

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY A/P:-LONERE, TALUKA:-MANGAON, DISTRICT:-RAIGAD ESTATE /ELECTRICAL CARE & MAINTENANCE DEPARTMENT

B-1 AGREEMENT

TENDER PAPERS

No. B1-Tender/DBATU/Estate/Electrical Maint./2022-23/02

NAME OF WORK: - SUPPLYING, INSTALLING, TESTING AND COMMISSIONIG OF 5 KW HYBRID SOLAR SYSTEM FOR CLASSROOM AND ESTABLISHMENT SECTION AT UNIVERSITY MAIN BUILDING, LONERE.

AMOUNT PUT TO TENDER: - Rs. 9,96,275/-

Registrar Dr. B. A. T. University, Lonere

DISCLAIMER

- 1. Detailed Time Table for the various activities to be performed in tendering process by the tenderer for quoting his offer is given in this Tender Document under "Tender Schedule ". Contractor should carefully note down the cut-off dates for carrying out each e-tendering process / activity.
- 2. Every effort is being made to keep the website up to date and running smoothly 24 x 7 by the Government and the Service Provider. However, Government takes no responsibility and will not be liable for the website being temporarily unavailable due to any technical issue at any point of time.
- 3. In that event, University will not be liable or responsible for any damages or expenses arising from any difficulty, error, imperfection or inaccuracy with this website. It includes all associated services or due to such unavailability of the website or any part thereof or any contents or any associated services
- 4. Tenderers must follow the time table of tendering process and get their activities of tendering processes down well in advance so as to avoid any inconvenience due to unforeseen technical problem if any.
- 5. University will not be responsible for any incomplete activity of tendering process of the tenderer due to technical error / failure of website and it cannot be challenged by way of appeal, arbitration and in the Court of Law. Contractors must get done all the e-tendering activities well in advance.

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Name of Work: - Supplying, Installing, Testing and Commissioning of 5 kW Hybrid Solar System for Classroom and Establishment Section at University Main Building, lonere.

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Issued to:-			
Transaction ID No.:-			

(Dr.B.F.Jogi) Registrar



Dr. Babasaheb Ambedkar Technological University

(Established by Government of Maharashtra and Governed by Dr. Babasaheb Ambedkar Technological University, Maharashtra Act No. XXIX of 2014) www.dbatu.ac.in

Tender Notice No.: DBATU/Store/Exam /Elec.Maint/2023/2283

Date: 11/08/2023

Following tenders are invited by Registrar, Dr. Babasaheb Ambedkar Technological University, Lonere

The control of the co						
Tenders details	Start Date	End Date				
Online Mode (available on http://www.	Start Date	End Date				
Online Mode (available on http://www.mahatenders.gov.in)	11/08/2023	25/08/2023				
1, 32 1 agos Miswel Booklets 10 b	From	То				
	11:00 AM	5:00 PM				
various Graph Papers and Reports						
Offline Mode (available on www.dbatu.ac.in)						
1 Supplying Installing Text	11/08/2023	22/08/2023				
1. Supplying, Installing, Testing and Commissioning of 5 kw Hybrid	From	To				
Sold System for Classroom and Establishment section at	11:00 AM	5:00 PM				
University Main Bulding, Lonere. 02 Units		M N				

Details of tender RFP, extension, retender, corrigendum or change in schedule will be published at http://www.mahatenders.gov.in for online mode and University website (www.dbatu.ac.in) for offline mode only. Right to reject any or all Tenders without assigning any reason there of is reserved by the University.

Date: 11/08/2023

Registrar



Dr. Babasabeb Ambedkar Technological University

(Established by Government of Maharashtra and Governed by Dr. Babasaheb Ambedkar Technological University, Maharashtra Act No. XXIX of 2014) www.mahatenders.ac.in

Tender notice - DBATU/Store/Ele.maint/2023-24/01

Online e-Tenders in percentage rate in B-1 form for the following work are invited by the Registrar, Dr. Babasaheb Ambedkar Technological University, Lonere from registered contractors with appropriate class.

Name of work	Estimated	Earnest	Time	Tender Fee	Class of	Tender Period
	cost	money	limit	(Rupees)	Contractor	
	(Rupees)	(Rupees)				
Supplying, Installing, Testing and Commissioning of 5 kw Hybrid Solar System for Classroom and Establishment section at University Main Building, Lonere. No of Units: - 02 Nos	9,96,275/-	10,000/-	1 Month	560/-	B and above	As published on www.dbatu.ac.in

Before submitting the proposal, the bidders shall mandatorily register and enlist themselves (the firm and all key personnel), on www.dbatu.ac.in. Further, the bidders shall follow the operating procedure as may be prescribed on the said website. The other details are also available on the portal. Extension of tender, retender, corrigendum or change in schedule will not be published in Newspaper; it will be published only at www.dbatu.ac.in. Right to reject any or all Tenders without assigning any reason thereof is reserved by the University.

(Dr.B.F.Jogi) **Registrar**

TENDER SCHEDULE

Name of work	:	Supplying, Installing, Testing and Commissioning of 5 kw
		Hybrid Solar System for Classroom and Establishment
		section at University Main Building, Lonere.
Period of download of bidding	:	As published on www.dbatu.ac.in
document online		
Last date and time for receipt of	:	As published on www.dbatu.ac.in
online bids (bid due date)		
Time, date of opening technical	:	As published on www.dbatu.ac.in
bids		
Date & time of submission	:	The bidder shall submit in sealed cover with name of work
documents in original		on the envelop hard copy of tender document duly signed by
		bidder to the office of Registrar, Dr. B. A. T. University,
		Lonere District - Raigad within 72 hours of the Bid lock time.
Time, date of opening financial bids	:	As published on www.dbatu.ac.in. Or will be announced
		later
Place of opening of technical bids	:	Dr. B. A. T. University, Lonere District - Raigad
Officer inviting bids	:	Registrar, Dr. B. A. T. University, Lonere District - Raigad

ADDRESS FOR COMMUNICATION

The Registrar,

Dr. Babasaheb Ambedkar Technological University, Lonere.

"Vidyavihar", A/P :- Lonere, Tal :- Mangaon Dist: - Raigad, Maharashtra, India, PIN: 402 103.

Phone no: +91-2140-275142 Fax No: +91-2140-275440 Email: **registrar@dbatu.ac.in** Email: **em@dbatu.ac.in**

1. Introduction

1.1 About The University

The district of Raigad is blessed with historical legacy of Chhattrapati Shivaji Maharaj and Bharat Ratna Dr. Babasaheb Ambedkar, both role models to the community. The University provides an environment, ideal and conducive for nurturing academic progress and pursuit of knowledge.

This University was established on 5th May 1989 by the Government of Maharashtra under the Dr. Babasaheb Ambedkar Technological University Act No. XXII, 1989.

We celebrated the Silver Jubilee Year in 2014. 1st March 2022 is another milestone now in the history of this university, when with the appointment of New Vice-Chancellor Dr. Karbhari Vishwanath Kale, the state Government has declared this university as State Technical University to which the Engineering & Technology, Pharmacy, Architecture and Hotel Management and Catering Technology Institutes from the State shall get affiliated over the next few years. The University is committed to provide guidance and directions in quality technical education, research and development to meet the needs of industry, businesses, and the society, at large.

The benefit of the research and education at the University has to flow to the eco-system in its surrounding.

At present, the University administers 8 UG and 06 PG Programs in Engineering and Technology. It also has 08 Ph.D. programs. There are approximately 4500 students on the campus. The University has a conducted institute of its own, "Institute of Petrochemical Engineering", running Diploma Courses in eight streams of engineering and technology. The University extends its services to the society through a governmental scheme of "Community Polytechnic" by educating the dropouts and empowering them with technical skills. The University offers education especially to rural women through a Certificate Course in Nursing Technology.

PRE-QUALIFICATION CRITERIA

Prospective bidders meeting the following minimum pre-qualification criteria are only eligible to respond to this invitation for bid.

Checklist of Eligibility criteria should be as per the following table:

Sr. No.	Criteria	Supporting Documents
1.	a) The bidder should be a registered contractor with PWD Electrical (Mandatory) in appropriate class B or Above w.r.t. estimated cost put to tender	a) Valid Certified copy of Registration of the concerned authority.
2.	Minimum available Bid Capacity as per given in clause 4.1.15	Bid Capacity statement of the Contractor should be got certified from the Chartered Accountant.
3.	The bidder should be registered with statutory authorities as required	 a) Scanned copy of valid G.S.T. Certificate, b) Scanned copy of PAN Card c) Income Tax Returns Statement for the last Three Assessment Years. d) GST Returns for last financial years.
4	Bidder should not have been blacklisted for any reason by any government institution / department in the last three years.	An affidavit by competent authority/ Self Declaration.
5.	A) Work done in all classes of Electrical Engg. B) Similar type of work carried out C) List of Works in hand D) Undertaking Of Machinery	A) Form No. I B) Form No. II C) Form No. III D) Format Page
6.	Other Important Documents mentioned in Cover-I	Scanned copies of respective documents



Dr. Babasabeb Ambedkar Technological University

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ORIGINAL AGREEMENT NO.B-1

Name of work: - Supplying, Installing, Testing and Commissioning of 5 KW Hybrid Solar System for Classroom and Establishment section at University Main Building, Lonere.

1) Name of Contractor	:						
2) Date of Receipt of Tender	:						
3) No. & Date of Work Order	:						
4) Amount put to tender	: 9, 96,275/-						
5) Percentage Quoted	:						
6) Amount of Contract	:						
7) Date of Commencement	:						
8) Time stipulated for completion	n of work 1 (Month) from the date of written order to start the work.						
9) Date of Completion as per Ag	reement:						
10) Actual Date of completion	:						
11) Reference to Sanction of Ext	11) Reference to Sanction of Extension of time: 1						
3							
Certified that this original Agree	ment contains						
Page 1 to							
Fly Leaves	Nos.						
Drowings	Nos						

DETAILS OF WORK

Name of work: Supplying, Installing, Testing and Commissioning of 5 kw Hybrid Solar System for Classroom and Establishment section at University Main Building, Lonere.

Estimated Cost put to tender Rupees : 9,96,275.00*

* The Estimated Cost put to tender is including 18% GST.

Earnest Money Rupees : 10,000.00

Receipts of Online payment of tender fee as well as EMD should be uploaded to the Tender at the time of submission. 02 (Two) % total Security Deposit Rupees 20,000.00 (50% at the time of Agreement and 50% from R.A. bills). Time Stipulated for completion is 1 (**One**) Calendar Month.

TENDER SCHEDULE:-

Sr.	Stage	Start		Expiry			
No.		Date	Time	Date	Time		
1.	Tender Download	As published on www.dbatu.ac.in					
2.	Bid preparation & submission	As published on www.dbatu.ac.in					
3.	Cover 1 Opening	As published on www.dbatu.ac.in					
4.	Cover 2 Opening	As p	ublished on w	ww.dbatu.a	c.in		

Recei	ot of bid securit	y and tender docum	ent fees :	Upto	Time:

(in original one day before of the opening of the

Technical bid's date and time)

Cost of Tender Form : 560.00

Registration Class of Contractor : B and Above

TO BE FILLED BY THE CONTRACTOR

I / We have quoted my /our offer in percentage rate in words as well as in figures. I/We f	urther
undertake to enter into contract in regular "B-1" form in Dr. B. A. T. University, Lonere.	

Name	and	sionature	α f	Contractor/
Name	anu	Signature	ΟI	Contractor

Power of Attorney holder :

With complete address.

Dr. BABASAHEB AMBEDKAR TECHNOLOGIGAL UNIVERSITY, LONERE INVITATION FOR TENDERS DETAILED TENDER NOTICE

Name of Work: - Supplying, Installing, Testing and Commissioning of 5 kw Hybrid Solar System for Classroom and Establishment section at University Main Building, Lonere.

Online percentage rate tenders in 'B-1' Form are invited by the Registrar, Dr. Babasaheb Ambedkar Technological University at Lonere, Taluka: - Mangaon, District: - Raigad for the following work from Contractors registered in appropriate class of the Public Works Department (PWD Electrical works). The name of work, estimated cost, earnest money, security deposit, time limit for completion etc. are as under.

Sr. No.	Name of work	Estimated cost (Rupees)	Earnest money (Rupees)	Class of Contractor	Time limit
1.	Supplying, Installing, Testing and Commissioning of 5 kw Hybrid Solar System for Classroom and Establishment section at University Main Building, Lonere. No of Units: - 02 Nos	9,96,275/-	10,000/-	B and Above	One Month

Tender form, conditions of contract, specifications and contract drawings can be downloaded from the www.dbatu.ac.in after entering the details of payment towards Tender Fees as per the **Tender Schedule.** Further information regarding the work can be obtained from the office of the Registrar, Dr. Babasaheb Ambedkar Technological University, Lonere, Dist.:- Raigad (Phone No.02140-275 142 / 238)

 be present at that time. For late delivery or no delivery by postal authority/ courier service, the department will not be responsible.

TENDERING PROCEDURE

1.1 Blank Tender Forms.

Tender form can be downloaded from the e-Tendering Portal of Government of Maharashtra i.e. www.mahatenders.ac.in after entering the details of payment towards Tender Fees as per the Tender Schedule.

1.2 Pre-tender conference

- 1.2.1 Pre-tender conference will be held as per the schedule, if required.
- 1.2.2 The prospective tenderers are free to ask for any additional information or clarification either in writing or orally concerning the work, and the reply to the same will be given by the Registrar Dr. Babasaheb Ambedkar Technological University, Lonere and the same will be made available on www.dbatu.ac.in and this clarification referred to as common set of conditions/deviations (C.S.D.), shall form part of tender documents and which will also be common and applicable to all tenderers. The point/points if any raised in writing and/or verbally by the contractor in pre-tender conference and not finding place in C.S.D. issued after the pre-bid conference, is/are deemed rejected. In such case the provision in NIT shall prevail. No individual correspondence will be made thereafter with the contractor in this regards.
- 1.2.3 The tender submitted by the tenderer shall be based on the clarification, additional facility offered (if any) by the University, and this tender shall be unconditional. **Conditional tenders will be summarily REJECTED**.
- 1.2.4 All tenderers are cautioned that tenders containing any deviation from the contractual terms and conditions, specifications or other requirements and conditional tenders will be treated as non-responsive. The tenderer should clearly mention in forwarding letter that his offer (in Cover No. I & II) does not contain any conditions, deviations from terms and conditions stipulated in the tender.

2. SHORT LISTING OF CONTRACTORS FOR FINANCIAL BIDDING PROCESS

The Tendering Authority will first open the Technical Bid documents of all Contractors and after scrutinizing these documents will shortlist the Contractors who are eligible for Financial Bidding Process. The short listed Contractors will be intimated by e-mail.

3. OPENING OF THE FINANCIAL BIDS

The Contractors must be present in the office of the Tender Opening Authority at the time of opening of Financial Bids. However, the results of the Financial Bids of all Contractors shall be available on the University website and e-Tendering Portal immediately after the completion of opening process.

4. TENDER SCHEDULE (KEY DATES)

The Contractors are strictly advised to follow the Dates and Times allocated to each stage as given in tender notice. All the activities are time tracked and the. At the sole discretion of the tender Authority, the time schedule of the Tender stages may be extended.

5 DOCUMENTS TO BE SUBMITTED

5.1 COVER NO. I (TECHNICAL BID DOCUMENTS)

The first Cover clearly marked as "Cover No. I" shall contain scanned copy of following Documents:

- 5.1.1 Online payment towards Tenders fee.
- 5.1.2 Online payment of Rs **10,000/-(Rupees Ten Thousand Only)** for the amount of earnest money. Earnest Money Deposit (E.M.D.) exemption certificate shall not be considered.
- 5.1.3 Scanned Copy of Valid certificate as a Registered Contractor/Firm/Company with the Government of Maharashtra/India in appropriate class as may be applicable in original or attested copy thereof (Attested by a Gazetted Officer).
- 5.1.4 Scanned copy of valid GST certificate.
- 5.1.5 Scanned Copy of Affidavit by Competent Authority/Self Declaration, that Bidder not has been blacklisted.
- 5.1.6 Undertaking of Machinery (Information to be given in Format)
- 5.1.7 Original scanned Copy of Pan Card.
- 5.1.8 Scanned copy of details of work done during last three year with value of work unfinished. (Information to be given in Form no. I)
- 5.1.9 Scanned copy of details of work of similar type and magnitude carried out by the contractor. (Information to be given in Form no. **II**)
- 5.1.10 Details of list of works in hand and works tendered for. (Information to be given in Form no.III)

- 5.1.11 Certified copy of Partnership Deed and Power of Attorney, in case of a firm tendering for work. (True copy attested by a Gazetted Officer).
- 5.1.12 The contractor shall submit an affidavit in original (as per format given on Page No 36) to the tender accepting authority on due date as per tender schedule Regarding completeness, correctness and truthfulness of documents in Envelope No.1).
 - a) Scanned copy of Affidavit in respect of genuineness of documents contained in the Cover No. 1 in the prescribed proforma provided with Tender Set on Stamp Paper of Rs. 500/-(Proforma of Affidavit is attached with Tender).
 - b) The Affidavit is also to be submitted physically as per schedule given in tender in original and will be the part and parcel of contract agreement. Contractor will be solely responsible and liable for action under Indian Penal Code for uploading or physical submission of any false / fraudulent document /information of envelope No. 1 and 2. Contractor will be solely responsible and also liable for action under Indian Penal Code for submission of any false information, false bills / invoice / vouchers of purchase of material in supporting proof of purchase, proof of testing / test results and any other required documents submitted by his staff / representative or by himself or subletting company /contractor during contract period or even after completion of work till finalization of bill and completion of defect liability period.

If false information / documents are submitted as mentioned above, the contractor will be blacklisted and if contract is at initial stage then such contract will be terminated and no any compensation will be payable on any account to the contractor. University Staff / University Officers / Divisional Accounts Officers will not be responsible for any complications due to submission of false / fraudulent documents by the contractor as mentioned above. Separate Affidavit shall be submitted for each work in original. Affidavit not confirming to these conditions will not be accepted and Envelope No. 2 will not be opened.

5.1.13 Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity is more than the total bid value. The available bid capacity will be calculated as under

Assessed Available Bid Capacity = $[(A \times N \times 1.5) - B]$

Where

A = maximum value of Electrical engineering works executed in any one year as a prime contractor during the last Five years (updated to 2021-2022) taking into account the completed works as well as completed value of works in progress.

N = Number of years prescribed for completion of the work for which bids are invited.

B = Value as 2021-2022 price level of existing commitments and ongoing works to be completed during next 06 (Six) months

Note: The statement showing the value of existing commitments and ongoing work as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the officer not below the rank of the Executive Engineer and Bid capacity statement of the contractor should be got certified from the Chartered Accountant.

- 5.1.14 Scanned copies of all other documents mentioned in pre-qualification criteria
- 5.1.15 Numbering should be done for all papers contained in Cover No. 1 amid indexed.
- 5.1.16 All the documents from Sr. No.4.1.1 to 4.1.16 shall be given by contractor in Cover No.1 correctly and completely otherwise his Cover No.2 will not be opened.

Even though the Bidders meet the above qualifying criteria, they are subject to be disqualified if they have made.

Misleading or false representations in the Statements, attachments submitted in proof of the qualification requirements.

And / or

Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history or financial failures etc.

5.2. OFF LINE SUBMISSION

All documents are to be submitted offline including tender fee and EMD. However in special circumstances the tender fee and EMD will be accepted offline.

5.3 COVER II (FINANCIAL BID)

- The second envelope marked as "Cover No. 2" shall Contain only the main tender including the Common Set/ Deviation issued by the University after the pre-tender Conference. It shall also contain the Scanned Copy of the Demand Draft as performance Security if the offer quoted is below the estimated cost put to tender as explained in Para 6.1 under performance Security. A tender submitted without this would be considered as invalid.
- 2. The second cover "COVER II" shall contain only the main tender. The Tenderer should quote his offer in terms of **Percentage of Estimated rates** at the appropriate place of B.O.Q. template to be submitted online only in COVER II. Tenderer should not quote

his offer anywhere directly or indirectly in COVER I. The contractor shall quote for the work as per details given in the main tender and also based on the detailed set of conditions / deviations issued / Additional stipulations made by the University from Registrar after pre- tender conference, if any. His tender shall be unconditional.

3. Second Cover Shall also contains Form C1.

5.4 SUBMISSION OF TENDER

i.) HARD COPY SUBMISSION

Submission of Hard Copy of tender and necessary documents:

Tenderer must submit the Hard copy to the office Registrar.

- a) Documents submitted online in Cover No.1 & 2 are put in separate Envelope as Cover No.1 (Technical Bid) and Cover No. 2 (Financial Bid) respectively and sealed properly.
- b) The above two sealed Cover No.1 and 2 shall be again put together in one common cover and sealed. The name of work, online tender Notice Number (i.e. SGN) and Name and full address of Tenderer with mobile number shall be mentioned on the said common cover marked sealed Common cover properly covers corner.
- c) The above Common cover Containing Cover No.1 and 2 must be submit to the Registrar within the time and date specified in Tender Schedule Flashed on Web-site portal on working days (during office hours) only.
- d) No delay on account of any cause will be entertained for the receipt said Hard copy.
- e) If tenderer fails or neglect to submit Hard copy <u>his online offer (Tender) will be considered for further tendering procedure.</u>

5.5 OPENING OF TENDERS

On the date, specified in the Tender Schedule, following procedure will be adopted for opening of the Tender.

(A) COVER I: (TECHNICAL BID DOCUMENTS)

First Cover I of the tender will be opened online to verify its contents as per requirements. If the scanned copies of various documents contained in this cover do not meet the requirements of the Department, a note will be recorded accordingly by the tender opening authority and the said tenderer's Cover II will not be considered for further action and the same will be recorded. The decision of the tender opening authority in this regard will be final and binding on the contractors.

(B) COVER II: (FINANCIAL BID)

This Cover II shall be opened online after opening of Cover I, only if the contents of Cover I are found to be acceptable to the University. The tendered rates in percentage above/below the

Estimated rates shall then be read out (From pg No. 41) in the presence of bidders who remains present at the time of opening of Cover II.

6. EARNEST MONEY

Tenders should be deposited along with Earnest Money of **Rs 10,000.00/-** (as indicated in tender document) **via online/Demand Draft** payment mode. No EMD exemption certificate will be entertained in lieu of online gateway payment. The earnest money will be refunded in due course in case of tenderers whose tenders are not accepted. In case of successful tenderer, the Earnest money will be adjusted towards the initial security deposit and completing the tender documents by the Tenderer. The amount of Earnest Money will be forfeited to University in case the successful contractor does not pay the amount of initial security deposit within specified time limit.

Earnest Money in the form of cheques or any other form except online will not be accepted.

7. SECURITY DEPOSIT

Successful Bidders will be required to pay a sum fixed by the Registrar as a **security deposit i.e. 2%** (The earnest money submitted by the Bidder will be converted into Security Deposit) and enter into agreement for the performance of the contractor. The security deposit will be returned to the vendor after the expiry of defect liability period and it should be extendable upto expiry of valid extension if any, as directed by Engineer-incharge.

7.1 ADDITIONAL PERFORMANCE SECURITY DEPOSIT

- A. If the tenderer has quoted the offer less than 1% below the estimated rates put to tender, then the tenderer shall have to submit Additional Performance Security Deposit in the form of Bank Guarantee /Demand Draft/ Fix Deposit Receipt of any Nationalized or Scheduled bank in favour of the University.
- B. The scanned copy of the Bank Guarantee / Demand Draft/ Fix Deposit Receipt shall be uploaded and submitted in online Envelope no. 2, through e-tendering process, while the original Bank Guarantee / Fix Deposit Receipt shall be submitted in the sealed envelope in the office of the Registrar within 3 working days from the last date prescribed for the receipt of tender.

C. The amount of the Bank Guarantee /Demand Draft/ Fix Deposit Receipt shall be calculated by the tenderer in accordance with the following manner.

a)	If the offer submitted is below schedule "B"	1% of the estimated cost put to tender
	rates by more than 1% but less than 10% of the	
	estimated cost put to tender	
b)	If below by more than 10% of the estimated	1% of the estimated cost put to tender plus an
	cost put to tender	amount equal to the percentage by which the offer is
		below 10% of the estimated cost put to tender.(e.g.
		if the offer is 14.00% below, then performance
		Security will be 1%+(14%-10%)=5.00% of the
		estimated cost put to tender.
c)	If offer is more than 15% below	For balance amount, submission of double amount
		in the form of Demand Draft/Fixed Deposit Receipt
		/ Bank Guarantee is mandatory for example 19%
		below rate
		Upto 10% below rate =01%
		Upto 15% below rate =05%
		(15%-10%)
		Upto 19% below rate
		(19%-15%=4% x 2) = <u>08%</u>
		Total = 14%

Note: - (i) For more than 10% below and upto 15% below 'b' is applicable.

