ०वै०मं०, के०लो०नि०वि०,
एन० एच०-4, फरीदाबाद।

कार्यपालक अभियन्ता (वै०)
फ०वै०मं०, के०लो०नि०वि०,
एन० एच०-4, फरीदाबाद।

Abstract of Cost						
Name of Work: Renovation/Repair of Workshop Buildings and other works i/c Electrical works at NISE Campus, Gwal Pahari, Gurugram.						
S.No.	Description	Qty	Unit	Rate	Amount	DSR-2018
1	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand (zone - III) : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	170	Sqm	614.05	104389.00	4.17
2	Providing and fixing factory made uPVC white colour sliding glazed window upto 1.50 m in height dimension comprising of uPVC multi-chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads and uPVC extruded interlocks, EPDM gasket, wool pile, zinc alloy (white powder coated) touch locks with hook, zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes, wire mesh and silicon sealent shall be paid separately)					
	Note: For uPVC frame and sash extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made.					
2.1	Two track two panels sliding window made of (small series) frame 52 x 44 mm &sash 32 x 60 mm both having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension. (Area of window upto 1.75 sqm)	95	Sqm	6709.60	637412.00	9.147D.1
3	Structural steel work in single section, fixed with or without connecting plate,including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete	710	KG	86.05	61096.00	10.1

4	Providing and laying Vitrified tiles in floor with different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).					11.49
4.1	Size of Tile 600 X 600 mm	300	Sqm	1609.95	482985.00	11.49.2
5	Provicing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200 mm centre to centre, and cross "T" of size 24x28 mm made out of 0.33 mm (Minimum) sheet, 1200 mm long spaced between main'T' at 600 mm centre to centre to form a grid of 1200x600 mm and secondary cross 'T' of length 600 mm and size 24 x28 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600 mm panel to from grid of size 600x600 mm, resting on periphery walls /partitions on a Perimeter wall angle pre-coated steel of size(24x24X3000 mm made of 0.40 mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230 mm interval and laying					
	15 mm thick densified edges calicum silicate ceiling tiles of approved texture in the grid, including, cutting/ making opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc., wherever required. Main 'T' runners to be suspended from ceiling using G.I. slotted cleats of size 25x35x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm G.I. adjustable rods with galvanised steel level clips of size 85 x 30 x 0.8 mm, spaced at 1200 mm centre to centre along main 'T', bottom exposed with 24 mm of all Tsections shall be pre-painted with polyster baked paint, for all heights, as per specifications, drawings and as directed by Engineer-in-Charge					
	Note :- Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames/ opening (cut outs) having area less than 0.30 sqm.The calcium silicate ceiling tile shall have NRC value of 0.50 (Minimum), light reflection > 85%, non-combustible as per B.S. 476 part IV, 100% humidity resistance and also having thermal conductivity <0.043 w/ mK.	730	Sqm	1643.95	1200084.00	12.53

6	Rough cast plaster upto 10 m height above ground level with a mixture of sand and gravel or crushed stone from 6 mm to 10 mm nominal size, dashed over and including the fresh plaster in two layers, under layer 12 mm cement plaster 1:4 (1 cement : 4 coarse sand) and top layer 10 mm cement plaster 1:3 (1 cement : 3 fine sand) mixed with 10% finely grounded hydrated lime by volume of cement.					13.19
6.1	Ordinary cement finish using ordinary cement	200	Sqm	681.10	136220.00	13.19.1
7	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	1060	Sqm	196.70	208502.00	13.26
8	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :					13.60
8.1	Two or more coats on new work	1060	Sqm	128.65	136369.00	13.60.1
9	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	1060	Sqm	18.25	19345	13.91
10	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :					13.99
10.1	One or more coats on old work	300	Sqm	79.95	23985	13.99.1
11	Finishing walls with Acrylic Smooth exterior paint of required shade :					13.111
11.1	Old work (Two or more coat applied @ 1.67 ltr/ 10 sqm) on existing cement paint surface	1060.00	Sqm	99.90	105894	13.111.2
12	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:					14.5

12.1	Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)	177	Sqm	890.55	157627	14.5.1
13	Providing and laying APP (Atactic Polypropylene Polymer) modified prefabricated five layer, 3 mm thick water proofing membrane, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 litre/sqm by the same membrane manufactured of density at 25°C, 0.87 - 0.89 kg/litre and viscocity 70 - 160 cps. Over the primer coat the layer of membrane shall be laid using butane torch and sealing all joints etc., and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 350/300 N/5 cm. Tear strength in longitudinal and transverse direction as 60/80N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane :					14.9
13.1	3 mm thick	1025	Sqm	512.95	525774	14.19.1
14	Extra for covering top of membrane with Geotextile, 120 gsm non woven, 100% polyester of thickness 1 to 1.25 mm bonded to the membrane with intermittent touch by heating the membrane by Butane Torch as per manufactures recommendation.	1025	Sqm	99.75	102244	14.92
15	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	200	Sqm	39	7800	15.56
16	Providing and laying 60mm thick facicry made cement concrete interlocking paver block of M - 30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.	520	Sqm	859.35	446862	16.68

17	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately)					21.1
17.1	For fixed portion					21.1.1
	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	2470	KG	423.95	1047157	21.1.1.1
17.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)					21.1.2
	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	200	KG	513.40	102680	21.1.2.1
18	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):					21.3
18.1	With float glass panes of 5 mm thickness (weight not less than 12.50 kg/ sqm)	380	Sqm	1296.40	492632	21.3.2
19	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & double action hydraulic floor spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-incharge (Door handle, lock and stopper etc.to be paid separately).	14	Sqm	4447.90	62271	21.18
20	Cleaning of exposed concrete surface of sticking material including loose and foreign material by sand blasting with coarse sand followed by and including cleaning with oil free air blast as per direction of Engineer in charge.	200	Sqm	289.90	57980	26.37

