

RAJMATA VIJAYARAJE SCINDIA KRISHI VISHWA VIDYALAYA
R. A. K. College of Agriculture, Sehore - 466001 (M.P.)

TENDER NOTICE

Sealed tenders are invited for the supply/works of following items from the Manufacturer/Authorized Stockiest/Dealers/ Registered Contractors.

A. 2nd Call 1. Gel documentation unit with UV Trans-illuminator 2. Ultrasonicator 3. Refrigerated Centrifuge 4. 15 KV Air Cooled Kirloskar Green 3 phase Genset 5. Liquid Nitrogen Storage Can 6. Trinocular Microscope (Olympus) 7. Binocular Microscope (Olympus) 8. DSLR Camera (Canon) 9. Polyhouse with fertigation system 10. Portable Net house 11. Electronic Balance (Mettler/Ohaus/Sansui) 12. Rotary Flask Shaker (Variable Speed) 13. Orbital shaker cum BOD incubator 14. Horizontal Laminar Flow 15. RCC Tanks 16. Plant Growth Chamber 17. Automatic Nitrogen analyzer B. 3rd Call 1. Rainout Shelter 2. Printing & binding

The tender form with details can be obtained from the Office of the Dean, R.A.K. College of Agriculture, Sehore on payment of Rs. 200/- per form by cash/ DD in favor of Dean, R.A.K. College of Agriculture, Sehore from **01.02.2012 to 08.02.2012 up to 2.00 P.M.** in working days. The tenders complete in all respects along with earnest money will be received on or before **14.02.2012 up to 02.00 pm** and will be opened on **15.02.2012 at 12.00 Noon**. Tender forms along with specifications can also be downloaded from University Website: **www.naiprvskvv.org.in and www.rvskvv.nic.in**

DEAN

**RAJMATA VIJAYARAJE SCINDIA KRISHI VISHWA VIDYALAYA
R. A. K. COLLEGE OF AGRICULTURE, SEHORE (M.P.)**

TENDER FORM "A"

(For agencies supplying equipments this form is to be kept in Envelop marked 'A- Technical Bid')

1. NAME OF THE ITEM.....:
2. A. Tender form fee Rs. 200 per form: DD/TR No.Dated: .../.../2012
(Enclose DD)
Bank.....Payable at Sehore in favour of Dean, R.A.K. College of Agriculture.
- B. Earnest money deposit: : Draft No.Dated: .../.../2012
Valued for Rs./- only;(Enclose DD)
Bank.....Payable at Sehore in favour of Dean, R.A.K. College of Agriculture.
3. Technical specifications: As in Annexure.
4. a. You are Contractor/Main distributor/dealer/authorized agency of company or manufacturer?
.....
b. Certificate of above: Encl. No.....
5. a. Sales Tax No. (If not allotted, reason of the same):
b. Sales tax clearance certificate (recent)::
Encl. no.
6. a. Income tax PAN no. (if not allotted, reason for the same) :
b. Income tax clearance certificate (recent): Encl. no.....
7. Experience/Appreciation/performance certificate from institute/concern of repute for quoted item (two/three):
Encl. No.
8. Whether the item is free of taxes/duties. If yes, enclose the documents in support:
Encl. no.
9. Guarantee/ warranty (minimum of one year):
10. After sale service (for repair at site/ at shop /spare parts availability): Years will be provided
for above item.
11. Or any annual maintenance contract required ?: Yes/No
If yes, mention compulsory or optional?:
The cost in rupees per annum:

(Authorized Signatory)

TENDER FORM "B"

(For agencies supplying equipments this form is to be kept in Envelop marked
'B-Price Bid')

12. Financial offer for the item..... in Rs:
.....(Each)

(Cost must include all the charges applicable like transportation/packaging/
handling/loading/unloading/freight/insurance.)

13. Installation/ demonstration charges if any (in Rs.) :

14. Accessories: (if any)

a. Name: cost in Rs.(each)

b. Name: cost in Rs.(each)

c. Name: cost in Rs.(each)

d. Name: cost in Rs.(each)

e. Name: cost in Rs.(each)

f. Name: cost in Rs.(each)

g. Name: cost in Rs.(each)

15. Other charges (if any) in Rs.:/-

16. Taxes/duties applicable (total for 12 to 16) :(Please Clear The Type Of The Tax/Duties)

a. In percent : %

b. In Rs. : /-

17. Final price (total for 12 to 16) in Rs. : /-(each)

18. Validity of above quoted rates will remain effective minimum for 180 days or 365 days from the date of opening the tenders.

