

Office of the Director INDIRA GANDHI INSTITUTE OF MEDICAL SCIENCES,

<u>SHEIKHPURA, PATNA - 800 014 (Bihar, India)</u>

<u>Tel.: 0612 – 2297631, 2297099; Fax: 0612 – 2297225; Website: www.igims.org</u> <u>E-Mail: director@igims.org</u>

Tender Notice No.: IGIMS / 2014 – 15 / 21 / Medical College / Store

Chapter I- Instruction to bidders

"NOTICE INVITING TENDER FOR SUPPLY OF EQUIPMENT / INSTRUMENTS AND TEACHING AIDS (I. E. CHARTS / MODEL, ANATOMICAL SPECIMEN ETC.) FOR THE DEPARTMENT OF ANATOMY, FORENSIC MEDICINE, ENT & COMMUNITY MEDICINE"

- 1. Indira Gandhi Institute of Medical Sciences, Patna (IGIMS) invites bids from reputed, experienced and financially sound Companies/Firms/Agencies for supply of Equipments/Instruments and Teaching Aids (i.e. Charts, Models, Anatomical Specimen etc.) for the department of Anatomy, Community Medicine, ENT and Forensic Medicine of Medical College of the Institute. Those who are in the similar business for the last three years and providing the same service to Central/State Govt. Medical Colleges or autonomous bodies may send their bids both Technical and Commercial in sealed envelopes.
- 2. Complete Tender Document may be obtained from the Store Office, I.G.I.M.S. Patna (Bihar) on all working days from 10:00 AM to 4.00 PM, by depositing a Demand Draft for Rs. 1,000.00 (Rs. One Thousand Only) payable at Patna and drawn in favour of "Director, I.G.I.M.S. Patna". It can also be downloaded from the website of IGIMS Patna www.igims.org till 24 / 03 / 2015 up to 12.00 PM. The bidders using the tender form downloaded from the website shall enclose a Demand Draft for Rs. 1, 000/- (Rs. One Thousand Only) payable at Patna and drawn in favour of "Director, I.G.I.M.S. Patna".
- 3. The interested Companies/Firms/Agencies may send their bid complete in all respect along with Earnest Money Deposit (EMD) of Rs. 10,000/- (Rs. Ten Thousand Only) in the form of Demand Draft/Bank Guarantee issued in favour of "Director, IGIMS, Patna", drawn on any scheduled bank payable at Patna and other requisite documents to the undersigned duly superscripted "<u>Bid for Tender</u> <u>Notice No.: IGIMS / 2014 15 / 21 / Medical College</u>" before 4:00 PM on 24 / 03 / 2015. The bids received after this deadline shall not be entertained under any circumstances whatsoever. In case of postal delay this Institute will not be responsible.

NOTE: The EMD and Tender Fee draft should be put in the envelope containing Technical Bid failing which the tender shall be rejected forthwith.

- The sealed tender should reach the office of the Director, Indira Gandhi Institute of Medical Sciences, Sheikhpura, Patna – 800 014 (Bihar) through registered post / speed post / Courier Services.
- 5. Bids will be opened on 25 / 03 / 2015 at 3:00 P.M. in the presence of bidders or their authorized representatives who wish to participate in the bidding process. If the opening date happens to be a closed day/holiday, the tender will be opened on the next working day.
- 6. Any future clarification(s) and / or corrigendum(s) shall be communicated by the Director, I.G.I.M.S. Patna through the Institute website www.igims.org.
- 7. Director, IGIMS Patna reserves the right to amend or withdraw any of the terms and conditions contained in the Tender Document or to reject any or all tenders without giving any notice or assigning any reason. The decision of the Director, IGIMS, Patna in this regard shall be final.

Sd/-Prof. (Dr.) N. R. Biswas, Director, I.G.I.M.S. – Patna.

Chapter-II: Conditions of Contract

General Terms and Conditions

Subject: Notice Inviting Tender for supply of Equipments/Instruments and Teaching Aids (i.e. Charts, Models etc.) for the department of Anatomy, Forensic Medicine, ENT & Community Medicine of Medical College of the Indira Gandhi Institute of Medical Sciences - Patna

1. Parties:

The parties to the contract are the contractor (the tenderer to whom the work have been awarded) and the IGIMS through Director, Indira Gandhi Institute of Medical Sciences, Patna for and on behalf of the Director, IGIMS, Patna.

2. Earnest Money:

Earnest money by means of a Bank Demand Draft/ Demand Draft of **Rs 10,000/- (Rs. Ten Thousand only)** may be enclosed with the quotation (Technical Bid). It is also clarified that the quotations received without earnest money will be summarily rejected. The BG/DD must be prepared in the name of "Director, Indira Gandhi Institute of Medical Sciences, Patna".

- a) No request for transfer of any pervious deposit of earnest money or security deposit or payment of any pending bill held by the Institute in respect of any previous work will be entertained.
- b) Tenderer shall not be permitted to withdraw his offer or modify the terms and conditions thereof. In case the tenderer fail to observe and comply with stipulations made herein or backs out after quoting the rates, the aforesaid amount of earnest money will be forfeited.
- c) The Tenders without Earnest Money or Cost Receipt will be summarily rejected.
- d) The EMD, in case of unsuccessful Bidders shall be retained by the Purchaser till the finalization of the tender. The bid security shall be refunded to the unsuccessful tenderers on written request. No interest will be payable by the IGIMS authorities on the EMD.

