

SECTION – XV

BANK GUARANTEE FORM FOR PERFORMANCE SECURITY/ CMC* SECURITY

To

HSCC (India) Limited
E 6 (A), Sector -1, Noida

IFB No.
Name of Item
Item no.

WHEREAS _____ (Name and address of the supplier) (Hereinafter called “the supplier”) has undertaken, in pursuance of contract no _____ dated _____ to supply (description of goods and services) (herein after called “the contract”).

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognised by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of _____ (Amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid up to 30/66 months from the date of Notification of Award i.e. up to ----- (indicate date)

* **For CMC the BG shall be addressed to the Consignee**

.....
(Signature with date of the authorised officer of the Bank)

.....
Name and designation of the officer

.....
Seal, name & address of the Bank and address of the Branch

**SECTION - XVI
CONTRACT FORM - A**

**CONTRACT FORM FOR SUPPLY, INSTALLATION, COMMISSIONING, HANDING OVER, TRIAL
RUN, TRAINING OF OPERATORS & WARRANTY OF GOODS**

(Address of the Purchaser's/Consignee's office issuing the contract)

Contract No _____ dated _____

This is in continuation to this office's Notification of Award No _____ dated _____

1. Name & address of the Supplier: _____
2. Purchaser's TE document No _____ dated _____ and subsequent Amendment No _____, dated _____ (if any), issued by the purchaser
3. Supplier's Tender No _____ dated _____ and subsequent communication(s) No _____ dated _____ (if any), exchanged between the supplier and the purchaser in connection with this tender.
4. In addition to this Contract Form, the following documents etc, which are included in the documents mentioned under paragraphs 2 and 3 above, shall also be deemed to form and be read and construed as integral part of this contract:

- (i) General Conditions of Contract;
- (ii) Special Conditions of Contract;
- (iii) List of Requirements;
- (iv) Technical Specifications;
- (v) Quality Control Requirements;
- (vi) Tender Form furnished by the supplier;
- (vii) Price Schedule(s) furnished by the supplier in its tender;
- (viii) Manufacturers' Authorisation Form (if applicable for this tender);
- (ix) Purchaser's Notification of Award

Note: The words and expressions used in this contract shall have the same meanings as are respectively assigned to them in the conditions of contract referred to above. Further, the definitions and abbreviations incorporated under clause 1 of Section II - 'General Instructions to Tenderers' of the Purchaser's TE document shall also apply to this contract.

5. Some terms, conditions, stipulations etc. out of the above-referred documents are reproduced below for ready reference:
 - (i) Brief particulars of the goods and services which shall be supplied/ provided by the supplier are as under:

Schedule No.	Brief description of goods/services	Accounting unit	Quantity to be supplied	Unit Price	Total price	Terms of delivery

Any other additional services (if applicable) and cost thereof: _____

Total value (in figure) _____ (In words) _____

2. Delivery schedule
- (iii) Details of Performance Security
- (iv) Quality Control
 - (a) Mode(s), stage(s) and place(s) of conducting inspections and tests.
 - (b) Designation and address of purchaser's inspecting officer
- (v) Destination and despatch instructions
- (vi) Consignee, including port consignee, if any
3. Warranty clause

HSCC (India) Ltd

- 4. Payment terms
- 5. Paying authority

**(Signature, name and address
of the Purchaser's/Consignee's authorised official)
For and on behalf of** _____

Received and accepted this contract

(Signature, name and address of the supplier's executive
duly authorised to sign on behalf of the supplier)

For and on behalf of _____

(Name and address of the supplier)

(Seal of the supplier)

Date: _____

Place: _____

**SECTION - XVI
CONTRACT FORM - B
CONTRACT FORM FOR ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT**

Annual CM Contract No. _____ **dated** _____
Between _____

(Address of Head of Hospital/Institute/Medical College)
And _____

(Name & Address of the Supplier)

Ref: Contract No _____ **dated** _____ **(Contract No. & date of Contract for supply, installation, commissioning, handing over, Trial run, Training of operators & warranty of goods)**