(Authorized Signatory)

Terms and Conditions

(Please read carefully)

1. In case of scientific equipment, only the manufacturers and their authorized suppliers / sole agents/authorized dealers need to submit their tender. The authorized dealers should furnish a certificate in original from the manufacturer for their dealership and should provide original printed catalogue mentioning specifications as we required. The tenders without required information will be treated as disqualified in technical bid.
2. No person or firm shall submit more than one tender for the same item.
3. Broad-based specifications of equipment/items etc are given in Annexure- II.
4. The tenderers should submit their technical specification in the same order as mentioned in the tender document. The make of the equipment should be of standard international companies only for equipments required for Genomics lab; of national standards required for seed testing lab. The tenderes should also take note of the remarks, if any, given there in.
5. a. Tender for **each Item** must be submitted in a separate sealed cover envelope, complete in all respect along with earnest money and cost of the form addressed to **Dean, College of Agriculture, Sehore** by Registered post or delivered personally so as to reach on or before **14/02/2012 up to 03.00 pm** (The last date for submission of the tender). **The tender will be opened on 15/02/2012 at to 12.00 noon in the office of the Dean, College of Agriculture, Sehore** in the presence of the authorized representatives who may wish to be present with proper authority letters from their principals.
b. Belated Tenders due to postal or any other delay will be rejected.
c. The tender for each item should be sent separately. Each cover of the sealed envelope should be super scribed: 1.-"Tender FOR.....Item.", 2.-Date of opening the tender.....3. **Technical Specification Bid and Price Bid**
d. If offers for more than one item are clubbed together, tender will be rejected.
e. The details of the items for which tenders are submitted, and of the DD's towards their **Earnest Money** (Annexure-I) must be mentioned in the main covering letter of the offer. However, the DD's and all relevant documents for each item must be enclosed with the tender for that item.
f. The tender offers should have a validity of **180 days or more** from the due date.
g. RAK, College of Agriculture, Sehore reserves the right to extend the due date and or the date of opening the tenders.
h. Please mention appropriate model number for each item, sub-item and accessories etc. Necessary literature in **original** duly signed must be attached Photostats of originals will not be accepted.
i. **Please do not offer specifications by quoting phrases like 'Yes' 'as per your specifications' etc. Please quote your tender for the equipment in two bids (Technical and Price bid). Technical bid should be submitted in Envelope "A" along with tender document "A" and Price bid in separate envelope marked "B" along with tender document "B" and keep the two bids in third envelope.**
j. Please mention the offered costs with terms and conditions etc. by supplementing the Annexure with each offer separately.
k. Authorized person should mark all the leaflets in the offer with signature and seal.
l. List of users must be enclosed to secure preference in the offers.
6. a. The rates quoted should be F.O.R. delivery at RAK College of Agriculture, Sehore (M.P.). The rates quoted should be inclusive of packing and forwarding, loading / unloading / handling charges, freight, full risk coverage, insurance etc.

- b. In case of imported items, the details relating to the cost should separately mention freight, delivery, CIF, customs excise and other taxes should be clearly mentioned.
 - c. The price offered for individual items should preferably be in Indian Currency.
 - d. Excise duty, sales tax (with and without concession certificate) and other levies, if any should be shown separately and the total price of each item should be worked out incorporating the same.
 - e. Any other charges, such as technical service charges, cost of training, installation charges, TA/DA of tender's staff etc. if any, should be shown separately for each item and each sub-item.
 - f. **Prices for the main item and its sub-items / essential accessories (necessary for successful operation of unit), and additional accessories, if any, only should be given separately. This is necessary to workout prices of a desired configuration.**
7. The tender should be accompanied by detailed printed technical literature (in original) specification make and model number of each item and each sub-item quoted in the tender. Specifications given in the offer must match to the printed technical literature in the **same serial order** as required otherwise the offers shall be rejected.
 8. If asked for by the College, the tenderers will have to arrange a demonstration of the equipment/ systems at RAK College of Agriculture, Sehore without any charges or obligation.
 9. All losses during transit and/or installation will have to be made good by the tenderers at his cost within a period of 15 days.
 10. **a. The tenderers must guarantee satisfactory functioning of the equipment/system and free service including free replacement of parts for a period of at least one year from the date of successful and satisfactory installation and demonstration of the equipment/system at the company's cost.**
 - b. For subsequent years, the facility of comprehensive annual maintenance contract should be available. This should include cost of spares, replacement of defective parts and components, preventive maintenance, break down maintenance as and when necessary, TA/DA expenses of the tender's staff etc.
 - c. The rates for comprehensive annual maintenance contract should also be quoted. The same will be payable quarterly each year.
 11. **The tender must be accompanied by crossed Bank/Demand Draft drawn on a Nationalized Bank made in favour of "DEAN, RAK College of Agriculture , Sehore" as Earnest Money for any of the tender item (** as mentioned along with each item separately). Without the earnest money in the above form, the offers are likely to be rejected.**
 12. **a. The standard terms and conditions of payment are in full only after the contract is affected in full and to the satisfaction of College authorities.**
 - b. In special cases, payment through advance or Payment through a bank against the documents or payment by opening irrevocable Letter of Credit with a bank or any other mode of payment may be considered by College provided in such cases the tender furnishes an unconditional Bank Guarantee for the full amount to College with an agreement that in case of any loss, incomplete supply, delay, or break of contract in any manner, the College can recover full amount from the supplier through this Bank Guarantee.
 - c. The tenderer should make it clear in the offer as to whether payment term 11 is acceptable to the tenderers else the tender form / offer is liable for rejection.
 - d. In case of equipments to be imported, import license NMI / CDE certificates, as applicable will be arranged by RVSKVV as per the Government procedures. However, the tenderers will have to help RVSKVV in completion of these formalities.
 13. **The tenders are negotiable with those firms whose tenders have been found acceptable as regards technical specifications, and possess lowest price.**