3. Signing of Tender:

Individual signing the tender or other documents connected with contract must specify whether he sign as:

- a) A sole proprietor of the concern or constituted attorney of such sole proprietor;
- b) A partner of the firm, if it is a partnership firm in which case he must have authority to execute the contracts on behalf of the firm and to refer to arbitration disputes concerning the business of the partnership either by virtue of the partnership agreement or by a power of attorney duly executed by the partners of the firm.
- c) Director or a principal officer duly authorized by the Board of Directors of the Company, if it is a company.
- 4. A person signing the tender form or any document forming part of the tender on behalf of another person should have an authority to bind such other person and if, on enquiry it appears that the person so signing had no authority to do so, IGIMS, Patna may without prejudice, cancel the contract and hold the signatory liable for all costs, consequences and damages under the civil and criminal remedies available.
- 5. The tenderer should sign and affix his firm's stamp at each page of the tender and all its annexure as the acceptance of the offer made by tenderer will be deemed as a contract and no separate formal contract will be drawn. NO PAGE SHOULD BE REMOVED/ DETACHED FROM THIS NOTICE INVITING TENDER.

- 6. (a) Technical Bid: The tenderer should submit the technical details in Chapter IV of contract form. An undertaking will be given by the bidder that sample of all items will be kept ready by them for inspection by the IGIMS, Patna, if required. Tenders of those bidders whose samples are not found up to the mark will be summarily rejected.
- 6. (b) Commercial Bid: It should be submitted in form given in Chapter V. The price quoted will be exclusive of taxes and inclusive of all applicable charges (i.e. packing, forwarding, postage and transportation) at F.O.R. Store Section, IGIMS Patna and shall be fixed and final. Taxes, as applicable will be extra, which will separately quoted in the bid, The Bidders will quote for every item. At the time of payment Income Tax or any other Tax payable shall be deducted at source.

7. Opening of Tender:

The tenderer is at liberty either himself or authorize not more than one representative to be present at the opening of the tender. The representative attending the opening of the tender on behalf of the tender should bring with him a letter of authority from the tenderer and proof of identification

8. Validity of the bids:

The bids shall be valid for a period of 180 days from the date of opening of the tender. This has to be so specified by the tenderer in the commercial bid.

9. Right of acceptance:

The IGIMS, Patna reserve the right to accept or reject any or all tenders / quotations without assigning any reason there of and also does not bind itself to accept the lowest quotation or any tender. Any failure on the part of the contractor to observe the prescribed procedure and any attempt to canvass for the work will prejudice the contractor's quotation or any tender.

10. Payment Clause:

The bill in triplicate may be sent to Store Section for settlement after satisfactorily delivery of the material. The bill should have full particulars of the items(s). No payment shall be made in advance nor shall the loan from any bank or financial institutions be recommended on the basis of the order of award of work.

The contractor shall submit the bill only after supply of the material to the satisfaction of the IGIMS, Patna, on receipt of a pre-receipted bill invoice from the Contractor the case of issuing sanction and passing of bill for payment will be initiated. No payment will be made for goods rejected.

11. Communication of Acceptance / Right of Acceptance:

IGIMS, Patna reserves all right to reject any tender including of those tenders who fails to comply with the instructions without assigning any reason whatsoever and does not bind itself to accept the lowest or any specific tender. The decision of this Institute in this regard will be final and binding. Any failure on the part of the contractor to observer the prescribed procedure and any attempt to canvass the work prejudice the contractor's quotation.

12. Period and Terms of Delivery:

Delivery of goods shall be made by the supplier within 30 (thirty) days of placing of purchase order; however, in case of emergent requirement he has to supply the required quantity of goods within 24 hours of placing of order also.

13. Liquidated Damages

i. The date of delivery of the store, stipulated in the acceptance of the tender should be deemed to be the essence of the contract and delivery must be completed not later than the dates specified therein. Extension will not be given except in exceptional circumstances. Should, however, deliveries be made after the expiry of contracted delivery period, without prior concurrence of the purchaser and be accepted by the consignee, such delivery will not deprive the purchaser of this right to recover liquidated damages under clause (ii) below.

(ii) Should the supplier fails to deliver the store or any consignment thereof within the period prescribed for delivery, the purchaser shall be entitled to recover 5 % of the value of delayed supply for a period up to 2 (two) weeks and thereafter at the rate of 10 % of the value of the delayed supply for another 2 (two) weeks of delay. In the case of package supply where the delayed portion of supply materially hampers installation and commissioning of the systems, liquidated damages charges shall be levied as above on the total value of the concerned package of the purchase order. Quantum of liquidated damages assessed and levied by the purchaser shall be final and not challengeable by the supplier.

14. FORCE MAJEURE:

If, at any time during the subsistence of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war or hostility, act of public enemy, civil commotion, sabotage, fire, floods, explosion, epidemics, quarantine restriction, strikers lockout or act of God (hereinafter referred to as events) provided notice of happening of any such eventuality is given by party to other within 21 days from the date of occurrence thereof, neither party shall by reason of such event be entitled to terminate this contract nor shall either party have any claim for damages against other in respect of such non- performance or delay in performance, and deliveries have been so resumed or not shall be final and conclusive.

Further, that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days, either party may, at least option to terminate the contract.

15. Insolvency etc:

In the event of the firm being adjudged insolvent or having a receiver appointed for it by a court or any other order under the Insolvency Act made against them or in the case of a company the passing any resolution or making of any order for winding up, whether voluntary or otherwise, or in the event of the firm failing to comply with any of the conditions herein specified IGIMS, Patna shall have the power to terminate the contract without any prior notice.

16. Breach of Terms and Conditions:

In case of breach of any terms and conditions as mentioned above, the Competent Authority, will have the right to cancel the work order/ job without assigning any reason thereof and nothing will be payable by IGIMS, Patna in that event the security deposit shall also stands forfeited.

17. Subletting of Work:

The firm shall not assign or sublet the work/job or any part of it to any other person or party without having permission in writing of IGIMS, Patna, which will be at liberty to refuse if thinks fit. The tender is not transferable. Only one tender shall be submitted by one tenderer.

18. Right to call upon information regarding status of work:

The IGIMS, Patna will have the right to call upon information regarding status of work / job at any point of time. To assist in the analysis, evaluation and computation of the bids, the Purchase Committee of IGIMS, Patna, may ask bidders individually for clarification of their bids. The request for clarification and the response shall be in writing but no change in the price or substance of the bid offered shall be permitted.

