

## WBUAFS

No: WBUAFS/RKVY /96

Date: 20.01.11

**Sealed tenders are invited for supply of various items and construction works for the project. Details are in [www.rkvy-wbuafs.com](http://www.rkvy-wbuafs.com) Last date 04.02.11 by 12 Noon. EMD 2%.**

Dr.P K Das, PI, RKVY Project, WBUAFS, 37, K.B. Sarani, Kolkata – 37

### **DETAILS OF TENDER NOTICE**

The tender should be submitted to the Office of the Registrar at 68, K B Sarani, Kolkata – 700 037, West Bengal addressing to the **Principal Investigator, RKVY Project, WBUAFS** along with a Demand draft of Rs.100/- (Rupees one hundred) and 2% of the quoted amount in favour of “**Finance Officer, WBUAFS**” payable at “**Kolkata**” from any schedule Bank. **Last date for dropping is 04.02.11 by 12 Noon.** The tender quotation will be opened on 04.02.11 at the conference room of the University at 68, K.B.Sarani, Kolkata – 700 037, WB at 12: 05 Noon. All the eligible bidders may attend during the opening of tenders on the date with appropriate permission.

Dr.P K Das, PI, RKVY Project, WBUAFS, 378, K.B. Sarani, Kolkata – 700 037, WB.

**Rashtriya Krishi Vikash Yojana sponsored Project on  
DEVELOPMENT OF A MODEL FOR  
SUSTAINABLE BACKYARD POULTRY FARMING IN WEST BENGAL**



Organised by

**West Bengal University of Animal & Fishery Sciences**

37, K B Sarani, Kolkata – 700 037, West Bengal

In Collaboration with

**Department of Animal Resources Development, Government of West Bengal**

and

**Three tier Panchayet System**



**APPLICATION FOR TENDER**

(for items under Annexure I, II and III)

To  
The Principal Investigator,  
RKVY Project,  
WBUAFS  
68, K.B. Sarani  
Kolkata – 700 037  
West Bengal  
India

**Sir,**

In response to the **Tender Notice No.:** WBUAFS/RKVY /96 **Dated 20.01.11**, we are/I am interested to compete/place for the tender for supplying of following item(s) as specified in the list enclosed and submitting tender offers along with a Demand Draft of Rs.100/- (Rupees one hundred) Vide DD No....., dated ..... and Rs. .... (Rupees ..... ) only Vide DD No....., dated ..... drawn in favour of “Finance **Officer, WBUAFS**” payable at “**Kolkata**”. from Bank....., Branch..... .In this connection we/I accept your terms & conditions specified below:

**TERMS AND CONDITONS**

1. The Principal Investigator, RKVY Project, WBUAFS reserve the right to accept or reject the Tender, partly or fully without assigning any reasons there of. Simple submission of the lowest rate does not form a right to get a supply/ purchase order. Call of tender does not necessarily mean purchasing of all items.
2. The supply of items should be made within thirty days from the issuing date of the purchase order. In case of construction work specific time schedule and terms and condition will be followed as mentioned separately.
3. Delivery of articles etc. should be made / work to be done at the HQ of the Project, Department of Veterinary Physiology, 37, K B Sarani, Kolkata – 700 037, WB or at Mohanpur (Nadia) Campus or Jalpaiguri District or South 24 Parganas District or Midanpur of Paschim Medenipur or at Balurghat of Dakshin Dinajpur district of West Bengal or as mentioned for any specific areas or as per instruction in the purchase/ work order.
4. Every price/rate quoted in the tender offer shall be inclusive of packaging, transportation and installation cost etc., (i.e. all sorts of additional costing) and also taxes etc.
5. Earnest Money @ 2% of the quoted value and Rs.100/-(Rupees one hundred) only is to be deposited by Demand Draft in favour of “**Finance Officer, West Bengal University of Animal and Fishery Sciences**” payable at “**Kolkata**” from any schedule Bank. After being selected, if the party fails to honour the commitment within the stipulated period, the Earnest Money will be forfeited.

6. Tender must be accompanied with a copy of

- i) Valid trade License
- ii) Income Tax clearance certificate / current copy of return acknowledgement
- iii) Sales Tax clearance certificate / current copy of return acknowledgement.
- iv) Current Professional Tax clearance receipt of the firm
- iv) Proof of authorization of the concern companies /supplier.
- v) PAN Card
- vi) VAT registration certificate, if any

7. Tender offers for the articles should be as indicated as prescribed in tender papers attached herewith for competing Tender. Extra sheets may be attached if required.

8. All legal matters will be settled within the jurisdiction of Kolkata High Court.

9. **Last date of submission of Tender is 04.02.11** upto 12 noon. and **Date of Tender opening is 04.02.11** at 12:05 noon at the conference room of the University at 68, K.B.Sarani, Kolkata – 700 037, WB

Thanking you,

Yours faithfully,

Date: .....

(Signature)

Name of the Firm.....

Address for Communication .....

Contact Phone No. ----- Fax \_\_\_\_\_ Email: \_\_\_\_\_

**Rashtriya Krishi Vikash Yojana sponsored Project on  
DEVELOPMENT OF A MODEL FOR  
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and

**Three tier Panchayet System**

**APPLICATION FOR TENDER**

**(for items under Annexure IV)**

For the Work ..... amount a  
sum of money Rs ..... (Rupees .....) put to tender, at the  
West Bengal University of Animal & Fishery Sciences, vide N.I.T. No. .... of .....

To  
The Principal Investigator,  
RKVY Project,  
WBUAFS  
68, K.B. Sarani  
Kolkata – 700 037  
West Bengal  
India

**Sir,**

In response to the **Tender Notice No.: WBUAFS/RKVY /96 Dated 20.01.11**, we are/I am interested to compete/place for the tender for construction work of following item(s) as specified in the list enclosed and submitting tender offers along with a Demand Draft of Rs.100/- (Rupees one hundred) Vide DD No....., dated ..... and Rs. .... (Rupees ..... ) only Vide DD No....., dated ..... drawn in favour of “Finance **Officer, WBUAFS**” payable at “**Kolkata**”. from Bank....., Branch.....

I/We namely ..... having my/our registered office at ..... highly glad to offer my/our lowest rate / item rated (for solar power project only) to execute the above mentioned work. My/our rate is ..... at par ..... % above Schedule of rate ..... % below Schedule of rate.

(Strike out which is not applicable)

Further, I/We like to undertake after careful consideration of N.I.T that I/We abide by the (i) General Conditions of Contract, (ii) Specification of Work (iii) Mode of Measurement for Building, Sanitary, Plumbing and Drainage work as per State P.W.D. Schedules and for other works as per specification stated in the tender document.

The following documents are enclosed herewith for your consideration.

- i) Constitution of the company:- i.e. enlistment certificate
- ii) Solvency Certificate:
- iii) List of Work executed with completion and payment Certificates:
- iv) List of equipments:
- v) Name of the Technical personnel:
- vi) Tax clearance Certificates (P.T, S.T & I.T)
- vii) I/We enclose herewith all the tender documents duly signed by me us

In this connection we/I accept your terms & conditions specified below:

### **TERMS AND CONDITONS**

- 1) The Principal Investigator, RKVY Project, WBUAFS reserve the right to accept or reject the Tender, partly or fully without assigning any reasons and there of. Simple submission of the lowest rate does not form a right to get a construction work order. Call of tender does not necessarily mean construction of all items.
- 2) There is No restriction to forbear any intending tenderer from submitting tenders for more than one.
- 3) No Advance will be paid against the contract. Payment will be made as per the actual work done.
- 4) The tenderer shall submit the detail programme of work and method of construction. The work shall be completed within 3 (three) months i.e. 90 days / as will be specified in work order from the date of written order to commence the work.
- 5) The construction shall follow the detailed drawing to be supplied from the Office of the RKVY, Department of Veterinary Physiology, Faculty of Veterinary & Animal Sciences, WBUAFS, 37, K B Sarani, Kolkata – 700 037 during office hours on working days of the University to the lowest tender(s).
- 6) Contract documents consisting of specification drawings (to be shown in the Office of the RKVY at the above mentioned address on demand), complete specification of the schedule of items of the various classes of work to be done and the set of conditions of contract to be complied with by the Tenderers who's Tender may be accepted.
- 7) Tender shall be submitted in the form which can be obtained from web site
- 8) Amount of Security Deposit will be 10% (ten percent) of the amount of contract without any upper ceiling. In case the security deposit is above 2,00,000.0 Bank Guarantee of the amount above of Rs. 2,00,000.00 is to be furnished in the form of Bank Guarantee (in the prescribed format) in favour of the tender inviting authority.
- 9) Amount of Earnest Money will be 2% (two percent) of the amount of contract. The initial earnest money shall be 2% of the tendered amount. The balance amount of initial earnest money deposit, if any, after adjustment of earnest money shall have to be deposited during execution of formal agreement.
- 10) 1% of cess of cost of construction will be deducted from the contractor's bill employing 10 (Ten) or more construction workers on any building or other construction work. Under section – 7 of the

building and other construction workers Act. 1996 and building and other construction workers Welfare Cess Act. 1996 and the rules framed there under.