14. Complimentary items/gifts offered will not be taken into account while calculating the total cost of the item.
- 14 a. If so desired by College, the tenderers shall have to enter in to an agreement.
- b. Any deviation, variation of noncompliance of the terms and conditions by the tenderers shall be considered as a breach of contract and College reserves the right to forfeit the amount of earnest money and/or security deposit in part or in full and take action as per legal arrangement.
15. Should there arise any dispute, the DEAN, RAK College of Agriculture, Sehore shall be the sole Arbitrator whose decision in the matter shall be final and binding.
16. DEAN, RAK College of Agriculture, Sehore reserves the right to accept or reject any or all offers in full or in part without assigning any reason(s). Therefore, it also reserves the right to place and order wholly or in part with one or more than one firm as they may be convenient to College.
17. The tenderers shall have to give an undertaking that the terms and conditions as mentioned above of this tender are acceptable to the tenderers.
18. The tenderers, who have not paid the cost of tender document by receiving the tender document either through RVSKVV Website or through E-mail, will have to pay **the cost of tender document (Rs. 200/-) through crossed Bank/Demand Draft drawn on a Nationalized Bank made in favour of "DEAN, RAK College of Agriculture, Sehore", otherwise the offer will not be considered.**
19. The purchase order will be given only after approval and release of fund from V.V.
20. The EMD of second lowest party will be returned only after supply of equipment/items by the first lowest party.

DDO

For Dean
College of Agriculture, SEHORE

Note – Specifications for individual items are provided in annexure-II

Annexure –I**EARNEST MONEY DEPOSITE (Rs.) FOR INDIVIDUAL ITEMS**

S. No.	Items	EMD (Rs.)
1	Gel documentation unit with UV Trans-illuminator	5000
2	Ultrasonicator	2000
3	High speed programmable Refrigerated Centrifuge	4000
4	Programmable Centrifuge	2000
5	15 KV Kirloskar Green 3 Phase Generator	3000
6	Liquid Nitrogen storage Can	2000
7	Trinocular Microscope	3000
8	Binocular Microscope	2000
9	DSLR Camera (Canon Make) with microscopic attachments	2000
10	Polyhouse with fertigation system	5000
11	Portable shed nets	5000
12	Electronic precision balances	2000
13	Rotary Flask Shaker	2000
14	Orbital Shaking Incubator	3000
15	Horizontal Laminar Flow	2000
16	RCC Tanks	2000
17	Plant Growth Chamber	3000
18	Automatic Kjeldhal Nitrogen Analyzer/Distillation Unit	3000
19.	Rainout Shelter	4000
20.	Composing, Designing, Printing & Binding for Reports/Brochure/Compendium	2000

1. GEL DOCUMENTATION SYSTEM

PARAMETERS	SPECIFICATIONS
Camera	CCD Camera
Pixel Resolution	1.3 Mega Pixels
Lens Type	6X Motorized Zoom
Dark Space	Light Source and Camera
Filter	F590nm Type with multi-layer coating
UV Trans-illuminator	Filter Area : 200mm X 200mm Wavelength : 312 nm
Trans- White	Built-in LED cold light source
Operational Panel	Dual Control for Computer and Mainframe
Operation Mode	Multi –User System
Software	User-Friendly software with features of- Image Database, Image Capture, Image Edit, Image Analysis, Image Import and Export etc.
System Hardware Requirements	CPU - C1.8G Storage – 2 GB RAM Hard disk - 80G Drive – CD ROM, USB 2.0 Resolution – 1024 X 768*17 Color Display
System Software Requirements	Operating System - Window 2000 / Window XP
Image Format	BMP / JPG
Image Import	Scanner / Digital Camera / Internet / CD / Etc
Image Export	CD / Internet / LAN /etc

2. ULTRASONICATOR

PARAMETERS	SPECIFICATIONS
Capacity	3 to 4 Liter
MOC outer	made of stainless steel sheet buffed to mirror finish
MOC tank	made of stainless steel sheet
Insulation	high grade mineral glass wool
Heater	Industrial grade energy efficient Heater
Temperature range	Ambient +5 to 70 ⁰ C
Temperature Controller	Microprocessor based PID digital Temperature indicator-cum-controller,
Temperature accuracy	±1 ⁰ C
Display	Digital LED display with set value & process value
operating frequency	33 KHz ±3KHz
Timer (Micro Controller based)	Fitted with digital timer as a standard feature
Standard Accessory	Supplied with network basket
Safety feature	Digital tuning of transducer with generators to avoid any frequency shift