- (ii) For more than 15% below 'c' is applicable.
- D. The Bank Guarantee / Fix Deposit Receipt shall be valid beyond 1 month after the expiry of Defect Liability Period.
- E. After opening the online Cover No. 1, if it is found that the tenderer is not qualified for opening his online Cover No. 2, then his Bank Guarantee / Fix Deposit Receipt shall be returned within 7 days. Also after opening online Cover No.2, except the Bank Guarantee / Fix Deposit Receipt of 1st and 2nd lowest bidders, the Bank Guarantee /Demand Draft / Fix Deposit Receipt of other bidders shall be returned within 7 days.
- F. Bank Guarantee / Fix Deposit Receipt of the 2nd lowest bidder shall be returned 3 days after the issue of work order to the 1st lowest bidder.
- G. The scanned copy of this Bank Guarantee/FDR shall be uploaded in Envelope No. 2 (Financial Offer) of the bid. The Hard Copy of Bank Guarantee shall be submitted in the

office of the Registrar in "sealed envelope" within 72 hours from the date of receipt of bid. The bidder shall write the 'Name of Work,' 'E- Tender No.' and 'Tender Notice No.' on such sealed envelope addressed to the Registrar.

H. If it is found that the Bank Guarantee as above submitted by the bidder is False / Forged then the Earnest Money submitted by such bidder shall be forfeited and request will be made to PWD for suspending his registration as a contractor of Public Works Department & he will be entered in the Black List. This is also applicable for Unregistered Bidder in such case he will be entered in the Black List.

I. Refund of Additional Performance Security.

- i. The amount of the Additional Performance security shall be refunded within 3 months after completion of Defect Liability Period, as per the Government of Maharashtra, Public Works Department, Mantralaya, Mumbai G.R No.CAT-2017/CR-8/(II)/Bldg-2, Dt.27/9/2018.
- ii. Non submission of Additional Performance Security deposit and performance security or submission of less amount of the Additional Performance Security deposit shall be liable to summarily rejection of his tender.
- iii. After complete tender process, if bidder submitted the Demand Draft with tender, then the lowest bidder will submit requisite amount of Bank Guarantee and then Demand Draft will be refunded with tender.

8 TIME LIMIT

- (a) Work completion period as specified in the **N.I.T**. shall be reckoned from the date of work order for commencing the work and shall be inclusive of monsoon period.
- (b) The validity of tender is 120 Days.

9 TENDER RATE

No alteration in the form of tender and the schedule of tender and no additions in the scope of special stipulation will be permitted. Rates quoted for the tender shall be taken as applicable for all leads and lifts.

10 TENDER UNITS

The tenderers should particularly note the unit mentioned in the Schedule "B" on which the rates are based. No change in the units shall be allowed. In the case of difference between the rates written in figures and in words ,the correct rate will be the one, which is lowest of the two.

11 CORRECTION

No corrections shall be made in the tender documents. Any corrections that are to made shall be made by crossing the incorrect portion and writing the correct portions above with the initials of tenderer.

12 TENDER ACCEPTANCE

Acceptance of tender will rest with **Dr. Babasaheb Ambedkar Technological University, Lonere** who reserves the right to reject any or all tenders without assigning any reason therefore. The tenderer whose tender is accepted will have to enter in to a regular B-1 agreement within 10 days of being notified to do so. In case of failure on the part of Tenderer to sign the agreement within the stipulated time, the earnest money paid by him shall stand forfeited to the University and the offer of the tenderer shall be considered as withdrawn by him.

13 CONDITIONAL TENDER

The tenderers who do not fulfil the condition of the notification and the general rules and directions for the guidance of contractor in the tender or incomplete in any respect are likely to be rejected without assigning any reason therefor.

- 13.1 The Tenderers shall be presumed to have carefully examined the conditions of as prescribed in tender document and have fully acquainted themselves with all details of the site conditions and in general with all the necessary information and data pertaining to the work, prior to tendering for the work.
- 13.2 The data whatsoever supplied by the University along with the tender documents are meant to serve only as guidelines for the tenderers while tendering and the Department do not take any responsibility whatsoever either for the accuracy of data for their comprehensiveness.
- 13.3 The quarries for extraction of metal, murum etc. provided in the sanctioned estimate are as per survey conducted by the University. The Contractor should however examine these quarries and see whether full quantity of materials required for execution of the work strictly as per specification are available in these source before quoting the rates. In case the materials are not available due to reasons whatsoever, the contractor will have to bring the materials from any other source with no extra cost to Government. The rates quoted, should therefore be for all leads and lifts from wherever the materials are brought at site of work and inclusive of royalty to be paid to the University by the Contractor.

- 13.4 No foreign exchange will be released by the Department for the purchase of plants and machinery for the work by the Contractor.
- 13.5 All scanned pages of tender documents, conditions, specifications, corrections slips etc. shall be initialed by the tenderer. The tender should bear full signature of the tenderer, or his authorized power of Attorney holder in case of a firm.
- 13.6 The Income Tax at prevailing rates including surcharges or percentage in force from time to time or at the rate as intimated by the competent Income Tax authority shall be deducted from bill amount whether measured bill or advance payment or secured advance.

14 POWER OF ATTORNEY

- 14.1 If the tenderers are a firm or company, they should mention the names of all the partners together with the name of the person who holds the power of Attorney, authorizing him to conduct all transactions on behalf of the body, along with the tender as per scanned copy uploaded in Cover I.
- 14.2 The tenderer may, in the forwarding letter, mention any points be may wish to make clear but the right is reserved to reject the same or the whole of the tenders if the same become conditional tender thereby.
- 14.3 The contractor or the firms tendering for the work shall inform the University if they appoint their authorized person on the work.

15 VALIDITY PERIOD

The offer shall remain open for acceptance for minimum period of **120 days** from the Date of opening of Cover No.2 (Financial Bid) and thereafter until it is withdrawn by the contractor by notice in writing duly addressed to the authority opening the tender and sent by Registered Post Acknowledgment due.

16. TESTING OF MATERIALS

All the material shall be tested from time to time according to the frequency chart attached in the tender. No separate charges will be given by the University and same have to borne by the Contractor himself

17 Contractor is Liable for action under relevant clauses/sections of Indian Penal Code if any papers are found to be false/fraudulent paper/information submitted in Cover no.1, Also if during contract period and defect liability period, any false information, false bill of purchases submitted as supporting proof of purchase, proof of testing submitted by contractor staff or by

- contractor and even after the completion of contract and finalization of final bill. (As per Govt. resolution no. CAT-2018/C.R. 127/ Buld-2, Dated- 28.11.2018).
- Successful contractor shall submit a certificate on a 100 Rs. Stamp paper to the effect that "All the payments to the labour/ Staff are made in bank accounts of staff linked to Unique Identification Number (AADHAR CARD) the certificate shall be submitted by contractor within 60 day from the commencement of contract.
- 19. The successful tenderer will be required to produce, to the satisfaction of the specified concerned authority a valid concurrent license issued in his favor under the provisions of the Contract Labour (Regulation and Abolition) Act 1970 for starting the work. On failure to do so, the acceptance of the tender shall be liable to be withdrawn and also liable for forfeiture of the earnest money.
- **20.** The tenderer shall submit the list of apprentices engaged by the Contractor under Apprentice Act.
- 21. Bidders convicted of an offence under the Bombay Prohibition Act, 1949, or the Bombay Opium Act, 1936, will be considered ineligible for being given contracts.

22. BID EVALUATION PROCESS

22.1 Proposal Evaluation Process

- 1. Proposals will be evaluated by a Committee of Experts (the "Committee") appointed by the university. Evaluations of bids will be only on the basis of information provided by the bidders in the proposals, or any additional information provided by the bidders against specific requests for clarifications sent by the university during the evaluation process. The bids submitted with required EMD only will be considered
- 2. Evaluation of the bids will be done in the following sequence and at the end of every stage, short listed bidders will be informed of the results of evaluation
- a. Scrutiny of Bid Security and adherence to general guidelines
- b. Evaluation of prequalification proposal
- c. Evaluation of Technical proposal
- d. Live demo and / or site visits if necessary
- e. Opening of commercial proposal
- f. Final evaluation of the Techno commercial bid and finalization of the bid

 Only those bids that have been technically qualified will be considered for opening the commercial bid.

22.2 Technical Proposal Evaluation

- 1. The Technical bid will be scrutinized for complying with the following requirements before going ahead with further evaluation of the bid.
- a. Proposal Covering letter as response to the RFP.
- b. statement on Clarifications as required

Evaluation of the solution - the technical solution proposed by the bidder may be evaluated against the response to the RFP and on the basis of live demonstration of the solution including site visit/s required if any

The final decision of the technical evaluation of the proposals submitted by the bidders shall rest with the University and the decision of the expert committee appointed by the university on the technical evaluation of the proposals shall be final and binding on all the bidders.

22.3 Presentation and live demo of the solution

The committee shall invite each bidder to make a presentation and live demo of the proposed work to the university at a date, time and venue determined by the University and the Solution Provider shall attend the same at his own cost. The purpose of such presentations and live demo would be to allow the bidders to present their solution to the university and to evaluate the same by the expert committee of the university in order to arrive at the final and considered decision. The bidders shall arrange for live site visits when demanded by the expert committee where similar solutions have been implemented or under implementation. Such site visits shall be done independently by the expert committee and the bidder shall not accompany any of the University officials or members of the expert committee. The expenses for the travel of the committee shall be borne by the University.

22.4 Clarifications during evaluation

- 1. During the time of the evaluation of the Bids, the University may seek clarifications from the bidder on specific items in the bids submitted by them. All such clarifications will be sent to the contact persons indicated in the proposal either by email.
- 2. The primary role of clarifications in the evaluation process is to clarify ambiguities and uncertainties arising out of the evaluation of the bid documents. The clarifications provide the opportunity for the University to state its requirements clearly and for the bidder to more clearly state its proposal.
- 3. If such clarifications are oral in nature, they will only be considered in the form of minutes of the meeting duly signed/agreed to by the all the participants.
- 4. The bidder has the option to respond or not respond to these queries. If the bidder fails to respond within the stipulated time period, the University has the right to make assumptions on the Bids submitted by the SP/contractor and if such assumptions lead to disqualification of Bids, the University is not accountable for these omissions.
- 5. All the responses to the clarifications will be part of the Technical Proposal of the respective bidders, and if the clarifications are in variance with the earlier information in the proposal, the information provided in later stages will be the part of the contract for implementation between SP/Contractor and the University.
- 6. If any of the responses by the SP//Contractor to the queries sent by the University has commercial implications, these commercial aspects will not be accommodated in the evaluation process.

22.5 Notification of Award and signing of contract

- 1. The University will award the Contract to the bidder whose proposal has been determined to be the successful bidder based on the above evaluation method.
- 2. The University reserves the right to negotiate further with the bidder whose proposal has been accepted as successful bidder.
- 3. Prior to the expiration of the validity period, The University will notify through a "Letter of Intent", to the successful bidder in writing that their proposal has been accepted and invite them for signing a formal contract.
- 4. **Signing the contract-** The University shall execute a formal contract with the SP//Contractor on mutually agreeable terms and conditions and as per the RFP and the bid submitted in response to the RFP by incorporating all necessary terms and conditions to protect the continuing interest of both the parties while implementing the said project. The contract shall clearly specify the deliverables under the scope of service, duration of the contract, payment terms, performance metrics and responsibility matrix of both the parties and protection of the interest of both the parties, penalty for non-performance of both the parties, force majeure etc in accordance with the Indian contracts Act. Any amendment to the contract if required during the period of subsistence of the contract shall be carried out as addendum to the existing contract after both the parties agree to the terms thereof.

22.6 Lack of Competition

1. If a situation arises where if after evaluation of bids, the tendering authority ends up with one responsive Bid only and in such situation, the tendering authority would check as to whether while floating the tender all necessary requirements to encourage competition like standard bid conditions, industry friendly specifications, wide

publicity, sufficient time for formulation of Bids, etc were fulfilled. If not, the tender would be re-floated after rectifying deficiencies.

- 2. The bid process shall be considered valid even if there is one responsive Bid, provided that:
 - i. the Bid is technically qualified
 - ii. the price/percentage quoted by the bidder is assessed to be reasonable
 - iii. the Bid is unconditional and complete in all respects
 - iv. there are no obvious indicators of cartelization amongst bidders and
 - v. the bidder is qualified as per the provisions of pre-qualification/ eligibility criteria in the bidding document
 - 3. The tendering authority shall prepare a justification note for approval by the next higher authority of the procuring entity and with the concurrence of the committee.
 - 4. In case of dissent by any member of bid evaluation committee, the next higher authority in delegation of financial powers shall decide as to whether to sanction the single Bid or re-invite Bids after recording reasons.
 - 5. If a decision to re-invite the Bids is taken, market assessment shall be carried out for estimation of market depth, eligibility criteria and cost estimate.

22.7 Delays in Completion of Work

Please refer the Clause 2 of Conditions of Contract.

Bid Formats

Details	Formats
Response Formats for Technical Proposal	Cover I
Response Formats for Financial Proposal	Cover II

ANNEXURE I

Form T.1

Technical Proposal Covering Letter

(Company letter head)

[Date]	
The Registrar,	
Dr. Babasaheb Ambedkar Technological University, Lonere-Rai	gad
Dear Sir,	
Ref: Request for Proposal of	
Having examined the bid document, the receipt of undersigned, offer to execute	
We attach hereto the bid technical proposal as requiproposal.	•
We undertake, if our proposal is accepted, to execute the unconditional acceptance of all the terms and conditions set our response for a period of 6 months opening and it shall remain binding upon us with formal contract is prepared and executed. This bid thereof in your notification of award, shall const University.	put forward in this RFP. We agree for the tin the bid document and also agree to abide by this bid to from the date fixed for bid full force and virtue, until within this period response, together with your written acceptance.
We confirm that the information contained in thi exhibits, schedules, and other documents and instructional University is true, accurate, and complete. This ensure that the statements therein do not in whole material fact.	ruments delivered or to be delivered to the proposal includes all information necessary to
We agree that you are not bound to accept the localso agree that you reserve the right in absolute specified in the bid response without assigning any reason whatsometric than the bid response without assigning any reason whatsometric than the bid response without assigning any reason whatsometric than the bid response without assigning any reason whatsometric than the bid response without assigning any reason whatsometric than the bid response without assigning any reason whatsometric than the bid response without assigning any reason whatsometric than the bid response without assigning any reason whatsometric than the bid response without assigning any reason whatsometric than the bid response without assigning any reason whatsometric than the bid response without assigning any reason whatsometric than the bid response without assigning any reason whatsometric than the bid response without assigning any reason whatsometric than the bid response without assigning any reason whatsometric than the bid response without assigning any reason whatsometric than the bid response without assigning any reason what as the bid response without assigning any reason what are the bid response without assigning any reason where the bid response with	sense to reject all or any of the tender
It is hereby confirmed that I/We are entitled to firm/organization and empowered to sign this documnary be required in this connection.	to act on behalf of our corporation/company. nent as well as such other documents, which
Dated this	Day of 2023
(Signature)	(In the capacity of)

Duly authorized to sign the Bid Response for and on behalf	f of:
(Name and Address of Company)	Seal/Stamp of bidder
CERTIFICATE AS TO AUTHORISED SIGNATORIES	
I, certify that I am designation> of Name of the Respondent> to bind the company by authority of its governing body.	* *
	Date:-
(Seal here)	

ANNEXURE II

Form C.1

Commercial/Financial Proposal Covering letter

[Date]
The Registrar,
Dr. Babasaheb Ambedkar Technological University, Lonere-Raigad
Ref: Commercial Proposal for
Dear Sir,
Having examined the Bid Document, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to execute
We attach hereto the commercial proposal as required by the Bid document, which constitutes ou proposal.
We undertake, if our proposal is accepted, to execute the
out forward in the RFP.
We agree for acceptance of all the terms and conditions in the bid document and also agree to abide by the bid response for a period of 6 months from the date of opening the commercial bid and it shall remain binding upon us until such time a formal contract is prepared and executed within the 6 months.
We agree that you are not bound to accept the lowest or any bid response you may receive. We also agree that you reserve the right in absolute sense to reject all or any of the tender specified in the bid response without assigning any reason whatsoever.
It is hereby confirmed that I/We are entitled to act on behalf of our corporation/company firm/organization and empowered to sign this document as well as such other documents, which may be required in this connection.
Dated this Day of 2023
(Signature) (In the capacity of)
Duly authorized to sign the Bid Response for and on behalf of:
Name and Address of Company) Seal/Stamp of bidder
CERTIFICATE AS TO AUTHORISED SIGNATORIES
I, certify that I am of the, and that who signed the above proposal is authorized to bind the
corporation by authority of its governing body.

FORM NO. - I

STATEMENT SHOWING WORK DONE IN ALL CLASSES OF ELECTRICAL ENGINEERING CONTRACTION WORK DURING LAST THREE YEARS.

NAME OF CONTRACTOR:-	
·	

Sr.	Name of	Amount	Agreement	Date of	Amount of work done		Amount of	Remarks	
No.	the work	Put to	No.	Comme	durir	ng each o	f last	work still	
		Tender /		ncement	three	years (H	Rs. in	remaining to	
		Tendered				Lakhs)		be executed	
		Cost.						2021-2022	
		(Rupees							
		In Lakhs)			2019-20	2020-21	2021-22		
1	2	3	4	5	6	7	8	9	10
	ĺ								

Outward No. and Date of Certificate issuing authority.

Signature of bidder

FORM NO. – II

DETAILS OF WORKS OF SIMILAR TYPE AND MAGNITUDE CARRIED OUT BY CONTRACTOR

NAME OF CONTRACTOR:-	

Sr. No.	Name of the work	Amount put to Tender/Tender ed Cost(Rupees in Lakhs)	Agreeme nt No.	Date of Commenc ement	Amount of Work done during each of last three years(Rs in lakhs)		Date of Comple tion	Principle Feature in brief	
					2019-20	2020-21	2021-22		
1	2	3	4	5	6	7	8	9	10

Note: This is only a standard form Details are to be furnished in this format in the form of type written statements which shall be enclosed in Cover-1.

Signature of bidder

FORM NO. - III

DETAILS OF LIST OF WORKS IN HAND AND WORKS TENDERED FOR AS ON-----

NAME OF CONTRACTOR:		
_		

(I) WORKS IN HAND

Sr. No.	Name of the work	Agreement No.	Tendered Cost. (Rupees In Lakh)	Date of Commen cement	Stipulated Date of Completi on	Value of work already done (Rs. in Lakhs)	Value of balance work	Probable Date of Completi on	Remarks
1	2	3	4	5	6	7	8	9	10

(II) WORKS TENDERED FOR

Name of the work	Name and Address of Client	Tendered Amount (Rs. in Lakhs)	Time Limit	Probable Date when decision is expected	Other relevant Details if any.
2	3	4	5	6	7
	the work	the work Address of Client	the work Address of Amount (Rs. Client in Lakhs)	the work Address of Amount (Rs. Client in Lakhs)	the work Address of Amount (Rs. when decision is Client in Lakhs) expected

Note: This is only a standard form Details are to be furnished in this format in the form of type written statements which shall be enclosed in Cover-1.

Signature of bidder

UNDERTAKING

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SELF UNDERTAKING OF CONTRACTORS WITHOUT OWNERSHIP OF MACHINERY

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[Affidavit on stamp paper of Rs.500/- registered before the Notary or Executive Magistrate]

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Commissioning of 5 kw Hybrid Solar System f	or Classroom an	d Establishment section at
University Main Building, Lonere." ªÉÉ EÒ	É"ÉɺÉÉ`Ò	ÊxÉÊ′ÉnùÉ ºÉÉnù®ú

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FORM B -1 PRECENTAGE RATE TENDER & CONTRACT FOR WORKS

Name of work: "Supplying, Installing, Testing and Commissioning of 5 Kw Hybrid Solar System for Classroom and Establishment section at University Main Building, Lonere."

General Rules and Directions for the Guidance of Contractors

- 1. All works proposed to be executed by contract shall be notified in a form of invitation to tender pasted on a board hung up in the office of the Registrar DBATU, Lonere and signed by the Registrar DBATU, Lonere. This form will state the work to be carried out as well as the date for submitting and opening tenders, and the time allowed for carrying out the work also the amount of earnest money to be deposited with the tender, and the amount of the security deposit and performance guarantee to be deposited by the successful tenderer and the percentage, if any, to be deducted from bills. Copies of the specifications, designs, drawings and estimated rates, scheduled rates and any other document required in connection with the work shall be signed by the Registrar for the purpose of identification and shall also be open for inspection by contractors at the office of Registrar DBATU, Lonere during office hours.
- Where the works are proposed to be executed according to the specifications recommended to a contractor and approval by a competent authority on behalf of the Building and Works committee, such specification with designs and drawings shall form part of the accepted tender.
- 2. In the event of the e-tender being submitted by a firm, it must be digitally signed. Such tender will be treated as signed tender. For physical tender it must be signed separately by each partner

thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power-of-attorney authorizing him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act, 1952.

- 2. (A) I) The contractor shall pay along with the tender the sum of....... as and by way of earnest money. The contractor may pay the said amount by forwarding along with the tender e-print of online payment for the said amount. The said amount of earnest money shall not carry any interest what-so-ever.
- II) In the event of his tender being accepted, subject to the provisions of sub-clause (iii) below, the said amount of earnest money shall be appropriated towards the amount of security deposit payable by him under conditions of General Conditions of contract.
- III) If, after submitting the tender, the contractor withdraws his offer or modifies the same, or if, after the acceptance of his tender the contractor fails or neglects to furnish the balance of the security deposit, within 10 days from receipt of acceptance letter without prejudice to any other rights and powers of the University, hereunder, or in law, University shall be entitled to forfeit the full amount of the earnest money deposited by him.
- IV) In the event of this tender not being accepted, the amount of earnest money deposited by the contractor shall, unless it is prior thereto forfeited under provisions of sub-clause (iii) above, be refunded to him on his passing receipt there for. (B&C. Dept. Resolution No.CAT-1272/44277-Q DT-3-3-73.)
- 3. Receipts for payments made on account of any work, when executed by a firm, should also be signed by all the partners except where the contractors are described in their tender as a firm, in which case the receipt shall be signed in the name of the firms by one of the partners, or by some other person having authority to give effectual receipt for the firm (holding the power of attorney).
- 4. Any person who submits a tender shall fill up the usual printed form stating at what percentage above or below the rates specified in Schedule B (Memorandum showing items of work to be carried out) he is willing to undertake the work. Only one rate or such percentage on all the estimated rates/ schedule rates shall be named. Tenders, who propose any alternation in the works specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions will be liable for rejection. No printed form of tender shall include a tender submit a separate tender for each. Tender shall have the name and numbers of the work to which they refer written outside the envelope.
- 5. Registrar or his duly authorized Assistant shall open tenders in the presence of contractors who have submitted tenders or their representatives who may be present at the time, and he will enter

the amounts of the several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, the contractor shall for the purpose of identifications, sign copies of the specifications and other documents mentioned in Rule 1. In the event of tender being rejected, the Registrar shall authorize the other officer concerned to refund the amount of the earnest money deposited to the contractor making the tender, on his giving a receipt for the return of the money.

- 6. The officer competent to dispose off the tenders shall have the right of rejecting all or any of the tenders.
- 7. No receipt for any payment alleged to have been made by a contractor in regard to any matter relating to this tender or the contract, shall be valid and binding on University unless it is signed by the Registrar.
- 8. The memorandum of work to be tendered for and schedule of materials to be supplied by the DBATU and their rates shall be filled in and complete by the office of the university engineer before the tender form is issued. If a form issued to an intending tendered has not been so filled in and completed, he shall requested the said office to have this done before he completes and delivers his tender.
- 9. All work shall be measured net by standard measure and according to the Rules and customs of the Public Works Department and their rates shall be with reference to local custom and Indian standards and standards laid by PWD.
- 10. Under no circumstances shall any contractor be entailed to claim enhanced rates for any item in contract.
- 11. All corrections and additions or pasted slips should be initialed.
- 12. The measurements of work will be taken according to the usual methods used in the Public Works Department and no proposals to adopt alternative methods will be accepted. The University Engineer's decision as to what is "the usual method in use in the Public Works Department" will be final.
- 13. The tendering Contractor shall furnish a declaration along with the tender showing all works for which he has already entered into contract and the value of the work that remain to be executed in each on the date of submitting the tender.
- 14. In view of the difficult position regarding the availability of foreign exchange, no foreign exchange would be released by the University for the purchase of plant and machinery required for the execution of the work contracted for. (GCD/CFM/1058/62517 OF 26.5.1959)
- 15. The contractor will have to construct shed for storing controlled and valuable materials brought by Contractor at work site having double locking arrangement at Contractors cost. The material will

- then be taken for use in the presence of the University person. No materials will be allowed to be removed from the site of works.
- 16. The contractors shall also give a list of machinery in their possession and which they propose to use on the work.
- 17. Successful tender shall have to produce to the satisfaction of the accepting authority a valid and current license issued in his favour under the provisions of Contract Labour (Regulation and Abolition Act, 1973) before starting the work. Failing which, acceptance of the tender shall be liable for withdrawal and earnest money shall be forfeited to the University (refer Government of Maharashtra, Irrigation and Power Department's letter NO. Lab 1076h 181/(666E-17), Dated 8/9/1976.
- 18. The contractor shall comply which the provisions of Apprentices Act, 1961 and the rules and orders issued the under from time to time. If he fails to do so, his failure shall be breach of the contract and the Vice-Chancellor/Registrar, May in is discretion cancel the contract. The contractor shall also the liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.