In continuation to the above referred contract

6. The Contract of Annual Comprehensive Maintenance is hereby concluded as under: -

1	2	3	4					5
Schedule No.	BRIEF DESCRIPTION OF GOODS	QUANTITY. (Nos.)	Annual Comprehensive Maintenance Contract Cost for Each Unit year wise*.					Total Annual Comprehensive Maintenance Contract Cost for 5 Years [3 x (4a+4b+4c+4d+4e)]
			1 st	2 ⁿ d	3 ^r d	4 th	5 th	
			a	b	c	d	e	

Total value (in figure) _____ (In words) _____

- b) The CMC commence from the date of expiry of all obligations under Warranty i.e. from _____ (date of expiry of Warranty) and will expire on _____ (date of expiry of CMC)
- c) The cost of Annual Comprehensive Maintenance Contract (CMC) which includes preventive maintenance, labour and spares, after satisfactory completion of Warranty period may be quoted for next 5 years as contained in the above referred contract on yearly basis for complete equipment (including X ray tubes, Helium for MRI, Batteries for UPS, other vacuumatic parts, ____ & ____) and Turnkey (if any).
- d) There will be 98% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period.
- e) During CMC period, the supplier shall visit at each consignee's site for preventive maintenance including testing and calibration as per the manufacturer's service/ technical/ operational manual. The supplier shall visit each consignee site as recommended in the manufacturer's manual, but at least once in 6 months commencing from the date of the successful completion of warranty period for preventive maintenance of the goods.
- f) All software updates should be provided free of cost during CMC.
- g) The bank guarantee valid till _____ [(fill the date) 2 months after expiry of entire CMC period] for an amount of Rs. _____ [(fill amount) equivalent to 2.5 % of the cost of the equipment as per contract] shall be furnished in the prescribed format given in Section XV of the TE document, along with the signed copy of Annual CMC within a period of 21 (twenty one) days of issue of Annual CMC failing which the proceeds of Performance Security shall be payable to the Purchaser/Consignee.

HSCC (India) Ltd

- h) If there is any lapse in the performance of the CMC as per contract, the proceeds Annual CMC bank guarantee for an amount of Rs. _____ (equivalent to 2.5 % of the cost of the equipment as per contract) shall be payable to the Consignee.
- i) **Payment terms:** The payment of Annual CMC will be made against the bills raised to the consignee by the supplier on six monthly basis after satisfactory completion of said period, duly certified by the HOD concerned. The payment will be made in Indian Rupees.
- j) **Paying authority:** _____ (name of the consignee i.e. Hospital/ Institute /Medical College's authorised official)

**(Signature, name and address
of Hospital/Institute/Medical College's authorised official)
For and on behalf of** _____

Received and accepted this contract

(Signature, name and address of the supplier's executive
duly authorised to sign on behalf of the supplier)

For and on behalf of _____

(Name and address of the supplier)

(Seal of the supplier)

Date: _____

Place: _____

SECTION - XVII
CONSIGNEE RECEIPT CERTIFICATE
(To be given by consignee's authorized representative)

The following store (s) has/have been received in good condition:

- 1) Contract No. & date : _____
- 2) Supplier's Name : _____
- 3) Consignee's Name & Address with
telephone No. & Fax No. : _____
- 4) Name of the item supplied : _____
- 5) Quantity Supplied : _____
- 6) Date of Receipt by the Consignee : _____
- 7) Name and designation of Authorized
Representative of Consignee : _____
- 8) Signature of Authorized Representative of
Consignee with date : _____
- 9) Seal of the Consignee : _____

SECTION – XVIII
Proforma of Final Acceptance Certificate by the Consignee

No _____
Date _____

To
M/s _____

Subject: Certificate of commissioning of equipment/plant.

This is to certify that the equipment(s)/plant(s) as detailed below has/have been received in good conditions along with all the standard and special accessories and a set of spares (subject to remarks in Para no.02) in accordance with the contract/technical specifications. The same has been installed and commissioned.