19. All payment shall be made by Cheque only:

The IGIMS, Patna shall be at liberty to withhold any of the payment in full or in part subject to penalties mentioned in the preceding Para.

The term 'Payment' mentioned in this Para includes all types of payment due to the contractor arising on account of this contract excluding EMD and Security Deposit governed by separate clauses of the contract.

20. Disclaimer:

The near relatives of employees of IGIMS, Patna are prohibited from participation in this tender. The near relative for this purpose are defined as:

Members of a Hindu undivided Family, Their spouses the one related to the other in the manner as father, son(s), Son's wife (daughter-in-law), daughter(s) and daughter's husband (sons-in-law) brother (s) and brother's wife, sister(s) and sister's husband, brother(s)- in-law.

21. Fall Clause:

If at any time during the period of contract, the price of tendered items is reduced or brought down by act of the Central or State Govt. or by the tenderer himself, the tenderer shall be morally and anv law or statutorily bound to inform IGIMS, Patna immediately about such reduction in the contracted prices. The IGIMS. Patna is empowered to unilaterally effect such reduction as is necessary in rates in case the such reduction of rates. In case of any enhancement in tenderer fails to notify or fails to agree for Excise Duty/Custom Duty due to statutory Act of the Govt. after the date of submission of the tenders and during the tender period, the additional excise duty/custom duty so levied will be allowed to be charged extra as separate item without any change in price structure of the items approved under the tender. For claiming the additional cost on account of the increase in excise duty/custom duty, the tenderer should produce letter from the concerned excise authorities indicating his commitment for the supply

made to the IGIMS, Patna on account of the increase in excise duty/custom duty.

22. Arbitration:

If any difference arises concerning this agreement, its interpretation on payment to the made thereunder, the same shall be settled out by mutual consultation and negotiation. If attempts for conciliation do not yield any result within a period of 30 days, either of the parties may make a request to the other party for submission of the dispute for decision by an Arbitral Tribunal containing Sole Arbitrator to be appointed by the Secretary, Department of Legal Affairs. Such requests shall be accompanied with a panel of names of three persons to act as the sole arbitrator. In case of such arbitrator refusing, unwilling or becoming incapable to act or his mandate having been terminated under law, another arbitrator shall be appointed in the same manner from among the panel of three

persons to be submitted by the claimant. The provision of Arbitration and Conciliation Act, 1990 and the rule framed there under and in force shall be applicable to such proceedings.

23. Legal Jurisdiction:

The agreement shall be deemed to have been concluded in Patna, Bihar and all obligations hereunder shall be deemed to be located at Patna, Bihar and Court within Patna, Bihar will have Jurisdiction to the exclusion of other courts.

24. Periodicity/ Duration of Tender:

The tender is **initially for a period of one year** and may be extended for a further period of 12 months or more on year to year basis with mutual consent on the same terms and conditions and rates.

25. Other Conditions:

- The successful firm will be required to do the work / job for a period of one year from the date of award the contract. IGIMS, Patna shall, however, reserve the right to terminate the contract at any time without assigning any reason.
- The job will be entrusted on the basis of all inclusive rate contract on as is where is and competitive rates basis.
- The firm should also have a valid TIN number, which should be mentioned.
- The Tenderers should furnish a copy of S.T. /C.S.T./VAT registration number, the State / U.T. of registration and the date of such registration. Tenders not complying with this condition will be rejected.

- The tenderers should submit along with the tender, a photostat copy (duly certified) of the last Income Tax return and copy of current valid income tax clearance certificate (IT CC) otherwise tender may be ignored.
- IGIMS Patna shall be the sole authority to cancel or amend the order, as per requirement, and also to place order for supply of item beyond office hours/holidays/place of supply for which, no additional payment shall be made.
- The tendering Firm/Agency/Company shall be bound by the details furnished by him/her to the IGIMS Patna while submitting the tender or at subsequent stage. Upon selection of the tendering Firm/Agency/Company, if at any stage, the documents furnished by him/her is found to be false or the quality of the articles or rates are found of poor quality/different specifications, it would be deemed to be a breach of terms of contract, the contract shall be cancelled at the discretion of competent authority and performance security shall be stand forfeited.
- If the Local Authorized Dealer of any Manufacturing Company is participating in this Tender, he will allowed to be submit the Manufacturer's Companies duly certified Audited Accounts, Copy of Income Tax Return for Last Three Financial Years. Rest document like Affidavit, EMD, TIN No., VAT No., Registration Certificate of the Firm shall be submitted by Local Authorized Dealer / Firm of his own.
- The rate quoted by the participating Firm/Agency/Company should not be higher than the rates at which the items are being supplied by it to other Government Institutes/Ministries/Departments/PSUs. If subsequently it is found that the firm has supplied such items at higher rates to the Indira Gandhi Institute of Medical Sciences (IGIMS), Patna, the excess amount shall be recovered from the Performance Security and/or from the pending bills of the firm along with a penalty of Rs. 5000/- (Five Thousand) on firm on such occasion and shall be doubled on subsequent occasions.
- The selected tendering Firm/Agency/Company shall also provide the name and mobile number of a key person, who can be contacted at any time, even beyond the office hours on holidays. The person should be capable of taking orders and making arrangement for supply of the desired items even on short notice to IGIMS, Patna.
- In case the quality of goods supplied are not in conformity with the standard given in tender and as per the samples supplied or the supplies are found defective at any stage these goods shall immediately will be taken back by the supplier and will be replaced with the tender quality goods, without any delay. The Purchase Committee reserves all right to reject the goods if the same are not found in accordance with the required description / specifications and liquidates damages shall be charged.
- The Specification and quantity of the item needed is mentioned in Financial Bid but it is approximate detail and is subject to increase/decrease at the discretion of the Purchase Committee of IGIMS, Patna. The payment would be made for actual supply taken and no claim in this regard should be entertained.
- If a tendering Firm/Agency/Company decides to withdraw from the bidding before the financial bids are opened, the IGIMS, Patna shall have the authority to forfeit the EMD deposited with the technical bid.
- Full description & specifications, make/brand and name of the manufacturing firm must be clearly mentioned in the tender failing which the tender will not be considered. The tendered must also mention whether the goods are imported / indigenous. Descriptive literature / catalogues must be attached with the tender in original failing which tender may be ignored.
- The rate quoted should be firm and final and written in ink or typed against each item and should in no case be overwritten.
- Each page of the Tender Notice to be signed and stamped by the bidder in token of having accepted the same.