TENDER FOR WORKS

I/We hereby tender for the execution, for the Registrar (here-in before and herein after called as
the University) of the work specified in the underwritten through online memorandum within the
time specified in such memorandum at *In wordsIn
per cent below/above the estimated cost entered in Schedule B (Memorandum
showing items of work to be carried out) and in accordance in all respects with the specification,
designs, drawing and instructions in writing referred to in Rule I thereof and in Clause 12 of the
annexed conditions of contract and agree that when material for the work are to provided by the
University, Such materials and the rates to be paid for them shall be as provided in 'Schedule A'
hereto.

The tenderer shall quote his offer through online.

MEMORANDUM

Name of work: - "Supplying, Installing, Testing and Commissioning of 5 Kw Hybrid Solar System for Classroom and Establishment section at University Main Building, Lonere."

(b) Estimated cost : 9,96,275/-(c) Earnest Money : 10,000/-

To be converted into security deposits

for the successful tenderer

(d) Security Deposit(Total 2%)

(i) Amount (Not less than the amount: 10,000/-

Earnest Money) (1%)

(ii) To be deducted from running : 10,000/-

Total Rs. 20,000.00

(e) Percentage, if any, to be deducted from bills so as to make up the total amount required as security deposit by the time, half the work, as measured

2% (Two percent)

by the costs, is done.

(f) Time allowed for the work from date of 4 Months written order to commence.

- 2. I/We agree that this offer shall remain open for acceptance for a minimum period of 120 days from the date fixed for opening the same means Cover No.2 and thereafter until it is withdrawn by me/us by notice in writing duly addressed to the authority opening the tenders and sent by registered post A.D. or otherwise delivered at the office of such authority. Online Payment No. and date in respect of the sum of **Rupees 10000.00/-** (**Rupees Ten Thousand**) only. Representing the earnest money is herewith forwarded. The amount of earnest money shall not bear interest and shall be liable to be forfeited to the University should I/We fail to (1) abide by the stipulation to keep the offer open for the period mentioned above or (2) sign and complete the contract documents as required by the Registrar and furnish the security deposit as specified in item (d) of the memorandum contained in paragraph 1 above within the time limit laid down in clause (I) of the annexed General Conditions of contract. The amount of earnest money may be adjusted towards the security deposit or refunded to me/us if so desired by me/us in writing, unless the same or any part thereof has been forfeited as aforesaid.

Contractor :- Signature of Contractor

before submission of the tender.

Address :-

Dated The Day of Month 2023 -----

(Witness) :-

Signature of witness to contractors

Address :-

(Occupation) :-

The above tender is hereby accepted by me for and on Behalf of Dr. Babasaheb Ambedkar Technological University, Lonere.

Registrar

CONDITIONS OF CONTRACT

CLAUSE 01

Security Deposit

The person/persons whose tender may be accepted (hereinafter called the contractor, which expression shall unless excluded by or no repugnant to the context include his heirs, executors, administrators, and assigns) shall (A) within 10 days (which may be extended by Registrar concerned up to 15 days if the Registrar thinks fit to do so) of the receipt by him of the notification of the acceptance of his tender deposit with the University in cash or Government securities endorsed to the Registrar (if deposited for more than 12 months) of sum sufficient which will made up the full security deposit specified in the tender or (B) (Permit University at the time of making any payment to him for work done under the contract to deduct such as will amount to * Two percent of all moneys so payable such deductions to be held by University by way of security deposit) provided always that in the event of contractor depositing a lump sum by way of security deposit as contemplated at above, then and in

Resolution such case, if the sum so deposited shall not amount to **Two percent** of the total estimated cost of the work, it shall be lawful for University at the time of making any payment to the contractor for work done under the contract to make up the full amount of Two **percent** by deducting a sufficient sum from every such payment as last aforesaid until the full amount of the security deposit is made up. All compensation or other sums of money payable by the sale of sufficient part of his security deposit or from the interest arising there from, or from any sums which may be due or may become due by Government to the contractor under any other contract or transaction of any nature on any account whatsoever and in the event of his security deposit being reduced by reason of any such deduction or sale as aforesaid, the contractor shall, within ten days thereafter, make good in cash or Government securities endorsed as aforesaid any sum or sums which may have been deducted from, or raised by sale of his security deposit or any part thereof. The security deposit referred to when paid in cash may, at the cost of the depositor, be converted into interest bearing securities provided that the depositor has expressly desired this in writing.

The security deposit will not be accepted in forms of insurance company bonds as per Government orders contained in No.CCM/PWD/4250 DATED 27-12-1956.

If the amount of the security deposit to be paid in a lump sum within the period specified at (A) above is not paid, the tender/contract already accepted shall be considered as cancelled and legal steps taken against the contractor for recovery of the amounts. The amount of the security deposit lodged by a contractor shall be refunded along with the payment of the final bill, if the date upto which the contractor has agreed to maintain the work in good order is over. If such date is not over, only 50% amount of security deposit shall be refunded along with the payment of the final bill. The amount of security deposit retained by the University shall be released after expiry of period upto which the contractor has agreed to maintain the work in good order is over. In the event of the contractor failing or neglecting to complete rectification work within the period upto which the contractor has agreed to maintain the work in good order, the subject to provision of clause 17 and 20 hereof the amount of security Deposit retained by University shall be adjusted towards the excess cost incurred by the department on rectification work.

CLAUSE 02

Compensation for delay

The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be reckoned form the date on which the order to commence work is given to the contractor. The work shall throughout the stipulated period of the contract be proceeded with, with all due diligence (time being deemed to be the essence of the contract on the part of the contractor) and the contractor shall pay as compensation an amount equal to one percent or such smaller amount as the Registrar (whose decision in writing shall be final) may decide of the amount of the estimated cost of the whole work as shown by tenderer for every day that the work remains uncommented or unfinished after proper dates. And further to ensure good progress during execution of the work, the contractor shall be bound, in all cases in which the time allowed for any work exceeds on month to complete.

25% of the work in = $\frac{1}{4}$ th of the time 50% of the work in = $\frac{1}{2}$ of the time

75% of the work in = $\frac{1}{3}$ of the time. 100% of the work in = 4 Months)

Full work to be completed in stipulated time period mentioned in

work order including Monsoon.

In the event of contractor failing to comply with this condition he shall be liable to pay as compensation an amount equal to one percent or such smaller amount as Registrar or his authorized representative (whose decision in writing shall be final) may decide of the said estimated cost of the whole work for every day that due quantity, of work remains incomplete. Provided always that the total amount of compensation to be paid under the provisions of this clause shall not exceed 10% of the estimated cost of the work as shown in the Tender. Penalty clause operates for work continued beyond initial/extended time period for portion of left over work.

Clause 03

In event when whole of security deposit is forfeited

In any case in which under any clause of this contract the contractor shall have rendered himself liable to pay compensation amounting to the whole of this security deposit (whether paid in one sum or deducted by installments) or in the case of abandonment of the work knowing to serious illness or death of the contractor or any other cause, the Registrar or his authorized representative shall have power to adopt any of the following courses, as he may deem best suited to the interest of University:-

- (A) To rescind the contract (for which rescission notice in writing to the contractor under the hand of Registrar shall be conclusive evidence) and in that case the Security Deposit of the contractor shall stand forfeited and he absolutely at the disposal of University.
- (B) To carry out the work or any part of the work departmentally debiting the contractor with the cost of the work expenditure incurred on tools and plant and charges on additional supervisory staff including the cost of work-charged establishment employed for getting unexecuted part of the work completed and crediting him with the value of the work done departmentally in all crediting him with the in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Registrar to the costs and other allied expenses so incurred and as to the value of the work so done departmentally shall be final and conclusive against the contractor.
 - (C) To order that the work of the contractor be measured up and to take such part thereof as shall be unexecuted, out of his hands and to give it to another contract or to complete, in which case all expenses incurred on advertisement for fixing a new contracting agency, additional supervisory staff including the cost of work-charged establishment and the cost of the work executed by the new contract agency will be debited to the contractor and at the

value of the work done or executed through the new contractor shall be credited to the contractor in all respects and in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the incurred as aforesaid for or in getting the unexecuted work done by the new contractor and as to the value of the work so done shall be final and conclusive against the contractor.

In case the contract shall be rescinded under clause (a) above the contractor shall not be entitled to recover or be paid, any sum for any work there for actually performed by him under this contract unless and until the Registrar shall have certified in writing the performance of such work and the amount payable to him in respect thereof and he shall only be entitled to be paid the amount so certified. In the event of either of the courses referred to in clause (b) or (c) being adopted and the cost of the work executed departmentally or through a new contractor and other allied expenses exceeding the value of such work credited to the contractors, the amount of excess shall be deducted from any money due to the contractor by University under the contract or otherwise howsoever or from his security deposit or the sale proceeds thereof provided, however that the contractor shall have no claim against University even if the certified value of the work done departmentally or through a new contractor exceeds the certified cost of such work and allied expenses, provided always that whichever of the three course mentioned in clauses (a), (b) or (c) is adopted by the Registrar, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased, or procured any materials, or entered into engagements, or made any advance on account of, or with a view of the execution of the work or the performance of the contract.

Clause 04

Action when the progress of any portion of the work is unsatisfactory If the progress of any particular portion of the work is unsatisfactory, the Registrar shall not-with-standing that the general progress of the work is in accordance with the conditions mentioned in clause 2, be entitled to take action under clause 3(b) after giving the contractor 10 days' notice in writing. The contractor will have no claim for compensation, for any loss sustained by him owing to such action.

Clause 05

Contractor remains liable to pay compensation if action not taken under clause 4 and clause 5 and Power to take possession of or require removal of or sell contractors plant In any case in which any of the powers conferred upon the Registrar by clauses 3 and 4 hereof shall have become exercisable and the same shall not have been exercised, then on-exercised there of shall not constitute a waiving of any of the conditions hereof an such powers shall not-with-standing be exercisable in the event of any future case of default by contractor for which under any clauses here of he is declared liable to pay compensation amounting to the whole of his security deposit and the liability of the contractor for past and future compensation shall remain unaffected. In the event of the Registrar taking action under sub-clause (a) or (c) of clause 3, he may, if he so

desires, take possession of all or any tools, plant materials and stores in or upon the works or the site thereof or belonging to the contractor, or procured by him and intended to be used for the execution of the work or any part thereof, paying or allowing for the same in account at the contract rates, or in the case of contract rates not being applicable at current market rates, to be certified by the Registrar whose certificate thereof shall be final. In the alternative, the Registrar may, after giving notice in writing to the contractor or his clerk of the work, foreman or other authorized agenda require him remove such tools, plant, materials, or stores from the premises within a time to be specified in such notice; and in the event of the contractor failing to comply with any such requisition, the Registrar may remove them at the contractor's expenses or sell them by auction or private sale on account of the contractor's and at his risk in all respects; and the certificate of the Registrar as to the expenses of any such removal and the amount of the proceeds and expense of any such sale shall be final and conclusive against the contractor.

Clause 06

Extension of time

If the contractor shall desire an extension of the time for completion of work on the ground of his having been unavoidably hindered in its execution or on any other ground, he shall apply in writing to the Registrar, before the expiry of the period stipulated in the tender or before the expiration of 30 days from the date on which he was hindered as aforesaid or on which the cause for asking for extension occurred, whichever is earlier and the Registrar, may if in his opinion, there were reasonable grounds for granting an extension after obtaining approval from the competent authority of the University. The decision of the Registrar in this matter shall be final.

Clause 07

Final Certificate

On the completion of the work the contractor shall be furnished with a certificate by the Registrar of such completion, but no such certificate shall be given nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall have been executed, all scaffolding, surplus materials and rubbish, and shall have cleaned off, the dirt form all wood work, doors, windows, wall, floor or other parts of any building in or upon which the work has been executed or of which he may have had possession for the purpose of executing the work, nor until the work shall have been measured by the Registrars or his Authorized representative of where the measurement have been taken by his subordinates until they have received approval of the Registrar or his authorized representative, the said measurements being binding the conclusive against contractor. If the contractor shall fail to comply with the requirement of this clause as to the removal of scaffolding, surplus materials and rubbish and cleaning of dirt on or before the date fixed for the completion of the work, the Registrar or his authorized representative may at the expense of the contractor, remove such scaffolding, surplus materials and rubbish and dispose of the same as he thinks fit and clean off such dirt as aforesaid and the contractor shall forthwith pay the amount of all expenses so incurred, but shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.

Clause 08

Payment on intermediate certificate to be regarded as advances No payment shall be made for any work, estimated to cost less than rupees one thousand till after the whole of work shall have been complete and certificate of completion given. But in the case of works estimated to cost more than rupees one thousand, the contractor shall on submitting a monthly bill therefore, be entitled to receive payment proportionate to the part of the work then approval and passed by the Registrar, whose certificate of if such approval and passing of the sum so payable shall be final and conclusive against the contractor. All such intermediate payments shall be regarded as payments by way of advance against the final payments only and not as payment for work actually done and completed, and shall not preclude the Registrar from requiring any bad, imperfect or unskillful work to be removed or taken away and reconstructed, or re-erected not shall any such payment be considered as an admission of the due performance of the contract or any part thereof in any respect on the accruing of any claim, nor shall it conclude, determine, or affect in any other way the powers of the Registrar as to the final settlement and adjustment of the accounts or other wises, or in any other way vary or affect the contract. The final bill shall be submitted by the contractor within Three (03) month of the date fixed for the completion of the work, otherwise the Registrar or his authorized representative's certificate of the measurements and the total amount payable for the work shall be final and binding on all parties.

Clause 09

Payment at reduced rates on account items of works not accepted as completed to be at the discretion of the Registrar

The rates for server items of works estimated to cost more than Rs.1,000/- agreed to within, shall be valid only when the item concerned is accepted as having been competed fully in accordance with the sanctioned specifications. In cases where the items of work are not accepted as so completed, Registrar or his authorized representative may make payment on account of such items at such reduced rates as they may consider reasonable in the preparation of final or on running account bills.

Clause 10

Bills to be submitted monthly.

A bill shall be submitted by the Contractor each month on or before the date fixed by the Registrar or his authorized representative for all work executed in the previous month, and the Registrar or his authorized representative shall take or cause to be taken the requisite measurements for the purpose of having the same verified; and the claim, so far as it is admissible, shall be adjusted, if possible, within ten days from the presentation of the bill. If the Contractor does not submit the bill within the time fixed as aforesaid, the Registrar or his authorized representative may depute a subordinate to measure up the said work in the presence of the Contractor or his duly authorized agent whose countersignature to the measurement list shall be sufficient warrant, and the Registrar or his authorized representative may prepare a bill from such list which shall be binding on the Contractor in all respects.

Clause 11

Bills to be on printed form.

The Contractor shall submit all bills on the printed forms to be had on application at the office of Registrar .The charges to be made in the bills shall always be entered at the rates specified in the tender or in the case of any extra work ordered in pursuance of these conditions and not mentioned or provided for in the tender, at the rates here in after provided for such work.

Clause 12

Stores supplied by the University.

If the specification or estimate of the work provides for the use of any special description of materials to be supplied from the store of University or if it required that the contractor shall use certain stores to be provided by the Registrar(such material and stores and the prices to be charged therefore as here in after mentioned being so far as practicable for the convenience of the Contractor but not so as in any way to control the meaning or effect of this contract specified in the schedule or memorandum hereto annexed) the contractor shall be supplied with such material and stores as may be required from time to time to be used by him for the purpose of the contract only and the value of the full quantity of the materials and stores so supplied shall be set off or deducted from any sums then due, , or thereafter to become due to Contractor under the Contractor, or otherwise from the security deposit, or the proceeds of the sale thereof, if the security deposit is held in Government securities, the same or a sufficient portion thereof shall in that case be sold for the purpose. All materials supplied to the Contractor shall remain the absolute property of University and shall on no account be removed from the site of the work, and shall at all times be open to inspection by the Registrar. Any such materials unused and in perfectly good condition at the time of completion or determination of the contract shall be returned to the University store, if the Registrar so requires by a notice in writing given under his hand, but the Contractor shall not entitled to return any such materials except with consent of the Registrar and he shall have no claim for compensation on account of any such materials supplied to him as aforesaid but remaining unused by him or for any wastage or damage to any such materials.

Clause 12 A

Stores supplied by the University.

All stores of controlled materials such as cement, steel etc, supplied to the contractor by University should be kept by the contractor under lock and key and will be accessible for inspection by the Registrar or his agent at all times.

Clause 13

Works to be executed in accordance with specifications, drawings, orders etc. The contractor shall execute the whole and every part of the work in the most substantial and workman like manner, and both as regards materials and every other respect in strict accordance with specifications. The contractor shall also conform exactly, fully and faithfully to the designs, drawings and instructions in writing relating to the work signed by the Registrar or his authorized representative and lodged in his office and to which the contractor shall be entitled to have access for the purpose of inspection at such office, or on the site of the work during office hours. The contractor will be entitled to receive three sets of contract drawing and working drawing and one certified copy of the accepted tender along with the work order free of cost. Further copies of the contract drawings and working drawing if required by him, shall be supplied at the rate of Rs.500/- per set of contract drawings and Rs.100/- per working drawing except where otherwise specified.

Clause 14

i) Alteration in specifications and designs not to invalidate contract.
ii) Rates for work not entered in estimate or schedule of rate of district.
iii) Extension of time in consequence of addition or alterations.

The Registrar shall have power to make any alternations in, or additions to the original specifications, drawing, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and the contractor shall be bound to carry out the work in accordance with any instructions in this connections which may be given to him in writing signed by the Registrar or his authorized representative and such alternation shall not invalidate the contract, and any additional work which the contractor may be directed to do in the manner above specified as part of the work shall be carried out by the contractor on the same conditions in all respect on which he agreed to do the main work and at the same rates as are specified in the tender for the main work. And if the additional and altered work included any class of work for which no rates is specified in the tender for the main work. And if the additional and altered work included any class of work for which no rates is specified in this contract, then such class of work shall be

carried out at the rates entered in the Schedule of Rates of the P.W.D. Navi Mumbai circle prevailing at the time when the extra items crop up or at the rates mutually agreed upon between the Registrar and the contractor, whichever are lower. If the additional or altered work, for which no rate is entered in the schedule of Rates of the Division, is ordered to be carried out before the rates are agreed upon then the contractor shall, within seven days of the date of receipt by him of the order to carry out the work, inform the Registrar of the rate which it is his intention to charge for such class of work, and if the Registrar does not agree to this rate he shall by notice in writing be at liberty to cancel his order to carry out such class of work and arrange to carry out in such manner as he may consider advisable, provided always that the contractor shall commence work or incur any expenditure in regard there to before the rates shall have been determined as lastly here in before mentioned, then in such case he shall only be entitled to be paid in respect of the work carried out or expenditure incurred by him prior to the date of the determination of the rates as aforesaid according to such rate or rates as shall be fixed by the Registrar. In the event of a dispute, the decision of the Registrar will be final.

Where, however, the work is to be executed according to the designs, drawing and specifications recommended by the contractor and accepted by the competent authority the alterations above referred to shall be within the scope of such designs drawings and specification appended to the tender. The time limit for the completion of the work shall be extended in the proportion that the increase in its cost occasioned by alterations or additions bears to the cost of the original contract work, and the certificate of the Registrar as to such proportion shall be conclusive.

Clause 15

No claim to any payment compensation for alteration in or restriction of work

(1) If at any time after the execution of the contract documents, the Registrar shall for any reason what-so-ever (other than default on the part of contractor for which the University is entitled to rescind the contract) desires that the whole or any part of the work specified in the tender should be suspended for any period or that the whole or part of the work should not be carried out at all, he shall give to the contractor a notice in writing of such desire and upon the receipt of such notice the contractor shall forthwith suspend or stop the work wholly or in part as required, after having due regard to the appropriate stage at which the work should be stopped or suspended so as not to cause any damage or injury to the work already done or endanger the safety thereof provided that the decision of the Registrar as to the stage at which the work or any part of it could be or could have been safely stopped or suspended shall be final and conclusive against the contractor. The contractor shall have no claim to any payment or compensation whatsoever by reason of or in pursuance of any notice as aforesaid, on account of any suspension, stoppage or curtailment except to the extent specified hereinafter.

- (2) Where the total suspension of work ordered as aforesaid continued for a continuous period exceeding 90 days, the contractor shall be at liberty to withdraw from the contractual obligations under the contract so far as it pertains to the unexecuted part of the work by giving a 10 days prior notice in writing to the Registrar, within 30 days of the expiry of the said period of 90 days, of such intention and requiring the Registrar to record the final measurements of the work already done and to pay final bill. Upon giving such notice, the contract shall be deemed to have been discharge from his obligation to complete the remaining unexecuted work under this contract. On receipt of such notice the Registrar shall proceed to complete the measurement and make such payment as may be finally due to the contractor within a period of 90 days from the receipt of such notice in respect of the work already done by the contractor. Such payment shall not in any manner prejudice the right of the contractor to any further compensation under the remaining provisions of this clause.
- (3) Where the Registrar requires the contractor to suspend the work for a period in excess of 30 days at any time or 60 days in the aggregate, the contractor shall be entitled to apply to the Registar within 30 days of the resumption of work after such suspension for payment of compensation to the extent of pecuniary loss suffered by him in respect of working machinery rendered idle on the site or on account of his having had to pay the salary or wages of labour engaged by him during the said period of suspension, provided always that the contractor shall not be entitled to any claim in respect of any such working machinery, salary or wages for the first 30 days whether consecutive or in the aggregate of such suspension or in respect of any suspension whatsoever occasioned by unsatisfactory work or any other default on his part. The decision of the Registrar in this regard shall be final and conclusive against the contractor.

(4) In the event of

- (I) Any total stoppage of work on notice from the Registrar under clause (I) in that behalf.
- (II)Withdrawal by the contractor from the contractual obligations to complete the remaining unexecuted work under sub-clause (2) on account of continued suspension of work for a period exceeding 90 days.
- (III)Curtailment in the quantity of item or items originally tendered on account of any alteration, omission or substitutions in the specifications, drawings, designs, or instructions under clause 14 (I) where such curtailment exceeds 25% in quantity and the value of the quantity curtailed beyond 25% at the rates for the item specified in the tender is more than Rs.5000/-

It shall be open to the contractor, within 90 days from the service of (I) the notice stoppage of work or (II) the notice of withdrawal from the contractual obligations under the contract on account of the continued suspension or work or (III) notice under 15 (I) resulting in such curtailment, to produce to the Registrar, satisfactory

documentary evidence that he had purchased for agreed to purchase material for use in the contract work before receipt by him of the notice of stoppage, suspension or curtailment and require the University to take over on payment such material at the rates determined by the Registrar, provided, however such rate shall in no case exceeds the rates at which the same were acquired by the contractor. The University shall thereafter take over the material so offered, provided the quantities offered are not in excess of the requirements of the unexecuted work as specified in the accepted tender and are of quality and specifications approved by the Registrar.

Clause 15 A

No claim to any payment or compensation on account of for alteration or Restriction of work.

The Contractor shall not be entitled to claim any compensation from University for loss suffered by him on account of delay by University in the supply of materials entered in the supply of materials, entered in Schedule A where such delay is caused by-

- (I) Difficulties relating to the supply or railway wagons.
- (II) Force majeure.
- (III) Act of God.
- (IV) Act of enemies of the State or any other reasonable cause beyond the control of Government.

In the case of such delay in the supply of materials, University shall grant such extension of time for the completion of the work on recommendation of architect in accordance with the circumstances of the case. The decision of the Registrar as to the extension of time shall be accepted as final by the contractor.

Clause 16

Time limit for unforeseen claims.

Under no circumstances whatever shall the contractor be entitled in any compensation from University on any account unless the contractor shall have submitted a claim in writing to the Engineer-in-charge within one month of the cause of such claim occurring.

Clause 17

Action and compensation payable in case of bad work.

If any time before the security deposit or any part thereof is refunded to the contractor it shall appear to the Registrar or his authorized representative in charge of the work, that any work has been executed with unsound, imperfect or unskillful workmanship or with materials of inferior quality, or that any materials or articles provided by him for the execution of the work are unsound, or of quality inferior to that contracted for, or are otherwise not in accordance with the contract, it shall be lawful for the otherwise not in accordance with the contract, it shall be lawful for the Registrar or his authorized representative to intimate this fact in writing to the contractor and then not-withstanding the fact that the work, materials or articles complained or may have been in advertently passed, certified and paid for, the contractor shall be bound forthwith to rectify or remove and reconstruct the work so specified in whole or in part, as the case may require, or if so required, shall remove the materials or articles so specified and provided, other proper and suitable material or articles at his own charges and cost and in the event of his failing to do so within a period to be specified by the Registrar in the written intimation aforesaid, the contractor shall be liable to pay compensation at the rate of one percent on the amount of the estimate for every day not exceeding ten days during which the failure so continues and in the case of any such failure Registrar may rectify or remove and reexecute the work or remove and replace the materials or articles complained of, as the case may be, at the risk and expense in all respects of the contractor. Should the Registrar consider that any such inferior work or materials as described above may be accepted or made use of it shall be within his discretion to accept the same at such reduce rates as he may fix therefore.