- (a) Contract No _____ dated _____
- (b) Description of the equipment(s)/plants: _____
- (c) Equipment(s)/ plant(s) nos.: _____
- (d) Quantity: _____
- (e) Bill of Loading/Air Way Bill/Railway Receipt/ Goods Consignment Note no _____ dated _____
- (f) Name of the vessel/Transporters: _____
- (g) Name of the Consignee: _____
- (h) Date of commissioning and proving test: _____

Details of accessories/spares not yet supplied and recoveries to be made on that account.

Sl. No.	Description of Item	Quantity	Amount to be recovered No.
---------	---------------------	----------	----------------------------

The proving test has been done to our entire satisfaction and operators have been trained to operate the equipment(s)/plant(s).
The supplier has fulfilled its contractual obligations satisfactorily ## or
The supplier has failed to fulfil its contractual obligations with regard to the following:
He has not adhered to the time schedule specified in the contract in dispatching the documents/drawings pursuant to 'Technical Specifications'.
He has not supervised the commissioning of the equipment(s)/plant(s) in time, i.e. within the period specified in the contract from date of intimation by the Purchaser/Consignee in respect of the installation of the equipment(s)/plant(s).
The supplier as specified in the contract has not done training of personnel.

The extent of delay for each of the activities to be performed by the supplier in terms of the contract is
The amount of recovery on account of non-supply of accessories and spares is given under Para no.02.

HSCC (India) Ltd

The amount of recovery on account of failure of the supplier to meet his contractual obligations is _____ (here indicate the amount).

Signature

Name

Designation with stamp

Explanatory notes for filling up the certificate:

i.He has adhered to the time schedule specified in the contract in dispatching the documents/drawings pursuant to 'Technical Specification'.

ii.He has supervised the commissioning of the equipment(s)/plant(s) in time, i.e. within the time specified in the contract from date of intimation by the Purchaser/Consignee in respect of the installation of the equipment(s)/plant(s).

iii.Training of personnel has been done by the supplier as specified in the contract

iv.In the event of documents/drawings having not been supplied or installation and commissioning of the equipment(s)/plant(s) having been delayed on account of the supplier, the extent of delay should always be mentioned in clear terms.

SECTION - XIX
AFFIDAVIT/UNDERTAKING

IFB No.

We have read and understood the all instructions and all terms and conditions contained in the TE document.

We are fully agreed all the terms and conditions of TE document including SIT, SCC, amendment/ corrigendum, technical specification issued till opening of bid. In case, anywhere any conditional terms found in our bid, the same shall be treated as deleted/cancelled/ withdrawn from our bid. Whenever there is a conflict, the acceptance of all terms and conditions of TE document in the tender form/ bid form / affidavit shall prevail only.

We (manufacturer and /or manufacture authorised agent) shall jointly and severally liable to perform all contractual obligations under the agreement.

We (manufacturer and /or manufacture authorised agent) confirm that we do not stand deregistered/ banned/ blacklisted/ debarred by any Govt. Authorities in India.

We hereby confirm and certify that the prices offered by us in this tender is not higher than the prices we had offered to any other Govt. of India Organisation(s)/PSU(s) during the last one year and shall provide the justification for reasonableness of our offered price whenever asked during evaluation of our submitted bid.

We hereby certify that all information and documents submitted in this tender are true to the best of our knowledge and belief and that nothing material has been concealed/ misrepresented. We are solely responsible for its accuracy.

In case, at any stage, any of the information/ document is found to be false/ misrepresentation, we (manufacturer and /or manufacture authorised agent) shall be fully liable and the purchaser/HSCC shall have full right to reject my bid/ cancel the purchase order and / or stop payment / recover the liabilities/ loss if any, from our balance payment /EMD/ performance security etc. We are liable for any action as deemed fit by the purchaser/HSCC in addition to forfeiture of the earnest money/ performance security.

We are fully agreed all the terms and conditions of TE document including amendment/ corrigendum /technical specification issued till opening of bid. In case, anywhere any conditional terms found in our bid, the same shall be treated as deleted/cancelled/ withdrawn from our bid. Whenever there is a conflict, the acceptance of all terms and conditions of TE document in the tender form/ bid form / affidavit shall prevail only.