- The IGIMS, Patna reserves the right to place an order for supply of any items mentioned in the Financial Bid or otherwise, to any other firm(s) in emergency/unavoidable situation.
- Details regarding item description, quantity, Company preference etc. has been given against each item in the Schedule of Requirement. Rates should strictly be quoted accordingly. Items where brand has not been indicated, rates should be quoted for best available/good quality product conforming to the prescribed/prevailing standards.
- The quantity shown in the schedule is an estimated requirement and there is no guarantee that the order for the same will be placed; it may be change as per requirement of the hospital or can be totally cancelled after giving order by the competent authority.
- All the damages in transit or manufacturing defect etc., detected at the time of supply shall be at the risk and cost of the supplier.
- All samples / supplies rejected shall be removed by the supplier or through his authorized representative within the period of one week from the date of submission / intimation. If the goods are not collected within the stipulated period it will be disposed off in any manner deemed fit by the IGIMS Patna.

Sd/-Director, I.G.I.M.S. – Patna.

Chapter - IV Contract Form

TENDER FORM - 1 - TECHNICAL INFORMATION AND UNDERTAKING.

(Tenderer may use separate sheet wherever required)

A.: To be filled by the bidder and submitted along with the **Technical Bid**.

Sl. No.	Terms & Conditions as per Bidding Document	Page No.	Remarks
1.	 Status of Bidder: Manufacturer or Authorized Agent of the Manufacturer Whether Public Undertaking, Public Ltd., Private Ltd. Company or Proprietary Firm 		
	(Please attach Notary certified MANUFACTURER'S AUTHORISATION FORM as per FORMAT placed at Annexure – II)		
2.	Power of Attorney as per Annexure - V attached in favour of person to sign, submit and negotiate the bid.		
3.	Certificate towards market standing of minimum 03 years in the area of supply of various consumables in a hospital.		
4.	List of Major Customer may be given on a separate sheet and proof of satisfactory supply, if any (Annexure – VI)		
5.	Statements of turnover per year for last three successive years duly certified by the Chartered Accountants.		
6.	Whether Bidders have quoted for each and every item mentioned in Notice.		
7.	Whether rates quoted are inclusive of all taxes or not.		
8.	Whether rates are quoted as per format mentioned in the Bidding Document or not.		
9.	Affidavit to the effect that the bidder is not blacklisted by any Govt. agency or have no pending case either Civil or Criminal against them.		
10.	Affidavit, to the effect that the bidder is not supplying the quoted item(s) to any other Govt. / Pvt. Organizations / Institutions / Hospitals at the rate lower than the rate quoted against this tender.		
11.	Quality Assurance Certificate like ISI, ISO-9002, IP/BP, CE, FDA (US) or any other (please specify)		
12.	Bid Security amount deposited is enclosed or not. If yes, please mention the details.		

r		
13.	Details of the cost of the Tender documents worth Rs. 1, 000/- (Rs. One Thousand only)	
14.	Acceptance of all terms / conditions mentioned in the Tender Notice.	
15.	PAN and copies of Income Tax Returns for the last three years.	
16.	Sale Tax Registration No. & Duly attested copy of sales tax registration certificate.	
17.	TIN No. with Proof	
18.	Undertaking as per Annexure – I.	
19.	Declaration as per Annexure – VII.	
20.	Any other information important in the opinion of the tenderer	

Note:

Page number/serial number may be given to each and every page of Tender Documents and photocopies of the documents attached. Mention Page number, wherever the copy (ies) of the document(s) is kept.

In case of non-fulfillment of any of the above information/ document(s), the Tender will be summarily rejected without giving any notice.

(Signature of the Tenderer with stamp of firm)

Dated: Place:

Chapter - V Financial Bid

Format for Financial Bid

(To be submitted on the letterhead of the company / firm)

List of Items

Group – A: Department of Anatomy

Sl. No.	Name of Items	Unit in which items to be procured	Make / Brand / Specification	Rate per unit of items (Excluding Tax) (In Rs.)	TAX / VAT	Total Rate Including TAX / VAT
1.	Mortuary Cooler /					
2.	Cabinet, Charts,					
3.	MICROSCOPIC					
4.	HISTOLOGY GLASS SLIDES,					
5.	MICROSCOPIC					
6.	HISTOLOGY GLASS					
7.	SLIDES, Glass Jar etc.					
8.						
9.						
10.	Details as per list					
11.	Details as per list attached.					
12.	attacheu.					
13.						
14.						
15.						
16.						

<u>Group – B: Department of Forensic Medicine</u>

Sl. No.	Name of Items	Unit in which items to be	Make / Brand / Specification	Rate per unit of items (Excluding	TAX / VAT	Total Rate Including TAX / VAT
		procured		Tax) (In Rs.)		
1.	Models, Specimen,					
2.	Showcase, Human					
3.	Skeletron Material,					
4.	Human Body					
5.						
6.	Details as per list					
7.	attached.					
8.						
9.						
10.						