Clause 18

Works to be open to inspection and Contractor or responsible agent to be present All works under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the. Registrar and his subordinates, and the contractor shall at all times during the usual working hours, and at all other times at which reasonable notice of the intention of the Registrar and his subordinates to visit the work shall have been given to the contractor, either himself be present to receive orders and instruction or have a responsible agent duly accredited in writing present for that purpose. Orders given to the contractors duly authorized agent shall be considered to have the same force and effect as if they had been given to the contractor himself.

Clause 19

Notice to be given before work is covered up The contractor shall give not less than five days' notice in writing to the Registrar or his authorized representative of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimension therefore taken before the same is so covered up or placed the reach of measurement any work without the consent in writing of the Registrar or his authorized representative of the work, and if any work shall be covered up or placed beyond the reach of measurement, without such notice having been given or consent obtained the same shall be uncovered at the contractor's expense, and in default thereof no payment or allowance shall be made such work or for the materials with which the same was executed.

Clause 20

Contractor liable for damage done, and for imperfections If during the period of 24 (Twenty Four) Months from the date of completion as certified by the Registrar pursuant to clause 7 of the contract or 12 Months after commissioning the work whichever is earlier in the opinion of the Registrar or his authorized representative they said work is defective in any manner whatsoever, the contractor shall forthwith on receipt of notice in that behalf from the Registrar or his authorized representative duly commence execution and completely, carry out at his cost in every respect all the work that may be necessary for rectifying & setting right the defects specified therein including dismantling and reconstruction of unsafe portions strictly in accordance with and in the manner prescribed and under the supervision of the Registrar. In the event of the contractor failing or neglecting to commence execution of said rectification work within the period prescribed therefore in the said notice and or to complete

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the same as aforesaid as required by the said notice, the Registrar get the same as aforesaid as required by the said notice, the Registrar get the same executed and carried out departmentally or by any other agency at the risk on account and the cost of the contractor. The contractor shall forthwith on demand pay to the University the amount of such cost charges and expenses sustained or incurred by the University of which the certificate of the Registrar or his authorized representative shall be final and binding on the contractor. Such costs, charges and expenses shall be deemed to be arrears of land revenue and in the event of the contractor failing or neglecting to pay the same on demand as aforesaid without prejudice to any other rights and remedies of the University; the same may be recovered from the contractor as arrears of land revenue. The University shall also be entitled to deduct the same from any amount which may then the payable or which may thereafter become payable by the University to the contractor either in respect of the said work or any other work whatsoever or form the amount of the security deposit retained by University. The defect liability period in particular for waterproofing treatment (Measurement Building work) shall be Ten years and for anti-termite treatment shall be Ten years.

Clause 21

Contractor to supply plant, ladder, scaffolding etc. Contractor is liable for damages arising from no provision of light, fencing etc.

The contractor shall supply at his own cost all material (except such special materials, if any, as may, in accordance with the contract, be supply from University stores), plant, tool, appliances, implements, ladders, cordage, tackle scaffolding and temporary works requisite or proper for the proper execution of the work, whether, in the original, altered or substituted from, and whether included in the specification or other documents forming part of the contract or referred to in these conditions or not and which may be necessary for the purpose of satisfying or complying with requirements of the Registrar us to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with the carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials necessary for the purpose of setting out works and counting weighing and assisting in the measurement or examination at any time and from time to time of the work or the materials, failing which the same may be provided by the Registrar at the expenses of the contractor and expenses may be deducted from any money due to the contractor under the contract or from his security deposit or the proceeds of sale thereof, or of sufficient portion thereof. The contractor shall provide all necessary fencing and lights required to protect the public from accident, and shall also be bound to bear the expenses of defense of every suit, action or other legal proceeding, that may be brought by any person for injury sustained owing to neglect of the above precaution, and to pay any damages and cost which may be awarded in any such suit, action or proceeding to any such person, or which may with the consent of the contractor be paid for compromising any claim by any such person. Proceedings to any such person or which may with consent of the contractor be paid for compromising any

	alaim by any ayah marsan			
CI OI A	claim by any such person.			
Clause 21 A :-				
	The contractor shall provide suitable scaffolds and working platforms			
	gangways and stairways and shall comply with the following			
	regulations in connection therewith-			
	(a) Suitable scaffolds shall be provided for workmen for			
	all works that cannot be safely done from a ladder of			
	by other means. (b) A scoffold shall not be constructed taken down or			
	(b) A scaffold shall not be constructed, taken down or substantially altered except.			
	(i) Under the supervision of a competent and responsible			
	person; and			
	(ii) As for as possible by competent workers possessing			
	Adequate experience in this kind of work.			
	(c) All scaffolds and appliances connected therewith and			
	all ladders shall :-			
	(i) Be of sound material			
	(ii) Be of adequate strength having regard to the loads and			
	strains to which they will be subjected, and			
	(iii) Be maintained in proper condition.			
	(d) Scaffolds shall be so constructed that no part thereof			
	Can be displaced in consequence of normal use.			
	(e) Scaffolds shall not be over-loaded and so far as			
	Practicable the load shall be evenly distributed.			
	(f) Before installing lifting gear on scaffolds special			
	precautions shall be taken to ensure the strength and			
	Stability of the scaffolds.			
	(g) Scaffolds shall be periodically inspected by a Competent person.			
	(h) Before allowing a scaffold to be used by his workmen			
	the contractor shall whether the scaffold has been			
	erected by his workmen or not, take steps to ensure that			
	It compels fully with regulations here in specified.			
	(i) Working platform, stairways shall-			
	(i) Be so constructed that no part thereof can sag unduly			
	On unequally.			
	(ii) Be so constructed and maintained, having regard to the			
	prevailing conditions as to reduce as for as practicable			
	risks of persons tripping or slipping and,			
	iii) Be kept free from any unnecessary obstruction.			
	(j) In the case of working platform, gangways, working			
	(k) places and stair ways at a height Exceeding 7.5			
	meters (to be specified)			
	i) Every working platform, gangway shall be closely boarded			
	unless other adequate measures are taken to ensure safety.			
	ii) Every working platform and gangway shall have adequate			
	width, and			
	iii) Every working platform, gangway, working place and			
	m, bvery working platform, gangway, working place and			

stairway shall be suitable fenced.

- (l) Every opening in the floor of building or in a working platform shall except for the time and to the extent required to allow the excess of persons or the transport or shifting or material be provided with suitable means to prevent the fall of persons or material.
- (m) When person are employed on a roof where there is a danger of failing from a height exceeding 7.5 meters (to be specified) suitable precautions shall be taken to prevent the fall of persons or materials.
- (n) Suitable precautions shall be taken to prevent persons being struck by articles which fall from scaffolds or other working places.
- (o) Safe means of access shall be provided to all working platform and other working places.
- (p) The contractor/(s) will have to make payments to labourers as per Minimum Wages Act 1948.

Clause 21 B

The contractor shall comply with the following regulations as regards the Hoisting Appliances to be used by him:-

- (a) Hoisting machines and tackle including their attachments anchorage's and supports shall-
- (i) Be of good mechanical construction, sound material and adequate strength and free from patent defect;

And

- (ii) Be kept in good repair and in good working order.
- (b) Every rope used in hoisting or lowering material or as a means of suspension shall be suitable quality and adequate strength and free from patent defect.
- (c) Hoisting machines and tackle shall be examined and adequately tested after erection on the site and before use and be re-examined in position at intervals to be prescribed by the

Registrar or his authorized representative.

- (d) Every chain, ring, hook, shackle, swivel and pulley block used in hoisting or lowering materials or as a means of suspension shall be periodically examined.
- (e) Every crane driver or hoisting appliance operator shall be properly qualified.
- (f) No person who is below the age of 18 years shall be in control of any hoisting machine, including any scaffold, which, or give signals to the operator.
- (g) In the case of every hoisting machine and of every chain, ring, hook, shackle, swivel and pulley block used in hoisting or lowering or as a means of suspension the safe working load shall be ascertained by adequate means.
- (h) Every hoisting machine and all gear referred to in preceding regulation shall be plainly marked with the safe working load.

In the case of a hoisting machine having a variable safe (i) working load, each safe working load and the conditions under which it is applicable, shall be clearly indicated. No part of any hoisting machine or of any gear referred to in regulation (g) above shall be loaded beyond the safe working load except for the purpose to testing. Motors, gearing transmissions, electric wiring and other dangerous parts of hoisting appliance shall be provided with efficient safeguards. Hoisting appliances shall be provided with such means as will reduce to a minimum the risk of the accidental descent of the load. (m) Adequate precaution shall be taken to reduce to a minimum the risk of any part of suspended load becoming accidentally displaced. Clause 22 Measure for The contractor shall not set fire to any standing jungle, trees, prevention of fire brushwood or grasses without a written permit from the Registrar, when such permit is given, and also in all cases when destroying cut or dug up trees, brushwood, grass etc. by fire, and the contractor shall take necessary measured to prevent such fire spreading to or otherwise damaging surrounding property. The contractor shall make the own arrangements for drinking water for the labour employed him and provide sanitary and other arrangements. Clause 23 Liabilities of Compensation for all damages done intentionally or unintentionally by contractor for any contractor's labour whether in or beyond the limits of mentioned damage done in or clause 22 shall be estimated by the Registrar or such other officer as out side work he appoint and the estimate of the Registrar on appeal shall be final areas and the contractor shall be bound to pay the amount of the assessed compensation on demand, failing which the same will be recovered from the contractor as damages in the manner prescribed in clause 1 or deducted by the Registrar from any sums that may be due or become due from University to contractor under this contract or otherwise. The contractor shall bear expense of defending any action or other legal proceeding that may be brought by any person of injury the spread sustained by him owing to neglect of precautions to prevent the spread of fire and he shall pay any damages and cost that may be awarded by the court in consequence. Clause 24 **Employment of** The employment of female labours on works in neighborhood of female labour soldier's barrack should be avoided as far as possible. The Contractor shall employ the labours from the nearest Employment Exchange. Clause 25 Work on Sunday No work shall be done on a Sunday/Holiday Without the sanction in writing of the Registrar or his authorized representative. Clause 26 Work not to The contractor shall not be assigned or sublet without the written sublet, Contract approval of the Registrar or his authorized representative.

may be rescinded
and security
deposit forfeited
for
subletting it
without approval
or bribing a
University officer
or if contractor
become insolvent

And if the contractor shall assign or sublet his contract, or attempt so to do, or become insolvent or commence any proceedings to get himself adjudicated and insolvent or make any composition with his creditors. Or attempt so to do or if bribe gratuity, gift loan, perquisite, reward or advantage pecuniary or otherwise shall either directly or indirectly be given, promise, or offered by line contractor or any of his servants or agent to any public officer or person in the employ of University in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly inserted in the contract, the Registrar may other up on by notice in writing rescind the contract, and the security deposit of the contractor shall hereupon stand forfeited and be absolutely at the disposal of University, consequences shall ensure as if; the contract had been rescinded under Clause 3 here of and in addition the contractor shall not be entitled to recover or be paid for any work there for actually performed under the contractor.

Clause 27

Sum payable by way of compensation to be considered as reasonable compensation without reference to actual loss

All sums payable by a contractor by way of compensation under any of these conditions shall be considered as a reasonable compensation to be applied to the use of University without reference to the actual loss or damage sustained, and whether any damage has or has not been sustained.

Clause 28.

Changes in constitution of firm to be notified

In the case of tender by partners, any change in the constitution of a firm all be forthwith notified by the contractor to the Registrar for information.

Clause 29

Direction and control of registrar

All works be executed under the contractor shall be executed under the direction and subject to the approval in all respect of the Registrar, for the time being, who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from the to time carried on.

Clause 30

Direction and control of registrar

(1) Except where otherwise specified in the contract and subject to the powers delegated to him by University under the Code-Rules then in force, the decision of the Registrar for the time being shall be final, conclusive and binding on all parties of the contract upon all questions realign to the meaning of the specifications, designs, drawings and instruction herein before mentioned and as to the quality of workmanship, or materials used, on the work, or as to any other question, claim right, matter or things whatsoever in any way arising out of or relating to the contract designs, drawings, specifications, estimates instructions, order or other condition or whereas concerning the works or the execution or failure to executed the same whether arising during the progress of the work, or after the completion

abandonment thereof.

- (2) The contractor may, within thirty days of receipt by him of any order passed by the Registrar of the Circle as aforesaid, appeal against it to the University with the contract work or project provided that:
- (A)The accepted value of the contract exceeds Rs.10.00 Lakhs (Rupees Ten Lakhs)
- (B) Amount of claim is less than Rs.1.00 Lakh (Rupees One Lakh).
- (3) The decision of competent authority of University in case of appeal made by the contractor University shall be final and binding upon him.

Clause 31

Store of European as American manufacture to be obtained from Government.

The contractor shall obtain from the University store or stores and articles of European or American manufacture which may be required for the work, or any part thereof or in making up any articles required thereof in connection therewith unless he has obtained permission in writing from the Engineer-in-charge to obtain such stores and articles elsewhere. The value of such stores and articles as may be supplied to the contractor by the Engineer-in-charge will be debited to the contractor in his account at the rates shown in the schedule, in form A attached to the contractor and if they are not entered in the said schedule, they shall be debited to him a cost price which for the purpose of this contract shall include the cost of carriage and all other expenses whatsoever, which shall have been incurred in obtaining delivery of the same at the stores aforesaid.

Clause 32

Lump-sum in estimates.

When the estimate on which a tender is made includes lump sums in respect of part of the work, the Contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as payable under this Contract for each items, or if the parts of the work in question is not in the opinion of the Engineer-in-charge capable of measurement, the Engineer-in-charge may at his discretion pay the lump sum amount entered in the estimate and the certificate in writing of the Engineer-in-charge shall be final and conclusive against the Contractor with regard to any sum or sums payable to him under the provisions of this clause.

Clause 33

Actions where no specifications

In the case of any class of work for which there is no such specification as is mentioned in Rule I such work shall be carried out in accordance with the P.W.D. specifications, and the event of there being no P.W.D. Specifications, then in such case the work shall be carried out in all respects in accordance with all instruction and requirements of the Registrar.

Clause 34

Definition of work

The expression "work" or "works" where used in these conditions, shall unless there be something in the subject or context repugnant to such construction, be constructed to mean the work or works contracted to be executed under or in virtue of the contract, whether

	temporary or permanent and whether original, altered, substituted or additional.		
Clause 35			
Contractor's percentage whether applied to net or gross amount of bill	The percentage referred to in the tender shall be deducted from/added to the gross amount of the bill before deducting the value of any stock issued.		
Clause 36			
Quarry	All quarry fees, royalties, Octroi dues and ground rent for stacking materials, if any, shall be paid by the contractor.		
Clause 37			
Compensation under workmen's compensation act	The contractor shall be responsible for and shall pay any to his workmen payable under the workmen's Compensation Act, 1923 (VIII of 1923), (hereinafter called the said Act) for injuries caused to the workmen. If such compensation is payable/paid by University as principal under sub-section (I) of section 12 of the said Act on behalf of the contractor, it shall be recoverable by University from the contractor under sub-section (2) of the said section. Such compensation shall be recovered in the manner laid down in clause I above.		
Clause 37 A			
	The contractor shall be responsible for and shall pay the expenses of providing medical aid to any workman who may suffer a bodily injury as a result of an accident. If such expenses are incurred by University the same shall be recoverable from the contractor forth with and be deducted without prejudice to any other remedy of University from any amount due or that may become due to the contractor.		
Clause 37 B			
	The contractor shall provide all necessary personal safety equipment's and first aid apparatus available for the use of the person employed on the site and shall maintain the same in condition suitable for immediate use at any time and shall comply with the following regulation in connection therewith. (A) The workers shall be required to use the equipment so provided by the contractor and the contractor shall take adequate steps to ensure proper use of Equipment by those concerned. (B) When work is carried on in proximity to any place where there is a risk of drawing all necessary equipment shall be provided and kept ready for use and all necessary steps shall be taken for the prompt		
	rescue of any person in danger. (C) Adequate provision shall be made for prompt first-aid treatment of all injuries likely to be sustained during the course of the work.		
Clause 37 C			
	The contractor shall duly comply with the provision of the Apprentice Act 1961 (III of 1961) the rules made there under and the orders that		

may be issued from time to time under the said Act and the said Rules and on his failure of neglect to do so he shall be subject to all the liabilities Provide by act and said rule.

(Govt. circular No.CAT-6076/3336/ (400)/Bldg.2 dt.16-8-1985.)

Clause 38

Claims for quantities entered in tender or estimate

- (1) Quantities shown in the tender are approximate and no claim shall be entertained for quantities of work executed being either more or less than those entered in the tender or estimate.
- (2) Quantities in respect of the several items shown in the tender are approximate and no revision in the tendered rate shall be permitted in respect of any of the items so long as, subject to any special provision contained in the specifications prescribing a different percentage of permissible variation in the quantity of the items does not exceed the tender quantity by more than 25 percent and so long as the value of the excess quantity beyond this limit at the rate of the items specified in the tender, is not more than Rs.5,000/-.
- (3) "The contractor shall, if ordered in writing by the Engineer so to do, also carry out any quantities in excess of the limit mentioned in sub-clause (1) hereof on the same conditions as and in accordance with the specifications in the tender and at the rates (I) derived from the rates entered in the current schedule of rates and in absence of such rates, (II) at the rate prevailing in the market, the said rates increased or decreased as the case may be by the percentage which the total tendered amount bears to the estimated cost of the work as put to tender based upon the schedule of rates applicable to the year in which the tenders were invited. For the purpose of operation of this clause, this cost shall be worked out from the D.S.R. prevailing at the time of acceptance of tender.
- 4) Claim arising out of reduction in the tendered quantity of any item beyond 25 percent will be governed by the provision of clause 15 only when the amount of such reduction beyond 25 per cent at the rate of items specified in the tender is more than Rs. 5,000/-.

Clause 39

Employment of famine labours etc.

The contractor shall employ any famine, convict or other labour of a particular kind or class if ordered in writing to do so by the Registrar.

Clause 40

Claims for compensation for delay in start of work No compensation shall be allowed for any delay caused in the starting of the work on account of acquisition of land or, in the case of clearance works, on account of any delay in according sanction to estimates.

Clause 41

Claims for compensation for delay in start of work No compensation shall be allowed for any delay caused in the starting of the work on account of water, standing in borrows pits or compartments. The rates are inclusive for hard or cracked soil, excavation in mud, sub-soil water or water standing in borrows pits and no claim for an extra rate shall be entertained unless otherwise

	expressly specified.	
Clause 42		
Entering upon or commencing any portion of work	The contractor shall not enter upon or commence any portion of work except with the written authority and instruction of the Registrar or his authorized representative of the work. Failing such authority the contractor shall have no claim to ask for measurements of the payment for work.	
Clause 43		
Minimum age persons employed, the employment of donkeys and or other animals and the payment of fair wages	i) No contractor shall employ any person who is under the age or 18 years. (ii) No contractor shall employ donkeys or other animals with breaching of string or thin ropes. The breaching must be at least three inches wide and should be of tape (Newar). (iii) No animal suffering from sores, lameness or emaciation or which is immature animal shall be employed on the work. (iv) Registrar or his authorized representative is authorized to remove from the work, any person or animal found working which does not satisfy these conditions and no responsibility shall be accepted by University for any delay caused in the completion of the work by such removal. (v) The contractor shall pay fair and reasonable wages to the workmen employed by him in the contract under taken by him. In event of any dispute arising between contractor and his workmen on the grounds that the wages paid are not fair and reasonable, the dispute shall be refereed without delay to the Registrar who shall decide the same. The decision of the Registrar shall be conclusive and binding on the contractor but such decision shall not in any way affect the conditions in the contract regarding the payment to be made by University at the sanctioned tender rates. (vi) Contractor shall provide drinking water facilities to the workers, Similar amenities shall be provided to the workers engaged on large work in urban areas. (vii) All facilities provided in the contractor labour (Regulation & Abolition Act 1971), The Maharashtra Contract Labour regulation & Abolition rule 1971 should be provided.	
Clause 44	•	
Method of payment	Payment to contractors shall be made by cheque drawn or online them, provided the amounts exceed Rs.10. Amounts not exceeding Rs.10 will be paid in cash.	
Clause 45		
Acceptance of conditions compulsory before tendering for the work	Any contractor who does not accept these conditions shall not be allowed to tender for works.	
Clause 46		
Employment in scarcity labours	If Government declares a state of scarcity or famine to exist in any village situated within 10 miles of the work, the contractor shall employ upon such parts of the work, as are suitable for unskilled	

labour, any person certified to him by the Registrar, or be any person to whom the Registrar may have delegated this duty in writing to be in need of relief and shall be bound to pay to such person in wages not below the minimum which Government may have fixed in this behalf. Any dispute which may arise in connection with the implementation of this clause shall be decided by the Registrar whose decision shall be final and binding on the Contractor

Clause 47

The price quoted by the contractor shall not in any case exceed the control price, if any, fixed by Government or reasonable price which it is permissible for him to charge a private purchase for the same class and description of goods under the provision of Hoarding or Profiteering prevention Ordinance, 1948 as amended from time to time. If the price quoted exceeds the controlled price or the price permissible under Hoarding and Profiteering Prevention Ordinance, the contractor will specifically mention this fact in his tender along with the reasons for quoting such higher prices. The purchaser at his discretion will in such case exercise the right of revising the price at any stage so as to confirm with the controlled price on the permissible under the Hoarding and Profiteering Prevention Ordinance. This discretion will be exercised without prejudice to any other action that may be taken against the contractor.

Clause 47(A)

- a) Bidder shall quote his rate considering the provisions covered under GST Act. 2017.
- b) Provisional Amount of GST @ 2% i.e.1% CGST+1% SGST will be deducted at source (TDS) after the enforcement of Section 51 of Maharashtra Goods and Service Act.2017.
- c) Bidder shall quote his rate excluding GST.
- d) GST shall be paid on the amount of bill of the work done as per prevailing guidelines rate of GST during the period of work done as applicable. Necessary evidence is required.
- e) The rates quoted by the contractor shall be deemed to be inclusive of the labour welfare cess and other taxes (other than GST) that the contractor will have to pay for the performance of this contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

Clause 48

In case of materials that may remain surplus with the contractor from those issued for the work contracted for, the date of ascertainment of the materials being surplus will be taken as the date of sale for the purpose of sales tax and sales tax will be recovered on such sale.

Clause 49

Government Circular No. CAT-1284/(120)/Bldg-2 Dt.14-8-85

The Contractor shall employ the unskilled labour to be employed by him on the said work only from locally available labours and shall give preference to those persons enrolled under Maharashtra Government Employment and Self Employment Department's Scheme.

Provided, however, that if the required unskilled labours are not available locally, the contractor shall in the first instance employ such number of persons as is available and thereafter may with previous permission, in writing of the Registrar of said work, obtain the rest of requirement of unskilled labour from outside the above scheme.

Clause 50

The contractor shall comply with the provision of the apprentices Act 1961 & the rules and orders issued there under from time to time, if he fails to do so this failure will be a breach of the contract and the Registrar, may in his discretion may cancel the contract. The contractor shall also be liable for precautionary liability arising on account of any violation by him of the provision of Act.

The contractor shall pay laborers, skilled and unskilled according to prescribed wages by Minimum Wages Act, 1948 applicable to the area in which work lies.

The contractor to take precautions against accidents which take place on account of labour using loose garments while working on machinery.