Signature:

Name:

Designation

Seal:

Note:

- **Original copy of Affidavit is to be submitted as instructed in the tender. The original document duly signed and stamped is to be scan & upload**
- **To be submitted on non-judicial stamp paper of Rs. 10/- duly certified by Public Notary**

SECTION – XX
CHECKLIST

Name of Tenderer:

Name of Manufacturer:

Sl No.	Activity	Yes/ No/ NA	Remarks
1. a.	Have you enclosed EMD of required amount for the quoted schedules?		
b.	In case EMD is furnished in the form of Bank Guarantee, has it been furnished as per Section XIII?		
2. a.	Have you enclosed duly filled Tender Form as per format in Section X?		
b.	Have you enclosed Power of Attorney in favour of the signatory?		
3.	Are you a SSI unit, if yes have you enclosed certificate of registration issued by Directorate of Industries/NSIC		
4. a.	Have you enclosed clause-by-clause technical compliance statement for the quoted goods vis-à-vis the Technical specifications?		
b.	In case of Technical deviations in the compliance statement, have you identified and marked the deviations?		
5. a.	Have you submitted satisfactory performance certificate/ Installation Reports as per the Proforma for performance statement in Sec. IX of TE document in respect of all orders?		
b.	Have you submitted copy of the order(s) and end user certificate/ Installation Reports?		
6.	Have you submitted manufacturer's authorization as per Section XIV?		
7.	Have you submitted prices of goods, turnkey (if any), CMC etc. in the Price Schedule as per Section XI?		
8.	Have you kept bid validity of 180 days from the Techno Commercial Tender Opening date as per the TE document?		
9. a.	In case of Indian Tenderer, have you furnished Income Tax Account No. as allotted by the Income Tax Department of Government of India?		
b.	In case of Foreign Tenderer, have you furnished Income Tax Account No. of your Indian Agent as allotted by the Income Tax Department of Government of India?		
10.	Have you intimated the name and full address of your Banker (s) along with your Account Number		
11.	Have you fully accepted payment terms as per TE document?		
12.	Have you fully accepted delivery period as per TE document?		
13.	Have you submitted the certificate of incorporation?		

HSCC (India) Ltd

Sl No.	Activity	Yes/ No/ NA	Remarks
14.	Have you accepted the warranty as per TE document?		
15.	Have you accepted terms and conditions of TE document?		
16.	Have you furnished documents establishing your eligibility & qualification criteria as per TE documents?		
17.	Have you furnished Annual Report (Balance Sheet and Profit & Loss Account) for last three years (2012- 13, 2013- 14 & 2014 - 15) duly certified by chartered accountant bearing their membership no.?		
18.	Have you enclosed the Affidavit as per Section XIX of the TE Document?		

N.B.

10. All pages of the Tender should be page numbered and indexed.
11. The Tenderer may go through the checklist and ensure that all the documents/confirmations listed above are enclosed in the tender and no column is left blank. If any column is not applicable, it may be filled up as NA.
2. It is the responsibility of tendered to go through the TE document to ensure furnishing all required documents in addition to above, if any.

(Signature with date)

**(Full name, designation & address of the person duly authorised sign on behalf of the Tenderer)
For and on behalf of**

(Name, address and stamp of the tendering firm)

**Section – XXI
Consignee List**

Consignee	Medical Institutions	Contact Address.
	Director, Kalapana Chawla Govt. Medical College, Model Town, Karnal.	Director, Kalapana Chawla Govt. Medical College, Model Town, Karnal.

NB: The Purchaser/consignee will ensure timely issue of CDEC, Octroi Exemption Certificates, Road Permits & Entry Tax Exemption Certificates, wherever applicable, to the suppliers.

Section – XXII

BID SUMMARY SHEET

1. Bidding document fee Details:

DD No.	Date	Amount Rs.	Name of Bank
XXXX	XX.XX.2014	XXXXX	State Bank of India

- Tender document / Bidding document fee Rs. 5000/-
- DD should be favour of “**HSCC (India) Ltd**” payable at New Delhi/ Noida.