3. HIGH SPEED REFRIDGERATED PROGRAMMABLE CENTRIFUGE

PARAMETERS	SPECIFICATIONS
Centrifugation Speed Option	Select between RPM / RCF
RPM	3000 to 14000
Temperature range	- 20 ⁰ C to room temperature
Timer	0-99 minutes with an increment of 1 minute
Rotor	2 (Detachable)
Rotor capacity	18 Places X 1.5 ml tubes / 8 Places X 5 ml tubes
Display	Digital display for temperature, RPM, RCF, time and programme
Warning display	With alarm
Dimensions (Cm ³)	545 X 325 X 298
Features	Refrigerated, auto stop function, safety interlock switch

4. PROGRAMMABLE CENTRIFUGE

PARAMETERS	SPECIFICATIONS
Centrifugation Speed Option	Select between RPM / RCF
RPM	3000 to 16000
Maximum RCF	17600g
Timer	0-99 minutes with an increment of 1 minute
Rotor capacity	12 Places X 1.5 ml tubes
Display	Digital display for temperature, Speed and timer
Warning display	With alarm
Body Material	Engineering Plastic to avoid vibrations
Dimensions	305 X 252 X 215 mm
Features	Refrigerated, auto stop function, safety interlock switch, 0.2 ml and 0.5 ml adapters

5. 15 KV AIR COOLED KIRLOSKAR GREEN 3 PHASE GENSET

PARAMETERS	SPECIFICATIONS
Model	Kirloskar Green
Capacity	15 KVA
Phase	3 Phase
Cooling system	Air Cooled

6. LIQUID NITROGEN STORAGE CAN

SPECIFICATIONS

1. CAPACITY – 30 TO 40 LITERS
2. STATIC HOLDING CAPACITY – MORE THAN 200 DAYS

7. TRINOCULAR MICROSCOPE

PARAMETERS	SPECIFICATIONS
Make	Olympus
Model	CX 21i TR
Optical system	UIS2 (Universal Infinity-Corrected System) optical system
Trinocular Tube	30' Inclination
Eyepiece	10 x (F.N20)
Revolving nosepiece	Fixed quadruple nosepiece with inward tilt
Objective	4 x, 10 x, 40x, 100x Plan achromatic
Other features	Wire movement, Fixed mechanical stage, ABBE Condenser, 6 Volt 20 W Halogen tube 2 piece, Blue filter KB-P (LP 5146), Thermocouple packing
Upgradable items for above microscope	
	<ul style="list-style-type: none"> a. Magnus phase contrast attachment model PC 2 for long barrel achromatic phase objectives 10x and 40x b. Olympus Japan dark field central stop CH2-DS for dark field observations upto 40x c. Magnus Image projection system Model MIPS-USB consisting of lightweight wide field optical microscope adapter and with in-built USB connectivity without power supply (Plug & Play design). Microscope compatible with Window XP Operating software d. OCM 10/100 mm eyepiece micrometer (ERMA) for WF Epc. e. Stage micrometer 1/100 mm (ERMA) f. Digital Microphotography system consisting of Olympus DSLR Camera (>12 Megapixels along with one Zoom lens) with Rechargeable battery, Carry bag, Compatible 1.0 GB Memory card and Magnus optically corrected

8. BINOCULAR MICROSCOPE

PARAMETERS	SPECIFICATIONS
Make	Olympus
Model	CH 20i Binocular
Other Features	
Standard set complete with binocular head, inbuilt 6 V, 20 W Halogen light illuminator , with anti-fungus acromatic objective, iNEA 4x, 10x, 40x (Spring) and 100x (Oil Spring), Paired eyepiece, widefield ICWHK 10x, ABBE Condenser	

9. DSLR CAMERA FOR MICROSCOPIC IMAGING (CANON MAKE)

PARAMETERS	SPECIFICATIONS
Make	Canon
Model	EOS 7D Kit I (EF S15-85IS)
Type	Digital Single lens reflex, AF/AE Camera with built-in-flash
Imaging sensor size	22.3 x 14.9 mm
Pixels	Effective pixels – 18.0 megapixels Total pixels – 19.0 megapixels
Accessories	<ol style="list-style-type: none">1. Dual Battery2. Photographic attachment compatible with Olympus Microscope3. Image analyzing software