Clause 51

All amounts whatsoever which the contractor is liable to pay to the University in connection with the execution of the work including the amount payable in respect of (I) materials and / or stores supplied issued hereunder by the University to the contractor. (II) hire charges in respect of heavy plant, machinery and equipment given on hire, by the University to the contractor for execution by him of the work and / or on which advances have been given by the University to the contractor shall be deemed to be arrears of Land Revenue and University to the contractor shall be may without prejudice to any other rights and remedies of the University recover the same from the contractor as arrears of land revenue. (CAT-1274/40364/Desk-2, dt.7/12/76)

Clause 52

The contractor shall duly comply with all the provision of the contract Labour (Regulation and Abolition) Act.1970 (37 of 1970) and the Maharashtra Contract Labour (Regulation and Abolition) Rules, 1971 as amended from time to time and all other relevant statutes and statutory provision concerning payment of wages particularly to workmen employed by the contractor and working on site of work. In particular the contractor shall pay wages to each worker employed by him on the site of the work at the rates prescribed under the Maharashtra Contractor Labour (Regulation and Abolition) Rules, 1971. If the contractor fails or neglects to pay wages at the said rates or makes short payment and the University makes such payment of wages in full or part thereof less paid by the contractor, as the case may be, the amount so paid by the University to such worker shall be

	deemed to be an arrears of land revenue and the University shall be entitled to recover the same as such from the contractor or deduce the same from any other amount payable to him by the University.			
Clause 53				
	The contractor shall engage apprentice such as brick layer, carpenter, wiremen, plumber, as well as blacksmith recommended by the State Apprenticeship Advisor Director of Technical Education, Dhobi Talaw, Mumbai 400 001. In the construction work (as per circular of Government of Maharashtra, Education Department No.CAT/1086/CR-243/K/Bldg.32dt.11.8.1987)			
Clause 54				
(Govt. of Maharashtra P.W.D. resolution No. CAT/1086/CR- 243/K/Bldg- 2,dt.11/8/87)	A. The anti-malaria and other health, measures shall be as directed by The joint Director (Malaria and Filaria) of Health Service, Pune. B. Contractor shall see that mosquitogenic conditions are not created so as to keep vector population to minimum level. C. Contractor shall carry out anti malaria measures in the area as per guidelines prescribed under National Malaria Eradication Programme and as directed by the Joint Director (M&F) of Health Services, Pune. D. In case of default in, carrying out prescribed anit malaria measured resulting in increase in malaria incidence, contractor shall be liable to pay to Corporation the amount spent by University on anti-malaria Measures into control the situation in addition to fine. E. RELATIONS WITH PUBLIC AUTHORITIES:- The contractor shall make sufficient arrangements for draining away the sewage water as well as water coming from the bathing and washing places and shall dispose off this water in such a way as not to cause any nuisance. He shall also keep the premises clean by employing sufficient number of sweepers. The contractor shall comply with all rules, regulations, bye-laws and			
	directions given from time to time by any local or public authority in			
	connection with this work and shall pay fees or charges which are livable on him without any extra cost to University.			
Clause 55				
The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996	All the establishments who carryon any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay Cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as Canteens, First-Aid facilities, Ambulance, Housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.			
Clause 56				
Mandatory testing of Material Penalty	Mandatory Testing of Material Penalty: - It is mandatory on the part of contractor to carry out all the required tests of various construction materials as mentioned in schedule "B" of the tender. If the contractor fails to submit required test result to the various construction in			

materials as mentioned in the items schedule "B" he will be liable to deposit the amount at penal rate of Five times of the amount of particular test which he has not carried out. Contractor will be informed by the Engineer – in – charge through letter. On receipt of letter, contractor will have to either deposit the said amount or to carry out the required test within ten day. If he again fails to carry out the required tests in stipulated time, the said tests will be carried out by the Department and total expenditure incurred on the testing charges plus five times amount of testing charges will be recovered from the contractor's bill. As this recovery is only due to the negligence on the part of contractor to carry out work as per Tender condition and Executive Engineer"s decision will be final and binding on the contractor and it can not challenged by the contractor by way of Appeal, Arbitration or in the Court of Law. Considering above, relevant clause shall be included in DTP. Tender Percentage for Royalty, Testing charges and Man Power While preparing D.T.P. the schedule "B" /BOQ amount shall be divided as (A) work portion and (B) Royalty charges, Testing charges and Man power for Dept. For B-1 Tender the percentage shall be applied to work portion (A) only. For B-2 tender the rate of item shall be applied to work portion (A) only. In above both case the part "B" of schedule B/BOQ will be intact. Considering above, relevant clause shall be including in DTP.

ADDITIONAL CONDITIONS/INSTRUCTIONS TO TENDERERS WHILE TENDERING FOR THE WORKS.

ADDITIONAL CONDITIONS/INSTRUCTIONS TO TENDERERS WHILE TENDERING FOR THE WORKS.

Person tendering for the work covered by the schedule will be required to complete the work within the periods specified below:

Name of work	To start from the date of issue of work order	To complete
Supplying, Installing, Testing and Commissioning of 5 kw Hybrid Solar System for Classroom and Establishment section at University Main Building, Lonere.		Within 1 month
No of Units :- 02 Nos		

Clause1: Security Deposit (PWD, Resolution No. CAT/1087/CR-94/B.dg – 2.Dt. 14.6.89)

The person / persons whose tender may be accepted (hereinafter called the contractor, which expression shall unless excluded by or repugnant to the context include his heirs, executors, administrators and assigns) shall (A) within 10 days (Which may be extended by the Registrar concerned upto 15 days if the Registrar thinks fit to do so) of the receipt by him of the notification of the acceptance of his tender deposit with the Registrar in cash or University securities endorsed of the Registrar. (If deposited for more than 12 months) of sum sufficient which will made up the full security deposit specified in the tender or (B) (Permit University at the time of making any payment to him work done under the contract to deduct such as will amount to * _10 (Ten) percent { Note : * this will be the same percentage as that in the tender at (e) } of all moneys so payable such deductions to be held by University by way of security deposit) provided always that in the event of the contractor depositing a lump sum by way of security deposits as contemplated at (A) above, then and in such case, if the sum so deposited shall not amount to 4 (Four) percent of the total estimated cost of the work, it shall be lawful for University at the time of making any payment to the contractor for work done under the contract to make up the full amount of 4 (Four) percent by deducting a sufficient sum from every such payment as last aforesaid until the full amount of the security deposit is made up. All compensation or other sums of money payable by the contractor to University under the terms of his contract may be deducted from or paid by the sale of sufficient part of his security

deposit or from the interest arising there from, or from any sums which may be due or may become due by University to the contractor under any other contract or transaction of any nature on any account whatsoever and in event of his security deposit being reduced by reason of any such deducting or sale as aforesaid, the contractor shall, within ten days thereafter make good in cash or University securities endorsed as aforesaid any sum or sums which may have been deducted from or raised by sale of his security deposit or any part thereof. The security deposit referred to, when paid in cash may, at the cost of the depositor, be converted into interest bearing securities provided that the depositor has expressly desired this in writing.

The Security deposit will not be accepted in the form of insurance company's bond as per University orders contained CCM/PWD/CAT-4250-S dtd. 27.2.1956

If the amount of the security deposit to be paid in a lump sum within the period specified at (A) above is not paid the tender / contractor already accepted shall be considered as cancelled and legal steps taken against the contractor for recovery of the amount. The amount of the security deposit lodged by a contractor shall be refunded along with the payment of the final bill, if the date upto which the contractor has agreed to maintain the work in good order is over. If such date is not over, only 90% amount of security deposit shall be refunded along with the payment of the final bill. The amount of security deposit retained by the University shall be released after expiry of period up to which the contractor has agreed to maintain the work in good order is over. In the event of the contractor failing or neglecting to complete rectification work within the period up to which the contractor has agreed to maintain the work in good order, then, subject to provisions of clauses 17 and 20 hereof the amount of security deposit retained by University shall be adjusted towards the excess cost incurred by department on rectification work.

Clause2: Compensation for Delay:

The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be reckoned from the date of which the order to commence work is given to the contractor. The work shall through the stipulated period of the contract be proceeded with, with all due diligence (time being deemed to be the essence of the contract on the part of the contractor.) and the contractor shall pay as compensation an amount equal to one percent of such smaller amount as the Registrar (whose decision in writing shall be final) may decide, of the amount of the estimated cost of the whole work as shown by the tenderer for every day that the work remains uncommenced, or unfinished after the proper dates. And further to ensure good progress during execution of the work, the contractor shall be bound, in all cases in which the time allowed for any work exceeds one month to complete.

In the event of the contractor failing to comply with the conditions he shall be liable to pay as compensation an amount equal to one percent or such smaller amount as the Registrar (whose decision in writing shall be final) may decide of the said estimate cost of the whole work for every day that the due quantity of work remains incomplete provided always that the total amount of compensation to be paid under that provisions of this clause shall not exceed 10 percent of the estimated cost of work as shown in the tender. Registrar, should be the final authority in this respect, irrespective of the fact that the tender is accepted by anybody.

Clause 3: Action when whole of security deposit is forfeited.

In any case in which under any clause of this contract the contractor shall have rendered himself liable to pay compensation amounting to the whole of this security deposit whether paid in one sum or deducted by installments or in the case of abandonment of the work owing to serious illness or death of the contractor or any other cause the Registrar, on behalf of the University, shall have power to adopt any of the following courses, as he may deem best suited to the interest of University:

- (A) To rescind the contract (for which rescission notice in writing to the contractor under the head of Registrar shall be conclusive evidence) and in that case the security deposit of the contractor shall stand forfeited and be absolutely at the disposal of University.
- (B) To carry out the work or any part of the work departmentally debiting the contractor with the cost of the work, expenditure incurred on tools and plants, and charges on additional supervisory staff including the cost of work charged establishment employed for getting the un-executed part of the work completed and crediting him with the value of the work done departmentally in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Registrar as to the cost and other allied expenses so incurred and also the value of the work so done departmentally shall be final and conclusive against the contractor.
- (C) To order that the work of the contractor be measured up and to take such part thereof as shall be unexecuted out of his hands, and to give it to another contractor to complete, in which case all expenses incurred on advertisement, for fixing a new contracting agency, additional supervisory staff including the cost of work charged establishment and the cost of the work executed by the new contract agency will be debited to the contractor and the value of the work done or executed through the new contractor shall be credited to the contractor in all respects and in the same manner and at the same rates a if it had been carried out by the contractor under the terms of his contract. The certificate of the Registrar as to all the cost of the work and other expenses incurred as aforesaid for or getting the unexecuted work done by the new contractor and as to the value of the work so done shall be final and conclusive against the contractor. In case the contractor shall be rescinded under clause (a) above the contractor shall not be by entitled to recover or be paid, any sum for any work therefore actually performed by him under this contract unless and until the Registrar shall have certified in writing the performance of the such work and the amount payable to him in respect thereof and he shall only be entitled to be paid the amount so certified. In the event of either of the courses referred to in clause (b) or (c) being adopted and the cost of the work executed departmentally or through a new contractors and other allied expenses exceeding the value of such work credited to the contractor the amount of excess shall be deducted from any money due to the contractor, by University under the contract of otherwise howsoever or from his security deposit or the sale proceeds thereof provided, however, the contractor shall have no claim against University even if the certified value of the work done departmentally or through a new contractor exceeds the certified cost of such work and allied expenses, provided always that whichever of the three courses mentioned in clause (a), (b) or (c) is adopted by the Registrar, the contractor shall heave no claim to compensation for any loss sustained by him by reason of his having purchase or procured any materials or entered in to any engagements, or made any advance on account of or with a view to the execution of the work or the performance of the contract.

Clause 4: Action when the progress of any particular portion of the work is unsatisfactory

Clause 3 (b) after giving the contractor 10 days' notice in writing. The contractor will have no claim for compensation, for any loss sustained by him owing to such action.

Clause 5: Contractor remains liable to pay compensation if action not taken under clause 3 & 4.

In any case in which any of the powers conferred upon the Registrar by clause 3 & 4 hereof shall have become exercisable and the same shall not have been exercised the nonexercised thereof shall not constitute a waving of any of the conditions hereof and such powers shall not withstanding be exercisable in the event of any future case of default by the contractor for which under any clause hereof he is declared liable to pay compensation amounting to the whole of his security deposit and the liability of the contractor for past and future compensation shall remain unaffected. In the event of Registrar taking action under sub-clause (b) or (c) of clause 3, he may, if he so desires, take possession of all any tools and plant, materials and stores in or upon the work of the site thereof or belonging to the contractor, or procured by him and intended to be used for the execution of the work or any part thereof paying or allowing for the same in account at the contract rates not being applicable at current market rates to be certified by the Registrar whose certificate thereof shall be final. In the alternative the Registrar may, after giving notice in writing to the contractor or his clerk of the work, foreman or other authorized agent require him to remove such tools and plants, materials or stores from the premises within a time to be specified in such notice, and in the event of the contractor failing to comply with any such requisition, the Registrar may remove them at the contractor's expense or sale them by auction or private sale on account of the contractor and at his risk in all respects and the certificate of the Registrar as to the expense of any such removal and the amount of the proceeds and expense of any such sale shall be final and conclusive against the contractor.

Clause 6. Extension of time.

If the contractor shall desire an extension of the time for completion of work on the ground of his having been unavoidably hindered in its execution or on any other ground he shall apply in writing to the Registrar before the expiration of the period stipulated in the tender or before the expiration of 30 days from the date on which he was hindered as aforesaid or on which the case for asking for extension occurred, whichever is earlier and the Registrar or in the opinion, there were reasonable grounds for granting an extension, grant such extension as he thinks necessary or proper. The decision of the Registrar in this matter shall be final.

Clause 7. Final Certificate

On the completion of the work the contractor shall be furnished with a certificate by the Registrar (hereinafter called the Engineer-in-charge) of such completion but no such certificate shall be given nor shall the work be consider to be complete until the contractor shall have removed from the premises on which the work shall have been executed, all scaffolding, surplus material and rubbish, and shall have cleaned off, the dirt from all wood work, doors, windows, wall, floor or other parts of any building in or upon which the work has been executed or of which he may have had possession for the purpose of executing the work, not until the work shall have been measured by the Engineer- in-charge or where the measurement have been taken by his subordinates until they have received approval of the Engineer-in-charge, the said measurements being binding and conclusive against contractor. If the

contractor shall fail comply with the requirements of this clause as to the removal of scaffolding surplus materials and rubbish and cleaning of dirt on or before the date fix for the completion of the work the Engineer-in-charge may at the expense of the contractor remove such scaffolding surplus material and rubbish and dispose off the same as he thinks fit and clean off such dirt as aforesaid and the contractor shall forth with pay the amount of all expenses so incurred, but shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.

Clause 8. Payment on Intermediate Certificate to be regarded as advance.

No payment shall be made for any work estimated to cost less than rupees 1000/- till after the whole of work shall have been completed and a certificate of completion given but in the case of works estimated to cost more than Rs.1000/- the contractor shall on submitting a monthly bill therefore be entitled to received payment proportionate to the part of the work then approved and passed by the Engineer-in-charge, whose certificate of such approval and passing of the sum so payable shall be final and conclusive against the contractor. All such

intermediate payments shall be regarded as payment by way of advanced against the final payments only and not as payments for work actually done and completed and shall not produce the Engineer-in-charge from requiring any bad, unsound imperfect or unskillful work to be removed or taken a way and reconstructed or re-erected nor shall any such payment be considered as an admission of the due performance of the contract or any part thereof in any respect or the occurring any claim nor shall it include, determine or effect in any other way the powers of the Engineer-in-charge just as to the final settlement and adjustment of the account or otherwise, or in any other way very or effect the contract. The final bill shall be submitted by the contractor within one month of the date fixed for the completion of the work, otherwise the Engineer-in-charge's certificate of the measurements and of the total amount payable for the work shall be final and binding on all parties.

Clause 9. Payment as reduced rates on account of items of work not accepted as completed, to be at the discretion of the Engineer- in-charge.

The rate for several items of work estimated to cost more than Rs.5000/- agreed to within, shall be valid only when the item concerned is accepted as having been completed fully in accordance with the sanctioned specification. In cases where the items of the work are not accepted as so completed by the Engineer-in-charge may make payment on account of such items at such reduced rates as he may consider reasonable in the preparation of final of on account bills.

Clause 10. Bill to be submitted monthly.

A bill shall be submitted by the contractor in each month or before the data fixed by the Engineer-in-charge for all work executed in the previous month and the Engineer-in-charge shall take or cause to be taken the request measurement for the purpose of having the same

verified and the claim, so far as it is admissible, shall be adjusted, if possible, within ten days from the presentation of the bill. If the contractor does not submit the bill within the time fixed as aforesaid, the Engineer-in-charge may dispute a subordinate to measure up the said work in the presence of the contractor or his duly authorized agent whose countersignature to the measurement list shall be sufficient warrant and Engineer-in-charge may prepare a bill from such list which shall be binding on the contractor in all respects.

Clause 11. Bills to be on printed forms.

The contractor shall submit all bills on the printed forms to be had on application at the office of the Engineer-in-charge. The charges to be made in the bills shall always be entered at the rates specified in the tender or in the case of any extra work ordered in pursuance of these conditions and not mentioned or provided for in the tender at the rates hereinafter provided for such work.

Clause 12. Stores supplied by University.

If the specification or estimate of the work provides for the use of any special description of material to be supplied from the store of the Dept. store or if it is required that the contractor shall use certain stores to be provided by the Engineer-in-charge. (such material., stores and the prices to be charged therefore as hereinafter mentioned being so far as practicable for the convenience of the contractor but not so as in any way to control the meaning or effect of this contract specified in the schedule or memorandum hereto unnexed) the contractor shall be supplied with such materials and stores as may be required from time to time to be used by him for the purpose of the contract only, and value of the full quantity of the materials and stores so supplied shall be set off or deducted from any sums then due or thereafter to become due, to the contractor under the contract or otherwise, or from the security deposit or the proceeds of sale thereof if the security deposit is held in University securities, the same or a sufficient portion thereof shall in that case be sold for the purpose. All materials supplied to the contractor shall remain the absolute property of University and shall on no account be removed from the site of the work, and shall at all times be open for inspection by the Engineer-in-charge so requires by a notice in writing given under his hand but the contractor shall not be entitled to return any such materials except with consent of the Engineer-in-charge and he shall have no claim for compensation on account of any such material supplied to him as aforesaid but remaining unused by him or for any wastage in or damage to any such materials.

Clause 12 A.

All stores of controlled material such as cement, still etc. supplied to the contractor by University should be kept by the contractor under lock and key and will be accessible for inspection by the Registrar or his agent at all the times.

Clause 13. Works to be executed in accordance with specifications, drawings, orders etc.

The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner, and both as regards materials and every other respect in strict accordance with specifications. The contractor shall also conform exactly, fully and faithfully to the designs, drawings and instructions in writing relating to the work signed by the Engineer-incharge and lodged in his office and to which the contractor shall be entitled to have access for

the purpose of inspection at such office, or on the site of the work during office hours. The contractor will be entitled to receive three sets of contract drawings and working drawings as well as one certified copy of the accepted tender along with the work order free of cost. Further copies of the contract drawings and working drawings if required by him shall be supplied at the rate of Rs. ______ per set of contract drawings and Rs. ______ per working drawing except where otherwise specified.

Clause 14. Alteration in specifications and designs not to invalidate contracts ...

The Engineer-in-charge shall have power to make any alteration in or additions to the original specifications, drawings, designs and instruction that may appear to him to be necessary or advisable during the progress of the work and the contractor shall be bound to carry out the work in accordance with any instructions in this connection which may be given to him in writing signed by the Engineer-in-charge and such alteration shall not invalidate the contract, and any additional work which the contractor may be directed to do in the manner above specified as part of the work shall be carried out by the contractor on the same conditions in all respects on which he agreed to do the main work and at the same rates as are specified in the tender for the main work. And if the additional and altered work includes any class of work for which no rate is specified in this contract, then such class of work shall be carried out at the rates entered in the schedule of rates of the division or at the rates mutually agreed upon between the Engineer-in-charge and the contractor, whichever are lower. If the additional or altered work for which no rate is entered in the schedule of rates of the division is ordered to be carried out before the rates are agreed upon then the contractor shall within 7 days of the date of receipt by him of the order to carry out the work, inform the Engineer-in-charge of the rate which it is him intention to charge for such class or work. And if the Engineer-in-charge does not agree to this rate he shall by notice in writing be at liberty to cancel his order to carry out such class of work and arrange to carryout in such manner as he may consider advisable provide always that if the contractor shall commence work or incase any expenditure in regard thereto before the rate shall have been determined as lastly herein before mentioned, then in such case he shall only be entitled to be paid in respect of the work carried out or expenditure incurred by him prior to the date of the determination of the rate as aforesaid according to such rate or rates as shall be fixed by the Engineer-in-charge. In the event of a dispute the decision of Registrar of the circle will be final.

Where, however the work is to be executed according to the designs, drawings and specifications recommended by the contractor and accepted by the competent authority the alterations above referred to shall be within the scope of such designs, drawings and specifications appended to the tender.

The time limit for the completion of the work shall be extended in the proportion that increase in its cost occasioned by alterations of additions bears to the cost of the original contract work and the certificate of the Engineer-in-charge as to such proportion shall conclusive.

Clause 15. (1) Bo claim to any payment or compensation for alteration in or restriction of work.

If at any time after the execution of the contract documents the Engineer shall for any reason what - so - ever (other than default on the part of the contractor for which the University is

entitled to resigned the contract) desires that the whole or any part of the work specified in the tender should be suspended for any period or that the whole or part of the work should not be carried out, at all he shall give to the contractor a notice in writing of such desire and upon the receipt of such notice the contractor shall forthwith suspend or stop the work wholly or in part as required, after having due regard to the appropriate stage at which the work should be stopped or suspended so as not to cause any damage or injury to the work already done or endanger the safety thereof provided that the decision of the Engineer as to the stage at which the work or any part of it could be or could have been safely stopped or suspended shall be final and conclusive against the contract. The contractor shall have not claim to any payment or compensation whatsoever by reason of or in pursuance of any notice a aforesaid, an account of any suspension, stoppage or curtailment except to the extent specified hereinafter.

- (2) Where the total suspension of work ordered as aforesaid continued for a continuous period exceeding 90 days the contractor shall be at liberty to withdraw from the contractual obligations under the contract so far as it pertains to the unexecuted part of the work by giving a 10 day's prior notice in writing to the Engineer, within 30 days of the expiry of the said period of 90 day's prior notice in writing to the Engineer, within 30 days of the expiry of the said period of 90 days, of such intention and requiring the Engineer to record the final measurement of the work already done and to pay final bill. Upon giving such notice the contractor shall be deemed to have been discharged from his obligations to complete the remaining unexecuted work under his contract. On receipt of such notice the Engineer shall proceed to complete the measurements and make such payment as may be finally due to the contractor within a period of 90 days from the receipt of such notice in respect of the work already done by the contractor. Such payment shall not in any manner prejudice the right of the contractor to any further compensation under the remaining provisions of this clause.
- (3) Where the engineer required the contractor to suspend the work for a period in excess of 30 days at an time or 60 days in the aggregate, the contractor shall be entitled to apply to the Engineer within 30 days of the resumption of work after such suspension for payment of compensation to the extent of pecuniary loss suffered by him in respect of working machinery remain idle on the site or on the account of his having and to pay the salary or wages of labour engaged by him during the said period of suspension provided always that the contractor shall not be entitled to any claim in respect of any such working machinery, salary or wages for the first 30 days whether consecutive or in the aggregate or such suspension or in respect of any suspension whatsoever occasioned by unsatisfactory work or any other default on his part. The decision of the Engineer in this regard shall be final and conclusive against the contractor.
- (4) No Claim to compensation on account of loss due to delay in supply of material by University
- (I) Any total stoppage of work on notice from Engineer under sub clause (1) in that behalf
- (II) Withdrawal by the contractor from the contractual obligations complete the remaining unexecuted work under sub-clause (2) on account of continued suspension of work for a period exceeding 90 days.
- (III) Curtailment in the quantity of item or items originally tendered on account of any alteration, omission on substitution in the specifications, drawings, designs or instruction under clause (14) one where such curtailment exceeds 25% in quantity and the value of the quantity curtailed beyond 25% at the rates for the item specified in the tender is more than Rs.50,000/-

It shall be open to the contractor, within 90 days the services of (i) the notice of stoppage of work or (II) the notice of withdrawal from contractual obligations under the contract on account of the continued suspension of work or (III) notice under clause 14 (1) resulting in such curtailment to produce to the Engineer satisfactory documentary evidence that he had purchased or agreed to purchase material for use in the contracted work, before receipt by him of the notice of stoppage, suspension or curtailment and required the University to take over on payment such ;material at the rates determined by the Engineer, provided, however, such rates shall in no case exceed the rates at which the same was acquired by the contractor. The University shall thereafter take over the material so offered, provided the quantities offered are not in excess of the requirement of the unexecuted work as specified in the accepted tender and are of quality and specifications approved by the Engineer.

Clause 15 A. No claim to compensation on account of loss due to delay in supply of material by University

The contractor shall not be entitled to claim any compensation from University for the loss suffered by him on account to delay by University in the supply of materials entered in Schedule A where such delay is caused by

- (I) Difficulties relating to the supply of railway wagons.
- (II) Force majeure
- (III) Act of God
- (IV) Act of enemies of the State or any other reasonable cause beyond the control of University.

In the case of such delay in the supply of materials, University shall grant such extension of time for the completion of the work as shall appear to the Registrar to be reasonable in accordance with the circumstances or the case. The decision of the 4 Registrar as to the extension of time shall be accepted as final by the contractor.

Clause 16. Time limit for unforeseen claims.

Under no circumstance whatever shall the contractor be entitled to any Compensation from University on any account unless the contractor shall have Submitted a claim in writing to the Engineer-in-charge within on month or the case of such claim occurring.

Clause 17. Action and compensation payable in case of bad work. (PWD Resolution No. CAT 1087/CR-94/Bldg. – 2 dt.14/6/1989

If any time before the security deposit or any part thereof is refunded to the contractor it shall appear to the Engineer-in-charge or his subordinate in charge of the work, that any work has

been executed with unsound, imperfect or unskillful workmanship or with materials of inferior quality, or that any materials or articles provided by him for the execution of the work are unsound, or of a quality inferior to that contracted for, or are otherwise not in accordance with the contract, it shall be lawful for the Engineer-in-charges to intimate this fact in writing to the contractor and then not withstanding the fact that the work, materials or articles complained of may have been inadvertently passed, certified and paid for, the contractor shall be bound forthwith to rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or if so required, shall remove the materials or articles so specified and provided other proper and suitable materials or articles at his own charge and cost and in the event of his failing to do so within a period to be specified by the Engineer-in-charge in the written intimation aforesaid, the contract shall be liable to pay compensation at the rate of one percent on the amount of the estimate for every day not exceeding 10 days, during which the failure so continuous and in the case of any such failure the Engineer-in-charge may rectify or remove and re-execute the work or remove, and replace the materials or articles complained of as the case may be at the risk and expense in all respects or the contractor. Should the Engineerin-charge consider that any such inferior work or materials as described above may be accepted or made use o fit shall be within his discretion to accept the same at such reduced rates as he may fix therefore.