21	Shotcreting R.C.C. columns, beams and slabs etc. in layers with approved design mix concrete having the specified minimum characteristic compressive strength [with ordinary portland cement, coarse sand and graded stone aggregate of 10 mm maximum size in proportion as per design criteria] including the cost of centering and shuttering at edges and corners etc. as directed by Engineerin-Charge					
	Note: Rates shall include the providing necessary ground wires etc. The levelling gauges, if used, shall be paid for separately. Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding/ tapping with a blunt metal instrument.					
21.1	25mm thick in Grade M 25 with cement content not less than 330 kg per cum	200	Sqm	635.65	127130	26.38.1
22	Providing and fixing hard drawn steel wire fabric of size 75 x25 mm mesh or other suitable size wire mesh to be fixed & firmly anchored to the concrete surface by means of "L" shaped mild steel shear key welded with existing reinforcement including the cost of materials, labour, tool & plants as approved by Engineer-in-charge.	200	Sqm	801.70	160340	26.40
23	Providing & fixing stainless steel lock of Ozone, Nexia or equivalent make for fully glazed and toughened glass door, complete as per direction of Engineer-in-Charge.					
23.1	150 X 50 mm	2	Each	2706.30	5413	NS
24	Providing and fixing stainless steel grade AISI-304, D-Shape door handles hardwyn make or equivalent with all necessary standard fixing accessories complete.				0	
24.1	450mm long	8	Each	1879.05	15032	NS
					0	
25	Extra for itching on the surface of the toughened glass door to provide required pattern, design and signages etc. complete as per the direction of Engineer-in- charge.	14	Sqm	2244.40	31422	NS
					0	
26	Providing and fixing 6.00 mm thick PVC Vinyl sheet in any colour(Rexcode, L.G make) in flooring fixed with aerobend including welding the joints as required as per direction of Engineer-in-charge.	730	Sqm	4750.75	3468048	NS

					0	
27	Supplying and placing in position of sliding tile base modular Workstation as per image. (Curvilinear Workstations (Cluster of 2 seats) Size: L-1500mm x L-1500mm x D-600mm x H-1200mm). Free standing partition height 1200mm and should be minimum of 65-67mm thick. Partition inner frame is 1.1-1.2 mm thick mild steel. Horizontal and vertical trims are made out of extruded aluminum of 1.mm thick. All Panels/trims shall be powder coated with 50 microns. Aluminum trims are elegantly fixed with special fixtures in the partition. The frame work shall be fitted with 9mm thick pre laminated Particle tiles of approved shade. Partition shall have provision for pin up board with fabric/ white marker/ laminated of approved shade. Partition framework shall have adequate provisions for the movement of electric data cables at desired 2 levels; one at skirting and another above / below the table top. The complete partitioning work shall be carried out as per the approved drawing. Tabletop for workstation made up of 25mm thick pre laminated Particle board of approved shade. The worktop shall be supported on minimum 2mm thick powder coated CRCA brackets and side panels. Side's panels should be made from 18mm thick pre laminated Particle board of approved shade.				0	
	All working or non working edges shall be provided with machine pressed Zmm thick PVC edging using special hot melt glue at hot temperature. The worstation shall have 10mm thick dear or frosted glass dividers (as approved by architect) between two seats. Provision of one PVC keyboard tray and Metal CPU trolley with lockable castors for each seating. Also a provision of Mobile Pedestal Unit (size:- L-400mm x D450mm x Il-600mm) with a combination of 2 drawer & one filing drawer. The pedestal storage unit shall be made of 18 mm thick prelaminated Particle board with provision of handles & central Locking arrangement. The product should be from approved make/ equivalent model of Godrej/Durian Complete as per specification mentioned above & image under the guidance and aprroval of engineer in charge.	10	Sqm	168867.57	1688676	NS
					0	
28	Removing existing old damaged PVC flooring including all operational i.e removing the adhesive from existing surface and staking the material within 50 meters lead of .	730	Sqm	37.33	27251.00	
				Total	**11642620**	
	Deduct Cost Index @3 % Except Item No. 23 to 28 Item Rs. 11642619=Rs.5235841=6406778				**192203**	
				Total	**11450417**	

Justifications for additional work required in PVTF workshop

The additional work was necessitated by the evolving requirements of the Module Test Lab and the challenges encountered during the repair/renovation project. A brief detail are as follows:

1. The introduction of advanced testing equipment, such as a large-sized module solar simulator and a dynamic mechanical load tester, equipment as per IEC 61730 standards, required a complete redesign of the electrical layout to ensure seamless functionality and safety.
2. Water penetration during the last rainy season caused significant roof damage, necessitating urgent repair and renovation in some of the new areas to prevent further deterioration.
3. Although not included in the original scope, the approach road was added to improve accessibility to the facility.
4. New earth pits had to be refined to meet the critical performance requirements of the equipment.
5. The additional HVAC units were installed to address the increased heat load generated by the new testing equipment/equipment planned. These individual HVAC units were strategically deployed to optimize temperature and humidity control in specific sections of the facility, ensuring the equipment's reliable operation while minimizing energy wastage. This approach also contributed to a reduction in electricity bills, as the use of individual units allowed for localized cooling and avoided the inefficiencies of overcooling less critical areas.
6. Lighting was redesigned to provide uniform diffused illumination necessary for precision work.
7. To enhance reliability, equipment was sectionally divided based on power consumption and criticality, with appropriate backup systems, LT panels, and distribution boxes integrated. Furthermore, the facility's integration with the institute's smart grid called for advanced monitoring and safety controls.
8. The rooftop SPV power plant, dismantled during renovation, was reinstalled to ensure energy efficiency, with this additional task awarded to CPWD.

These changes were essential to align the facility with current operational and safety standards while ensuring long-term performance.