10. Open/ Natural Vent Type Polyhouse/Greenhouse with fertigation system

Sr. No.	Item	Description
1	Structure	Pre- Galvanized Channel cum Tubular Structure
2	Grid Size	8 m x 4 m Balcony/Canopy along all 4 sides, 2 m
3	Gutter Height	3.0 m
4	Gutter Slope	1-2% to be provided in civil structural work
5	Apron height	1.2 to 1.5 mtr on all four sides with GI fixing arrangement. Bottom of the poly film to be embedded in 1.0 ft brick wall above ground level
6	Curtain	Manual Operable side roll-up curtains up to 2 mtr on all four sides with handles. Insect net 40 mesh below the curtains with proper fixing mechanism.
7	Ridge Height	5.75-6.5 mtr with suitably overlapping open vent of 0.9 to 1.05 mtr to maintain the ventilation inside poly house.
8	Columns	90 mm x 60 mm 2.5 mm thick Pre Galvanized Lipped Channel
9	Trusses	Bottom 25 mm OD/2 mm thick G.I. Pipe. Top Chords and truss members 48 mm OD/ 2 mm thick Bracing 33 mm OD/2 mm thick G.I. Pipe Structural members to be fitted in plated nuts, bolts and washers without welding.
10	Purlins	Top Purlin 48 mm OD/ 2 mm thick and bottom purlin 43 mm OD/ 2 mm thick G. I. Pipe or Pre galvanized Channel 70 mm x 50 mm 1.8 mm thick
11	Balcony	70mm x 50mm 2 mm thick Pre galvanized Channel Structure
12	Foundation	Depth 750 to 900 mm or suitably altered depending upon ground strata/ level so as to ensure safety and stability of the structure even under extreme wind conditions. Columns are fitted over ground " Inserts" and bolted to insert PCC of 1:2:4 of 40 mm & filling the pit with 1:2:4 concrete hand mixed with appropriate grade cement.
13	Gutter	2.0 mm thick, G.I. sheet with 500 mm perimeter trapezoidal section, so as to avoid spill over the gutter under maximum rain conditions. To be bolted to purlins with plated nuts and bolts.
14	Fastener	M6 to M10 bolts & nuts, bolts from 15 to 100 mm length, plain washers as per requirement and with the best quality plating to have good anti-corrosiveness.
15	Polyfilm	200 micron thick, U. V. stabilized, Diffused, IR, Anti fog/ drip multilayer poly film
16	Poly Fixing	Alluminium/ Galvanized Locking profiles with G. I. wire spring with smooth finish for single and double poly fixing.
17	Gables	To be fixed with two way Alluminium Poly lock for locking two poly sheets along with curtain top.
18	Doors	FRP Door 1 m x 2 m size hinged type.
19	Entrance Chamber	For entrance of size 1.5 M x 1.0 M height and brick masonry work for entrance chamber upto 60 cm x 23 cm. Plaster in entrance chamber-both sides
20	Aerodynamic shape	With a view to reduce the impact of wind and consequent damage to poly house structure; Poly house should be Aerodynamic along all four sides with tapered shaped balcony pipes of 70x 60 mm 2 mm Channel Structure.
21	Shade Net	White/ Green colour, 50% shading net 100-105 GSM with collapsible mechanism below gutter level.
22	Insect Net	Insect net white colour 40 mesh below roll up curtains and at ridge ventilation

23	Drip System for fertigation of plants	State of the art drip lines 1.3 lph @ 45 cm spacing, PVC pipes 4 kg/cm ² of different sizes, plastic disc filter, PVC ball valves, flush valves for flushing of sub mains with suitable water delivery system for nutrient supply etc. Sand filter 5 m ³ /hour, screen filter 10 m ³ /hour by control valve 63 mm control valve 50 mm bypass assembly 1.5 inch, Air release valve 1", Non-return valve 1.5", Throttle valve 1.5", Flush valve 50 mm, Venturi 1.5"
24	Fogger system	Four way anti-leak foggers with 28 lph discharge which gives very fine droplet size and used for maintaining the temperature and humidity, PVC pipes of 6 kg/cm ² pressure ratings of various sizes, ball valves, flush valves for flushing of sub mains with 2.0 HP motor pump etc
25	Miscellaneous	Silver print on all structures
	NOTE	Rates for above specified structure should be quoted in Rs. Per Square Meteres

General Terms and conditions:

1. Only reputed manufacturers having following documents to quote (copies to be enclosed)
 - a. Registration with Central Excise Department.
 - b. Sales Tax Registration Certificate
 - c. Supplier should have average annual turnover of Rs. 1.0 Crore for last 3 years
 - d. Photocopy of PAN No.
 - e. Details of some esteemed customers and their testimonials
 - f. Supplier should be certified with ISO certificate
2. If the material is not supplied of the desired specification, same shall be rejected at the cost of supplier
3. The rates quoted will be compared with features/ specifications of the material / product so as to suit the requirement of university and lowest rates may not be the solely criteria for the acceptance of the tender.
4. Specification brochures / literature describing the plan and layout of high quality design of Polyhouse should be enclosed with the tender form

11. Portable Shade Nets

Sr. No.	Item	Description
1	Structure	Galvanized Tubular Structure
2	Grid Size	8 m x 6 m
3	Height	3.5 m
4	Slope	1-2% to be provided in civil structural work
5	Columns	75 mm OD/ 2 mm thick at Periphery and 60 mm OD/2 mm thick for internal G.I. Pipe
6	Purlin	48 mm OD 2 mm thick
7	Locking Profile	Alluminium locking profile at top only
8	Doors	FRP sheet, GI frame 1 m x 2 m size hinged type.
9	Shade Net	White/ Green/Black colour, 50% shading net as covering.