Clause 18. Work to be open to inspection. (Contractor or Responsible agent to be present)

Contract shall at all times be open to the inspection and supervision of the Engineer-in-charge and his subordinates, and the contractor shall at all times during the usual working hours, and at all other times at which reasonable notice of the intention of the Engineer-in-charge and his subordinate to visit the work shall have been given to the contractor, either himself be present to receive orders and instructions or have responsible agent duly accredited in writing present for that purpose. Orders given to the contractor's duly authorized agent shall be considered to have the same force and effect as if they had been given to the contractor himself.

Clause 19. Notice to be given before work is covered up.

The contractor shall give not less than five day's notice in writing to the Engineer-in-charge or his subordinate in charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof taken before the same is so covered up or place beyond the reach of measurements and shall not cover up or place beyond the reach of measurements any work without the consent in writing of the Engineer-in-charge or his subordinate in charge of the work, and if any work shall be covered up or place beyond the reach of measurement, without such notice having been given or consent obtained the same shall be uncovered at the contractors expenses, and in default thereof no payment or allowance shall be made for such work or for the materials with which the same was executed.

Clause 20. Contractor liable for damage done and for imperfections. (PWD Resolution No. CAT. 1087/CR-94/Bldg-2 dt.14.6.89)

If during period of 12 month / 1 year from the date of completion as certified by the Engineer-in-charge pursuant to Clause-7 of the contract or _____ or 12 months/1year after commissioning the work, whichever is earlier in the opinion of the Registrar, the said work is defective in any manner whatsoever, the contractor shall forthwith on receipt of notice in that behalf from the Registrar, duly commence execution and completely carry out at his cost in

every respect all the work that may be necessary for rectifying and setting right the defects specified therein including dismantling and reconstruction of unsafe portion strictly in accordance with and in the manner prescribed and under the supervision of the Registrar. In the event of the contractor failing or neglecting to commence execution of the said rectification work within the period prescribed therefore in the said notice and /or to complete the same as aforesaid as required by the said notice, the Registrar get the same executed and carried out departmentally or by any other agency at the risk on account and t the cost of the contractor. The contractor shall forthwith on demand pay to the University the amount of such cots, charges and expenses sustained or incurred by the University of which the certificate of the Registrar shall be final and binding on the contractor. Such costs, charges and expenses shall be deemed to be arrears of land revenue and on the event of the contractor failing or neglecting to pay the same on demand as aforesaid without prejudice to any other rights and remedies of the University; the same may be recovered from the contractor as arrears of land revenue. The University shall also be entitled to deduct the same for many amount which may then be payable or which may thereafter become payable by the University to the contractor either in respect of the said work or any other work whatsoever or from the amount of security deposit retained by University.

Clause 21. Contractor to supply plant, ladder, scaffolding etc.

The contractor shall supply at his own cost all material (except such special materials if any as may in accordance with the contract, be supplied from the ____ tools, appliances, implements, ladders, cordage, tackle, scaffolding and temporary works requisite or proper for the proper execution of the work, whether, in the original, altered or substituted from, and whether included in the specification or other documents forming part of the contractor or referred to tin these conditions or not and which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-charge as to any matter as to which under these conditions he is entitles to be satisfied, or which he is entitled to require together with the carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials necessary for the purpose of setting out works and counting, weighing and assisting in the measurement or examination at an time and from time to time of the work or the materials, failing which the same may be provided by the Engineer-in-charge at the expense of the contractor and the expenses may be deducted from any money due to the contractor under the contract or from his security deposit or the proceeds of sale thereof, or of a sufficient portion thereof. The contractor shall provide all necessary fencing and lights required to protect the public from accident and shall also be bound to bear the expenses of defense of every suit, action or other legal proceeding that may be brought by any person for injury sustained owing to neglect of the above precautions, and to pay damages and cost which may be awarded in any such suit action or proceedings to any such person or which may with consent of the contractor be paid for compromising any claim by any such person.

List of machinery in contractor's possession and which they propose to use on the works should be submitted alongwith the tender.

Clause 21 (A).

The contractor shall provide suitable scaffolds and working platforms gangways and stairways and shall comply with the following regulations in connection therewith:

- (a) Suitable scaffolds shall be provided for workmen for all works that can not be safely done from a ladder or by other means.
- (b) A scaffold shall not be constructed, taken down or substantially altered except
 - (i) under the supervision of a competent and responsible person and
 - (ii) Ss far as possible by competent workers possessing adequate experience in this king of work.
- (c) All scaffolds and appliances connected there with and ladders shall
 - (i) be of sound material
 - (ii) be of adequate strength having regard to the loads and strains to which they will be subjected and
 - (iii) be maintained in proper condition
- (d) Scaffolds shall be so constructed that no part thereof cab be displaced in consequence of normal use.
- (e) Scaffolds shall not be over-loaded and so far as practicable the load shall be evenly distributed.
- (f) Before installing lifting gear on scaffolds special precautions shall be taken to ensure the strength and stability of the scaffold,
- (g) Scaffold shall e periodically inspected by the competent person.
- (h) Before allowing a scaffold to be used by his workmen the contractor shall, whether, the scaffolds has been erected by his workmen or not take steps to ensure that it complies fully with the regulations here-in-specified.
- (i) Working platform, gangways stairways shall
 - i) Be so constructed that no part thereof can sag unduly or unequally.
 - ii) Be so constructed and maintained having regard to the prevailing conditions as to reduce as for as practicable risks of person tripping or slipping, and
 - iii) Be kept free from any unnecessary obstruction.
- (j) In the case of working platform, gangways, working places & stairways at the height exceeding 3 meters.
 - iv) Every working platform and every gengway shall be closely boarded unless other adequate measures are taken to ensure safety.
 - v) Every working platform and gangways shall have adequate width and
 - vi) Every working platform, gangway working place and stairway shall be suitable fenced
- (k) Every opening in the floor of a building or in a working platform shall except for the time and to the extent required to allow the excess of persons or the transport of shifting of materials be provided with suitable means to prevent the fall of persons of materials.

- (l) When persons are employed on roof where there is a danger of falling from a height exceeding 3 meters suitable precautions shall be taken to prevent that fall or persons or materials.
- (m) Suitable precautions shall be taken to prevent persons being struck by articles which might fall form scaffold or other working places.
- (n) Safe means of access shall be provided to all working platforms and other working places.
- (o) The contractor (s) will have to make payments to the labourers as per minimum wages Act.

Clause 21 (B).

The contractor shall comply with the following regulations as regard the Hoisting Appliances to be used by him-

- (a) Hoisting machine and tackle, including their attachments, anchorage and support shall
 - i) Be of good mechanical construction, sound material and adequate strength and free from patent defect,

And

- ii) Be kept in good repair and in good working order.
- (b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of suitable quality and adequate strength and free from patent defect.
- (c) Hoisting machine and tackle shall be examined and adequately tested after erection on the site and before use and be re-exami9ned in position at intervals to be prescribed by the University.
- (d) Every chain, ring, hook, shackle swivel and pulley block used in hoisting or lowering materials or as a means of suspension shall be periodically examined.
- (e) Every crane driver or hoisting appliance operator shall be properly qualified.
- (f) No person who is below the age of ______ years shall be in control of any hoisting machine, including and scaffold which, or give signals to the operator.
- (g) In the case of every hoisting machine and of every chain, ring, hook, shackle, swivel pulley block used in hoisting or lowering or as means of suspension, the safe working load shall be ascertained by adequate means.

- (h) Every hosting machine and all gear referred to in preceding regulation shall be plainly marked with the safe working load.
- (i) In the case of a hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated.
- (j) No part of any hosting machine or of any gear referred to in regulation (g) above shall be loaded beyond the safe working load except for the purpose of testing.
- (k) Motors, gearing transmissions, electric, wiring and other dangerous part or hosting appliances shall be provided with efficient safeguards.
- (l) Hoisting appliance shall be provided with such means as will reduces to minimum and the risk of the accidental descent of the load.
- (m) Adequate precaution shall be taken to reduce to minimum the risk of any part of a suspended load becoming accidentally displaced.

Clause 22. Measure for prevention of fire.

The contractor shall not set fire to any standing jungle, trees, brushwood or grass without a written permit form the Registrar. When such permit is given, and also in all case when destroying cut or dug up trees brushwood, grass etc. By fire, the contractor shall take the necessary measure to prevent such fire spreading to or otherwise damaging surrounding property. The contractor shall make his own arrangements for drinking water for the labour employed by him.

Clause 23. Liability of contractor for any damage done in or outside work area.

Compensation for all damages done intentionally or unintentionally by contractor's labour whether in or beyond the limits of University property including any damage caused by the spreading of fire mentioned in clause 22 shall be estimated by the Engineer-in-charge or such other officer as he may appoint and the estimate of the Engineer-in-charge subject to the decision of the Registrar on appeal shall be final and the contractor shall be bound to pay the amount of the assessed compensation on demand, failing which, the same will recovered from the contractor as damage in the manner prescribed in clause 1 or deducted by the Engineer-in-charge from any sums that may be due or become due from university to contractor under this contract otherwise.

The contractor shall bear the expenses of defending any action of other legal proceeding that maybe brought by any persons for injury sustained by him owing to neglect of precautions to prevent the spread of fire and he shall pay any damages and cost that may be awarded by the court in consequence.

Clause 24. Employment of female labour.

The employment of female labours on works in neighbor-hood of soldier's barracks should be avoided as far as possible.

Clause 25. Work on Sunday

No work shall be done on a Sunday without the sanction in writing of the Engineer-in-charges.

Clause 26. Work not to be sublet.

The contract shall not be assigned or subject without the written approval of the Engineer-incharge. And if the contractor shall assign or sublet his contract, or attempt so, to do, or become insolvent or commence any proceeding to get himself adjudicated and insolvent or make any composition with his creditors, or attempt so to do or if bride, gratuity, gift, loan, perquisite, reward or advantage, pecuniary or otherwise shall either directly or indirectly be give, promised or offered by the contractor or any of his servants or agents to any public officer or person in the employ of University in any way relating to his office or employment, or if any such officer or person shall become in anyway directly or indirectly interested in the contract, the Engineerin-charge may thereupon by notice in writing rescind the contract, and the security disposal of University and the same consequences shall ensure as if the contract had been rescinded under Clause 3 hereof and in addition the contractor shall not be entitled to recover or be paid for any work therefore actually performed under the contract.

Note:- Contract may be rescinded and security deposit forfeited for subletting it without approval or for bribing a public officer or if contractor becomes insolvent.

Clause 27. Sum payable by way of compensation to be considered as reasonable compensation without reference to actual loss.

All sums payable by a contractor by way of compensation under any of these conditions shall be considered as a reasonable compensation to be applied to the sue of University without reference to the actual loss or damage sustained, and whether any damage has or has not been sustained.

Clause 28. Change in the constitution of firm to be notified.

In the case of tender by partners, any change in the constitution of a firm shall be forthwith notified by the contactor to the Engineer- in-charge for his information.

Clause 29. Direction and control of the Registrar.

All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Registrar of the Circle, for the time being, who shall be entitled to direct at what point or point and in what manner they are to be commenced, and from time to time carried on.

Clause 30. Direction and control of the Registrar.

- (1) Except where otherwise specified in the contract and subject to the powers delegated to him by University under the code, rules then in force, the decision of the Registrar of the circle for the time being shall be final, conclusive and binding on all parties to the contract upon all question relating to the meaning of the specifications, designs, drawings and instructions herein before mentioned and as to the quality or workmanship or materials used on the work, or as to any other question, claim, right matter, or thing whatsoever, if any way arising out of, or relating to the contract designs, drawings, specifications, estimates, instructions, orders, or these conditions, or otherwise concerning the works, or the execution, or failure to execute the same, whether arising during the progress of the work, or after the completion or abandonment thereof.
- (2) The contractor may within thirty days of receipt by him of any order passed by the Registrar as aforesaid appeal against it to the Vice-chancellor of University.
- a) The accepted Value of the Contract exceeds Rs. 10 Lakhs (Rs. Ten Lakhs)
- b) Amount of claim is not less than Rs.1.00 Lakh (Rs. One Lakh)
- (3) If the contractor is not satisfied with the order passed by the Vice-chancellor of University as aforesaid, the contractor may, within thirty days of receipt by him of any such order, appeal against it to the Building & Work Committee for suitable decision, who if convinced that prima-facia the contractor's claim rejected by Registrar / Vice-chancellor that there is some substance in the claim of the contractor as would merit a detailed examination and decision by the Building & Work Committee shall put up to the University level for suitable decision. (vide PW Circle No. CAT -1086 CR 110/Bldg-2 dt 7.5.86)

Clause 31. Store of European or American manufacture to be obtained for the University.

The contractor shall obtain from the Departmental stores, all stores and articles of European or American manufacture which may be required for the work, or any part thereof or in making up any articles required therefore or in connection therewith unless he has obtained permission in writing form the Engineer-in-charge to obtain such stores and articles elsewhere. The value of such stores and articles as may be supplied to the contractor by the Engineer-in-charge will be debited to the contractor in his account at the rates shown in the schedule, in Form A attached to the contract and if they are not entered in the said schedule, they shall be debited to him at cost price which for the purpose of this contract shall include the cost of carriage and other expenses whatsoever which shall have been incurred in obtaining delivery of the same at the stores aforesaid.

Clause 32. Lumpsum in estimates

When the estimate on which tender is made includes lumpsums in respect of parts of the work the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for each item, or if the part of work in question is not in the opinion of the Engineer-in-charge capable of measurement, the Engineer-in-charge may as his discretion pay the lumpsum amount entered in the estimate and the certificate in writing of the Engineer-in-charge shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provision of this clause.

Clause 33. Actions where no specifications

In the case of any class of work for which there is no such specification as is mentioned in rule 1 such work shall be carried out in accordance with the Divisional specifications, and in the event of there being no Divisional specification, then in such case the work shall be carried out in all respects in accordance with all instructions and requirements of the Engineer-in- charge.

Clause 34. Definition of work

The expression 'work' or 'work' where used in these conditions shall unless there be something in the subject or context repugnant to such construction, be construct to mean the work or works contracted to be executed under or n virtue of the contract, whether temporary or permanent and whether original altered substituted or additional.

Clause 35. Contractor's percentage whether applied to net or gross amount of bill.

The percentage referred to in the tender shall be deducted from / added to the gross amount of the bill before deducting the value of any stock issued.

Clause 36. Compensation under workmen's Compensation Act.

The contractor shall be responsible for the shall pay any compensation to his workmen payable under the Workman's Compensation Act 1923 (VIII of 1923 (hereinafter called the said Act) for injuries caused to the workmen. If such compensation is payable paid by University principle under Sub-section (1) of section 12 of the said Acton behalf of the contractor, it shall be recoverable by University from the contractor under sub-section (2) of the said section Such Compensation shall be recovered in the manner laid down in Clause 1 above.

Clause 36-A.

The Contractor shall e responsible for and shall pay the expenses of providing medical aid to any workmen who may suffer a bodily injury as a result of an accident. If such expenses are incurred by University the same shall be recoverable from the contractor forthwith and be deducted without prejudice to any other remedy of University from any amount due or that may become due to the contractor.

Clause 36-B.

The contractor shall provide all necessary personal safety equipment and first aid apparatus available for the use of the persons employed on the site and shall maintain the same in conditions suitable for immediate use at any time and shall comply with the following regulations in connection therewith.

- (a) The workers shall be required to use the equipment so provided by the contractor and the contractor shall take adequate steps to ensure proper use of the equipment by these concerned.
- (b) When work is carried on in proximity to any place where there is a risk or drawing all necessary equipment shall be provided and kept ready to use and all necessary steps shall be taken for the prompt rescue of any person in danger.
- (c) Adequate provision shall be made for the prompt first-aid treatment of all injuries like to be sustained during the course of the work.

Clause 36-C.

The contractor shall duly comply with the provisions of the Apprentices Act, 1961 (III of 1961) the rules made there under and the orders that maybe issue form time to time under the Act the said rules and on his failure or neglect to do so, he shall be subject to all the liabilities and penalties provided by the said Act and said Rules.

Clause 37 Claim for quantities entered in the tender or estimates

- (1) Quantities in respect of the several items shown in the tender are approximate and no revision in the tendered rate shall be permitted in respect of any of the items so long, as, subject to any special provision contained in the specifications prescribing a different percentage of permissible variation the quantity of the item done not exceed the tender quantity by more than 15% and so long as the value of the excess quantity. Beyond his limit at the rate of the item specified in the tender is not more than Rs. 5000/-
 - (2) The contractor shall if ordered in writing by the Engineer so to do, also carry out any quantities in excess of the limit mentioned in sub clause (1) hereof on the same conditions as and in accordance with the specifications in the tender and at the rates (i) derived from the rates entered in the current schedule of rates and in the absence of such rates, (ii) at the rate prevailing in the market, the said rates being increased or decreased as the case may be by the percentage which the total tendered amount bears to the estimates cost of the work as put to tender based upon the schedule of rates applicable to the year in which the tenders were invited. For the purpose of operation of this clause, this cost shall be taken to be Rs. 20,00,000/- (in words : Twenty lakh)
 - (3) Claim arising out of reduction in the tendered quantity of any item beyond 25% will be governed by the provision of clause 15 only when the amount of such reduction beyond 25 percent at the rate of the tem specified in the tender is more than Rs. 5000/- (The clause is not applicable to extra items)

Clause 38. Employment of famine labour etc.

The contractor shall employ any faming, convict or other labour of a particular kind or class if ordered in writing to do so by the Engineer-in-charge.

Clause 39. Claim of compensation for delay in starting of work.

No compensation shall be allowed for any delay caused in the starting of the work on account of acquisition of land or in the case of clearance works, on account of any delay in according to sanction of estimates.

Clause 40. Claim of compensation for delay execution of work.

No compensation shall be allowed for any delay in the execution of the work on account of water, standing in borrow pits or compartments. ;the rates are inclusive for hard or cracked soil, excavation in mud, soil, water sanding in borrow pits and no claim for an extra rate shall be entertained, unless otherwise expressly specified.

Clause 41. Entering upon or commencing any portion of work.

The contractor shall not enter up or commence any portion of work except with the written authority and instructions of the Engineer-in-charge or of his subordinate in charge of the work. Failing such authority the contractor shall have no claim to ask for measurements of or payment for work.

- Clause 42. Minimum age of person employed, the employment of donkeys and or other animals and the payment of fair wages.
 - (i) No contractor shall employ any person who is under the age of 14 years.
 - (ii) No contractor shall employ donkeys or other animals with breaching of string or thin rope. The breaching must be at least three inches wide and should be of tape (Newar)
 - (iii) No animal suffering from stores, lameness or emaciation or which is immature shall be employed on the work.
 - (iv) The Engineer-in-charge or his Agent is authorized to remove from the work any person or animal found working which does not satisfy these conditions and no responsibility shall be accepted by University for any delay caused in the completion of the work by such removal.
 - (v) The contractor shall pay fair and reasonable wages to the workmen employed by him, in the contract under taken by him. In the event of any dispute arising between the contractor and his workmen on the grounds that the wages paid are not fair and reasonable, the dispute shall be referred without delay to the Registrar who shall decide the same. The decision of the Registrar shall be conclusive and binding on the contractor but such decision shall not in any way affect the conditions n the contract regarding the payment to be made by University at the sanctioned tender rates.
 - (vi) Contractor shall provide drinking water facilities to the workers. Similar amenities shall be provided to the workers engaged on large work in urban area.
 - (vii) Contractor to take precaution against accidents which takes place on account of labour using loose garments while working near machinery.

Clause 43. Method of payments

Payment to contractors shall be made by cheque drawn on any treasury within the division convenient to them provided the amount exceeds Rs.10. amounts not exceeding Rs. 10 will be paid in cash.

Clause 44. Acceptance of conditions compulsory before tendering compulsory before tendering the work.

Any contractor who does not accept these conditions shall not be allowed to tender for works.

Clause 45. Employment of scarcity labour

If University declares a states of scarcity or famine to exist in any village situated within 10miles of the work, the contractor shall employ upon such parts of the work, as are suitable for unskilled labour, any person certified to him by the Registrar, or be any person to whom the Registrar may have delegated this duty in writing to be in need of relief and shall be bound to pay to such person wages not below the minimum which University may have fixed in this behalf. Any disputes which may arise in connection with the implementation of this clause shall be decided by the Registrar whose decision shall be final and binding on the contactor.

Clause 46.

The price quoted by the contractors shall not in any case exceed the control price, if any, fixed by University or reasonable price which it is permissible for him to charge a private purchaser for the same class and description, the controlled price or price permissible under Hoarding and Profiteering Ordinances, 1948 as amended from time to time, if the price quoted exceeds the controlled price or the price permissible under Hoarding and Profiteering Prevention Ordinance, the contractor will specifically mention this fact in his tender along with the reasons for quoting such higher prices. The purchaser at his discretion will in such case exercise the right of revising the price at any stage so as to conform with the controlled price on the permissible under the Hoarding and Profiteering Prevention Of Ordinance. This discretion will be exercised without prejudice to any other action that may be taken against the contractor.

Clause 46-A. Maharashtra At XIX of 1985 clause regarding turnover Tax vide P.W.D. Circular No. CAT – 1086/CR/330/Bldg – 2 dt. 10-6-1987.

"The tendered rates shall be inclusive of all taxes, rates and cases and shall also be inclusive of the tax livable in respect of works contract under the provision of the Maharashtra Sales Tax on transfer of property in goods involved in the execution of works Contract Act, 1985)"

Clause 47.

The rates to be quoted by the contractor must be inclusive of sales tax. No extra payment on this account will be made to the contractor.

Clause 48.

In case of materials that may remain surplus with the contractor from those issued for the work contracted for that date of ascertainment of the materials being surplus will be taken as the date of sale for the purpose of sales tax and the sales tax will be recovered on such sale.

Clause 49. P.W.D. Resolution No. CAT – 1079/CR-478/Bldg.-2 Dt. 23-03-98.

The contractor shall employ the unskilled labour to be employed by him on the said work only form locally available labours and shall give preference to those persons enrolled under Maharashtra University Employment and self Employment Department's Scheme.

Provided, however, that if the required unskilled labours are not available locally, the contractor shall in the first instance employ such number of persons as is available and thereafter any with previous permission, in writing of the Registrar-in-charge of the said work, obtain the rest of unskilled the labour from outside the above scheme.

Clause. 50 Wages to be paid to the skilled and unskilled labourers engaged by the contractor.

(1) The contractor shall pay the labourers skilled and unskilled according to the wages prescribed by the Minimum wages Act of 1948 applicable to the area in which the work or the contract is located.

The contractor shall comply with the provisions of the Apprentices Act 1961 and the Rules and Orders issued there under from time, if he fails to do so, his failure will be a breach of the Contractor and Registrar, may in his discretion, cancel the Contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provision of Act. The contractor shall pay the laborers Skilled and Unskilled according to wages prescribed by Minimum Wages Act applicable to the area in which the work lies.

Clause 51.

All amounts whatsoever which the contractor is liable to pay to the University in connection with the execution of the work including the amount payable in respect of (i) materials and or stores supplied / issued hereunder by the University to the contractor (ii) hire charges in respect of heavy plant, machinery and equipment given on hire by the University to the contractor for Execution by him of the work and / or on which advances have been given by University to the contractor shall be deemed to be arrears of the Land Revenue and the University may without prejudice to any other rights and remedies of the University recover the same from the contractor as arrears of Revenue.

Clause 52.P.W. Dept. No. CAT / 1284 (120) Building - 2 dated 14-8-85.

The contractor shall duly comply with all the provisions of the contract Labour (Regulation and Abolition) Act, 1970 (37 of 197) and the Maharashtra Contract Labour (Regulation and Abolition) Rules, 1971 as amended form time to time and all other relevant statutes and statutory provisions concerning payment of wages particularly to workmen employed by the contractor and working on the site of the work. In particularly to workmen employed by the contractor and working on the site of the work at he rates prescribed under the Maharashtra Contract Labour (Regulation and Abolition) Rules 1971. If the contractor fails or neglects to pay wages at the said rates or makes short payment short payment and the University makes such payment of wages in full or part thereof less paid by the contractor as the case may be, the amount so paid by the University to such workers shall be deemed to be arrears of Land Revenue and the University shall be entitled to recover the same as such from the contractor or deduct same from the amount payable by the University to the contractor hereunder or from any other amounts payable to him the University.