		Remarks
		The equipment in the laboratory are energy intensive and emit a lot of heat during operation which increases the ambient temperature of the laboratory. Under enhanced temperature, the power consumption of the equipment increases. To address the issue, the lab is supposed to maintain a uniform temperature in the range of 20 – 30 ^{0}C. In this respect, the number of units of the air conditioning system has been increased, and sectional control over the air conditioning system has been implemented to ensure its usage only during the operation of the equipment. Along with the increase in units, the accessories like wires, piping, etc also increased.
	(A) Air conditioning	
1.	SITC of modular type Variable Refrigerant Flow/Variable Refrigerant Volume	
2.	SITC of VRV/VRF Cassette Type Indoor	
a)	4 TR	
3.	SITC VRV/VRF High wall type Indoor unit	
a)	1 TR	
4.	SITC of copper refrigerant piping for VRV/VRF system.	
a)	6.4mm dia (OD) (Soft drawn) with tube thickness 1.2mm with 19mm thick insulation	
b)	12.7mm dia (OD) (Soft drawn) with tube thickness 1.2mm with 19mm thick insulation	
c)	15.86mm dia (OD) (Soft drawn) with tube thickness 1,2mm with 19mm thick insulation	

d)	19mm dia (OD) (Soft drawn) with tube thickness 1.2mm with 19mm thick insulation	
e)	22.2mm dia (OD) (Soft drawn) with tube thickness 1.2mm with 19mm thick insulation	
f)	25.4mm dia (OD) (Soft drawn) with tube thickness 1.2mm with 19mm thick insulation	
	TOTAL OF SH-A: AIR CONDITIONING	
	(B) Electrical Work	
1.	Group C	The lab consists of various equipment operating on 3 phase (high current) and single phase (low current). Separate dedicated sockets are recommended for the smooth operation of all the equipment. Accordingly, the accessories like cables and safety devices were installed.
a	Group C (group controlled)	
3.	Wiring for light/ power plug with 2X4 sq. mm	
4.	Wiring for light/ power plug with 4X4 sq. mm	
5.	Supplying and fixing of steel conduit	
A	25 mm	
B	32 mm	
6.	Wiring for circuit/ sub main wiring alongwith earth wire	
A	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	
B	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	
C	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	
7.	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess,	
A	5/6 A switch	
9.	Supplying and fixing GI box	
A	3 Module (100mmX75mm)	
B	6 Module (200mmX75mm)	
C	8 Module (125mmXl25mm)	
D	12 Module (200mmX150mm)	
10.	SITC of 20 A, 240 V, SPN Industrial type socket outlet	
11.	SITC of 30 A, 415 V, TPN Industrial type socket outlet	
12.	Supplying and fixing of surface/ recess mounting, vertical type, 415 V, TPN MCCB distribution board of sheet steel	
A	12 way (4 + 36), Double door	
13.	SITC of 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable	
A	single pole	

14.	SITC of MCCB	
A	63 Amp FP, 16/18 KA MCCB	
	Fan & fittings	
15.	SITC of 600mm sweep Vortex Wall Mount	Lighting throughout the lab is very critical for the smooth and safe operation. Lightings were also added for the outside area for safe environment and aesthetic concerns.
16.	SITC of LED Luminarie of size 600mm x 600mm	
17.	SITC of LED downlighter Luminarie	
18.	SITC of 600 mm long, 440 lumens bollard Fitting	
19.	SITC of 100 watt LED flood light	
20.	Supplying & erection of factory fabricated decorative streetlight pole	
21.	SITC 1200mm sweep ceiling fan	Fans are installed within the laboratory for saving energy consumption when no technical activities are carried out
22.	SITC of fan regulator	
23.	laying of one number XLPE insulated and PVC / XLPE	Cable management is very critical for the safe operation of the laboratory and therefore related accessories are recommended
a)	3x6 sqmm	
b)	3x 1 0sqmm	
24.	Supplying and laying of following size DWC HDPE pipe	
a)	63 mm dia (OD-63 mm & ID-51 mm nominal)	
b)	160 mm dia (OD-160 mm & ID-135 mm nominal)	
25.	Laying of one number PVC insulated and PVC / XLPE	
	cable	
a)	2x10 Sqmm	
b)	3.5x300sqmm	
	LT panel	
27.	SITC of Air Insulated Compact	Some of the equipment in the laboratory is connected to the backup power line, whereas non-critical equipment is connected through a regular electricity supply. To ensure the proper electricity supply and operation of both critical and noncritical equipment properly, they are connected through different Distribution Boxes (D.B). along with dedicated D.B's the related accessories are also recommended.
a)	630 A Isc = 50kA for 1 second	
28.	SITC of capacity Plug In/ tap off box	
a)	125 A 25kA SC for 1 sec	
b)	200 Amp	
29.	SITC of capacity End Feed Unit	
a)	630 A 50kA SC for 1 sec	
b)	400 Amp	
c)	800 Amp	
30.	Providing and fixing following rating and breaking capacity	
	and pole MCCB	
a)	63 Amp FP, 16/18 KA MCCB (O/L - 0.8x1 In)	