General Terms and conditions:

1. Only reputed manufacturers having following documents to quote (copies to be enclosed)
 - a. Registration with Central Excise Department.
 - b. Sales Tax Registration Certificate
 - c. Supplier should have average annual turnover of Rs. 1.0 Crore for last 3 years
 - d. Photocopy of PAN No.
 - e. Details of some esteemed customers and their testimonials
 - f. Supplier should be certified with ISO certificate
2. If the material is not supplied of the desired specification, same shall be rejected at the cost of supplier
3. The rates quoted will be compared with features/ specifications of the material / product so as to suit the requirement of university and lowest rates may not be the solely criteria for the acceptance of the tender.
4. Specification brochures / literature describing the plan and layout of high quality design of Shed net should be enclosed with the tender form

12.ELECTRONIC PRECISION BALANCES

PARAMETERS	SPECIFICATIONS	
Make	Ohaus/Mettler/Sansui	
Capacity (g)	210 g.	120 g
Readability (g)	0.001	0.0001 g
Repeatability (Std. Dev.) g	0.0005	±0.0001 g
Linearity (g)	±0.002	±0.0002 g
Display type	High resolution LCD dot matrix/backlight	Full colour VGA graphic display

13. ROTARY FLASK SHAKER (VARIABLE SPEED)

PARAMETERS	SPECIFICATIONS
Platform size	105X105
MOC (body)	Heavy mild steel construction
MOC (Platform)	Made of Stainless steel with lotus type clamps
Motor	Fitted with variable speed motor
Speed control	Through a continuously variable speed regulator knob
RPM/Speed indication	Through Digital RPM/Speed Meter
Speed range	50 to 250RPM
Timer	Fitted with Automatic Digital ON/OFF Timer for shaking time control
Illumination	Overhead illumination for day light conditions/ photosynthetic application with light bank consisting of fluorescent lamps and programmable 24 hrs timer with real time clock
Light bank	Consisting of fluorescent lamps to provide illumination for photosynthetic applications
Chamber sterilization	Through a U.V. Germicidal tube for chamber sterilization
Lotus clamp holders	Made of stainless steel (SS-304)
Shaking tray size	510 x 510 cm
Volume	10 Cuft
Capacity	280 ltrs
RPM display	Digital display
High voltage protection	Through automatic voltage stabilizer supplied with the unit

14. ORBITAL SHAKER-CUM-BOD INCUBATOR

PARAMETERS	SPECIFICATIONS
Type	Forced Convection Type
Temperature range	5 ⁰ C to 60 ⁰ C
Temperature accuracy	±0.5 ⁰ C
MOC outer	Powder coated CRC steel sheet
MOC inner	Chamber and Trays made up of Stainless Steel (SS-304)
Safety	Over temperature limiter switch prevents overheating
Insulation	High density PUF insulation for tighter temperature controls
Shaking motion	Permanent Magnet DC Drive for continuous operations
Light bank	Consisting of fluorescent lamps to provide illumination for photosynthetic applications
Chamber sterilization	Through a U.V. Germicidal tube for chamber sterilization
Lotus clamp holders	Made of stainless steel (SS-304)
Shaking tray size	510 x 510 cm
Volume	10 Cuft
Capacity	280 ltrs
RPM display	Digital display
High voltage protection	Through automatic voltage stabilizer supplied with the unit

15. HORIZONTAL LAMINAR FLOW

PARAMETERS	SPECIFICATIONS
Main filter	HEPA Filter (99.99% efficient at 0.3 micron particles)
Type	Horizontal
Size	90 cm x 60 cm x 60cm
Prefilter	High-efficiency pre-filter
Illumination	Fluorescent lamp
Sterilizing	UV germicidal tubes
Front door	Made of stainless steel
MOC (Cabinet)	Stainless steel (SS-304)
Work table	Stainless steel (SS-304)
Optional accessories	
Microprocessor LCD Controller	Auto switch off mode for motor blower, Digital buzzer timer for alarm on completion of sterilizing time, Automatic on-off germicidal tube and fluorescent light
Magnehelic gauge	For pressure across HEPA filter
Filter chock alarm	Microprocessor based filter replacement warning signal

16. RCC TANKS

Item	Construction of RCC Tanks
Size	3 m X 1.5 m X 0.6 m (LxWxD) (0.10 m thick)
Quantity	4
Note: <ol style="list-style-type: none">1. Price should be quoted per tank. The numbers of tank may be increased or decreased as per availability of funds2. For any query please contact Dr. D.R. Saxena on 09425079059	