- 11) Each set of tender documents as mentioned in Clause above, should be supported by Earnest Money @ 2% of the quoted value and Rs.100/-(Rupees one hundred) only is to be deposited by Demand Draft in favour of “**Finance Officer, West Bengal University of Animal and Fishery Sciences**” payable at “**Kolkata**” from any schedule Bank. After being selected, if the party fails to honour the commitment within the stipulated period, the Earnest Money will be forfeited. Earnest Money deposited in either of the form should belong to in the name either the Proprietor of the Firm/or the Partner/Partners of the Firm, failing which the tender may be cancelled.
- 12) The Earnest Money shall be refunded to unsuccessful Tenderers without any interest thereof. No claim for delay shall be admissible.
- 13) The Security Deposit shall be collected by deduction from the running bills of the Contractor @ 10% of the value of work and the Earnest Money deposited by the Contractor shall be treated as a part of the Security Deposit for the successful Tender.
- 14) Tax Clearance Certificate is to be submitted with the Tender Form. The Contractors will have to abide by the provision of West Bengal Contract Labour (Regulation Y Abolition) Rules- 1972, as enforced during the period of the Contract. Mainly labours accommodation, sanitation, medical insurance etc., is to be provided by the Contractor.
- 15) Taxes at source will be recovered as per income Tax and West Bengal Sales tax Act/Rules as applicable.
- 16) Tenderer will clearly mention the name of work, Sl. No. & NIT No. over the sealed cover before submission of tender. All applicants will strictly follow the instructions given above. Application which does not fulfill the above mentioned points may be liable for rejection. Any sort of canvassing will also make the applicant liable for rejection.
- 17) Complete tender document with sealed covers either the name of the work and with the name and Address of the tenderer superscripted on the cover are to be submitted within the TENDER BOX kept in front of the room of the Registrar, WBUAFS. **Last date of submission of Tender is 04.02.11** upto 12 noon. and **Date of Tender opening is 04.02.11** at 12:05 noon at the conference room of the University at 68, K.B.Sarani, Kolkata – 700 037, WB. The intending tenderer or their authorized representative may be present at the time of opening of tender with due permission.
- 18) Tender documents shall consist of Technical Specifications, Schedule of works with quantities, Rates, Amount any other papers agreed upon by authority of W.B. University of Animal and Fishery Sciences and the tenderer.
- 19) Each tenderer is required to go through the Schedule of rates as defined in BOQ very carefully before submission of tender and he will give a declaration in the space provided for the purpose.
- 20) The rates shall be submitted on the basis of schedule of items attached with the Tender. The Tenderer shall quote the rate for work by mentioning of percentage above/below or at par for the total schedule of work. Item wise rates will not be accepted except for Solar Power Project. Quoted rates should be in figures as well as in words. In case of any discrepancy in rates quoted in words and in figures, the lower of the two shall be taken as correct.

- 21) The said quotation is to be written in any of the Form (A), (B) or (C) below as is appropriate in page of the Tender Form and no where else except for Solar Power Project where tender shall be evaluated on the basis of total of item rates and amount thereby.
- A) I/We agree to carry out the work mentioned in memorandum at par with the rates shown in the attached schedule of work with the quantities, rates and amount.
- B) I/We agree to carry out the work mentioned memorandum ..... at (percent) below the rates shown in the attached schedule of work with the quantities, rates and amount.
- C) I/We agree to carry out the work mentioned memorandum ..... at (percent) above the rates shown in the attached schedule of work with the quantities, rates and amount.
- 22) The quotation/tender rate shall be clearly & legibly written by the person signing the tender and with the same PEN & ink. ERASING OR OVERWRITING SHALL NOT BE ALLOWED. In case, it become necessary to correct the rates once within the entire quotation should be scored through and attested by full signature. A fresh quotation in appropriate Form should then be written. In the event of the tender being submitted by firm, it must be signed by a member or members of the firm having legal Authority to do so and the legal documents in support thereof must be produced along with the tender failing which the tender will be cancelled. In case of a Firm carried out by one member of a joint Hindu family it must disclose that the Firm is duly registered under Hindu Partnership Act.
- 23) The tenderer must sign the 'Declaration by the Tenderer'. The tenderer must also sign at the bottom of each page of the submitted Documents. Over writing shall not be done. All corrections admission alterations etc. must be duly signed.
- 24) No tender will be deemed to be fit for consideration unless the tender documents are fully and completely filled in. All information that may be asked for from a tender must be unequivocally furnished. Any tender which is incomplete or does not comply with the prescribed conditions contrary to those laid down here or in other tender documents, will be liable to rejection at the time of opening or during subsequent scrutiny, conditional tender will not be accepted.
- 25) Canvassing in connection with the tender is strictly prohibited and a tenderer who resorts to this will render his tender liable to rejection.
- 26) A tender once submitted shall not be withdrawn within a period of 4 (four) months from the last day of receipt of the tender, If a tenderer withdraws a tender within this period of four months without giving justifiable reason for such withdrawals to the satisfaction of the accepting authority of the tender. He shall render himself liable to be debarred from submitting any tender for works under the West Bengal University of Animal and Fishery Sciences and security deposit (Earnest Money) of the contractor shall stand forfeited and be absolutely at the disposal of WB University of Animal and Fishery sciences.
- 27) Earnest money deposited by an unsuccessful tenderer will be refunded on application to the PI, RKVY, WB University of Animal and Fishery sciences.
- 28) The tenderer whose tender is accepted, shall within 7 (seven) days of receipt of an intimation to the effect, deposit an additional amount required which together with some amount already deposited as Earnest Money and converted into part of security deposits on acceptance of tender will be equivalent upto 2 (two) percent of the tendered amount (i.e. the estimated value of the work at contractual rate).

Failing to deposit such amount end or in submission or the copies of the documents as specified herein after within the specified time shall render the contract to be transmitted without reference to the contractor and in such case the deposit security money shall stand forfeited to be department.

- 29) All legal matters will be settled within the jurisdiction of Kolkata High Court.
- 30) The documents to be submitted along with the applications are as follows:-

Attested Xerox copies of

- A) Valid P. Tax Certificate P. Tax Clearance Certificate, Registration of VAT, VAT return, (current) valid PAN Card as issued by the income Tax Authority, Income Tax Return for the last 3 (three) years, balance sheet authenticated prove of resourceful, (Bank solvency certificate) deed for work value 4.00 lakhs & above).
- B) Credential Certificate of successful completion of similar nature of work (showing break-up of main items executed with amounts) along with the work order for works completed within last 3 (three) years of values not less than 50% (fifty percent) of the works applied for including mentioning time of completion of the work.
- C) Credentials of works which are in progress or payment certificates only will not be entertained. Applicants applying in more than one serial must mention their priority.
- D) When the applicant is an authorized signatory, he should submit documents of authorization in his favour with the application.
- E) In case of partnership firms, they should submit copy of PARTNERSHIP DEED with their application. Otherwise application will not be entertained.