b)	125 Amp FP, 16/18 KA MCCB (O/L - 0.8x1 In)	
c)	630 Amp FP, 50 KA MCCB (O/L - 0.8x1 In)	
31.	SITC of TTA Type, powder coated, compartmentalised floor mounted, Double door type cubical electrical panel	
32.	Fabrication, SITC of feeder pillar	
34.	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	
35.	Providing and fixing 6 SWG dia G.]. wire on surface or in recess for loop earthing as required	
36.	Bus Trunking	
a)	800 Amp	
b)	400 Amp	
	Total of SH_B E1 WORK	
	(C) INTELLIGENT FIRE ALARM SYSTEM)	
1	SITC of AFAS	To ensure the fire safety of the laboratory, the proper fire alarm system is recommended
a)	Two Loop Panel.	
2	SITC of intelligent analog addressable photothermal detector	
3	SITC of response indicator on surface/recessed MS/ ABS/ PVC	
4	SITC of intelligent addressable programmable sounder	
5	SITC of addressable fire control module	
6	SITC of addressable manual call point	
7	SITC of addressable strobe	
8	Supplying & laying of fire survival armoured cable.	
9	SITC of portable fire extinguisher	
	Total of SH-C INTELLIGENT FIRE ALARM SYSTEM)	
	(D) CCTV System	
1	SITC of 3 MP Dome Camera	To monitor the movement in the laboratory and safeguard the assets, CCTV cameras are recommended in all significant zones
2	SITC of ONVIF profile	
3	SITC of Surveillance Class	
4	SITC of the workstation	
5	SITC of 43" LED with 3840 X 2160 (UHD) Resolution	
6	SITC of Network Switch Layer	
7	Installation of 19 inch IU Patch Panel	

8	SITC of 15 U Wall Mountable Network Steel Rack with Glass Door and Lock	
9	Drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.	
a)	1 run of cable	
b)	2 run of cable	
10	SITC of RJ 45 Termination Plug for Cat 6 end point	
	Termination.	
11	Installation, Testing & Commissioning Cat6 UTP Patch Cord	
	Total of SH: - D	
	(E) Access Control System	
1	ITC of IP Based 2 Reader Controller with TCP/IP Ethernet or RS-485 supervised, 5 Card Formats per panel	To limit the unauthorized access in the laboratory premises, proper access control systems are recommended
2	ITC of Universal 2 Reader/2 Door Controller	
3	ITC of smart card reader with operating frequency	
4	SITC of NO/NC base based stainless steel exit push button,	
5	ITC of clonoble, Non Copiable Data Stream Proximity card	
6	SITC g of 600 LBS EM lock single leaf	
7	SITC of suitable type of Bracket (as per the Door Type)	
8	Supplying & laying of cable	
a)	4 core I Sqmm Copper Flexible (2-conductor)	
b)	8 core x 1 sq-mm Flexible coper shielded cable	
9	SITC of 5 KVA	
	TOTAL OF SH: - E	Since the equipment is for testing, calibration and R&D purposes, the earthing plays a critical role in accurate measurement and smooth operations. A resistance of less than 1 ohm is recommended.
	(F) Earthing	
1	Earthing with G.I. earth pipe	
	TOTAL OF SH: - F	
	Sub Head:- G	
1	Supplying and installing of perforated painted with powder coating M.S cable trays Tee	Proper cable management throughout the lab and sectional distribution of electricity to various equipment and facilities in the lab
a)	300 mm width X 50 mm depth X 1.6 mm thickness	
2	Supplying and installing of perforated painted with powder coating M.S cable trays Tee	
a)	300 mm width X 50 mm depth X 1.6 mm thickness	

2	Supplying and installing following size of perforated Hot	
	Dipped Galvanised Iron cable tray	
a)	300 mm width X 50 mm depth X 1.6 mm thickness	
b)	150 mm width X 50 mm depth X 1.6 mm thickness	
3	Supply and fixing of Refrigerent piping Y joints or Refinets as required to connect the indoor units	
4	Supply and fixing of Refrigerent piping Y joints or Refnets as required to connect the outdoor units	
5	SITC of al LT panel board minimum Height 1575 mm x Width 1700mm x Depth 350mm	
6	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) 50x50x8	
	Hot finished welded type tubes	
7	Steel work in built up tubular 50x50x6	
	Hot finished welded type tubes	
8	Supplying & laying/fixing of 2 core 1.5 sq.mm shielded copper conductor flexible cable	
9	Supplying & laying/fixing of 25 sq.mm copper conductor flexible cable	
10	Providing and Fixing of Gel -Chemical Earthing Electrode of GI made as K-Type GI tube as per	Since the equipment is for R&D purposes, the earthing plays a critical role in accurate measurement and smooth operations. A resistance of less than 1 ohm is recommended.
11	Supplying and laying and fixing of 3.5 x 70 sq.mm	Poles for street lighting in the surrounding area and bollard lights at the entrance is required for the safe operation and aesthetic purposes. The D.B's and electrical panels for proper electrical supply to the equipment.
	Aluminium Armored Cable	
12	Supplying and Laying and fixing of Coppper Armored Cable	
a)	3 x 6 Sq.mm	
b)	3 x 10 Sq.mm	
c)	4 X 10	
D	4 X 16	
13	Supplying and Laying and fixing of Alluminium Armored Cable one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required.	
a)	2 X 10	
14	Supplying and fixing horizontal type three pole and neutral.	
	sheet steel, MCB distribution board	

a)	8 way (4 + 24). Double door	
15	Supplying and fixing of medium class PVC conduit along	
a)	25 mm	
16	SITC of vaccumiazation and Nitrogen testing	
a)	28.58mm dia (OD) (Harddrawn) with tube thickness 1.2mm with 19 mm thick insulation	
b)	34.9mm dia (OD) (Harddrawn) with tube thickness .62mm with 19 mm thick insulation	
c)	41.27mm dia (OD) (Harddrawn) with tube thickness 1.2 mm with 19 mm thick insulation	
d)	9.5 mm dia (OD) (soft drawn) with tube thickness 1.62 mm with 19 mm thick insulation	
16	Supplying and fixing of drain pipe 32 mm for ac water drain	
17	Supplying and fixing of drain pipe 25 mm for ac water drain	
18	Supply and fixing of SMC pole box (IP 65)Surface box, for out door main cable joint. etc complete as required.	
19	Supply and fixing of PVC Conduit Flexible Pipe 20 mm ete complete as required.	
20	Supply and fixing of PVC Conduit Flexible Pipe 25 mm	
21	Supply and fixing of 3 Pin 16A Top Plug for AC indoor unit	
22	Supply and fixing of 2 Module PVC Surface box	
23	Supplying and making end termination with brass compression gland and aluminium lugs	
a)	3½ X 300 sq. mm (70mm)	
b)	3½ X 70 sq. mm (38mm)	
c)	2 X 10 sq. mm (19mm)	
d)	4 X 10 sq. mm (25mm)	
e)	4 X 16 sq. mm (28mm)	
f)	3 X 10 sq. mm (22mm)	
24	Supplying & laying/fixing of 3 x 2.5 sq.mm copper conductor flexible cable	Accessories for the AC system
25	Supplying and fixing of PVC conduit	
a)	25 mm	