Group – C: Department of ENT

Sl. No.	Name of Items	Unit in which items to be procured	Make / Brand / Specification	Rate per unit of items (Excluding Tax) (In Rs.)	TAX / VAT	Total Rate Including TAX / VAT
1. 2.	Brain Evoke					
3.	Response Audiometry, Two					
4. 5.	Channel Diagnostic					
<i>5</i> .	Audiometer,					
7.	IMPEDANCE					

8.	AUDIOMETER.			
9.				
10.	Details as per list			
	attached.			

Sl. No.	Name of Items	Unit in which items to be procured	Make / Brand / Specification	Rate per unit of items (Excluding Tax) (In Rs.)	TAX / VAT	TotalRateIncludingTAX / VAT
1.	Models as per list					
2.	attached.					
3.						
4.						
5.						
6.						
7.						
8.]					
9.]					
10.]					

1. I/We have gone through the terms & conditions as stipulated in the tender enquiry document and confirm to accept and abide the same.

2. No other charges would be payable by the Institute.

Authorized signatory of the bidder with seal.

Note: The requirement given for any item is only tentative. The order will be given in phase manner as per requirement of the institute. It may increase or decrease by the institute.

(To be attached in Technical Bid)

Undertaking

That I/we have carefully studied all the terms & conditions of NIT and shall abide by it.

That I/We shall supply the items of requisite quality.

That I/We undertake that the information given in this tender are true and correct in all respect and I/We hold the responsibility for the same.

That I/We undertake that sample of items will be kept ready for inspections by the IGIMS, Patna. I/We shall be responsible for the cancellation of tender if samples are not up to mark.

(Signature of the Tenderer with stamp of firm)

Date: Place:

FORMAT FOR MANUFACTURER'S AUTHORISATION

To, The Director, Indira Gandhi Institute of Medical Sciences (IGIMS), Sheikhpura, Patna – 800 014 (Bihar, India)

Dear Sir,

Ref.	Your	Tender N We,		No.:							, ċ	lue on who
	proven tation)	and reputab	ole ma	nufacturers having	of	(name	and	-	<i>i of the</i> ories	Items	offered	<i>in the</i> at
				,			hereb	у	autho (nan		address	Messrs of the

agent) to

submit a Quotation, process the same further and enter into a supply contract with you against your requirement as contained in the above referred Quotation Form for the above items manufactured by us.

We further confirm firm individual other than that no supplier or or Messrs. _ (name and address of the above agent) is authorized to submit a tender, process the same further and enter into a supply contract with you against your requirement as contained in the above referred Quotation Form for the above items manufactured by us.

We also hereby confirm that we would be responsible for the satisfactory execution of supply contract placed on the authorized agent.

We also confirm that the price quoted by our agent shall not exceed than that which we would have quoted directly.

Yours faithfully,

[Signature *with date, name and designation*] for and on behalf of Messrs [*Name & address of the manufacturers*]

Note:-

This letter of authorization should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer.

Original letter may be enclosed with Quotation Form during submission in the sealed cover.

ANNEXURE – "III"

BANK GUARANTEE FORM FOR EMD

Whereas				(here	einafter	called	d the "H	Bidder") h	as su	ibmitted it	s quota	tion
dated			for the sup	oply of _					(ł	nereinafter	called	the
"tender")	against	the purcha	ser's tender	enquiry	No						Know	all
persons	by	these	presents	that	we							of
			(He	reinafter	called	the	"Bank") having	our	registered	office	e at
			are	bound u	into			_		(herein	after ca	alled
the "Purch	naser) in	the sum of _				for w	hich pay	ment will	and t	truly to be	made to	the
said Purch	naser, the	Bank binds	itself, its suc	cessors a	nd assig	ns by	these pr	esents. Se	aled v	with the Co	mmon	Seal
of the said	l Bank th	is		day o	f	20	TI	ne conditi	ons of	this obligation	ation ar	e:

(1) If the Bidder withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.

(2) If the Bidder having been notified of the acceptance of his tender by the Purchaser during the period of validity:-

a) fails or refuses to furnish the performance security for the due performance of the contract,

b) fails or refuses to accept/execute the contract,

or

or,

c) if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged.

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition(s).

This guarantee will remain in force for a period of 45 days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

(Signature of the authorized officer of the Bank) Name and designation of the officer Seal, name & address of the Bank and address of the Branch

BANK GUARANTEE FORM FOR PERFORMANCE SECURITY

(To be executed by any scheduled bank, on a non-judicial stamp paper under bank's covering letter mentioning address of the bank)

To, Indira Gandhi Institute of Medical Sciences, Patna Sheikhpura, Patna – 800 014 (Bihar)

In consideration of Indira Gandhi Institute of Medical Sciences, Patna [hereinafter referred to as IGIMS', which expression unless repugnant to the context and meaning thereof shall include its successors and assigns] having agreed to exempt _ [hereinafter referred to as 'supplier /contractor' which M/s expression unless repugnant to the context and meaning thereof shall include its successors and assigns] from depositing __) towards security / performance guarantee in with IGIMS a sum of Rs. ___ (Rupees ____ lieu of the said contractor having agreed to furnish a bank guarantee for the said sum of Rs. _ (Rupees _) as required under the terms and conditions of contract / work order no dated [hereinafter referred as the order'] placed by IGIMS on the said supplier /contractor. We. the bank [hereinafter referred to as 'the bank' which expression shall include its successors and hereby undertake to pay IGIMS an amount not exceeding Rs. assigns] do (Rupees _) on the demand made by IGIMS on us due to a breach committed by the said supplier /contractor of the terms and conditions of the contract /order.

1. ______ We_____ the bank hereby undertake to pay the amount under the guarantee without any demur merely on a demand from IGIMS stating that there is a breach by the supplier / contractor of any of the terms and conditions contained in the order or by the reasons of the supplier's / contractor's failure to comply with the terms and conditions as stipulated in the order or amendment(s) thereto. The demand made on the bank shall be conclusive as to the breach of the terms and conditions of the order and as regard to the amount due and payable by the bank under this guarantee, notwithstanding any dispute or disputes raised by the said supplier / contractor regarding the validity of such breach and we agree to pay the amount so demanded by IGIMS without any demur. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs._______(Rupees ______).