Thanking you,

Yours faithfully,

Date: .....

Signature of the Contractor

Name of the Firm .....

With Office Seal

Name of the Proprietor .....

Name of the Partner of the Firm .....

Address for Communication .....

.....

Contact Phone No. ----- Fax \_\_\_\_\_ Email: \_\_\_\_\_

**CHECK LIST**

- 1. Tender Form; 2. N.I.T No. ; 3. Drawing; 4. Constitution of Company; 5. Solvency Certificate; 6. List of work executed (a), (b) .... ; 7. List of equipments; 8. Name of Technical Personnel; 9. Tax Clearance Certificate; 10. Professional Tax; 11. Sales Tax (if applicable); 12. Income Tax and 13. Bank Draft for Earnest Money and Application Form Fees (separately)

**TENDERS ARE INVITED FOR FOLLOWING ITEMS WITH  
RESPECTIVE SPECIFICATIONS**

*ANNEXURE – I*

**Computer and Office Appliances**

**A. Computer and Laptop**

**i) Touch Screen Computer (Approx. Qty. – 1)**

**Specification:**

Monitor: Touch Screen (15.5” – 21.3”) LCD (HD 1080p impact) wide screen

Processor: Intel Core 2 Duo (2.13 GHz – 3.6 GHz) (64 Bit preferable)

Main board: Processor Compatible

RAM: 2 GB - 4 GB

Technology DDR2 / DDR3 and higher

Memory Speed 1333 MHz and above

Storage Controller: 1 x Serial ATA – Integrated

Hard Drive: 250 - 500 GB (6000-7200 rpm -Serial ATA)

Mouse and Keyboard: Wireless preferable

Printer: Laser/Deskjet

Power Supply: 19V DC, 3.42A, 65W Power Adapter

DVD writer

Operating System: Genuine Microsoft Windows XP/ Windows® 7 Home Premium (32/64 Bit) /  
Windows® Vista Home Premium (32/64 Bit)

Graphics: Integrated graphics and dedicated graphics (512 MB)

Rate of all items are to be specified as the per the following format otherwise tender paper will be considered invalid.

Sl No	Item Description	Rate (exclusive any kinds of tax)	VAT (4%) (if applicable)	Other Taxes (if applicable)	Warranty Period	Quantity	Total Amount	Amount In Words
1								
2								
3								
4								
5								
6								
7								
Total Amount								
Installation Charges (If any)								
Other Taxes / Charges against the Total Amount								
<b>Grand Total</b>								

## **ii) Desk Top Computer (Approx. Qty. – 3)**

### **Specification**

Duel Core (E 5400), 1 GB DDR3 RAM, 320 GB HDD, Key Board, Mouse, DVD RW, 15.6" TFT

## **iii) Laptop (Core 2 Duo) (Approx. Qty. – 1)**

### **Specification**

T 6570 (2.1 GHZ, 800 MHZ, 2 MB L2) or above, Mobile intel GM 45 Chip Set, 14 " wide screen, HD display, LED Backlit (1365 X 768 resolution), DVD RW, 2 GB DD R3 RAM, 320 GB HDD, Web Cam 2 MP

## **iv) Laptop (Core I3) (Approx. Qty. – 1)**

### **Specification**

Intel Core I3 – 370 M Processor or above, 2.4 GHZ, 3 MB L3 CACHE, 512 MB dedicated Video RAM, 3 GB DD R3 RAM, 15.6 " wide screen, HD display, LED Backlit (1365 X 768 resolution), DVD RW, Web Cam 2 MP, 500 GB HDD

## **B. Office Appliances**

### **i) Development of Hatcheries Business Projection Software (Approx. Qty. – 1)**

#### **Specification:**

This is software based on the statistical calculation (prediction logic) where the inputs will be following, Main Inputs from viewers

- 1) Type of Birds.
- 2) Number of birds.

Inputs from Administrator for statistical calculations

- 1) Statistical parameter can be changed as per the requirements.
- 2) Cost of the products can be changed basis of the market value.

And the output report will be shown at the user end contains the following,

- 1) Feed consumption ratio.
- 2) Total mortality
- 3) Mortality Ratio
- 4) Predictive average weight after certain period.
- 5) Total feeds requirement (approximate).
- 6) Approximate costing of total average weight.
- 7) Net approximate profit after certain period.

\*\* The Output parameters can be increased or decreased basis on the requirements of the authority. Rate of all items are to be specified as the per the following format otherwise tender paper will be considered invalid.

Sl No	Item Description	Rate (exclusive any kinds of tax)	VAT (4%) (if applicable)	Other Taxes (if applicable)	Warranty Period	Quantity	Total Amount	Amount In Words
1								
2								
3								
4								
5								
6								
7								
Total Amount								
Installation Charges (If any)								
Other Taxes / Charges against the Total Amount								
<b>Grand Total</b>								

**ii) Camera (Approx. Qty. – 1)**

**DSLR D3000100 of Nikon model with lenses 18 – 55 mm VR Kit, DX format**

**iii) Camera (Approx. Qty. – 1)**

**DSLR D3S of Nikon model, FX format with lenses 24 – 120 mm zoom**

**iv) Video camera (Approx. Qty. – 1)**

**Sony make handycam video camera – (HDD, 240 GB), HD CAMORDER, ‘Exmor R’ CMOS Sensor, HDR – XR - 550E Model**

**v) Spiral binding machine** For 10 – 500 pages (Approximate quantity – 1)

**vi) Water purifier** (Approximate quantity – 3)

Specification:

Electrically operated; Reverse Osmosis with Auto flush facility; In-built Voltage Stabiliser system; capacity – 7 – 8 liter. Branded make will get preference



Choice of response time: **High, medium and slow**  
Noise : **0.0001AU(empty cell) less**

Drift : **0.0001AU(empty cell) less**  
Source lamp: **Low pressure mercury lamp.**  
Response : **0.5 sec.**  
Flow cell volume: **6µl**  
Liquid contact part: Teflon, Quartz  
Electricity : 220VAC, 50/60 Hz

4.

**Recorder**

Channel: 1 pen system  
Measure range: 10,50,100mV 1,5,10V  
Chart paper speed: 2.5,5,10mm/s or min.  
Recording pen: Cartridge, tip pen, red color  
Recording width: 100mm  
Power: 220VAC, 50/60Hz

**Above system should come with all necessary column/ fittings & tubing**

**ii) Vacuum Concentrator/ Centrifugal (Approx. Qty. – 1)**

**Containing the following items / facilities -**

**a) EVAPORATOR WITH BUILT-IN DIAPHRAGM**

**VACUUM PUMP WITH FREEZE DRYING FACILITY.**

It should be resistant against corrosion and can be fitted with external vacuum pump as required

Rotation Speed : 1400/1700rpm fixed

Temp. Control range : RT +5 to 80°C

Temp. setting : Digital setting and digital read-out

Heater : 40W

Vacuum seal : Seal-less magnetically coupled drive

Vacuum gauge : Bourdon tube (-100~0Kpa)

Vacuum pump : Built-in (Compact size diaphragm pump)

Purge nozzle: Through 0.2 µm filter

Chamber material : SUS 304 (Stainless Steel)

Lid material : Transparent PVC

External port : Suction port for external vacuum pump 10mm

Exhaust port for external vacuum pump 9mm

**With Rotor**

Tube size : Micro tube OD10.8mm (1.5ml ~ 2.2ml) x 24

Capacity : 24pcs

Environment temperature: 5~35°C

Electricity : 100VAC, 50Hz.