S. No.	Particular	Amount
[illegible]		
1	[illegible]	[illegible]
2	[illegible]	[illegible]
	Total A	[illegible]
	Add Contingencies @ 3% on A	[illegible]
	Total B	[illegible]
	[illegible]	[illegible]
	Total C	[illegible]
	Add Departmental Charges @ 8% on A	[illegible]
	Grand Total	3,43,85,498.00
	Say ₹	3,43,85,500.00

3.0 [illegible] requested to start the above said works from immediately as per above provisions [illegible] final payment will be subject to adjustment/expenditure incurred by CPWD on the [illegible]

3.5 [illegible] works [illegible] be completed within three months from the award of the work as [illegible]

4.0 [illegible] for the quality/workmanship of the work under execution/executed [illegible] will be approved by CPWD and passed from DG NISE [illegible]

5.0 [illegible] contractors/CPWD staff should be given to NISE for [illegible] No other property of campus should be damaged [illegible] of workers/contractors must be limited to the site [illegible]

6.0 [illegible] must follow the safety precaution of Covid 19 as per the Govt. [illegible] CPWD. In case of any accident NISE will not [illegible]

Yours faithfully,

(Dr. Chandan Banerjee)
Dy. Director General

[illegible]

Revised Preliminary Estimate

Name of work: - Renovation / Repair of Workshop Building and other works i/c Electrical works at NISE Campus, Gwal Pahari, Gurgaon. (SH: Balance Electrical Works).

S. No.	Description of Items	Qty		Unit	Rate		Amount	
		Previous	Revised		Previous	Revised	Previous	Revised
	(A) AIR CONDITIONING							
1	SITC of modular type Variable Refrigerant Flow/Variable Refrigerant Volume	200	200	HP	55000	16415	11000000	3283000.00
2	SITC of VRV/VRF Cassette Type Indoor							
a)	4 TR	8	38	Each	25000	33981	200000	1291278.00
3	SITC VRV/VRF High wall type Indoor unit						0	
a)	1 TR	0	4	Each		19700	0	78800.00
4	SITC of copper refrigerant piping for VRV/VRF system,						0	
a)	6.4mm dia (OD) (Soft drawn) with tube thickness 1.2mm with 19mm thick insulation	0	22.70	Mtr		245	0	5561.50
b)	12.7mm dia (OD) (Soft drawn) with tube thickness 1.2mm with 19mm thick insulation	0	78.10	Mtr		466	0	36394.60
c)	15.86mm dia (OD) (Soft drawn) with tube thickness 1.2mm with 19mm thick insulation	0	205.60	Mtr		588	0	120892.80
d)	19mm dia (OD) (Soft drawn) with tube thickness 1.2mm with 19mm thick insulation	0	60.85	Mtr		707	0	43020.95
e)	22.2mm dia (OD) (Soft drawn) with tube thickness 1.2mm with 19mm thick insulation	0	100.00	Mtr		865	0	86500.00
f)	25.4mm dia (OD) (Soft drawn) with tube thickness 1.2mm with 19mm thick insulation	0	100.00	Mtr		1022	0	102200.00
	TOTAL OF SH-A: AIR CONDITIONING						**11200000**	**5047647.85**
	(B) Electrical Work							
1	Group C	62	325	point	1213	1213	75206	394225.00
a	Group C (group controlled)	168	160	point	707	707	118776	113120.00
3	Wiring for light/ power plug with 2X4 sq. mm	0	3011	Mtr		265		797915.00
4	Wiring for light/ power plug with 4X4 sq. mm	0	1000.00	Mtr		392		392000.00
5	Supplying and fixing of steel conduit							
a	25 mm	0	200	Mtr		165		33000.00
b	32 mm	0	100	Mtr		203		20300.00
6	Wiring for circuit/ submain wiring alongwith earth wire							
a	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire		800	Mtr		208		166400.00
b	2 X 6 sq. mm + 1 X 6 sq. mm earth wire		800	Mtr		356		284800.00
c	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	LS	1400	Mtr		529	50000	740600.00
7	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess,		50	Each		495		24750.00
a	5/6 A switch		200	Each		85		17000.00
9	Supplying and fixing GI box							0.00
a	3 Module (100mmX75mm)		50	Each		267		13350.00
b	6 Module (200mmX75mm)		20	Each		333		6660.00
c	8 Module (125mmX125mm)		10	Each		383		3830.00
d)	12 Module (200mmX150mm)		180	Each		434		78120.00
10	SITC of 20 A, 240 V, SPN Industrial type socket outlet		30	Each		1232		36960.00
11	SITC of 30 A, 415 V, TPN Industrial type socket outlet	230	27	Each	5000	3048	1150000	82296.00
12	Supplying and fixing of surface/ recess mounting, vertical type, 415 V, TPN MCCB distribution board of sheet steel							
a	12 way (4 + 36), Double door	LS	LS	Each			200000	250000
13	SITC of 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable							
a	single pole		432	Each		199		85968.00
14	SITC of MCCB							
a	63 Amp FP, 16/18 KA MCCB		55	Each		8920		490600.00