17. PLANT GROWTH CHAMBER

PARAMETERS	SPECIFICATIONS
Chamber Capacity	280 Liter
Temperature Heating type Range Accuracy Uniformity	Forced convection by silent coaxial fan + 5°C ~ 50°C (without illumination) ± 0.1°C at 20°C ± 0.8°C at 20°C
Humidity Creation type Range	Through sophisticated steam injection process Microprocessor based humidity controller 30% to 95%
MOC outer	Powder coated CRC steel sheet
MOC inner	Chamber and trays made of stainless steel (SS-304)
Evaporator	Finned tube evaporator for faster cooling effects
Insulation	Formed-in-place PUF insulation ensures thermal stability and reduces electrical energy consumption
Illumination Illumination type Range	Fluorescent lamp from 3 side light bank 0 ~ 20000 Lux (40000 lux optional)
Communication port	With PC interface and software
Control steps	6 steps
Control	Digital programmable microprocessor PID controller
Program	11 segment, 999 cycle or continuous
Sensor	Pt 100 for temperature/electronic sensor for humidity/Lux meter for illumination
Safety device Temperature Electrical	Hydraulic over temperature protection/low water level warning and cut off Electrical leakage breaker
Display	LCD display for set value

**18. AUTOMATIC MICRO KJELDHAL NITROGEN
ANALYZER/DISTILLATION UNIT**

Make	Pelican
Distillation type	Four samples at a time

THIRD CALL

19. Rainout Shelter

Technical specification for Rainout Shelter (Manual)

Total Size : - 10m x 4m x 2.13m: 3.65m (L x W x SH: CH).

No. of Span : - 1 Nos.

Total Area : - 40 Sq. Mtr.

Shape : - Dome Shape / Even Span

Structural arrangement of rain shelter for fixing of Polycarbonate sheet 6mm thick (equivalent to Lexan make) at roof:

1. GI Pipe : - ISI standard: - IS 1239 B class.

2. Thickness : - 2mm

3. GI coat : - ISI standard: - IS 4736-1968/ISO65-1973

4. Weight : - 38mm x 38 mm: - 12

GI 38 mm x 38mm/25mmx 25mm square pipe IS standard IS 1239 anti-corrosive, humidity resistant pipe with IS 4736-1968/ISO 65-1973 zinc coat as approved For maximum Indian wind load conditions, structural trusses will be provided for absolute strength wind load 120 km/hr.

1. Trusses: - 38 mm x 38mm

2. Column 38 mm x 38mm

3. Vertical Supports: - 38 mm x 38mm

4. Purlin: - 38 mm x 38mm

5. Runners: - 38 mm x 38mm

Roof Glazing: The roof and sides will be covered with 5mm thick double walled Poly Carbonate sheet.

The sheet will be fixed on roof with aluminium section (anti corrosion/rust proof) and provision of leak proof arrangement against entry of rainwater between two joints of the sheet with silicon sealant applicent.

Warrantee 10 years.

UV Protected

Std lengths 2.1 m x 11.8 m

Thickness 5mm multiwall.

Make LEXAN

Sheet Structure 5/2, RS

LEXAN sheet DIN 4102 St.

Approx. weight g/m² 1100

U.L Temperature Rating 100°C

Fixing Special Aluminium section

Size 2" inch

Weight 1.25 Kg / 12 feet

Sides Glazing will be covered with high quality UV stabilized 5 Layered diffused (equivalent to Ginegar make) LDPE Sheet 200 micron thick stabilized with Anti dust, anti diffusion, anti virus and anti drip properties. Confirming to IS 2508 standard. with necessary folding arrangement (Manual / Motorised) to open four sides

Civil Works & Brick Work: CC foundation (1:3:6) 2 feet below and 1 feet above ground level to checks lateral moments of water, Base PCC 2" thick , than 13" wide first base line , than 9" wide second base line, Damp proof cement (DPC) 2" thick. Frame base block height 1'x 1' x 1' RCC block at every 3m distance will be provided. The exposed wall duly plastered with 12mm thick material ratio (1cement: 6sand) & duly painted with weather resistant paint (equivalent to samosam)

Note- Firms having turnover of not less than 25 lakhs for last two years should quote only

(Attach copy of orders/Certificates)

**20. COMPOSING, DESIGNING, PRINTING AND BINDING OF
REPORTS/BROCHURES/COMPENDIUM**

Technical specification and proforma for quotation of rates

(For agencies supplying tenders this form is to be kept in Envelop marked 'B' Price Bid)

1. Designing Charges

S. No.	Specification	Price (Rs.)		
		B/W	Two colour	Multi colour
I.	9 Inch x 11 Inch			
II.	11 Inch x 18 Inch			
III.	18 x 22 Inch			

2. Processing charges finished four colour positive per sq. inch

S. No.	Specification	Price
I.	Composing A/4 size	
II.	Composing A/5 size	
III.	Composing A/3 size	
IV.	Scanning charges (Single Colour)	
V.	Scanning charges (Four Colour)	