2. EMD Detail:

A. If EMD/bid security in the form of Demand Draft:

Item sr, no.	#DD No.	Date	Amount Rs.	Name of Bank

Demand Draft (i.e. DD), then DD shall be in favour of **HSCC (India) Ltd**” payable at New Delhi/ Noida

B. If EMD/bid security in the form of Bank Guarantee:

Item no.	BG no.	Date	Amount Rs.	Name of Bank	BG Validity
15	XXXX	XX.XX.2014	XXXX	State Bank of India	XX.XX.2015

- **Name of Bank Manager who has issued BG : Ram Singh**
- **Mobile number of Bank Manager : 1234567890**
- **Email ID of Bank Manager : ram@sbi.com**

3.

Bid offer:

Sr. Item no	Quoted qty.	Name of Bidder	Name with full Address of Manufacture	Model no.
15	5	Rama	Sterling	124D

Signature:
Name:
Designation
Seal:

Note: Bidder Summary sheet shall be filled in all respect.

Section - XXIII

Power of Attorney

IFB No.

I -----, *Sole Proprietor' of M/s -----, or Board of Director of M/s -----* hereby authorised *Sh. --*
-----, ----- to sign all tender documents, participate in negotiations, make correspondence and sign all
documents to the client and government statutory bodies for approval take decisions.

He hereby authorized to sign and execute the agreement etc. for the works and all other documents relating
to the works awarded or being executed by *M/s -----*

Signature of *Sh. -----, -----* is attested below.

Sole Proprietor/ Board of Director
M/s -----
Sealed

Sh. -----
Designation

- **Power of attorney is to be signed by competent authority i.e. Sole Proprietor of the firm or Board of Director of the company.**
- **The original document duly signed and stamped is to be scan & upload.**

Section – XXIV

Bidder Information

Bidder correspondence Address :

Bidder correspondence Email ID :

Bidder contact number :

Bidder contact person :

Manufacture correspondence address :

Manufacture correspondence Email ID :
(who issued Manufacture authorisation form)

Manufacture contact number :

Signature:

Name:

Designation

Seal:

Note: All above information are mandatory.

ENVELOPE

(Bid Security/ EMD & TE Document Fee, Affidavit, Bid Summary Sheet)

IFB No.
DUE DATE:
Item no
Name of Item

To,
DIRECTOR
KALPANA CHAWLA GOVT. MEDICAL
COLLEGE, KARNAL

Item No - 1

Student Microscopes Specifications

- Binocular microscope with Universal Infinity corrected optical system
- LED light source illuminator.
- Rigid frame with ergonomics design
- Binocular observation tube with inclination of 45/30°
- Built in torque adjustable focusing knob.
- Square mechanical stage with rigid hand coaxial controls
- High performance aspheric lenses in Abbe condenser and light relay system
- Revolving quadruple nose piece.
- Plan achromatic objectives 4x, 10x, 40x, 100x.
- 40x, 100x should be spring loaded
- Eye piece 10x (FOV 20)
- Antifungal treatment should be applied to the observation tubes, eyepieces and objectives.
- Accessories, dust cover and power cord.
- Power requirement 220V / 50 Hz
- Should be CE certified / FDA approved.

Item No - 02

Microtomy Rotary

24

specimen feed of 25 mm or more and vertical stroke length of 59 mm or more, and blade holder setting angle upto 10° or more with marking of 0, 5 and 10° in blade holder.

- Specimen retraction of 220 μm or more in the return stroke and can be turn on & off.
- Coarse feed manual via coarse feed hand wheel
- Dedicated Nobe mechanical trimming thickness selector of 5-50 μm
- User selectable coarse feed turn direction clock or counter clock wise.
- Precise specimen orientation of 8° or more in x, y & z with anti tilt feature.
- Blade holder base with lateral displacement for disposable blades.
- should have 120° clock locking by simply pulling the handle so rest the specimen holder at upper position for fixation of another block
- Slot cover to protect the interior of instrument from section debris.
- Disposable blade holder with finger guard protection.
- Universal cassette clamp and standard specimen clamp each one.
- Hand rest for easy sectioning
- should be certified to CE and IFC.

warranty, AMC

ITEM No. 3

Human Skeleton Articulated (Real Bones)

Description of Function

- with wooden shoe case having three sided glass frame with lock system, wheel base & provision of hook on the roof for hanging the original human skeleton
- 1.1 Mounted skeleton, one with the various parts connected in such a way as to demonstrate normal relationships and allow motion between components as in the living body.