26	SITC of 250 mm sweep plastic body fresh air fan	
27	LED sign board	Sign board demonstrating the name of the lab
28.	Shifting of solar panel of the rooftop (300 panels)	PV panels installed on the rooftop were dismantled during the renovation, now post-renovation the solar panels are to installed
29.	Interconnection of solar panel	

	Fan & fittings							
15	SITC of 600mm sweep Vortex Wall Mount	20	20	Each	5000	9060	100000	181200.00
16	SITC of LED Luminarie of size 600mm x 600mm	0	442	Each		5101		2254642.00
17	SITC of LED downlighter Luminarie	0	16	Each		1676		26816.00
18	SITC of 600 mm long, 440 lumens bollard Fitting	25	30	Each	6000	6657	150000	199710.00
19	SITC of 100 watt LED flood light	0	10	Each		9648		96480.00
20	Supplying & erection of factory fabricated decorative streetlight pole	0	10	Each		26443		264430.00
21	SITC 1200mm sweep ceiling fan	0	10	Each		2262		22620.00
22	SITC of fan regulator	0	10	Each		342		3420.00
23	laying of one number XLPE insulated and PVC / XLPE							
a)	3x6 sqmm	0	600.60	Mtr		136.40		81921.84
b)	3x10sqmm	0	1200.00	Mtr		210		252000.00
24	Supplying and laying of following size DWC HDPE pipe							
a)	63 mm dia (OD-63 mm & ID-51 mm nominal)	0	420	Mtr		209		87780.00
b)	160 mm dia (OD-160 mm & ID-135 mm nominal)	0	377.60	Mtr		458		172940.80
25	Laying of one number PVC insulated and PVC / XLPE cable							
a)	2x10 Sqmm	150	550	Mtr	421	56	63150	30800.00
b)	3.5x300sqmm	800	626	Mtr	1863	660.40	1490400	413410.40
	LT panel							
27	SITC of Air Insulated Compact							
a)	630 A Isc = 50kA for 1 second	1	1	Each		12152	711609	12152.00
28)	SITC of capacity Plug In/ tap off box							
(a)	125 A 25kA SC for 1 sec	10	5	Each	6350	6358	63500	31790.00
(b)	200 Amp	10	6	Each	8048	6358	80480	38148.00
29)	SITC of capacity End Feed Unit							
(a)	630 A 50kA SC for 1 sec	0	0	Each		9344		0.00
(b)	400 Amp	1	0	Each	7307	7307	7307	0.00
(c)	800 Amp	1	0	Each	11017	11017	11017	0.00
30	Providing and fixing following rating and breaking capacity and pole MCCB							
a)	63 Amp FP, 16/18 KA MCCB (O/L - 0.8x1 In)	0	30	Each		8920		267600.00
b)	125 Amp FP, 16/18 KA MCCB (O/L - 0.8x1 In)	0	3	Each		7504		22512.00
c)	630 Amp FP, 50 KA MCCB (O/L - 0.8x1 In)	0	3	Each		32506		97518.00
31	SITC of TTA Type, powder coated,compartmentalised floor mounted. Double door type cubical electrical panel	0	1	Job		1753093		1753093.00
32	Fabrication, SITC of feeder pillar	1	1	Set	118478	107517	118478	107517.00
34	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required		250	Mtr		206		51500.00
35	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required		3000	Mtr		57		171000.00
36	Bus Trunking							
a)	800 Amp	70	0	Mtr	15653	15653	1095710	0.00
b)	400 Amp	70	0	Mtr	8933	8933	625310	0.00
	Total of SH-B EI work						**5399334**	**10672895.04**
	(C) INTELLIGENT FIRE ALARM SYSTEM)							
1	SITC of AFAS							
a)	Two Loop Panel.		1	Each		238907		238907.00
2	SITC of intelligent analog addressable photothermal detector		82	Each		2846		233372.00
3	SITC of response indicator on surface/recessed MS/ ABS/ PVC		20	Each		263		5260.00
4	SITC of intelligent addressable programmable sounder		2	Each		2638		5276.00
5	SITC of addressable fire control module		2	Each		2990		5980.00
6	SITC of addressable manual call point		2	Each		3859		7718.00
7	SITC of addressable strobe		2	Each		3354		6708.00
8	Supplying & laying of fire survival armoured cable.	1050	2000	Mtr		328	630000	656000.00
9	SITC of portable fire extinguisher	LS	LS	Each			500000	500000
	Total of SH-C INTELLIGENT FIRE ALARM SYSTEM)						**1130000**	**1659221.00**