**b) REFRIGERATED COLD TRAP**

Should have LED alarm against abnormality of refrigeration  
Should have glass condenser for solvent recovery also bath can be used as pre-freeze bath. Condensing capacity : Max. 0.5kg water  
Lowest Temperature : -50<sup>0</sup>C  
Safety feature : Breaker, overload relay for refrigerator high press, switch for refrigerator  
Refrigeration unit : 300W, air cooled type  
Service AC outlet : Max. 4A for diaphragm vacuum pump  
Trap dimension : Ø 90 x 225D (approx. 1.4L)  
Ambient temp. for operation: 5~35<sup>0</sup>C  
Its comes complete with Lid with nozzle B

**c) T-Shape Manifold as Freeze-Drying attachment**

d) for Drying 4 Nos. test tube/ampoule/vials/flasks with necessary adaptors  
No. of port: 4

**iii) MAGNATIC STIRRER (Approx. Qty. – 1)**

Stirring range : 200 ~ 2000 rpm  
Motor : AC 1.2W  
Digital tachometer : None  
Stirring volume : 100ml ~ 1L  
Material : ABS  
Stirring plate : 78W x 119D mm  
Dimension(mm) : 78W x 150D x 90H  
Power source : AC 220V, 50/60Hz  
Weight : 780g

**iv) Biological Safety Cabinet with manual window (Approx. Qty. – 1)**

- Double-layer side panels/plenums for intrinsic negative pressure protection of work chamber.
- Microprocessor based system for digital display of control of all parameters and safety functions with alarms and intelligent diagnostics.
- ULPA down flow and exhaust filter (0.1 ~ 0.2 um) at 99.9999% efficiency
- 70% downflow / 30% exhaust.
- UV light & fluorescent lighting (interlock)
- Automatic warm-up cycle for self-filtering.
- Auto (intelligent) blower speed adjustment for filter loading compensation.

- Manually operated weight balanced sliding front UV protected sash.
- Display of air pressure at ULPA filter life indication.
- True airflow velocity (downflow and inflow) display with temp. compensation.
- Timed operation for de-contamination cycle.
- Sloped front for user convenience.
- Stainless steel work surface and interior.

**It comes along with Floor stand, Gas tap and Electrical socket**

Specifications:

Internal dimensions (mm): 900W x 600D x 700H

Filter: ULPA at 99.999%

Downflow/Inflow velocity (m/s): 0.35/0.53±0.025

Noise (db): ≤ 60

Fluorescent lamp: 2 Nos, 1100 lux

Rated voltage: 220V ~ 240 V AC

**v) Laminar flow (Approx. Qty. – 2)**

**Specification**

48X30X30 inches (4'ftX2'ft); Hepa filter area: 1220mmX610mm, Workspace: 1285mmX775mmX762mm, overall dimensions: 1345mmX810mmX2390mm; SS 304; EU-13 Hepa filter, EU-6 Pre filter, motor blower assembly, anti vibrator, UV light, Fluorescent light, air regulator, pressure monitor, polycarbonate front door; air flow-vertical.

**vi) CO<sub>2</sub> INCUBATOR**

**Specification:**

Capacity: 48 liters

Microprocessor controlled six sided direct heating

Large LCD display

72-hour continuous data logging of temperature, alarms, door openings and CO<sub>2</sub> to provide a detailed record of environmental conditions to quickly troubleshoot any unexpected results.

Should be capable to quickly change both environmental and alarm settings through intuitive controller.

Should have diagnostic interface to show system parameters and functions.

Should have password protection for secure programmable settings and alarm set points.

Should have on-screen troubleshooting and help.

Upgradeable to Oxygen control

Fanless & Hepa filter less chamber to minimize the contamination as well as to facilitate the utility of the whole chamber.

Temperature range: 4°C above ambient to 50°C, Control: ± 0.1°C or better, Stability: ± 0.1°C or better, Uniformity: ± 0.2°C or better over temperature cutout facility to prevent overheating

High Temperature Decontamination facility at 120°C

Inner Glass Door to see the sample kept inside.

CO<sub>2</sub> Range: 0.2 – 20%, Control: ± 0.1%, Stability : ± 0.2%, Uniformity: ± 0.1%, Recovery: >0.7% per minute

IR CO<sub>2</sub> Sensor, User-programmable, and auto zero facilities are preferable in CO<sub>2</sub> Sensor

Reservoir: removable stainless tray of Volume approx 5 liters

Shelves: 3 nos., perforated and easily removable

Chamber should be Seamless, Corners should be rounded and external front flange prevent contamination and simplify cleaning.

Chamber should have access port to allow additional probes and equipment to be used inside the incubator chamber.

Should have HEPA Filter on CO<sub>2</sub> Inlet

RS-232 Communications port.

Should have stackable facility at least up to two units high.

Voltage: 230 V, 50 Hz

Power: 500 watts or lower

Power (At High Temp.): Max. 1,000 watts

Consumption:< 0.1 kWh

## **vii) -86°C Deep Freezer**

### **Specification:**

Capacity : 360 L

Microprocessor controlled with automatic reset facility

Programmable temperature range should be from -20°C to -86°C in 1°C increments, should maintain this temperature even at ambient temperature upto 32°C

Should have thin vacuum insulation panels bonded to foamed in place polyurethane foam; 3" thick

Less pull down time 5.6 hrs

Low power consumption and CO<sub>2</sub> emission: 491 Watt or 11.8 kWh/day

Door latch: Molded handle with built in removable lock

Should have at least three compartments with two adjustable heights, stainless steel shelves.

Gasket in the Inner Doors should be one-piece molded designed gasket with push pull latch to eliminate icing issues.

Should have at least 4 digit password protection facility

Must have diagnostic software to provide fault codes to trace and solve system errors

Alarm set points & status including door open alarms, should be displayed on screen with time date stamp

Must have audible alarms for High/low temperature, power out & system fail, with battery backup & a door open alarm

Should have large backlit LCD display (12 x 7 cm) to identify alarms, door opening, temperature, passwords & mote.

Should have battery backup to activate alarms and display temperature during power outage.

Should have heated air vent with spring assisted plunger to clear ice build up and prevents vacuum formation

Should have 30 day automatic data storage facility of temperature, alarms and door openings

Should have two pass through ports, 20mm diameter

To reduced power consumption and noise freezer should use not more that one fan.

Hermetically-sealed two stage cascade system

**Quantity required: 1 (approx.)**

**viii). Electrophoresis Apparatus**

**Specifications:**

a) Power supply having input voltage  $-220V \pm 10\%$  ; 30-300V; output- 4-400mA, 75W; LED display; 4 in parallel, 4mm socket with timer  
Compatible electrophoresis tray and accessories should be quoted separately.

**Quantity required: 1 (approx.)**

b) Power supply having input voltage  $-220V \pm 10\%$  ; 30-500V; output- 0-500mA, LED display; 2 in parallel, 4mm socket with timer.  
Compatible electrophoresis tray and accessories should be quoted separately.

**Quantity required: 1 (approx.)**

**ix) Densitometer (approx. qty. - 1)**

**Specification-**

Light Source- Fluorescent White

Wave Length- 400-750 nm

Absorbance Range- 0-3.0 OD

Operating Modes- Transmissive and reflective

Scanning Area- 30x40 cm max

Sampling Rate- 800x1600 dpi

Pixel Data Density- 12-bit

Resolution- 36.3um

Voltage- 100-240 V

Along with Compatible PC and Printer to be supplied locally.

**x) Ultra Centrifugation (Floor Model) (approx. qty. - 1)**

**Specification-**

Speed-1, 00,000rpm, RCF-8, 03,000xg

Max capacity-6 x 230 ml

Self rotor locking mechanism

Timer 1 min to 99 hrs. and 59 minutes, with a HOLD function, with Real time control function.

High frequency IGBT controlled direct drive unit.

Fixed Angle Rotors:-

Capacity-1.5mlx24 and 12mlx8

**xi) Western Blot Apparatus Mini System (approx. qty. - 1)**

**Specification:**

Principal material : Acrylic

Buffer Volume : 350 ml.