SPECIAL CONDITIONS OF CONTRACT

1.0 GENERAL: -

These special conditions are meant to amplify the specifications and General Conditions of Contract. If any discrepancy is noticed between General Conditions of contract, Specifications, Schedule – B1 and Drawings, the most stringent of the above shall apply.

The scope of this section is to describe materials and systems for electrical installation of building which form together with the project documents, a complete volume of work and quality description.

All electrical installations shall be of high quality, safe, complete and fully operational including all necessary items and accessories whether or not specified in details. All electrical works shall be completed in accordance with the regulations and standard to the specification Registrar, the general provisions, special provisions and general requirements apply to all items of this specification.

The work shall be carried out simultaneously with building work, civil work, etc. and shall be continued till it is completed satisfactorily along with the completion of essential portions of the building works.

During the progress of work, completed portion of the building may be occupied and be put to use by Registrar but the contractor will remain fully responsible for the maintenance of electrical installations till the entire work covered by this contract is satisfactorily completed by him and handed over to Registrar.

2.0 ACCOMPANIMENT TO TENDER: -

The tenderer will attach to the Tender, at the time of submission, a statement containing information on the following points on separate proforma:-

List of all the confirmation of materials to be used as per specification along with manufacturer's name, catalogue and other technical details. Any deviation from the specifications shall be separately pointed out.

2. **PAYMENTS:**

The tenderers must understand clearly that the rates quoted are for completed work and include all costs due to labour, including leads and lifts and it further necessitated, scaffolding plant, supervision, service works, power etc. and to include all to cover the cost of high and round the clock work as and when required and no claim for additional payment beyond the prices or rates quoted will be entertained and the tenderers will not entitled subsequently to make any claim on the ground of any representation or on any promise by any person (whether member in the employment of any University or not) or on the ground of any failure on his part to obtain all necessary information for the purpose of making his tender and fixing the several prices and rates therein him from any risks or liabilities arising out of the tender.

a) **RUNNING BILLS**

One payment in the month may be granted by the Registrar if the progress is satisfactory. Contractor shall submit bills to the Registrar in appropriate forms.

b) **FINAL BILLS**

The contractor should submit final bill within one month after completion of the work and the bill will be paid within 3 months if it is in order. Disputed item and claims if any shall be excluded from the final bill and settled separately later on.

c) <u>ADDITIONAL CONDITION ABOUT AVAILABI</u>LITY OF FUNDS

The payment of bills will be made as per the availability of funds. No claims will be entertained for delayed payments. If situation arises, the work will be stopped as safe and will be withdrawn under clause 15 for which no compensation will be allowed.

3.0 **INTENT:** -

It is the intention of the specification and drawings to call for finished work, tested and ready for operation. Whenever the works "Supply" or "Provide" are used, it shall mean delivery of material as specified in an assembled manner, ready for installation. Any apparatus, material or work not shown on drawings but mentioned in the specification or vice versa, or any incidental accessories necessary to make the work complete and perfect in all respects and ready for operation, even if not particularly specified, shall be furnished, delivered and installed by the contractor without additional expenses to REGISTRAR. Minor details not usually shown or

specified, but necessary for the proper installation and operations, shall be included in the work and in the contract.

4.0 INTERPRETATION OF PROJECT DOCUMENTS: -

- 4.1 The Specification, Drawings, and Schedule B1 shall be interpreted in accordance with good installation practice defined in the appropriate regulations and standards whether specifically referred to or not. If there is any discrepancy or shortfall in the application of the regulations to any aspect of this contract or the contractor considers there is anything detrimental to the standards or inconsistent with his obligations and guarantees, Registrar shall be informed prior to signing the contract and shall thereafter inform the contractor in writing the course to be followed. Where the drawings are to a small scale or are expressed in symbolic terms or are in the form of a diagram, then exact location of items shall not be inferred and in all cases, the work shall be fully integrated with the work of other trades and with the fabric of the buildings. The contractor shall appraise the duties of all plants and equipments taking account of any additions or variations and shall inform the Registrar of any matters, which may affect the design. In all cases the equipment installed shall be of appropriate rating for the duty it performs.
- 4.2 The Specifications and Schedule B1 shall be considered as part of this contract and any work or material shown on BOQ and not called for in the specification or vice versa, shall be executed as if specifically called for in both. The Drawings indicate the extent and general arrangement of the H. T. panel, Transformer, L. T. panel, H. T. & L. T. cable route layout, etc. and are essentially diagrammatic.

The work shall be installed as indicated on the drawings, however, any minor changes found essential to coordinate the installations of this work with other services shall be made without any additional cost to the Registrar. The drawings are for the guidance of the contractor; exact locations, distances and levels will be governed by the building. The contractor shall examine all structural and electrical drawings before starting the work, and report to REGISTRAR or its representative, any discrepancies, which in his opinion appear on them, and get them, and get them clarified.

5.0 Regulations and standards:

The installation shall conform in all respects to Indian standard code of Practice for Electrical Wiring installation IS: 732-1963 and IS: 2214-1963 (Silver Nitrate Pure and analytical reagent). It shall also be in conformity with the current Indian Electricity Rules,

Indian Electricity Act, National Electrical Code and Regulations of the Local Electrical supply Authority in so far as these become applicable to the installation. Wherever this specification calls for a higher standard of material and / or workmanship than those required by any of the above regulations then this specification shall take precedence over the said regulations and standard. In general, the materials equipment and workmanship not covered by the above shall conform to the relevant, Indian Standards.

The electrical installation work shall follow Codes, Indian standard specifications and rules (Within the best meaning of the same) under this contract.

The following list is given for general guidance only in addition to list given in each individual section, however all other latest editions of Codes, Indian standard specifications and Rules shall also be followed when it is required.

8.1	I. S.: 8623	Low voltage switchgear & control gear assemblies.
8.2	I.S.: 10118	Code of practice for selection, installation and maintenance of switchgear and controlgear.
8.3	I.S.: 4237	General requirement for switch gear and control gear for voltage not exceeding 1000 Volt A. C. or 1200 volts D.C.
8.4	I. S.: 13947	Low voltage switchgear and controlgear.
8.5	I. S.: 9224	Low voltage fuses.
8.6	I S. : 8828	Circuit breakers for out protection for household and Similar Installations.
8.7	I. S.: 12640	Earth leakage circuit breaker.
8.8	I. S.: 1248	Direct acting indicating analog electrical measuring Instruments.
8.9	I. S.: 2705	Current transformers.
8.10	I. S.: 4201	Application guide for voltage transformers.
8.11	I. S. : 6875	Control switches for voltage upto and indicating 1000V A.C. 1200 V. D. C.
8.12	I. S. : 5578	Guide for marking of insulated conductors.
8.13	I. S. : 11353	Guide for uniform system of marking and identification of Conductors and apparatus transmission.
8.14	I. S. 8197	Terminal markings for electrical measuring instruments and
8.15	I. S. 694	Their Accessories. Specifications for PVC insulated cables for working
8.16	I. S. 2551	Voltages up to and including 1100 volts. Danger notice plates.
8.17	I. S. 3043	Code of practice for earthing.
8.18	I. S. 5216	Guide for safety procedures and practices in electrical work.
8.19	I. S. 1646	Code of practice for fire safety of building: Electrical installation.

8.20	IS 2026 (Part I) -	Specification for power Transformers
8.21	IS 22026 (Part II) -	Specn. For power transformer temperature rise.
8.22	IS 2026 (Part III) -	Specification for power Transformers – insulation levels and dielectric tests
8.23	IS 2026 (Part IV) -	Specification for power Transformers –Terminal markings, tapping and connections.
8.24	IS 11171 / 1985	Reaffirmed in 1991- Specification for Dry Type transformers
8.25	IS 10028 -	Code of practice for selection, installation and maintenance of Transformers.
8.26	IS 335 -	Specification for insulating oils.
8.27	IS 8623 -	Specn. For LV switchgear & Control gear assembly
8.28	I S 139479 Part (I-V)	- Specn. For switchgear & Control gear.
8.29	IS 4047 -	Spec. For heavy duty Air breaks switch bus & composite Units for air break switches & fuses for voltage not Exceeding 1000 V
8.30	IS 2208 -	Specn. For HRC fuses, cartridge fuse links upto 650 V
8.31	IS 2705 -	Specn. For Current Transformer (Part I-IV)
8.32	IS 1248 -	Specn. For direct action Electrical indicating instruments.
8.33	IS 2516 -	Specn. For alternating current circuit breakers.
8.34	IS 9920 (PER I –IV)	- Specn. For switches & switch isolators for voltage above 1000 V
8.35	IS 375 -	Switchgear Busbar, main connections & auxiliary wwiring,
0.26		marking & arrangements
8.36	IS 3231 -	marking & arrangements Electric relays for power system protection
8.36	IS 3231 - IS 5082 -	
		Electric relays for power system protection Wrought Aluminium & Aluminium alloy bars, rods, tubes
8.37	IS 5082 -	Electric relays for power system protection Wrought Aluminium & Aluminium alloy bars, rods, tubes & seection for electrical purpose.
8.37 8.38	IS 5082 - IS 2834 -	Electric relays for power system protection Wrought Aluminium & Aluminium alloy bars, rods, tubes & seection for electrical purpose. Specn. For Power capacitor

- 8.42 Indian Electricity Act as amended up to date.
- 8.43 Indian Electricity Rules as amended up to date.
- 8.44 Rules and Regulations of Bombay Regional Council of Fire Insurance & Association of India for Electrical wiring.

6.0 FEES, PERMITS AND TESTS:

The Contractor shall pay for all fees and obtain permits/permissions required for the installation work. On completion of the work the contractor shall obtain and deliver to the Registrar, certificates of final inspection and approval by the local electric supply authority (MSEDCL) and the electrical inspector.

It is the responsibility of the contractor to co-ordinate with MSEDCL Department is limited to get the approval of drawing from IMP and inspection of substation by Electrical Inspector if required.

Warranty/Guarantee certificate on Rs.100 bond should be submitted by Contractor before start of the execution of the work, otherwise work order will be cancelled.

7.0 UTILITY SUPPLY:-

The location of receipt of incoming utilities supply (Hook up Points) like HT supply shall be verified with various concerned authorities. It is the responsibility of the contractor to coordinate with various utility agencies, the exact location of such Hook Up Point and mode of connection. Further the contractor shall co-ordinate with such utility agencies to provide necessary drawings, documents, get their approval, make the necessary arrangement for the payments and arrange the utilities supply at no extra cost.

8.0 ACTUAL ROUTE OF CABLE:-

The location of the cables, panel boards etc. is only indicative, therefore, the actual route of cables and the location of panel boards may differ from the plans according to the details of the building construction and the conditions of executions of the installations.

The contractor shall supply and install at his expense all secondary materials and special fittings found necessary to overcome the interference and to supply the modifications on the route of cables and conduits that are found necessary during the work, to the complete satisfaction of the Registrar's representative.

9.0 MATERIAL AND EQUIPMENT:-

All material and equipment shall conform to the relevant standards and shall be of the approved make and design. The materials and equipment shall conform to relevant Indian Standards. The Contractor shall be responsible for the safe custody of all the materials and shall insure them against theft, damage by fire, earthquake etc. A list of items of materials and equipment,

together with sample of each shall be submitted to the Registrar within 10 days of the award of the contract. Any item which is proposed as a substitute, shall be accompanied by all technical detail giving sizes, particulars of materials and the manufacturer's name and shall be submitted along with the tender or bid offer. At the time of the submission of proposed substitute the Contractor shall state the credit, if any due to the Registrar. In the event the substitution is approved, all changes and substitutions shall be requested in writing and approvals obtained in writing from Registrar. Registrar's decision in the matter shall be final.

All materials of the same kind of service shall be identical and made by the same manufacturers. Any deviation to this rule shall be approved by the Consultant. Top priority shall be given to the products that have a permanent agent providing spare parts and maintenance facilities in the same city where the project is situated.

The make of electrical equipment's, components, accessories, etc. has been mentioned in order of priorities. The tenderer has to quote for the first priority as mentioned above after ascertaining that the first preference materials are available. If at a later stage during executing the work, material of the first preference make are not available, the contractor has to get approval from the Registrar to use other make of material prior to procurement. Any rate difference for the first preference make and the one approved will be passed on to the Registrar.

Material that going to be used in execution of work shall be checked/inspected by University's Electrical maintenance Department.

10.0 MANUFACTURERS:-

Where manufacturers have furnished specific instructions relating to the materials used in this job, covering points not specifically mentioned in these documents, these instructions shall be followed in all cases. Where manufacturer's names and / or catalogue numbers are given, this is an indication of the quality, standards and performance required.

When interfacing occurs, equipment shall be mutually compatible in all respects.

11.0 **RATING**:-

Rating of all items shall be appropriate for the conditions on the particular site on which the items will be used. All the equipment shall be fit for continuous work under the worst conditions of site and shall be rated for the following ambient condition.

- Outdoor temperature 50 deg. Cel.
- Temperature under shed 45 deg. Cel.
- Salty, dusty and humid.
- Coastal area.

12.0 INSPECTION AND TESTING:-

It is the responsibility of the contractor to get the inspection and testing of metering cubicle done by the MSEDCL and MSEDCL testing division at the Manufacturer's site and at our premises. The contractor has to take the necessary shut down of HT power supply in co-

ordination with the local MSEDCL authorities. For all remaining items, manufacture's test certificate is acceptable.

- 12.1 That the equipment installed complies with specification in all particulars and is of the correct rating for the duty and site conditions.
- 12.2 That all items operate efficiently and quietly to meet the specified requirements.
- 12.3 That all circuits are correctly fused and protected and that protective devices are properly coordinated.
- 12.4 That all non-current carrying metal work is properly and safely grounded in accordance with the specifications.

The contractor shall provide all necessary instruments and labor for testing, shall make adequate records of test procedures and readings, shall repeat any tests requested by the Registrar and shall provide test certificates signed by a properly authorized person. Such test certificates shall cover all works.

If tests fail to demonstrate the satisfactory nature of the installation or any part thereof then no claims for the extra cost of modifications, replacements or retesting will be considered. Registrar's decision as to what constitutes a satisfactory test shall be final.

The above general requirements as to testing shall be read in conjunction with any particular requirements specified elsewhere.

13.0 PRICE DETAILS:-

At any time and at the request of Registrar, the contract shall provide details or breakdown of costs and prices of any part or parts of the works.

14.0 TEST CERTIFICATES:-

The contractor shall submit test certificates for all the electrical material / system installed. These shall be issued by a government recognized inspection office certifying that all equipment, materials, construction and functions are in agreement with the requirement of these specifications, ISI and when ISI is not applicable other approved certifying agencies.

15.0 INSTRUCTION MANUAL:

The contractor shall prepare and produce instruction, operation and maintenance manuals in English for the use, operation and maintenance of the supplied equipment and installations, and submit 3 sets to Registrar, at the time of handing over.

16.0 SAMPLES AND CATALOGUES:-

Before ordering the material necessary for these installations, the contractor shall submit to Registrar for approval, a sample of every kind of material such as cables, conductors, conduits,

switches, socket outlets, circuit breakers, lighting fixtures, boxes, etc., along with the catalogues.

For big items such as switchboards, the submission of catalogues shall be enough. Prior to ordering any electrical equipment / material / system, the contractor shall submit to Registrar, the catalogues, along with the samples, at least from three different manufacturers. After the selection of manufacturer by Registrar, the contractor shall arrange inspection and testing at the manufacturer's factory or assembly shop for final approval of the Registrar.

17.0 VENDOR AND SHOP DRAWINGS:-

The contractor shall prepare and submit to Registrar, for his approval, two sets of vendor detailed drawings of all distribution board, switch boards, outlet boxes, special pull boxes, and other likewise material, equipment to be fabricated by the contractor, or other vendor within 15 days of signing of the contract.

Before starting the work, the contractor shall submit to Registrar for his approval in the prescribed manner, the shop / execution drawings for the entire installation, specially the main connections and junctions, the route of conduits and cables, no. and size of wires drawn through the conduits, location of all the outlet points, and switch boards and distribution boards and any other information required by Registrar, Registrar reserves the right to alter or modify these drawings if they are found to be insufficient or not complying with the established technical standards or if they do not offer the most satisfactory performance or accessibility for maintenance.

18.0 AS BUILT DRAWINGS :-

At the completion of work and before issuance of certificate of virtual completion the contractor shall submit to Registrar, three sets of layout drawing drawn at appropriate scale indicating the complete wiring system "as installed". These drawings must provide (in plan, folded elevation and section)

- 18.1 Location and details of distribution boards, main switches, switchgear and other particulars.
- 18.2 Location of all earthing stations, route and size of all earthing conductors, manholes etc.
- 18.3 Route and particulars of all cables.
- 18.4 Lighting layout plan for all the floors along with circuit distribution details.
- 18.5 External Area Lighting Plan.

19.0 GUARANTEE:-

At the close of the work and before issuance of final certificate of virtual completion by Registrar, the contractor shall furnish written guarantee indemnifying Registrar against defective materials and workmanship for a period of one year after completion. The contractor

shall hold himself fully responsible for reinstallation or replacement, free of cost to Registrar, the following.

- 19.1 Any defective work or material supplied by the contractor.
- 19.2 Any material or equipment supplied by Registrar which is damaged or destroyed as a result of defective workmanship by the contractor.
- 19.3 Any material or equipment damaged or destroyed as a result of defective workmanship by the contractor.

20.0 SAFETY OF MATERIALS:-

The contractor shall provide proper and adequate, storage facilities to protect all the materials and equipment including those issued by Registrar against damage from any cause whatsoever.

21.0 COMPLETION CERTIFICATE:-

On completion of the electrical installation (or an extension to an installation) a certificate shall be furnished by the contractor countersigned by the licensed supervisor, under whose direct supervision the installation was carried out. This certificate shall be in the prescribed form as required by the local supply authority. The contractor shall be responsible for getting the electrical installation inspected and approved by the local concerned authorities.

22.0 DEFECTS LIABILITY:-

Defects liability period shall mean 12 calendar months after Registrar have issued certificate of completion of the whole work. The certificate of completion shall be issued after the necessary tests have been carried out to the satisfaction of Registrar and the required drawings are submitted.

The contractor shall make good at his own cost and to the satisfaction of Registrar, all defects or other faults arising in the opinion of Registrar out of bad workmanship or faulty materials not in accordance with the drawings, I.S.S. or I. E. Act and the Rules and Regulations under which it may appear within twelve months after completion of the work.

23.0 STAFF:-

The contractor shall employ a competent fully licensed qualified, full time electrical engineer to direct the work of electrical installation in accordance with the drawings and specifications. The engineer shall be available all times at site to receive instructions from Registrar, in the day activities throughout the duration of contract. The engineer shall correlate the progress of the work in conjunction with all the relevant requirements of the supply authority.

24.0 RESTATING & FINISHING OF CIVIL DAMAGES:-

For erection of equipment / cables etc. if any civil structure is required to be broken, the same shall be done, restated and finished as original by the tenderer without any extra cost.

TECHNICAL SPECIFICATIONS FOR THE ELECTRICAL WORKS

25.0 SCOPE OF WORK: -

The work to be carried out under this contract comprises of the Electrical Installation work for the proposed project called for in the documents. The work covered under this contract comprises of supply (wherever called for), installation, connection, testing and commissioning the Electrical installation commencing from point of electric power supply within the project site as per specifications, relevant Indian standards, Code of practice.

The contractor shall carry out and complete the said work under this contract in every respect in conformity with the current rules and regulations of the local Electricity Authority, the Indian Standards and with the directions of and to the satisfaction of the Consultant and Registrar. The Contractor shall furnish all labor and install all materials, appliances, equipment (except those items which will be supplied by the Registrar to the contractor at site), necessary for complete provision and testing of the whole electrical.

Instillation as specified herein and shown on the drawings. This also includes any material, appliances, equipment not specifically mentioned herein or noted on the drawing as being furnished or installed but which are necessary and customary to make complete installation with all outlets for power, light, telephone conduits, all other conduits and other electrical systems shown in the schedule or described herein, properly connected and in working order.

The work shall include all incidental jobs connected with electrical installation such as excavation for trenches and back filing, cutting / drilling holes through walls / floors and grouting for fixing of fixtures, equipment etc. Chiseling in the wall or principal structure is not permitted. In general the work to be performed under this contract shall comprise of the following:-

CABLING:

1. GENERAL:

All Cables shall be of the specified grade and shall have been manufactured as per Indian Standard Specification. These shall be of the approved type. Conductors of all cables and wires shall be of aluminum or copper as specified.

2. MULTI CORE ARMOURED CABLES:

These shall be of 1100 Volts grade and shall comprise of stranded aluminum or copper conductor. PVC insulated and have an inner sheath of regenerated rubber, galvanized steel tape or steel wire armouring and PVC sheath overall and shall comply with IS-1554.

3. SINGLE CORE UNARMOURED CABLE:

These shall be of the standard aluminum/copper Conductor, PVC insulated and PVC sheathed shall conform to IS-694.

4. FLEXIBLE:

Twin flexible cables used for pendants and connections to other lighting fixtures

shall have cross sectional area of 0.0001 sq. Inch (Equivalent to 23/.0076) or larger and shall be insulated in accordance with IS-343.

5 CABLES IDENTIFICATION:

For each telephone/LAN/TV/Mains cable to distribution boards, PVC ferrule type indicators or tags shall be provided at both ends for identifications for phase identification of the cores; coloured PVC tapes shall be used at both the ends. All exposed cable shall be provided with aluminum tag of approved design spaced not less than 8 meters apart and these shall contain the following information.

- a. Feeder No.
- b. Size and Number of Cores.

6 CABLES LAYING:

Cable shall be laid and jointed in conformity with the IS Code of Practice 1255.

Before commissioning, Cables must be tested and test results shall be submitted. Cables shall be energized only on approval of the test results.

Cables shall be laid as per the routes marked in the drawings. Where the route is not indicated, the contractor shall make out the cable route on the site and obtain approval before laying the cables. Cables shall be bent a radius of not less than 15 times the overall diameter.

All clamps and other cables supporting members shall be provided and fixed by the contractor. Cable shall be clamped of supports of approved design and spaced not more than one meter apart. Cable loops for all main cables shall be provided as required including at the point of entry in the building.

Cables laid above ground shall be suitably protected to the approval of the electrical inspectorate and other statutory regulations. Cables run on wall/ceiling shall be supported on spacers and saddles, fixed to wall/ceiling in an approved manner. Spacers and saddles shall be rendered rustproof.

Cables laid underground shall be so laid that they shall not interfere with other underground structures. All water pipes, sewage liner or other structure, which become exposed by excavation, shall be properly supported and protected from injury until the filling has been rammed solidly in place under and around them. Any telephone or other cables coming in the way are to be properly shielded as directed. However, if the contractor damages any existing underground cables or services, the same shall be rectified immediately and made good to the satisfaction of the Engineers. The cost of the same shall have to be borne by the Contractor. Excavation shall generally be in any type of soil and trenches shall be dug to a uniform depth of 1,000mm. and wide enough for laying the number of cables required. Back filling shall be done with screened sand without stones and hard lumps, to a depth of 200mm. before and laying the cable. A layer of bricks (Full size) shall be laid breadth wise across the cable and then the trench be refilled with excavated earth gradually in such a manner as to avoid any damage to the cables or the bricks.

Whenever a cable is to be laid across a road/ drain/ culvert and RCC pipe of suitable diameter be embedded under the road/ drain/ culvert and the cable shall be then added through the pipe. Ends of pipe shall be fixed at plugged to avoid collection of water in the pipe. Cable indicators shall be fixed at either end of the road indicating the cable position. Cable indicators shall be of G.I. round plate with appropriate description case thereon galvanized and fixed.

Cable entry in the building shall be made through the cutouts in the R.C.C. walls and floors and fixed to the walls or partition as directed by means of approved clamps.

7. SPACING BETWEEN CABLES:

When more than one multi core cable or trefoil group of single core cable is laid in the same trench, horizontal inter axial spacing of at least 15 cm. And also to ensure that a fault occurring one cable will not damage the adjacent cable.

8. BOTTOM OF THE TRENCH

The bottom of the trench should be carefully leveled and free from stones, but if gradients and changes of depth are unavoidable, they should be gradual.(if the soil is chemically charged, it may be necessary to transport a sufficient quantity of insert soil from elsewhere to the site to from a good bedding and cover for the cable.

All excavated materials should be store such that there is no obstruction to maintain all facilities around the excavated area. The excavated materials should be stored within predetermined area so that it may not fall back in trench block up gutter, roads, etc. The necessary red lamps and red flags should be displayed to avoid any accidents.

MEDIUM VOLTAGE SWITCHGEARS:

SCOPE:

The scope of work shall cover the supply,

Installation, testing and commissioning of all per panels, incorporating circuit breakers with fuse units, bus bars, interconnections, earthing etc. meeting the requirements shown in the equipment schedule and the drawings.

STANDARDS:

The following standards and rules shall be applicable:

- a IS 3072 Code of practice for installation and maintenance of Switchgears.
- b Indian Electricity Act 1910 and Rules 1956.

SWITCH FUSE UNITS AND DISCONNECTS:

Switch fuse units shall have quick - make , quick - break silver plated preferable double break contacts. All switches shall be rated according to the equipment schedule or drawings and shall withstand the system prospective fault current let through.