	(D) CCTV System							
1	SITC of 3 MP Dome Camera		12	Each		41305		495660.00
2	SITC of ONVIF profile		1	Each		56060		56060.00
3	SITC of Surveillance Class		1	Each		39900		39900.00
4	SITC of the workstion		1	Each		189900		189900.00
5	SITC of 43" LED with 3840 X 2160 (UHD) Resolution		2	Each		61470		122940.00
6	SITC of Network Switch Layer		1	Each		28000		28000.00
7	Installation of 19 inch 1U Patch Panel		1	Each		4480		4480.00
8	SITC of 15 U Wall Mountable Network Steel Rack with Glass Door and Lock		1	Each		24360		24360.00
9	Drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.							
a)	1 run of cable		1000	mtrs		19.60		19600.00
b)	2 run of cable		2000	mtrs		32.80		65600.00
10	SITC of RJ 45 Termination Plug for Cat 6 end point Termination.		100	Each		306		30600.00
11	Installation, Testing & Commissioning Cat6 UTP Patch Cord		150	Each		266		39900.00
	Total of SH:- D	**1050**			**200**		210000	
	(E) Access Control System						**210000**	**1117000.00**
1	ITC of IP Based 2 Reader Controller with TCP/IP Ethernet or RS-485 supervised, 5 Card Formats per panel		1	Each		27578		27578.00
2	ITC of Universal 2 Reader/2 Door Controller		1	Each		17220		17220.00
3	ITC of smart card reader with operating frequency		3	Each		5800		17400.00
4	SITC of NO/NC base based stainless steel exit push button,		3	Each		1400		4200.00
5	ITC of clonoble, Non Copiable Data Stream Proximity card		50	Each		86		4300.00
6	SITC g of 600 LBS EM lock single leaf		12	Each		7885		94620.00
7	SITC of suitable type of Bracket (as per the Door Type)		12	Each		2920		35040.00
8	Supplying & laying of cable							
a)	4 core 1 Sqmm Copper Flexible (2-conductor)		250	mtrs		245		61250.00
b)	8 core x 1 sq-mm Flexible coper shielded cable		250	mtrs		585		146250.00
9	SITC of 5 KVA		1	Each		125000		125000.00
		1050	583		200	188719	210000	
	TOTAL OF SH:- E						**210000**	**532858.00**
	(F)Earthing							
1	Earthing with G.I. earth pipe	4	10	Each	5308	5308	21232	53080.00
	TOTAL OF SH:- F						**21232**	**53080.00**
	Sub Head:- G							
1	Supplying and installing of perforated painted with powder coating M.S cable trays Tee							
a)	300 mm width X 50 mm depth X 1.6 mm thickness		527	Mtr.		1708.00		900116.00
2	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray							
a)	300 mm width X 50 mm depth X 1.6 mm thickness		150	Mtr.		963.00		144450.00
b)	150 mm width X 50 mm depth X 1.6 mm thickness		250	Mtr.		716.00		179000.00
3	Supply and fixing of Refrigerent piping Y joints or Refnets as required to connect the indoor units		50	Nos.		13846.00		692300.00
4	Supply and fixing of Refrigerent piping Y joints or Refnets as required to connect the outdoor units		10	Nos.		23682.00		236820.00
5	SITC of al LT panel board minimum Height 1575 mm x Width 1700mm x Depth 350mm		3	Job		460587.00		1381761.00
6	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) 50x50x8							
	Hot finished welded type tubes		3356.5	Kg,		194.40		652503.60

7	Steel work in built up tubular 50x50x6							
	Hot finished welded type tubes		299.25	Kg.		194.40		58174.20
8	Supplying & laying/fixing of 2 core 1.5 sq.mm shielded copper conductor flexible cable		600	Mtr.		465.00		279000.00
9	Supplying & laying/fixing of 25 sq.mm copper conductor flexible cable		1280	Mtr.		1071.00		1370880.00
10	Providing and Fixing of Gel -Chemical Earthing Electrode of GI made as K-Type GI tube as per		30	Nos.		36805.00		1104150.00
11	Supplying and Laying and fixing of 3.5 x 70 sq.mm Aluminium Armored Cable		550	Mtr.		1254.00		689700.00
12	Supplying and Laying and fixing of Coppper Armored Cable							
a)	3 x 6 Sq.mm		600	Mtr.		274.00		164400.00
b)	3 x 10 Sq.mm		1023	Mtr.		1198.00		1225554.00
c)	4 X 10		300	Mtr.		1547.00		464100.00
d)	4 X 16		200	Mtr.		2385.00		477000.00
13	Supplying and Laying and fixing of Alluminium Armored Cable one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required.							
a)	2 X 10		370	Mtr.		285.00		105450.00
14	Supplying and fixing horizontal type three pole and neutral,sheet steel, MCB distribution board							
a)	8 way (4 + 24), Double door		18	Nos.		5970.00		107460.00
15	Supplying and fixing of medium class PVC conduit along							
a)	25 mm		470	Mtr.		145.00		68150.00
16	SITC of vaccumiazation and Nitrogen testing							
a)	28.58mm dia (OD) (Harddrawn) with tube thickness 1.2mm with 19 mm thick insulation		70.7	Mtr.		1108.00		78335.60
b)	34.9mm dia (OD) (Harddrawn) with tube thickness 1.62mm with 19 mm thick insulation		27.8	Mtr.		1230.00		34194.00
c)	41.27mm dia (OD) (Harddrawn) with tube thickness 1.2 mm with 19 mm thick insulation		12.8	Mtr.		1309.00		16755.20
d)	9.5 mm dia (OD) (soft drawn) with tube thickness 1.62 mm with 19 mm thick insulation		240	Mtr.		331.00		79440.00
16	Supplying and fixing of drain pipe 32 mm for ac water drain		276	Mtr.		217.00		59892.00
17	Supplying and fixing of drain pipe 25 mm for ac water drain		51	Mtr.		153.00		7803.00
18	Supply and fixing of SMC pole box (IP 65)Surface box, for out door main cable joint. etc complete as required.		10	Nos.		600.00		6000.00
19	Supply and fixinx of PVC Conduit Flexible Pipe 20 mm etc complete as required.		500	Mtr.		13.00		6500.00
20	Supply and fixinx of PVC Conduit Flexible Pipe 25 mm		400	Mtr.		18.00		7200.00
21	Supply and fixing of 3 Pin 16A Top Plug for AC indoor unit		42	Nos.		132.00		5544.00
22	Supply and fixing of 2 Module PVC Surface box		20	Nos.		4.33		86.60
23	Supplying and making end termination with brass compression gland and aluminium lugs							0.00
a)	3½ X 300 sq. mm (70mm)		8	Sets		1195.00		9560.00
b)	3½ X 70 sq. mm (38mm)		22	Sets		468.00		10296.00
c)	2 X 10 sq. mm (19mm)		4	Sets		241.00		964.00
d)	4 X 10 sq. mm (25mm)		12	Sets		269.00		3228.00
e)	4 X 16 sq. mm (28mm)		24	Sets		309.00		7416.00
f)	3 X 10 sq. mm (22mm)		54	Sets		257.00		13878.00
24	Supplying & laying/fixing of 3 x 2.5 sq.mm copper conductor flexible cable		126	Mtr.		233.00		29358.00
25	Supplying and fixing of PVC conduit							
a)	25 mm		612	Mtr.		29.00		17748.00
26	SITC of 250 mm sweep plastic body fresh air fan		2	Nos.		2037.00		4074.00
27	LED Sign Board		40	Sq.ft		2500.00		100000.00