Gel Size : 8 x 7 cm

**xii) Automatic Egg Incubator (Approx. Qty. 1)**

**Specification**

Double walled in construction, inner chamber is made of SS and the outer chamber is made of MS. Complete with 2 Nos. of selves for egg. Capacity – 100 eggs

Temperature range: 98<sup>0</sup>F to 102<sup>0</sup>F; Tilting arrangement: Automatic tilting facility for eggs by ½ an hour; Humidity range: 60% to 90%; Temperature & Humidity Control: Digital indicator cum controller (Microprocessor based)

**xiii) Adaptor for attaching Canon DSLR Camera for Axiovert 25**

**Specification**

Photo adaptor 2.5 X T/2 Catalog No. 451256-0000-000 and T2 adaptor for Minolta (SR-Baynot mount) 416003-0000-000

**xiv) PCR Work Station**

**Specification**

Midi Model, Genei Make, Size 45 X 60 X 30

**xv) Microprocessor Based pH meter**

Standard quality for Laboratory Use

pH range 3.00 – 12.00

**D. Equipments for Poultry Museum**

**i) Specimen Jar (Approx. Qty. – 50)**

**Specification:**

Size (Maximum) – 2.5' X 3' X 2.5'

Size Minimum – 8" X 8" X 8"

Molded jar made by Indian glass (thickness 3 mm). The top part of the jar is also made by glass but it will not fixed.

Two types of jar will be provided

- a. only jar with fixing of name plate by anodised steel engraving the name.
- b. with steel platform and fixing the materials within jar suitably

Rate is asking for jar two types of jar on available capacity basis.

**ii) Chart/Photography (Approx. Qty. – 100)**

**Specification:**

Size Maximum – 12" X 18" / 24" X 36"

Size Minimum – 3" X 4"

Made by Paper/Bromied with Lamination. The paper/Bromied will be fix in between both side clear imported acrylic sheet and fix the acrylic on the wall with steel anodized screw.

Rate is asking for per sq. ft.

**iii) Platform for fixing Skeleton (Approx. Qty. – 30)**

**Specification:**

Size approx. - 2' X 2.5' X 2'

Given skeleton will be fix on a steel platform with anodized steel colour and the platform will be covered by imported acrylic box as per size basis. Name of the skeleton is to be engraved suitably.

Rate is asking for per sq. ft.

**iv) Model (Approx. Qty. – 30)**

**Specification:**

Size approx. - 3' X 4' X 1.5'

Made by given data basis. The total model fix on a steel platform and with anodized steel colour and the platform will be covered by imported acrylic box as per model size. Name of the model is to be focussed suitably.

Material. –Ply wood, Balsa wood, Clay, Fiberglass and many other things (which is use in the model should be Ecosolvent)

Rate is asking for per sq. ft.

**E. Chemicals (details will be available in the Project Office during Office hours)**

Sl. No	DESCRIPTION	UNIT
1.	CD3	30T
2.	CD4 (mAb- GC 50A1, Ig isotype -Ig M, Dilution- 1:250 )	30T
3.	CD8 (mAb- CACT80C, Ig isotype -Ig G1, Dilution- 1:1000 )	30T
4.	Mouse anti-human<smooth muscle actin	30T
5.	CD20 for B Cell	100ug
6.	CD32 for B Cell	100ul
	a. CD32 for B Cell	200ug
7.	CD16 for N.K. Cell	100ug

8.	CD64 for monocyte and macrophages	100ul
9.	CNA42 / D46 for dendritic cells	100ul
10.	S100 protein for dendritic cell	30T
11.	ABC Vecta stain ABC peroxidase kit Pk-4001 to 4010	1Kit
12.	3.3'diaminobenzidine tetra hydro chloride	5gm
13.	0.05% Phenyl hydrazine	
14.	Normal rabbit serum	
15.	CD2 (mAb- BAQ95A, Ig isotype -Ig G1, Dilution- 1:1000 )	
16.	MHC II (mAb- H42A, Ig isotype -Ig G2, Dilution- 1:10000 )	
17.	IgM (mAb- BAQ155A, Ig isotype -Ig G1, Dilution- 1:10000 )	
18.	Biotinylated rabbit antimouse Ig G ( Dilution 1:250 )	
19.	Human anticollagen IV monoclonal antibody	

## **F. Hostel Furniture (Approximate quantity – 22 unit)**

Rate is asking for each unit of item including supplying and fixing, wherever required, having one steel cot, one steel wardrobe and bedding materials altogether considering as one unit as per following specification.

### A. Steel Cot:

Size – 6.5' X 3' X 20"

Made of steel, 1.5" X 1.5" X 14<sup>th</sup> gangue tumbler pipe with six legs.

There should be one locker at the bottom of the cot having the size 36" X 36" X 14" of 20<sup>th</sup> gangue with middle partition and two doors including locking system.

Painted with powder coating. Black paint with top 10mm painted ply.

### B. Steel Wardrobe:

Size - 48" X 30" X 18" of 20<sup>th</sup> gangue with one shelf and hanging arrangement on wall, double door with locking arrangement. Wardrobe should be painted with synthetic enamel paint.

One folding self having the size of 24' X 18" of 20<sup>th</sup> gangue on both side of the wardrobe with two clips for folding the selves.

### C. Bedding materials:

(a) Mattress – 6.5' X 3' X 4" - No.1

(b) Mosquito net – fine quality – No. 1

(c) Pillow (foam made) – standard quality / size – No. – 1

(d) Bed Cover (cotton made) – Single size – Nos. – 2

(e) Bed Sheet (cotton made) – Single size – Nos. – 2

(f) Pillow cover (cotton made) – Single size – Nos. – 2

(g) Towel – large size – Nos. – 2

(h) Blanket – No. – 1

(i) Mattress – standard quality and size – No. – 1

**G. Almirah (Approximate quantity required – 10)**

6.5' X 3' X 1.5' with 18 gauges, with locker facility changeable racks arrangement and painting

**H. Generator**

(Approx. quantity required – 1 each and to be delivered at any project implementing site of West Bengal)

(i) 10 / 15 KVA Radiator cooled Diesel Engine, 20 BHP at 1500 RPM. 20 KVA alternator. AC, 3 Phase, 415 volts, 50Hz, 1500 RPM Suitable control panel, fuel tank, base frame, coupling acoustic, battery (dry) with leads. ,with Standard Manual panel. Any Branded make and servicing facility will be preferred.

(ii) 20 KVA Radiator cooled, Diesel Engine 32 BHP at 1500 RPM. 20 KVA alternator. AC, 3 Phase, 415 volts, 50Hz, 1500 RPM Suitable control panel, fuel tank, base frame, coupling Acoustic Enclosure , battery (dry) with leads. ,with Standard panel. Any Branded make and servicing facility will be preferred.

(iii) 25 KVA Radiator cooled Diesel Engine 35 BHP at 1500 RPM. 25 KVA alternator. AC, 3 Phase, 415 volts, 50Hz, 1500 RPM Suitable control panel, fuel tank, base frame, coupling Acoustic Enclosure , battery (dry) with leads. ,with Standard panel. Any Branded make and servicing facility will be preferred.

**Rate is asking for each type of generator separately with delivery and installation charge**

**I. AC machine**

(Approx. quantity required – 20)

1,1.5, 2, 3, 5 ton window/split. Branded make will get preference. Rate is asking for each type of AC machine

*ANNEXURE – III*

**Farm House and Accessories**

**J: Rural Poultry Housing**

**Specification:**

**Size** (inside the room): 8' (L) X 5' (B) X 4' (H-side)/ 6' (H-centre)

**Floor:** (a) 2.5' height from the ground level with removable poultry ladder with 1.5' projection.

(b) Placing one side of the house at one side of the pond and another side at the land.

Height of the floor from the land at least 2.5' from the ground level with removable poultry ladder with 1.5' projection.

*Materials-* Low cost, locally available with black Japan painting (woods/bamboo etc.). Care should be taken for protection of rodent, snake etc.

**Wall:** Wire net/ chain linked net/ square net/ strong bamboo net of 3' height from the top on both side of front wall and back wall and the side wall also. The lower part of the wall (1' height) should make up of locally available materials. There will be provision of screen for covering of netted part of the wall. Two doors at the front side. The doors will also be made by the same fashion as like wall. In the middle portion of the house one movable portion made by the similar materials having height 2' and length 5' will also be provided. All walls will be covered by nylon tread net.