All disconnects shall consist of switch units quick make. Quick break type with silver plated contacts and preferable have double break. All switches shall be mounted in sheet steel enclosure, which in turn mounted on suitable angle iron frame work. In wet locations switched shall have cast iron enclosure.

DISTRIBUTION BOARDS:

SCOPE:

The scope of work shall cover the supply, installation testing and commissioning of lighting and power distribution boards. Associated minor civil works required for the erection of the DB's are also included in the scope of this contract.

MINIATURE CIRCUIT BREAKER'S DISTRIBUTION BOARD:

Distribution boards along with the controlling MCB's/Fuse Or Isolator as shown shall be fixed in sheet steel enclosure suitable for recessed mounting in wall. Distribution boards shall be made of 16 SWG sheet steel duly rust inhibited through a process of degreasing acid prickling and spray painted to an approved colour over a coat of red oxide primer.

Three Phase boards shall have phase barriers and a wire channel on three sides Neutral bar shall be a solid tinned copper bar with tapped holes and chase headed screws. For 3 phases DB's independent neutral bars shall be provided.

All MCB's shall be internally prewired using PVC insulated copper wires brouth to a terminal strip of appropriate rating for outgoing feeders

Conduit knockouts shall be provided as required/shown on drawings and the entire board shall be rendered dust and vermin proof with necessary rubber gaskets.

MCB's shall have quick make and break non welding self wiping silver alloy contacts for 9 K.A. short circuit both on the manual and automatic operation. Each pole of the breaker shall be provided with inverse time thermal over load and instantaneous over current tripping with trip free mechanism. In case of multi pole breakers, the tripping must on all the poles and operating shall be common to IS-8828.

Pressure clamp terminals for stranded/solid conductor insertions are acceptable up to 4 sq. mm. aluminum or 2.5 sq. mm. copper and for higher ratings, the terminals shall be suitable shrouded. Wherever MCB isolators are specified they are without the tripping elements.

Fuses shall be HRC links, Bottle type fuse are not acceptable. Fuse carrier terminals shall be suitable shrouded rewireable fuse carrier shall be porcelain.

Distribution boards shall have HRC/Rewireable fuses as shown on the schedule and drawing. Board shall meet with the requirements of IS- 2675 and making arrangements of bus bars shall in accordance with IS- 375. Bus bars shall suitable for the incomer switch rating and sized for a temperature rise of 35 C over the ambient. Each board shall have two separate earthing terminals. Circuit diagram indicating the load distribution shall be posted on the inside of the DB's as instructed. One earthing terminal for single phase and two terminals for 3 phases DB's shall be provided with an earth strip connecting the brass studs and the outgoing ECC earth bars.

In case of MCB distribution boards, the backup fuses wherever shown shall be not less than 63 Amps. With a delayed characteristic and a minimum pre arcing time of 0.5 sec at 9 KA fault current.

All outgoing feeders shall terminate on a terminal strip which in turn is interconnected to the MCB/ Fuse base by meas of insulated single conductor copper wires as follows:

Upto 15 Amps. - 2.5 Sq.mm. 25 Amps. - 4.0 Sq.mm. 63 Amps. - 10 Sq.mm.

INSTALLATION AND TESTING:

All distribution boards shall be mounted on wall or

Recessed with necessary angle iron frame work. All mounting frames shall be primer coated and two finish coats after the completion of the work. All distribution boards shall be touched up by paint.

All boards shall be meggered phase to phase and to neutral using 5,000 Volt megger with all switchgears in closed position. The megger value should not be less than 2.5 megohms between phases and 1.5 megohms between phase and neutral.

Fabrication drawings of all boards shall be approved the Engineer before fabrication and the board inspected before dispatch.

CONDUIT WIRING SYSTEM:

SCOPE:

The scope work shall cover supply, installation, testing and commissioning of all conduit wiring.

STANDARDS:

The following standards and rules shall be applicable:

- a IS: 732 Codes of practice for Electrical Wiring Installation (System voltage not exceeding 650 volts.)
- b IS: 1646 Code of practice for fire safety of building(general) Electrical Installation.
- c. IS: 1653 Rigid steel conduits for electrical wiring.
- d IS: 2667 Fitting for rigid steel conduits for electrical wiring.
 - e IS: 3480 Flexible steel conduits for electrical wiring.
- f IS: 3837 Accessories for rigid steel conduit for electrical wiring.
 - g IS: 694 PVC Insulated cables.
 - h IS: 9537 Part III Rigid non-metallic conduits for electrical wiring.
 - i IS: 3419 Fittings for Rigid non-metallic conduits for wiring.
- j IS: 6946 Flexible (pliable) non-metallic conduit for electrical installation.
 - k IS: 1293 3 pin plugs and sockets.
 - IS: 8130 Conductors for insulated electrical cable and flexible cord.

IS: 9537 Part I & II Specification for conduits for Electrical Installation. Indian Electricity Act, 1910 and rules issued thereunder Regulations for the electrical equipments in building issued by the TARIFF ADVISORY COMMITTEE

CONDUIT WIRING SYSTEM WITH RIGID NON METALLIC CONDUITS:

Rigid nonmetallic conduit shall conform to IS: 9537 (Part-3) The conduit may be either threaded type or plain type as specified in IS: 9537(Part-3) and shall be used with the corresponding accessories to IS; 3419. Similarly casing and capping in PVC shall confirm to BS 4678 Part 4 of 1982.

Conduits shall be joined by means of screwed or plain couplers depending on whether the conduits are screwed or plain. Where there are long runs of straight conduit, inspection type couplers shall be provided at intervals.

ACCESSORIES:

Conduit fitting such as bends, junction boxes, elbows, reducers, chase nipples, split couplings, plugs etc. shall be specifically designed and manufactured for their particulars application. All conduit fittings shall conform to IS: 26676 and IS; 3837. All fittings associated with galvanized conduit shall be also galvanized.

Check nuts shall be used at the termination of conduit in boxes and PVC /Wooden Bushes shall be fixed at ends before wiring. Threads on conduit pipe in all cases shall be between 11mm. to 27mm. long sufficient to accommodate coupling and accessories with check nuts, the threaded portion shall be treated with anticorrosive preservative.

All wires shall be single core or multi-stranded copper PVC insulated to IS: 694 and shall be 1100 V. grade.

SWITCHES AND SOCKETS AND OTHER ACCESSORIES:

Switches shall be moulded plate type with silver coated contacts. Sockets shall be 3 pin with switch and plate type cover. All switch socket boxes shall be 16 SWG galvanized steel specially made for switches and sockets used. Combination of multiple switch units and sockets be used to minimize the switch boxes and they shall be fixed by chromium plated brass machine screws on the galvanized boxes.

For heavy duty, metal clad socket with MCB isolator mounted in a galvanized steel box shall be provided.

INSTALLATION:

The size of conduit shall be selected in accordance with the

Number of wires permitted under table given below. The minimum size of the conduit shall be 25mm diameter unless otherwise indicated or approved size of wires shall be not less than 1.5 sq.mm Copper.

Nominal	Nominal	25 mm.		32mm.		38mm.	
Dia of wires	Cross						
(mm)	Sectional Area in mm ²	S	В	S	В	S	В
1 / 1.40	1.5	8	6	15	9	1	-
1 / 1.80	2.5	6	4	10	8	1	-
1 / 2.24	4.0	4	3	8	6	1	-
1/ 2.8	6.0	4	3	6	6	-	-
1/ 3.55	10.0	3	2	5	4	6	6

Decrease the standard by one wire for future earthing.

- S- Runs of conduits which have distance not exceeds 4.25m between draw boxes and which do not deflect from the straight by an angle more than 15 degrees
- B- Run of conduit that deflects from the straight by more than 15 degrees.

Conduit shall be kept at a minimum of 100mm. from the pipes of other non-electrical service.

Separate conduits/runways or casing & capping shall be used for:

- a. Normal light and 5 A 3-pin socket on lighting circuit.
- b. Power outlets 15A. 3 pin 20A/30A 2 pin + scraping earth metal clad socket.
- c. Emergency lighting
- d. Telephones.
- e. Fire Alarm system
- f. Public Address system and

Call bell wiring layout of conduit shall be generally as indicated on drawings and the layout shall be supplemented and complemented by the contract on site with the approval of the Engineer.

Conduits run on surface shall be supported on 6* 20 mm M.S. spacers duly painted with rust preservative and with 12mm. width 20 gauge thick metal saddles which in turn are properly screwed to wall ceiling. Saddles shall be intervals of at more than 500mm. Fixing screws shall be nearly run parallel or at right angle to the walls of the building. Unseemly conduit bends and offsets shall be avoided by using fabricated mild steel junction/ pull through boxes.

No crossover of conduits shall be allowed unless it is necessary and entire conduit installation shall be clean and neat in appearance concealing may be done for such crossing,. Conduits embedded into the walls shall be fixed by means of wire nails at not more than 500mm. intervals and bound to steel of slab by binding wire firmly. Recesses in the walls shall be neatly made and refilled after laying the conduit and brought to the finish of the wall but the building contractor will do final finish and the expenditure shall be borne by the Electrical Contractors.

Final branch circuits shall be kept in a separate conduit up to the distribution board. No other wiring shall be bunched in the same conduit. Each lighting branch circuit shall not have more than ten outlets or 1,000 watts whichever is lower, each conduit shall not hold more than three branch conduits. Looping system of wiring shall be used. Wires shall not be jointed.

Control switches shall be connected in the phase conductors only and shall be "ON" when knob is down. Switches shall be fixed in 3mm. Thick painted or galvanized steel boxes with cover plates as specified brass screws shall be used.

Power wiring shall be distinctly separate from lighting wiring. Conduits not less than 25mm. and wires not less than 2.5 sqmm. Copper shall be used for power circuit. Every conductor shall be provided with identification ferrules at both ends matching with the drawings, only for mains from D.B. to suites/halls.

TESTING:

The entire installation shall be tested for:

- a Insulation resistance
- b Earth continuity
- c Polarity of single pole switch.
- d Earth resistance at various places.

A test certificate shall be submitted in the Proforma prescribed by the Engineer.

POINT WIRING:

All light point shall be terminated with ceiling roses switches and distribution boards as the case may be.

The location of light, fan, plug points etc. shown on the plan is Tentative. It may change at the time of execution of work. The contractor shall carry out the work as per directions of the Engineer in charge. All the wiring from distribution boards to the ceiling rose inside the building and other places shall be treated as point wiring.

EARTHIANG:

SCOPE:

The scope of work shall cover laying of continuous earth wire, earthing stations, laying copper earth strips and connecting the power panels, DB's and switch boards

EARTH LEADS AND CONNECTION:

Earth Lead shall be bare copper as specified with sizes shown on drawing or as directed. Copper leads shall have a phosphor content of not over 0.15 %. All earth wire shall run along with conduit from outside duly bound by copper earth clips 20 gauge 10mm width fixed at every screwed end and at maximum interval of 1.5 meters in straight run.

- a. The complete earthing system shall be mechanically and electrically bounded to provide an independent return path to the earth source.
- b. Earth leads at switch board shall be fixed to the board by cadmium plated brass nuts bolts 3/8" dia. And crimped/soldered heavy duty lugs.
- c. Metallic conduit shall not be accepted as an earth continuity conductor. A separate insulated/ bare earth continuity conductor shall be provided.
- d. All earth terminals in junction boxes for light fan plug bell shall be 3/8" dia Cadmium plated brass machine screws with washers.

LIST OF MATERIALS OF APPROVED BRAND AND OR MANUFACTURERS

6.1.1Switch fuse/fuse switch: L&T / LEGRAND./HAVELL'S

6.1.2 Switch board panel. : L&T / MDS / LEGRAND/HAVELL

6.1.3 1.1KV grade PVC insulated : FINOLEX /HAVELL'S

copper wire and flexible cords.

6.1.4 Isolator. : L&T / LEGRAND/ HAVELL'S

6.1.5 MCB Distribution Board. : MDS / L&T/LEGRAND/HAVELL'S

6.1.6 MCB/MCB type Isolator. : MDS / L&T/ LEGRAND/HAVELL'S

6.1.7 30/32A DP moulded Isolat : CRABERTEE / LEGRAND / ROMA

-ing Switch.

6.1.8 15/5 Amp switch & plug : CRABERTEE / LEGRAND/ ROMA

Socket.

6.1.9 15/5Amp modular switch : CRABERTEE / LEGRAND/ ROMA

105

And socket.

6.1.10 GI Pole : ISI Mark

6.1.11 LED Street Light : PHILLIPS/CROMPTON

6.1.12 XLPE Cable : POLYCAB Only

STANDARD AND SPECIFICATIONS

All the Electrical works shall be carried out as per

- a) Relevant B. I. S. Specification.
- b) Indian Electricity Rules, 1956.
- c) National Electricity Code.
- d) Chapter 16 of PWD Hand-book.

SCHEDULE - A

Schedule showing (approximate) the material to be supplied from the Dr. Babasaheb Ambedkar Technological University stores for works to be executed and the rate at which they are to be charged for.

Particular	Rate at which the material will be charged to the piece worker	Place for delivery
N.A.	N.A.	N.A.

Note:

- 1) The person or firm submitting tender should see that the rates in the above schedule are filled up by the Registrar on the issue of the form prior to the submission of the tender.
- 2) Stores to be supplied to contractors for a work the cost should be mentioned in schedule A in addition to schedule B and the specification attached to the contract agreement forms.

(Signature of Piece Worker)

(REGISTRAR)

REGISTERS TO BE MAINTAINED BY CONTRACTROR IN CO-ORDINATION WITH UNIVERSITY STAFF

(Whichever is Applicable)

- 1) Work order book
- 2) Visitor register
- 3) Register of registers.
- 4) Testing Equipments.
- 5) Weekly status report of work.
- 6) Test register.
- 7) Register of electrical machinery.
- 8) Log Books of electrical machinery and equipment's at site.

QUALITY ASSURANCE AND MAINTENANCE

To ensure the specified quality of work which will also include necessary survey, temporary works etc. the contractor shall prepare a quality assurance plan and get the same approved from the Registrar within one month form the date of work order. For this, the contractor shall submit an organization chart of his technical personnel to be deployed on the work along with their qualification, job descriptions defining the functions of reporting supervising inspecting and approving. The contractor shall also submit a list of tools, equipment, and the machinery and instrumentation which he proposes to use for the construction and for testing in the field and/or in the laboratory and monitoring. The contractor shall modify / supplement the organization chart and the list of machinery, equipment etc. as per the directions of the Registrar and shall deploy the personnel and equipment on the field as per the approved chart and list respectively. The contractor shall submit written method statements detailing his exact proposals of execution of the work in accordance with the specification. He will have to get these approved from the Registrar. The quality of the work shall be properly documented through certificate, records, checklists and log books of results etc., such records shall be complied form the beginning of the work and be the responsibility of the contractor. The forms should be got approved from the Registrar.

The contractor shall prepare detailed completion drawing after completion of the work. He shall also prepare and submit a maintenance manual giving procedure for maintenance, with the period of a maintenance works including inspections, tools and equipment to be used, means of accessibility for all

parts of the structure. He shall also include in the manual, the specifications for maintenance work that would be appropriate for his design and technique of construction. This manual shall be submitted within the contract period.

ANNEXURE – A

TECHNICAL SPECIFICATIONS for 5KW Solar Power Plant

The general scope of contract includes design, manufacture, testing, inspection, packing and forwarding, transportation up to project site, loading & unloading, storage in safe custody, erection, carrying out preliminary tests at site, commissioning, performance testing and operation for at least one month & handing over to the purchaser all the equipment's installed for 5KWp capacity SPV Power Plant in each of the rural hospitals under NHM, Assam.

The illustrative schedule of requirements is in accordance to the specifications contained in this document

1.1 **SYSTEM DETAILS:**

Sr No	Brief Description	Units
1	SPV modules for a total capacity of 5 KWp as per specifications	
	SPV module mounting structure suitable for accommodating 5	
2	KWp capacity SPV modules including foundation as per	
	specifications on ground/roof of building.	
3	PCUs as per specifications	
4	Array Junction Boxes	
5	Main Junction Boxes	
6	Data Logging system with remote monitoring as per specification	
7	DC Distribution units as per Specifications	
8	AC Distribution units as per Specifications	

9	Cables requirement as per design	
10	Fire extinguisher in accordance with BIS codes for electrical short	
10	circuit fires along with sand buckets	
11	Lightning arrester complete set as per Specification	
12	Earthing complete set as per Specification	
13	Battery Bank as per specifications	
14	Spares, tools and tackles for operation and maintenance	
15	Fuses, Transfer Switches, Printed Circuit Boards required for Power Plant	
16	Providing training to engineers and site staff for Operation, Maintenance and Trouble Shooting skills	
17	Operation of the SPV Power Plant for a period of 1 month from date of commissioning of the plant.	
18	Engineering, electrical drawings and installations and O&M manuals	

ANNEXURE – B

TEST REPORT FORMAT FOR MANUFACTURERS LAB AND INDEPENDENT LAB FOR 5 KW SOLAR PV PANEL

Test Report - Comparison of Specifications & Results.

System and Load

	5	
Brief System Description & Sketch:		
Manufacturer:		
Model:		
Type:		

Manufacturer's Specifications Test Results:-Nominal Load Voltage (Vdc): Average Load Voltage (Vdc):

Maximum/Start Current (Adc): Maximum/Start Current (Adc):

Date& Time:

Nominal Current (Adc): Average Current (Adc):

Inverter Idle Consumption Power (Wde): Inverter Idle Consumption Power (Wdc):

Inverter Continuous Power Output (Wac): Inverter Average Operating Power Output (Wac): Inverter Surge Power Output (Wac): Inverter Maximum Operating Power Output (Wac):

Hours of Operation / Day:

Hours of Operation / Day:

Days of Operation / Day:

Days of Operation / Week:

Days of Operation / Week:

Amp-Hours I Day: Amp-Hours / Day: Days of Autonomy: Days of Autonomy:

Observations/Notes/Calculations:

PV Array

Module Manufacturer:

Module Model:	
Module Material:	
Array Configuration (#in series):	(# in parallel):
Manufacturer's Specifications	Test Results
Rated Power (W):	Maximum Operating Power (W):
Voltage @ Pmax (V):	Voltage@ Max Operating Power (V):
Module Temperature (0C):	Module Temperature (0C):
Current@ Pmax (A):	Current@ Max Operating Power (A):
POA Irradiance (W/m2):	POA Irradiance (W/m2): Date& Time:
Open-Circuit Voltage (V):	Array Maximum Operating Voltage (V):
Open-Circuit Voltage (V):	Module Temperature (°C):
Module Temperature (°C):	Date& Time:
	Array Maximum Operating Current (A): POA Irradiance (W/m2):
Short-Circuit Current (A):	Date & Time:
POA Irradiance (W/m2): Array Tilt (° ranges):	Array Tilt (°):
Observations/Notes/Calculations:	
	Battery
Battery Manufacturer:	·
Battery Model:	
Battery Type:	
Battery Configuration (#in series):	(# in parallel):
Recommended Battery Initialization Charge Sec	quence:
Manufacturer's Specifications	Test Results
Nominal Battery Voltage (V):	Initial Battery Voltage (V): Date& Time:
Nominal Cell Voltage (V):	Initial Battery/Cell Voltage (V):
Nominal Capacity {Ah):	Battery Capacity (Ah):
Discharge Rate (A):	Average Current Draw (A)
Battery Temperature (°C):	Average Battery Temperature (°C):
Charge Voltage (V):	Battery Average Charging Voltage (V):
Battery Temperature (°C):	Average Temperature (0C):
Equalization Voltage (V):	Battery Maximum Voltage (V): Battery Temperature (°C): Date& Time:

Battery Minimum Voltage (V): Low-Voltage Disconnect (V): Discharge Rate (A):

Discharge Current (A): Battery Temperature {0C):

Date& Time:

Observations/Notes/Calculations:

Manufacturer:

Model:

Type:

Recommended Controller Connection Sequence:

Reverse Polarity Protection (YIN):

Manufacturer's Specifications

Maximum Input Voltage (V): Maximum Input Current (A):

Maximum Load Current (A):

Low-Voltage Disconnect (V):

Array Disconnect Voltage (V):

No-Load Power Consumption (W):

TC Coefficient (V/0C):

TC Sensor (Internal or External):

TC Coefficient (V /0C):

Observations/Notes/Calculations:

Test Results

Array Maximum Voltage (V): Array Maximum Current {+A):

Date& Time:

Load Maximum Current (-A):

Date& Time:

Low-Voltage Disconnect (V): Array Disconnect Voltage (V): No-Load Power Consumption (W):

Schedule B

Name of Work: Supplying, installing, testing and commissioning of 5 KW Hybrid solar power System for Classroom and Establishment section at University Man Building, Lonere.

	Schedule-B		ersiej ivi	<i>24.14.11.</i> g,	
Sr No	Description of item	Qty	Unit	Rate in Rs / Unit	Amount in Rs
1	Supplying, installing, testing and commissioning of 5 kWp OFF-GRID/HYBRID solar power pack with interconnecting wires / cables up to 24V pure sine wave solar power inverter (THD<3%), SPV Modules (335 WP X 15 Nos.), C-10 rated lead acid battery bank 24V, 300Ah x 4 nos. (12V, 300 Ah x 8 nos) suitable for 4 Hours backup with suitable MS powder coated stand to hold battery bank and keeping sufficient space for filling distilled water, canopy box to house inverter and other electronics, wiring up to solar inverter in casing and capping, display board, sign board, two distinct earthing, spike type lightning arrester, necessary accessories complete with 5 years ON-SITE warranty and fully comprehensive maintenance contract as per specification no. ESD-RT-OFG.(Item no.4-4-3) (As per University Requirement) (Battery Make:- Exide)	02	No's	373337.00	746674.00
	PWD Electrical works CSR 2022-23				
2	Supplying, erecting & terminating FR XLPE insulated, galvanized steel formed wire armoured (strip) cable 1100 V, 3 core 10 sq. mm. copper conductor complete erected with glands & lugs, on wall/ trusses/ pole or laid in provided trench/ pipe as per specification no. CB-LT/CU. (Item no.7-2-17) (Make:- Polycab)	200	Mtr	476.00	95200.00
	PWD Electrical works CSR 2022-23				
3	Supplying, erecting & marking DPMCB 6A to 32A, C-series with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB. (Item no.5-3-6) (Make:- Anchor/Legrand)	25	Nos	535.00	13375.00
	PWD Electrical works CSR 2022-23				
4	Supplying, erecting & marking DPMCB 40A to 63A, C-series with rated short - circuit breaking capacity (Icn) 10 kA in provided distribution board as per specification no. SW-SWR/MCB. (Item no.5-3-8) (Make:- Anchor/Legrand)	04	Nos	713.00	2852.00
	_ *				

5	Supplying & erecting triple pole and neutral distribution board (TPNDB), SP/TP MCBs total 8 ways /24 poles, with door, 1.2mm thickness surface/flush mounted, IP 43 Protection on iron/GI frame (vertical bus-bar type) as per specification no. SW-SWR/MCBDB. (Item no.5-4-5)	01	Nos	5696.00	5696.00
	PWD Electrical works CSR 2022-23				
6	1.5 Sqmm multi-strand copper wire. (Make:- Polycab)	05	Bundle	1650.00	8250.00
7	1.0 Sqmm multi-strand copper wire (Make:- Polycab)	05	Bundle	1100.00	5500.00
8	0.75 Inch Casing Capping Patti (Make:- Pressfit)	95	Nos	49.69	4720.50
	Item no 6 to 8 As per Rate Analysis				
			Su	b Total (Rs.)	882267.55
		GS	T 12%	on Item no.1	89601.00
GST 18% on Item no.2 to 8			24406.45		
Grand Total (Rs.)				996275.00	

(Dr.B.F.Jogi) Registrar

DECLARATION OF CONTRACTOR

Name of Work: Supplying, installing, testing and commissioning of 5 KW Hybrid solar power System for Classroom and Establishment section at University Man Building, Lonere.

I/We hereby declare that I/we have made myself/ourselves thoroughly conversant with the local conditions regarding all materials (such as but not limited to stone, murum, sand etc.) and labour including quarry locations, excess soil disposal locations etc. of which I/we have based my/our rates for this work. The specifications, conditions, core logging result sand lead of materials on this work have been carefully studied and understood by me/us before submitting this tender. I/We undertake to use only the best materials approved by the Registrar or his duly authorized representative, before starting the work and to abide by his decision.

I/We hereby declare that I/We have done a site visit to understand local site conditions and see no issues whatsoever in executing and completing this Work.

I/We hereby further declare that my/our tender is unconditional in every manner or whatsoever in nature.

I/We accept all terms & conditions laid down in the tender documents.

I/We hereby undertake to pay the labourers engaged on the work as per Minimum Wages Act, 1948 applicable to the zone concerned.

I/We have submitted the above mention Bid & validity of all Bids will be 120 days from the date of opening of financial Bid.

Authorized Signature	:	
Name and title of signature	:	
Name of Bidder	:	
Authorized address of communication	:	
Telephone No(s)	:	
Office	:	
Mobile No	:	
E-Mail	:	

Signature of Contractor