2. We, the bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said order and that it shall continue to be enforceable till the dues of IGIMS under or by virtue of the said order have been fully paid and its claim satisfied or discharged or till IGIMS certifies that the terms and conditions of the order have been fully and properly carried out by the supplier / contractor and accordingly discharge the guarantee.

3. We the bank, undertake to pay to IGIMS any money so demanded notwithstanding any dispute or disputes raised by the said supplier /contractor in any suit or proceedings pending before any court or tribunal relating thereto as our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under and the said supplier / contractor shall have no claim against us for making such payment.

4. We _______ the bank further agree that IGIMS shall have full liberty, without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the order / contract or to extend time of performance by the said supplier / contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the IGIMS against the said supplier / contractor and to forbear or enforce any of the terms and conditions relating to the order and shall not be relieved from our liability by reason of any such variation or extension being granted to the said supplier / contractor or for any forbearance, act or omission on the part of IGIMS or any indulgence by IGIMS to the supplier / contractor or by any such matter or thing whatsoever which under the law relating to sureties would but for this provisions have effect of so relieving us.

5. Our liability under this guarantee is restricted to Rs. ______ (Rupees ______) and shall remain in force up to ______ unless demand or claim under this guarantee is made on us in writing within 6 months from the date of expiry viz. ______. We shall be discharged from all liabilities under this guarantee thereafter.

6. This guarantee will not discharge due to change in the constitution in the bank or the said supplier / contractor.

7. The bank hereby agrees to address all the future correspondence in regard to this bank guarantee to The Director, Indira Gandhi Institute of Medical Sciences, Patna.

8. We,	the bank lastly unde	take not to revol	te this guarantee du	ring its currency exce	pt with the previous
consent of the IGIMS in	writing.				
Signed on the	day of				

Signature For the Bank Witness: Name(s) & Designation(s) Name & Address

POWER OF ATTORNEY

(On a Stamp Paper of relevant value)

I/ We hereby also undertake that I/we will be responsible for all action of Sri/Smt...... undertaken by him/her during the tender process and thereafter on award of the contract. His / her signature is attested below Dated this the ____day of 201_ For______

(Name, Designation and Address) Accepted

(Signature) (Name, Title and Address of the Attorney) Date: ______

Format of Experience certificate

Contract No./Supply order No.	Name of the Purchaser*	Description of work	Qty Supplie d	Value of Contract (Rs. In Lakhs)	Date of issue of work order	Stipulated period of completion	Actual date of completion

* Attach certificate(s) of payments.

DECLARATION

From:-M/s.....

To The Director, Indira Gandhi Institute of Medical Sciences, Sheikhpura, Patna – 800 014 (Bihar)

1.

I, ______Son / Daughter / Wife of Shri______Proprietor/Director authorized signatory of the agency/Firm, mentioned above, is competent to sign this declaration and execute this tender document;

2.

I have carefully read and understood all the terms and conditions of the tender and undertake to abide by them;

3.

The information / documents furnished along with the above application are true and authentic to the best of my knowledge and belief. I / we, am / are well aware of the fact that furnishing of any false information / fabricated document would lead to rejection of my tender at any stage besides liabilities towards prosecution under appropriate law.

4.

I/We further undertake that none of the Proprietor/Partners/Directors of the Agency/agency was or is Proprietor or Partner or Director of any Agency with whom the Government have banned /suspended business dealings. I/We further undertake to report to the Director, IGIMS, Patna immediately after we are informed but in any case not later 15 days, if any Agency in which Proprietor/Partners/Directors are Proprietor or Partner or Director of such a Agency which is banned/suspended in future during the currency of the Contract with you.

Yours faithfully,

(Signature of the Bidder)

Name: Designation Seal of the Agency

Date: Place:

Address:

<u>Group – A</u> Department of Anatomy

Part – A:

1. Name of the Equipment: Mortuary Cooler / Cabinet for Storing of Six Bodies

Technical Specification:

- Exterior & Interior Pre-painted GI Sheet
- Vapour proof incandescent lamp.
- Electronic temperature Indicator-cum-Controller.
- 3 Piece Carriage Assembly
- 1 Piece Stainless Steel Tray
- Width / Depth / Height: Should be approx. 2946mm / 2362mm / 1745mm
- Height with Cooling Unit & PCC Platform: approx. 2215mm
- Refrigeration System Unitary, Type: RTU 10
- Temperature range: $+2^{\circ}$ C to $+8^{\circ}$ C.
- Power Supply: 230±10% / Single Phase / 50 Hz.
- Equipment should be warranted for a period of three years from the date of successful installation and commissioning.
- 2. Monocular Student Microscope (preferably Olympus Magnus HB or equivalent)
- 3. Multimedia Projector (Brightness 3, 500 Lumens) with Screen, Pointer, accessories for fixing at ceiling

Part - B: CHARTS

CHARTS THICK LAMINATED BOTH SIDE WITH LOOP FOR WALLL HANGING CHARTS THICK LAMINATED ON BOTH SIDE AND FIXED TO A RUGGED BOARD WITH PROVISION FOR WALL HANGING.

EACH CHART SIZE: 26" X 20" CHARTS ON ANATOMY:

- 1. The Muscular System.
- 2. The female muscular System.
- 3. The Skeletal Systems.
- 4. The Vertebral Column.
- 5. The Trigeminal Nerve and its central connect on.
- 6. The Nervous System.
- 7. The Brain.
- 8. The Anatomy of the Brain.
- 9. The Spinal Nerves.
- 10. The Autonomic Nervous System.
- 11. The Vascular System and Vis Cera.
- 12. The Heart.
- 13. The Lymphatic System.
- 14. The Human Skull.
- 15. Skull External and Internal Surface.
- 16. The Head and Neck.
- 17. The Respiratory System.
- 18. The Eye.
- 19. The structural Anatomy of the eye.
- 20. The Eye... Anterior & Posterior Chambers.
- 21. The Ear, Nose & Throat.