*Materials-* Low cost and locally available (woods/ bamboos etc.). Care should be taken for protection of rodent, snake etc.

**Roof:** Both sides slanting with 2' outer projection from wall.

*Materials-* Tin (guage – mm) with strong insulated false ceiling facility. Care should be taken for protection of rodent, snake etc.

**Light / Heating Arrangement:** Facility for two light point (Electric bulb/ CFL) with separate switch. Arrangement of earthen pot with hanging arrangement or Kerosene lamp (harican) will be provided where electric facility is not persisting to the farmers' house.

**Feeder and Drinker:** Standard quality, 2L capacity, 2 nos. each.

**Egg Laying Nest:** Wide mouth two boxes earthen pot with bedding materials to be placed at 1' height from the floor.

**Board:** For mentioning the project name one suitable board to be hanged in front of house.

**Approximate Cost:** Within Rs.6, 000.00 (Rupees six thousand) only.

(Clear design & photograph is to be furnished with the quotation. Companies having experience in related furnishing are preferred)

**Rate is asking for –**

**i) Howrah district (Approximate quantity required – 350)**

**ii) Kakdwip Block, South 24 Parganas district (Approximate quantity required – 250)**

**iii) Sagar Block, South 24 Parganas district (Approximate quantity required – 200)**

## **K. Establishment of Vermicomposting pit**

Vermicomposting pits are to be established at the below mentioned areas with the following specifications.

### **Specification:**

- a. Shed – Size 12'(Length) X 6'(wide) X 8'(height at one side) / 6' (at one side).  
Structure supported by at least 4 cement pole  
Roof – Made by bamboo mash with plastic covering and bamboo thatch / mat  
Wall – Bamboo thatch / mat at 4 sides and a door facility at one side
- b. Bed – Made by plastic within the shed, Size – 10' (length) X 3'6" (wide) X 6" (height), height is to be covered by bamboo as barricade
- c. Green Matter – to be provided upto 8" and cow dung upto 18" height
- d. Worm – 100 grams of suitable / effective worm

### **Area:**

- (i) At Paschim Medenipur District – One / two pits at the specified area of Self Help Group at each Gram Panchayet of Keshiary, Khargarpur-I

and Midnapur Sadar block. Approximate No. – 40. Specific location with name and address for establishing the pit will be provided during work order.

- (ii) At South 24 Parganas District – One / two pits at the specified area of Self Help Group at each Gram Panchayet of Kakdwip and Sagar block. Approximate No. – 40. Specific location with name and address for establishing the pit will be provided during work order.
- (iii) At Howrah District - One / two pits at the specified area of Self Help Group three each Gram Panchayet of Udaynarayanpur, Jagatballavpur, Amta-I & II and Domjur block. Approximate No. – 30. Specific location with name and address for establishing the pit will be provided during work order.

**Terms and Condition:**

Live demonstrations are to be arranged on a specific prefixed date by the agency at every pit after establishing, where experts should demonstrate the process of vermicomposting to all the members of the Self Help Group

Payment will be made after producing the completion certificate for establishing the pit and demonstration from the SHG and duly authenticated by the BLDO.

Rate is asking separately for (i) Paschim District and  
(ii) South 24 Parganas District and  
(iii) Howrah district

**L. Supply of Seed of Vegetable, fertliser and pesticide**

Following fertilizer, pesticide and seed for vegetables are to be supplied as per specification and presentation at the Block Head Quarter of Kakdwip and Sagar block of South 24 Parganas district; Keshiary, Kharagpur-I and Midnapur Sadar block of Paschim Medenipur district and Udaynarayanpur, Jagatballavpur, Amta-I & II and Domjur block of Howrah district

Sl.	Name of Items	Specification	Presentation (Quantity of per packet)	Approximate quantity required
1	<b>NPK 10:26:26</b>	Moisture free and free from dust particles.	3 kg	2508 kg
2	<b>Urea</b>	ins 46 % N, dust free and contains no moisture.	2 kg	1672 kg
3	<b>Azadirachtin (Neem oil)</b>	0.15%EC (1500 ppm)	50 ml	41800 ml
4	<b><i>Trichoderma viride/ Pseudomonas fluorescens</i></b>	1% WP/1%WP	50 g	41800 g
5	<b>Chili Seed</b>	Tejaswini, Canning bullet,	1.5 g	231 g

		Beledanga		
6	<b>Cabbage Seed</b>	Rare ball, Green globe, Royal challenger	2.5 g	110 g
7	<b>Tomato Seed</b>	Early variety- Avinash 2 and CCS 448 Late variety- Nabin, Karan, Utsab, Himsona	1.5 g	82.5 g
8	<b>Okra Seed</b>	Jhanti pankaj, SG 152, Sonal, Sraban	25 g	7.5 kg
9	<b>Capsicum Seed</b>	California wonder	1.5 g	49.5 g
10	<b>Brinjal Seed</b>	Paira tuni, Boral, Md. Guli, Lal guli	2 g	286 g
11	<b>Parowal Cutting</b>	Papra	250 g cutting	19250 cutting
12	<b>Radish Seed</b>	Red long, Ghatal Aus (Early)	60 g	1.32 kg
13	<b>Coriander Seed</b>	Bliss aroma	150 g	1.65 kg
14	<b>Bottle Guard Seed</b>	Jora bonta	5 g	4.18 kg
15	<b>Pumpkin Seed</b>	Seorafuli, Chaitali	5 g	4.18 kg

Samples of the item should be given with the application. The items should be supplied without any admixture. The germination percentage should not be less than 90% in case of seed items.

Rate is asking separately for each item against specific presentation with service charge / VAT, if any for

i) Paschim Medenipr district ii) South 24 Parganas district and iii) Howrah district

## **M. Medium Size Incubator (Setter cum Hatcher)**

(Approximate quantity required – 6)

**Capacity:** 3200eggs

**Size:** 38"X 57"X 73" (Bottom less)

**Volt:** 220v

### **Specification (Complete in all respect):**

- Setter egg set capacity (2400 egg) & Hatcher egg set capacity (800egg).
- Reinforced 3mm laminated body.
- Smooth Laminated interior walls.
- High Density Thermocol Insulation.
- Independent Turning system with timer.
- External control of Incubator Temperature/ Fan motors.
- Provision of Polythene plastic Hatch Basket.
- Floorless Hatcher's design, Improves loading and unloading.
- Contact Thermometer Temperature and Humidity control with alarm bell provision.

Dayal Branded make will get preference

**Warrenty:** One year from the date of installation / commissioning

**After sale service** – local agent of the brand manufacturer should get priority

**Essential spare kits** for the above setter and Hatcher

## **N. Rural Poultry Feed Plant**

(Approximate quantity required – 3)

**Capacity:** 1.5-2 MT per hour in Poultry Mash.  
(Rate **should be** quoted for the following items)

**Description:**

- Feeding tray complete.
- One grinder machine (round net) 10hp. 2m<sup>3</sup>/t.p/h output, 7mm hole size net without motor base frame complete.
- One No. grinder and motor base frame complete.
- 1-No. Chute complete Grinder to bucket Elevator.
- 1-No. Magnet separator high power cross pole.
- 1-No. Bucket Elevator, 22'fts. Height with both side fabricated pulley, 4ply rubber belt complete without motor and motor accessories.
- 1-No. Chute complete Bucket Elevator to Hopper.
- 1-No. Hopper above mixture m/c 500kg. Capacity with top cover and top bottom flange complete.
- 1-No. Manual Gate with rack penion system complete.
- Mixture machine 500kg capacity with double ribbon blender, blend and mix with top cover complete, without, motor & gear box.