Technical Specifications

- 2.1 The articulated skeleton should be ideal for teaching the basics of human anatomy.
 - i. Adult Male & Female - 1 set each
 - ii. Old age Male & Female - 1 set each
 - iii. Adolescent Male & Female - 1 set each
 - iv. Child Male & Female - 1 set each
 - v. Paediatric Male & Female - 1 set each
- 2.2 It should be real skeleton of a life size human skeleton and should show all skeleton part in high details
- 2.3 The arms, legs and skull cap should be removable for study.
- 2.4 All of the joints, sutures, fissure, foramina and processes should be portrayed with at most accuracy/ intact.
- 2.5 Should be supplied with 5 caster roller stand.
- 2.6. It should be neat and clean.
- 2.7 Origin of bone should be marked & painted in RED colour and insertions should be marked and painted in BLUE colour.

ITEM No. 4

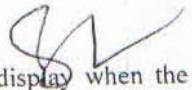
Complete human bones set dis articulated (Real Bones)

1. Real skeleton of life size human bone and should show all skeleton part in high details
2. The disarticulated adult bone set should be ideal for teaching the basics of human anatomy
3. It should be neat and clean. and dried showing all impressions/elevations/depressions foramina and bony landmarks without any deformity/ breakage and damages.

Item No - 05

Autoclave Electric

- 2 Nos.



1. The water reservoir shall have a capacity that is sufficient for minimum 10 cycles.
2. The reservoir shall have a float that reads the level of the water that indicates on the display when the reservoir needs to be refilled.
3. The sterilization chamber shall have a capacity of at least 5 litres, constructed of stainless steel.
4. The sterilizer shall function with a micro - processor which controls a defined volume of distilled water that is pumped into a boiler, converted into steam, and then injected into the sterilizing chamber.
5. The micro processor shall accurately control and monitor the sterilizing temperature and pressure.
6. The sterilizer shall have a keypad, which controls the pre-set programs and the start control with a single touch.
7. Unwrapped Cycle - To sterilize unwrapped instruments the sterilizing cycle shall be constant at 134°C for 3.5 minutes. The total cycle time including warm up, pressurization and de-pressurization shall not be more than 11 minutes.
8. Wrapped Cycle - To sterilize wrapped instruments the sterilizing cycle shall be constant at 134°C for 6 minutes. The total cycle time including warm up, pressurization and de-pressurization shall not be more than 15 minutes.
9. Cycle for Delicate Items - To sterilize certain rubber, plastic and delicate items the sterilizing cycle shall be constant at 121 degrees C for 15 minutes. The total cycle time including warm up pressurization and de-pressurization shall not be more than 24 minutes.
10. Digital Display for monitoring the systems throughout the processing cycle including the temperature, pressure and time elapsed.
11. Power supply - 220V, 50 Hz.
12. The product should be CE or FDA Certified

Item No - 06

Colorimeter

- 6 Nos.

1. Photoelectric colorimeter with 8 filter digital (490, 520, 540, 570, 600, 700 nm) etc ✓
2. Digital colorimeter should be highly stable and accurate ideal clinical instruments for blood and chemical analysis.
3. Should have 5 / 8 filters with battery option.
4. Range: 400nm to 700nm filters 5 high standard filters, Accuracy: +/-0.010.Abs
5. Output Optional, Density 0 to 1.99, display 2.5 digit LED display, detector selenium photo cell light.
6. Source 6.2V 0.3 Amp. Tungsten filament Lamp,
7. Min volume 1 ml
8. Power 230V+I- 10 50Hz Ac.
9. Size (LxBxH) 225 x 230 x 150mm (Appox),
10. Weight: 4 kg. (Approx)



Item No - 07

36. Electrophoresis Apparatus with Power Supply for Paper/ PAGE/ AGAROSE.

- 6 Nos.