- 22. The Ear-Organs of hearing & Balance.
- 23. Pharynx & Larynx.
- 24. Anatomy of the inner ear.
- 25. Temporomandibular Joint (TMJ).
- 26. The Skin.
- 27. The Human Hair.
- 28. The Female Reproductive System.
- 29. The Male Reproductive System.
- 30. Pregnancy & Birth.
- 31. Female Reproductive System (Ant. & Patho).
- 32. The Female External Genital is (ant. & Patho).
- 33. Obstetrical Table.
- 34. Critical Stages of foetal Development. 1st lunar month-10th lunar month.
- 35. The Endocrine System.
- 36. The shoulder & Elbow (Ligament).
- 37. Shoulder, Arm, Elbow, Forearm & Head.
- 38. The Hand and wrist (Ligament).
- 39. Anatomy & Injuries of hand & wrist.
- 40. Ligaments of the Joint.

- 41. Male, Female Pelvis, Sacrum, Coccyx, Hip and Knee.
- 42. Hip Thigh, Knee and leg.
- 43. Rib, Verte, Sternum & Hyoid Bone.
- 44. The Foot and Ankle (Ligament).
- 45. Anatomy & Injuries of the foot & ankle.
- 46. Anatomy & Injuries of Shoulder.
- 47. Anatomy & Injuries of Hip.
- 48. Body Surface area & body weight.
- 49. Birth Weight.
- 50. Ankle and Foot.
- 51. Skeletal Maturation & Growth.
- 63. Bones of the Pelvis and Lower Limb.
- 64. Varicose Veins. Femur.
- 65. (a) Estimation of Age-Ages of Eruption of teeth.
 - (b) International system of numbering the Teeth ... (one Chart).
- 66. Lymp node stations-Stomach & upper Abdominal viscera.
- 67. (a) External Morphological Features In Male and Female.(b) Sex differentiating features in Skull. (one Chart).
- 68. (a)Sex differentiating features in Mandible.

<u>CHARTS ON EMBRYOLOGY:</u> <u>An overview of developmental</u>

- 1. The First and second week.
- 2. The Embryonic Period-The Early Embryonic Period.
- 3. The Late Embryonic Period.

Early Embryonic development and the placenta:

- 8. Ovary, Ova. And Follicle development.
- 9. The Menstrual cycle and pregnancy.
- 10. The Second week: Implantation and Extra embryonic Membrane. Formation.
- 11. The third week: Gastrulation.
- 12. Events related to Gastrulation.
- 13. The Fourth week: Folding of the Gastrula.
- 14. The Vertebrate body plan.
- 15. Formation of the placenta.
- 16. Summary of Ectodermal Derivatives.
- 17. Summary od Endodermal Derivatives.
- 18. Summary of Mesodermal Derivatives.

The Nervous System:

- 19. Formation of the Neural Plate.
- 20. Neurulation.
- 21. Neural Tube and Neural Crest.

- 52. The Digestive System.
- 53. The Liver.
- 54. The Urinary Tract.
- 55. The Kidney.
- 56. The Prostate.
- 57. The Anatomy of the Heart.
- 58. The Portal System.
- 59. Gastro esophageal Disorders Sndrum... Digestive Anatomy.
- 60. Origion, Development & Structure Cells.
- 61. Soft Tissues of the Lower Limb.
- 62. Soft Tissues of the Foot.
 (b) Sex differentiating features in Hipe Bone.
 (c) Sex differentiating features in (One Chart).
- 69. (a) Sex differentiating features in Articulated Pelvis In addition to those present in hipe bone & sacrum.
 (b) Sex differentiating Features in (One Chart).
- 70. (a) Ages of appearance and fusion of Different Ossification of bones.(b) Multiplication factor for different Bones for calculation of persons Of different parts of India.

Events, Processes & Abnormalities.

- 4. The Fetal period.
- 5. Induction.
- 6. Apoptosis.
- 7. Cell Adhesion and cell Migration.
 - 22. Neuron Development.
 - 23. Development of the Spinal cord layers.
 - 24. Development of Spinal Cord-Alar and Basal Plates.
 - 25. Peripheral Nervous system-Somatic versus Splanchnic Nerves.
 - 26. Development of the brain-Early brain Development.
 - 27. Further development of Forebrain, Midbrain and Hindbrain.
 - 28. Development of major brain structures.
 - 29. Development on Motor Nuclei in the Brainstem.
 - 30. Segmentation of the Hindbrain.
 - 31. Development of the Pituitary Gland.
- 32. Development of the Ventricles.

The Cardiovascular system:

- 33. Early Vascular System.
- 34. Vein Development-Early Development of the Cardinal Systems.
- 35. Transformation to the Postnatal Pattern.
- 36. Aortic Arch Arteries.
- 37. Intersegmenntal Arteries.
- 38. Formation of Blood vessels.
- 39. Formation of Heart tube-Formation of the left and right heart tubes.
- 40. Formation of a Single heart tube.
- 41. Bending of the heart tube.
- 42. Partitioning the heart tube.
- 43. Atrial Separation.
- 44. Completion of the Spiral (Aorticopulmonary) Septum.
- 45. Vertricular Separation & Bulbus Cordis.
- 46. Fetal Circulation.

The Respiratory System:

- 47. Early Primordia.
- 48. Formation of the Pleural Cavities.
- 49. The relationship between Lungs and Pleural Cavities.
- 50. Viscerel and Parietal Pleura.
- 51. Development Of the Diaphragm.
- 52. Airway Branching-The airway at 4 to 7 Weeks.
- 53. The Airway at 7 to 10 weeks.
- 54. Development of Brochioles & Alveoli.
- 55. Bronchial Epithelium Maturation.
- 56. Palate Formation in the Upper Airway.