Drive & Drive Section:

- Drive & drive for Grinder m/c 10hp1440 rpm motor & motor accessories.
- Drive & drive for elevator 3hp 960rpm motor & other accessories, v-pulley, v-belt, rail, channel and base frame complete.
- Drive & drive for Mixer m/c 10hp 1440 rpm motor with other accessories, gear box, coupling, chain, spocket, base frame complete.

## **O: Egg Storage Room – only cooling side with following specification**

(Approximate quantity required – 6)

Temperature +18<sup>0</sup>C to 15<sup>0</sup>C, Room Size: 10' X 12' X 8' (approx.)

- 1) Double Compressor & Cooling Unit, Capacity 1.5 Ton
- 2) Timer System Duration 6 hours.
- 3) Digital Control with Audio-visual alarm (high & low Temp. from desire setting).
- 4) Suitable Voltage Stabilizer 5KVA; 125–290 Volt Input, Output 230Volt ±10% etc.
- 5) Dehumidification arrangement

## **Construction Works**

### **P. Solar Power Project at the Poultry Breeding Farm Complex under RKVY, Mohanpur Campus, Nadia**

#### **SCOPE OF WORK:**

The scope of Work shall comprise of Designing, Engineering, Supply, Erection Commissioning and performance testing of 6 KW Off grid Standalone solar photovoltaic system with associated components. The broad scope of work under the contract will include the following:

- Optimum designing of solar power system to maximize the harnessing of available solar resources.
- Laying of earthing equipments/structures and connecting to the main ground mat as per the statutory requirements
- Supply and installation of SPV modules
- Supply and installation of structures suitable for mounting PV modules on flat concrete roof with the help of anchor bolt to be fixed on roof top
- Supply and installation of Grid Support Conditioner (GSC)
- Supply and installation of Battery Bank along with its accessories
- Supply and installation of all the materials along with accessories to connect the SPV modules to the GSC with all the protection required as per the statutory norms.
- To supply and install the interconnect panel for combining the GSCs at 220 V, 1 Phase AC system level, if more than one GSC is installed.
- Operation and maintenance manual of the complete installation
- Seven days training on operation and maintenance to the client's man power.

The technical and commercial terms mentioned in this Tender document shall also include the following civil work as part of the scope of work:

- Major work related to site preparation in terms of shifting of various service lines.
- Cost related to other fixing arrangements for that of structural frames etc.
- Cost related to segregating the emergency power consumption point supported by solar power / battery backup. The solar power will be terminated at the main distribution box.

\* WEBREDA empanelled bidder will get preference

#### **ELECTRICAL LOAD DETAILS:**

- |      |  |   |                   |
|------|--|---|-------------------|
| i)   | Load of the Office Building            | - | 1714 Watt / hour. |
| ii)  | Load of the Guest House                | - | 1229 Watt / hour. |
| iii) | For Boundary Lighting of Project Area: |   |                   |

- a) 11 W Solar Power Street Light - 15 Nos.  
b) 36 W Solar Power Street Light - 2 Nos.

**DELIVERY & INSTALLATION:**

Delivery and installation time is 4 months after receipt of Work Order, down payment and L/C.

**SUBSIDY:**

Solar Power Projects of such nature are eligible for a 25% Subsidy of the Total Project Cost from the Ministry of New & Renewable Energy, Government of India.

It shall be the responsibility of the Project Developer to arrange for the release of the eligible Subsidy to the Project from the authorities concerned.

**FINANCIAL DETAILS:**

**1. Techno-Commercial Details of Electrical Load of the ‘Office’ Building for Electrification by Solar Power (BOQ):-**

<b>Sl. No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Qty. (Approx)</b>	<b>Rate (Rs.)</b>	<b>Total Amount (Rs.)</b>
1	Supply & Installation of 4000Wp SPV module 24V,125wp	Wp	4000		
2	Supply & Installation of Power Conditioning Unit (consisting of 3KVA Sine Wave Inverter + Charge Controller)	Nos.	1		
3	Supply & Installation of 24Volt 1000AH Battery Bank	Nos.	1		
4	Supply & Laying of 1C x 2.5Sq.mm Cu PVC Cable	Mtr.	200		
5	Supply & Laying 2C x 10Sq.mm Cu PVC Pipe	Mtr.	25		
6	Supply & Laying 1C x 25Sq.mm Cu PVC Cable	Mtr.	100		
7	Supply & Fixing of Module Mounting Structure for 32nos 125Wp modules	Set	1		
8	Supply & Installation of AC Distribution Board (Wall mounting type)	Nos.	1		
9	Supply & Fixing of 2 pole DC BCB & SFU for Array Line & Battery Isolation	Nos.	1		
10	Supply & Laying of Lightning Protection Equipment & Earthing.	Nos.	1		
11	Erection of hardware & Array J.B. and Main J.B.	Job	1		
12	Erection & Commissioning of 4	Job	1		

	KWp Solar Power Plant				
	<b>Total Project Cost</b>				

**1. Techno-Commercial Details of Electrical Load of the 'Guest House' for Electrification by Solar Power (BOQ):-**

<b>Sl. No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Qty. (Approx)</b>	<b>Rate (Rs.)</b>	<b>Total Amount (Rs.)</b>
1	Supply & Installation of 1500Wp SPV module 24V,125wp	Wp	1500		
2	Supply & Installation of Power Conditioning Unit (consisting of 2KVA Sine Wave Inverter + Charge Controller)	Nos.	1		
3	Supply & Installation of 24Volt 400AH Battery Bank	Nos.	1		
4	Supply & Laying of 1C x 2.5Sq.mm Cu PVC Cable	Mtr.	200		
5	Supply & Laying of 2C x 6Sq.mm Cu PVC Pipe	Mtr.	25		
6	Supply & Laying of 1C x 25Sq.mm Cu PVC Cable	Mtr.	100		
7	Supply & Fixing of Module Mounting Structure for 12nos 125Wp module	Set	1		
8	Supply & Fixing of AC Distribution Board (Wall mounting type)	Nos.	1		
9	Supply & Fixing of 2 pole DC BCB & SFU for Array Line & Battery Isolation	Nos.	1		
10	Supply & Laying of Lightning Protection & Earthing	Nos.	1		
11	Erection of hardware & Array J.B. and Main J.B.	Job	1		
12	Erection & Commissioning of 2 KWp Solar Power Plant	Job	1		
	<b>Total Project Cost</b>				

**3. Street Lighting System powered by Solar Energy for Boundary Lighting of the Backyard Poultry Unit with area 600 X 250 ft (BOQ):-**

**3.1) 11 WP LED Based Solar Street Light with the following features:**

Automatic Dusk to Dawn Service with 3 Days Autonomous Back-Up

Solar Module Capacity – 37 Wp

Solar Battery Capacity – 40 Ah

Pole, Battery Box, Mounting Structure and Installation.

**Quantity(approx.): 15 Nos. Rate: Rs. .... per unit Total: Rs. ....**

**3.2) 36 WP LED Based Solar Street Light with the following features:**

Automatic Dusk to Dawn Service with 3 Days Autonomous Back-Up

Solar Module Capacity – 150 Wp – 160 Wp

Solar Battery Capacity – 150 Ah – 160 Ah

Pole, Battery Box, Mounting Structure and Installation.

Quantity(approx.): 2 Nos.      Rate: Rs. .... per unit      Total: Rs. ....  
 Total (1+2+3) = (Rs..... + Rs. .... + Rs. .... )      = Rs. ....