3. Printing and Plate Making Charges (Per side colour)

S. No.	Specification	Price
I.	For 1 st 1000	
II.	For Next 1000 copy	

4. Paper for text cover

I. Ballarpur & JK make per ream 500 sheet (20x30)

S. No.	Specification	Price
I.	58 gsm	
II.	70 gsm	
III.	80 gsm	
IV.	90 gsm	
V.	100 gsm	

II. Imported Art Paper per ream 500 sheet (20x30)

S. No.	Specification	Price	
		Plain Gloss	Mat Finish
I.	100 gsm		
II.	120 gsm		
III.	135 gsm		
IV.	170 gsm		

III. Ballarpur & JK make per ream 500 sheet (23x36)

S. No.	Specification	Price
I.	58 gsm	
II.	70 gsm	
III.	80 gsm	
IV.	90 gsm	
V.	100 gsm	

IV. Imported Art Paper per ream 500 sheet (23x36)

S. No.	Specification	Price	
		Plain Gloss	Mat Finish
I.	100 gsm		
II.	120 gsm		
III.	135 gsm		
IV.	170 gsm		

V. Imported Art Card per packet of 100 sheet (20x30 & 23x36)

S. No.	Specification	Price	
		Plain Gloss	Mat Finish
I.	225 gsm		
II.	255 gsm		
III.	300 gsm		
IV.	350 gsm		

VI. Ledger Paper per 500 sheet (23x36) for Register, etc printing

S. No.	Specification	Price
I.	70 gsm	
II.	80 gsm	
III.	90 gsm	
IV.	100 gsm	

5. Binding (Including gathering, collecting, stitching/sewing and cover pasting)

(If 100 copies are printed, binding charges for 100 copies will be paid as permissible for 1st 100 copies)

S. No.	Specification	For 1 st to 1000 Copies	For Next 1000 Copies
I.	Report/Compendium 240-280 Pages		
II.	Report 160-240 Pages		
III.	Research Monograph 96-100 Pages		
IV.	Research Monograph/Information Bulletin 56-96 Pages		
V.	Brochure 40-56 Pages		
VI.	Bulletin/Hand Book 20-40 Pages		
VII.	News Letter 12 Pages		
VIII.	Additional Form of 16 pages or part		
IX.	Additional Form of 08pages or part		
X.	Additional Form of 04pages or part		
XI.	Slide/Center Stitching of small Bulletins		
XII.	(A) Spiral/Comb binding per book/report up to 100 pages		
	(B) Spiral/Comb binding per book/report up to 400 pages		
XIII.	Hard Bound with Jake per book/report		
	(A) Up to 96 pages		
	(B) Up to 160 pages		
	(C) Up to 240pages		
	(D) Up to 480 pages		

	(E) Hard Bound Register		
XIV.	Perfect Binding Up to 100 pages		
XV.	Perfect Binding Up to 300 pages		
XVI.	Letter Head Binding (Jaket)		

6. Lamination per sq. Inch (Rs.)

S. No.	Specification	Price
I.	Gloss lamination	
II.	Mat lamination	

7.	Screen PRINTING CHARGES (per colour per sq. inch) (Rs.)	
8.	UV coating charges on cover (per sq. inch) (Rs.)	

General Terms and Conditions

Tender form fee Rs. 200/- and EMD **Rs. 2000/-** should be submitted in form of D.D. favour of Dean, R.A.K. College of Agriculture, Sehore. Tender should be submitted in two Bid i.e. Technical Bid and Financial Bid separately in two sealed envelopes which should be kept in one larger envelope.

1. Please write "Tender for Printing & Publications" on the corner of envelope with date.
2. The sealed tender should reach either by post in this office on or before 00.00.2012 at 4.00 p.m. the tender received after the stipulated date and time will not be considered.
3. University has every right to reject one or all tenders without assigning any reason.
4. The quoted rate should be valid for 2 years as empanelment of publisher will be made for two years. The standards publishers/printers acceptable and ready to publish the items on lowest bid will impaneled for two years.
5. Only reputed manufactures having following documents (Attested copies to be enclosed) will be considered on the bid process.
 - (a) Reputed publishers/printers
 - (b) License to run a factory from component authority
 - (c) Registration with central excise department, if required
 - (d) Sales Tax Registration certificate
 - (e) Latest Income Tax Return
 - (f) Publisher/Printers should have average annual turnover of Rs. 10.00 lakh for last 2 years
6. Breakage and losses in transit will have to be borne by the supplier and other charges on such account will be deducted proportionately.
7. The details of equipments/articles with their literatures should be sent along with the tender must tally with the literatures supplied for the particular item.
8. Other terms and conditions of your firm in any may also be stated clearly.
9. In case the supply is not affected within the stipulated period the office reserves the right to cancel the order.
10. Tender complete in all respect should be with earnest money in form of D.D. in favour of Comptroller, RVSKVV, Gwalior from any Nationalized Bank payable at Gwalior.
11. The supply should be F.O.R. RVSKVV, Gwalior and inclusive of all charges. The ST/CST, VAT, packaging and forwarding charges, however, should be mentioned separately in accordance with the rates quoted by you.
12. Payment will be made after satisfactory report in delivery of order.
13. Supply time will be maximum 30 days after receiving order and material.
14. In case of any disputes the decision of Director Research Services, RVSKVV, Gwalior is final.
15. A team of the University may visit the working site before placing the order.