28	Shifting of solar Panel and the roof top(300 Panel) (lump sum)		1	Job		200000.00		200000.00
29	Interconnection of Solar Panel i/c 4 X 6C fexible Wire and male female connector(lump sum)		1	Job		250000.00		250000.00
						Total of SH G:-		11249241.20
						TOTAL OF (SH A+ SH B+ SH C+ SH D+	18170566	30331943.09
						Total	18170566	30331943.09
						Add Gst 6.33% on DSR Item(10418823.72)		659511.54
						Grand Total	18170566	30991454.63

Assistant Engineer (E)
FESD-I, CPWD, NH-IV,
Faridabad

सहायक अभियन्ता (वै०)-यो.
फ०वै०मं०, के०लो०नि०वि०,
एन० एच०-4, फरीदाबाद।

कार्यपालक अभियन्ता (वै०)
फ०वै०मं०, के०लो०नि०वि०,
एन० एच०-4, फरीदाबाद।

Annexure

Guidelines on Cumulative Professional Development Allowance

1.0 Introduction

This document provides the guidelines for the Cumulative Professional Development Allowance (CPDA) applicable for the eligible employees of NISE. The CPDA is provided for presenting paper (and attending) in conferences/workshops/ seminars (international or national), attending special training in (India or abroad) and also towards the membership fees paid to professional bodies. This guideline is in line with the F.No. 23-1/2008-TS II dated 18th Aug 2009 of MHRD.

2.0 Block Period

- A block period is single unit of duration considered for allotting CPDA.
- Duration of one block period: Three Years.
- First year shall be considered: From the date of start of block period.
- Current Block Period: 1st April 2025 to 31st March 2028, there after followed in similar block of 3 years.

3.0 Eligible employees

All employees who is on the pay roll of NISE to be considered as eligible employees.

4.0 Applicable Allowance:

(a) INR 3.00 Lakhs for a block period.

(b) If an eligible employee joins the Institute or retires from the institute service in between a block period, he/she shall be entitled to this allowance on pro-rata basis.

5.0 Admissibility of CPDA (For each eligible employee) :

Maximum reimbursement in the first year of block period.	INR 1.00 Lakhs
Maximum reimbursement in the second year of block period.	INR 2.00 Lakhs less expenditure incurred during the 1st year of the block period.

Maximum reimbursement in the third year of block period.	INR 3.00 Lakhs less expenditure incurred during the 1st two years of the block period.
Note: Unutilized amount in any block year shall not be carried further to subsequent block years.	

6.0 List of Activities with admissible allowance:

A) **Presenting of Paper / poster and attending International Conferences/Workshops/Symposia/ abroad.**

Total maximum allowable expenditure for the above purpose:	70% of the CPDA i.e INR 2.1 Lacs in a block period.
Expenditure Towards:	a. TA/DA (as per institute norms) b. Registration Fees c. Visa fees.

General Terms:

a. Participating in National / International Conferences / Workshops / Symposia / special training programs requires prior approval.

b. Participation should be recommended by a standing committee (nominated by DG). Committee will review and recommend the relevance of the event, submitted manuscript, and also the author/co-author representation. Eligible employee to give a presentation before the committee before participation. Committee may also review whether the research work mentioned in the manuscript are carried out at NISE. An eligible employee may be recommended once in a year for international conference. However, in case of exceptional case, committee may consider for more chances and approve additional allowance , subjected to approval from competent authority.

c. It is mandatory on the part of the eligible employee to submit a report in the institution after participation in any international conference and submit a report on the papers presented and attended, before making claim for reimbursement of expenditure incurred for participating in National / International Conferences / Workshops / Symposia.

d. The employees who are on deputation/leave (beyond 30 days) are NOT entitled for claiming reimbursement under the CPDA funds- during their absence from the institute.

e. The amount may be sanctioned on reimbursable basis. Advance amount may be sanctioned only up to 90% of the estimated expenses/admissible allowance.

f. The eligible employee shall be responsible for submitting the accounts and claiming reimbursement within a month after participation in the conference / expenditure incurred under various categories.

g. Any participation of the above events/conferences from other sponsored funds (Project etc.) requires only approval from the competent authority, where in CPDA guidelines will not be applicable.

h. Any other participation, as a part of official assignments, will not come under the ambit of CPDA.

B) **Membership Fee for Professional Bodies / and presenting papers or posters in National Conference / Symposia.**

Total maximum allowable expenditure for the above purpose:	30% of the CPDA i.e INR 0.9 Lacs in a block period.
Expenditure Towards:	a) Fees towards acquiring Membership of Professional Bodies/Societies, both National and International. Maximum memberships of three professional bodies/societies from CPDA grant in one block year. b) TA/DA (as per institute norms) Registration Fees of the conference.

General Terms:

a. The ceiling limit in respect of 'Membership Fees for Professional bodies/Contingent Expenses' is Rs. 90,000. which cannot be spent in one go. Out of maximum allocation of Rs. 90,000 in the block of three years, amount up to Rs. 30,000 in the first year, Rs. 30,000 plus unutilized amount of first year in second year and entire unspent balance out of the total allocation may be permitted in the last year.

b. The membership request to be recommended by the concerned DDG.

c. The participation in National Conference to be recommended by the concerned DDG.

3rd Draft _30th Dec 2024