## **Q. Construction work under RKVY at Mohanpur campus of University, Nadia**

### **Construction of 1<sup>st</sup> floor of Poultry Museum (BOQ)**

	Item	UNIT	Quantity	RATE (Rs.)	AMOUNT (Rs.)
<b>1.0</b>	<b>PLAIN AND REINFORCED CONCRETE AND ALLIED WORKS :</b>				
1.1	Controlled Cement Concrete Grade M25 mix with well graded stone chips (20 mm grade) excluding shuttering and reinforcement, with complete design of concrete as per IS-456 and relevant special publications, submission of job mix formula after preliminary mix design after testing of concrete cubes as per direction of Engineer-in-charge. Consumption of cement will not be less than 300 Kg.of cement per cubic meter of controlled concrete but actual consumption will be determined on the basis of preliminary test and job mix formula .In foundation & Gr floor. (using concrete mixture). M-25 Grade.	Cu.M.	91.49	6036.84	552310.49
1.2	Hire and labour charges for shuttering with centering and necessary staging using approved stout props and thick hard wood planks of approved thickness with required bracing for concrete slabs, beams, columns, lintels curved or straight including fitting, fixing and striking out after completion of works .				
	(a) 25 mm to 30 mm thick wooden shuttering without staging in foundation.	Sq.M.	752.79	162.42	122268.15
1.3	Reinforcement for reinforced concrete work in all sorts of structures including distribution bars, stirrups, binders etc. including supply of rods, initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position with chairs and spacers. and binding with 16 gauge black annealed wire at every inter-section, complete as per drawing and direction.				
	No extra payment will be made for chairs& spacers.				
	i) Tor steel / Mild steel	M.T.	16.89	55888.86	943962.85
<b>2.0</b>	<b>MASONRY AND ALLIED WORKS :</b>				
2.1	Brick work with 1st class bricks in cement mortar (6:1) of (class designation 75) In superstructure .	Cu.M.	86.00	4327.77	372188.22
2.2	125 mm thick brick work with 1st class bricks (class designation 75) in cement mortar (4 : 1) and using H.B. netting in every third layer at any floor.	Sq.M.	55.00	601.43	33078.65

	Item	UNIT	Quantity	RATE (Rs.)	AMOUNT (Rs.)
2.3	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints or roughening of concrete surface, including throating nosing and drip course, scaffolding/staging where necessary (upto 4th floor)				
	(i) With 6 : 1 cement mortar				
	(a) 25 mm. thick plaster	Sq.M.	280.00	146.19	40933.20
	(b) 20 mm. thick plaster	Sq.M.	425.00	124.75	53018.75
	(ii) With 4 : 1 cement mortar				
	(a) 10 mm thick plaster	Sq.M.	350.00	95.78	33523.00
<b>3.0</b>	<b>FLOOR FINISH AND ALLIED WORKS:</b>				
3.1	Supplying and laying true to line and level vitrified of approved brand (size not less than 600mm x 600mm x 10mm thick) in floor, skirting etc. set in 20 mm sand cement mortar (1:4) and 2 mm thick cement slurry back side of tiles using cement @ 2.91 kg/m <sup>2</sup> or using polymerized adhesive (6 mm thick layer applied directly over finished artificial stone floor/Mosaic etc without any backing course) laid after application slurry using 1.75 kg of cement per m <sup>2</sup> below mortar only, joints grouted with admixture of white cement and colouring pigment to match with colour of tiles / epoxy grout material of approved make as directed and removal of wax coating of top surface of tiles with warm water and polishing the tiles using soft and dry cloth upto mirror finish complete including the cost of materials , labour and all other incidental charges complete true to the manufacturer's specification and direction of Engineer-in-charge				
	(i) with application slurry@ 1.75 kg/m <sup>2</sup> , 20 mm sand cement mortar (1:4) & 2mm thick cement slurry at back side of tiles, 0.2kg/m <sup>2</sup> white cement for joint filling with pigment.				
	(A) Deep colour & white	Sq.M.	370.00	1442.19	533610.30
<b>4.0</b>	<b>PAINTING, WHITEWASHING, POLISHING ETC.</b>				
4.1	Rendering the surface of the walls and ceiling with Birla white cement putty of approved make and brand (thickness not less than 1.5 mm.) and smoothing with sand paper	Sq.M.	775.00	71.61	55497.75
4.2	Applying Interior grade Acrylic primer of approved quality and brand on plastered or concrete surface old or new surface to receive acrylic emulsion paint including scrapping and preparing the surface thoroughly, complete as per manufacturer's specification and direction of the Engineer-in-charge .----- Two coats				
	Water based interior Acrylic primer	Sq.M.	775.00	36.56	28334.00
4.3	Applying Acrylic Emulsion Paint of approved make and brand on walls and ceiling including sand papering in intermediate coats including putty (to be done under				

	specific instruction of Engineer-in-charge) :				
	( two coat )				
	Standard Quality	Sq.M.	775.00	49.59	38432.25
	<b>Item</b>	<b>UNIT</b>	<b>Quantity</b>	<b>RATE (Rs.)</b>	<b>AMOUNT (Rs.)</b>
4.4	Applying Exterior grade Acrylic primer of approved quality and brand on plastered or concrete surface old or new surface to receive acrylic exterior emulsion paint including scrapping and preparing the surface thoroughly, complete as per manufacturer's specification and direction of the Engineer-in-charge at all elevations.-- --- Two coats	Sq.M.	280.00	37.27	10435.60
4.5	Protective and decorative Acrylic Finish Exterior emulsion Paint of approved quality, as per manufacturer's specification and as per direction of Engineer-in-charge to be applied over a acrylic primer as required .The rates includes the cost of materials, labour, scaffolding and all others incidental charges but excluding the cost of primer .				
	Two or more coats to give an even shade.				
	Premium 100% Acrylic Emulsion	Sq.M.	280.00	72.52	20305.60
4.6	Painting with best quality synthetic enamel paint of approved make and brand including smoothening surface by sand papering etc.including using of approved putty etc. on the surface , if necessary:	Sq.M.	52.20	72.52	3785.54
4.7	Oil bound distemper (synthetic) to interior wall ,ceiling with two coat of primer (as per manufacturer's specification) including cleaning, smoothening surface (two coats)(at all elevations. to be done under specific instruction).	Sq.m.	775	57.53	44585.75
<b>5.0</b>	<b>ALUMINIUM , STEEL AND ALLIED WORKS :</b>				
5.1	Aluminium Work				
	Supplying, fitting & fixing aluminium windows / ventilators fabricated out of sections manufactured by HINDALCO or equivalent ,minimum15 microns thick colour anodised of approved shade including fixing glass with all necessary fixtures like hinges, stays, handles, glazing clips of extruded quality, sealing the gap between masonry / concrete with polysulphide sealant as per drawings, specification complete with all materials (except glass) as per direction of Engineer-in-charge.				
	(a) Glazed aluminium sliding window.	Sq.m.	87	2959.00	257433.00
5.2	Supplying, fitting and fixing M.S. or W.I. ornamental grill of approved design joints continuously welded with M.S., W.I. flats, bars & pipes for windows, railing etc. fitted and fixed with necessary screws and lugs .				
	(i) Grill weighing above 10 kg./sq.m. and upto 16 kg./sq.m.	Kg.	1131	67.65	76512.15
<b>6.0</b>	<b>ROOF WATER PROOFING AND ALLIED WORKS :</b>				

6.1	Providing and laying avg.45 mm. thick screed concrete in roof of proportion (1:2:4) with 12 mm.down stone chips including mixing curing etc. complete as per specification & direction of the Engineer-In-Charge.	Sq.M.	370.00	370.00	136900.00
	<b>Item</b>	<b>UNIT</b>	<b>Quantity</b>	<b>RATE (Rs.)</b>	<b>AMOUNT (Rs.)</b>
6.2	Providing and applying one coat SIKA TOP SEAL 109 membrane over screed concrete on the top of the SIKA FAB1fabric , to be done with 20mm overlap along entire length wherever necessary .After application of first coat of the membrane and fabric application, allow the membrane to harden .A final coat of SIKA TOP SEAL 109 Hi membrane tube applied over flat /sloped surface of roof including fillets, sides of the openings etc. as per manufacturer's specification and Engineer in charge.	Sq.M.	370.00	550.00	203500.00
	<b>TOTAL CIVIL COST</b>				3560615.25
<b>7.0</b>	<b>Electrical Works 10 % of civil cost</b>				<b>356061.53</b>
<b>8.0</b>	<b>Plumbing Works 5 % of civil cost</b>				<b>178030.76</b>
	<b>TOTAL AMOUNT</b>				<b>4094707.54</b>