Chambers – total 6

1. For Paper electrophoresis, horizontal – 2

Paper electrophoresis system, cellulose acetate system suited for standard and wet cellulose electrophoresis, support adjustable for different strip lengths. can adjust strip dimensions of upto 24X20 cm, Acrylic made, with lid, platinum electrodes, red and black connecting cords,

Suitable for standard and wet cellulose acetate electrophoresis of haemoglobin, serum proteins, isoenzymes, urine proteins, lipoproteins and glycoproteins, can adjust multiple gel sizes available commercially

94
paper

2. For gel (agarose) electrophoresis – 2

a. Small system - One

Acrylic made, Inner tank 215 x 141 x 55 mm, with lid

Trays:

130 x 130 mm - 1 No.

130 x 65 mm - 2 Nos.

65 x 60 mm - 4 Nos

No. of combs:

13 Well Analytical Acrylic Comb 1.5 mm thick x 1 No.

8 Well Analytical Acrylic Comb 1.5 mm thick x 4 Nos.

3 Well Preparative Acrylic Comb 3 mm thick x 1 No

Universal gel casting tray, Platinum electrodes, Red and black connecting cables

b. Large system – One

Acrylic made, Inner tank 39.5 X 23 X 9 cm, with lid

Trays:

200 x 100 mm - 1 No.

200 x 200 mm - 1 Nos.

200 x 250 mm - 1 Nos

Combs: 20 well (1 mm thick) X 2 Nos.

2 gel casting dams, Platinum electrodes, Red and black connecting cables

3. Vertical electrophoresis (PAGE)

a. Mini system - One

Vertical dual mini Gel, Acrylic made, with lid, Gel Size : 8 x 7 cms x 2,

Upper buffer tank dimension : 70 x 70 x 43 mm,

Lower buffer tank dimension : 150 x 130 x 115 mm,

Combs :

7 Well Teflon Comb 0.5 mm-2 Nos.

7 Well Teflon Comb 1 mm-2 Nos.

Teflon Spacers :

0.5 mm Teflon Spacers - 4 Nos.

1 mm Teflon Spacers - 2 Nos.

Glass plate : Notched and Rectangular 2 sets of glass plates, 2 sets of Clamp and screws, Water circulation, Gel casting unit , red and black connecting cables, Platinum electrodes.

b. Large system – One

Acrylic made, with lid, Dual-gel system, Gel Size : 16 x 20 cms x 2 gels,
Upper Buffer Tank Dimension : 200 x 75 x 20 mm
Lower Buffer Tank Dimension : 270 x 100 x 115 mm
Combs : 20 Well Teflon Comb 1 mm-2 Nos.
Teflon Spacers : 1 mm Teflon Spacers 6 Nos.
Red and black connecting cables, Platinum Electrodes, Water Circulation,
Glass Plate : Notched and Rectangular 2 sets.
Clamp and Screws : 4 sets.
Gel Casting Unit

95

Power supplies – One

Output range upto 500 V, adjustable in 1 V steps, 0.01–2.5 A, adjustable in 0.001 A steps, Upto 500 W, fully adjustable in 1 W steps.

Modes- programmable, constant voltage, constant current, or constant power with facility for auto crossover

Terminals- 4 pair of recessed banana jacks in parallel

Timer control of 1-99 hr 59 min, fully adjustable

Pause/resume function,

Programmable- memory for methods storage and real time clock.

Automatic recovery after power failure

LCD Display

Proper safety and electrical compliance,

Safety: No-load detection, sudden load change detection, ground leak detection, overload/short circuit protection, overvoltage detection, input line protection, auto power-up after power failure.

Input power suited to Indian power supply of 110–240 V AC, 50/60 Hz

Operating conditions 0–40°C, 0–90% humidity

Appropriate CE/ ISI etc certification