The Gastrointestinal System & Abdominal Wall:

- 57. Early Primordia.
- 58. Formation of the Gut tube and Mesenteries.
- 59. Foregut, Midgut & Hindgut.
- 60. Abdominal Veins.
- 61. Foregut and Midgut Rotations.
- 62. Midgut loop.
- 63. Abdominal Foregut Organ Development.
- 64. Development of Pancreatic Acini and Islets.
- 65. Development of the Hindgut.
- 66. Development of the Abdominal Wall.

The Urogential System:

- 67. Early Primordia.
- 68. Division of the Cloaca.
- 69. Pronephros. Mesonephros & Metanephors.
- 70. Development of the Metanephros.

CHARTS ON HUMAN HISTOLOGY

- 71. Ascent & Rotation of the Metanephric Kidneys.
- 72. Primordia of the Genital System.
- 73. 8-week Undifferentiated (Indifferent) Stage.
- 74. Homologues of the External Genital Organs.
- 75. Gonadal Differentiation
- 76. Testis, Epididymis, And Ductus Deferens.
- 77. Descent of Testis.
- 78. Ova And Follicles.

The Musculoskeletal System:

- 79. Myotomes, Dermatomes & Sclerotomes.
- 80. Mesenchymal Primordia at 5 and 6 weeks,
- 81. Development of the Atlas, Axis, Ribs & Sternum.
- 82. Ossification in the Newborn Skeleton.
- 83. Joint Development.
- 84. Muscular System: Primordia.
- 85. Segmentation and Division of Myotomes.
- Bevelopment and organization of Limb Buds.
- 87. Rotation of the Limbs.

Head and Neck

- 88. Ectoderm, Endoderm & Mesoderm.
- 89. Pharyngeal (Branchial) Arches.
- 90. Ventral and Mids agittal Views.
- 91. Fate of the Pharyngeal Pouches.
- 92. Midsagittal View of the Pharynx.
- 93. Fate of the Pharyngeal Grooves.
- 94. Pharyngeal Arch Nerves.
- 95. Development of Pharyngeal Arch Muscles-Early Development.
- 96. Development of Pharyngeal Arch Muscles-Later Development.
- 97. Pharyngeal Arch Cartilages.
- 98. Cervical Plexus.
- 99. Orbit.
- 100. Ear Development.
- 101. Summary of Ear Development.
- 102. Cranial Nerve Neuron Components.
- 103. Parasympathetic Innervation and Unique Nerves.
- 104. Development of the face-3 to 4 weeks.
- 105. Development of the face-4 to 6 weeks.
- 106. Development of the face-6 to 10 weeks.
- 107. Palate Formation.
- 108. Interior view of Palate formation: Roof of Oral Cavity.
- 109. Floor of the Oral Cavity.
- 110. Developmental Coronal Sections.
- 111. Tooth Structure & Development.

THE EPITHELIAL TISSUE:

- 1. Simple Squamous Epithelium: Dissociated Squamous Epithelial Cells.
- 2. Simple Squamous Epithelium: Surface View of Peritoneal Mesotheliu.
- 3. Simple Squamous Epithelium: Peritoneal Mesothelium (Traverse Section).
- 4. Simple Columnar Epithelium.
- 5. Simple Columnar Epithelium: Cells with Striated Borders and Goblet Cells.
- 6. Stratified Squamous Epithelium (Transverse section).
- 7. Stratified Squamous Epithelium (Trangential section).
- 8. Pseudostratified Columnar Ciliated Epithelium.
- 9. Transitional Epithelium.

THE CONNECTIVE TISSUE:

- 10. Loose Irregular Connetive Tissue (Spread).
- 11. Cell of loose Connective Tissue in Sections.
- 12. Dense Irregular and Loose Connective Tissue (Elastin Stain).
- 13. Adipose Tissue.
- 14. Embryonic Connective Tissue.

THE CARTILAGE:

- 15. Fetal Cartilage: Developing Hyaline Cartilage.
- 16. Fetal Cartilage (Sectional View).
- 17. Mature Hyaline Cartilage.
- 18. Newly Formed hyaline Cartilage of the Trachea.
- 19. Fibrous Cartilage: Intervertebral Disk.
- 20. Elastic Cartilage: Epiglottis.

THE BONE:

- 21. Compact bone, Dried: Diaphysis of the Tibia (Transverse Section).
- 22. Compact bone, Dried; Diaphysis of the Tibia (Longitudinal Section).
- 23. Cancellous bone: Adult Sternum (Transverse Section, Decalcified).
- 24. Intramembranous Ossification: Mandible of Five-Month Fetus (Transverse Section, Decalcified).

THE MUSCLE TISSUE:

25. Smooth muscle Fibers.

- 26. Skeletal (Striated) Muscle Fibers (Dissociated).
- 27. Spinal Cord: Midthoracic Region (Panoramic View, Transverse Section).
- 28. Spinal Cord: Anterior Gray Horn and Adjacent Anterior White Matter.
- 29. Cerebellum (Sectional View, Transverse Section).
- 30. Cerebellum: Cortex.
- 31. Cerebral Cortex: Section Perpendicular to the Cortical Surface.
- 32. Cerebral Cortex: Central Area of the Cortex.

THE CARDIOVASCULAR SYSTEM:

- 33. Blood & Lymphatic Vessels.
- 34. Large Vein: Portal Vein (Transverse Section).

THE LYMPHOID SYSTEM:

- 35. Lymphoid Node, Secrional View.
- 36. Lymph Node: Reticular Fibers of the Stroma.
- 37. Lymph Node: Proliferation of Lymphocytes.
- 38. Palatin Tonsil.
- 39. Thymus Gland, Panoramic View.
- 40. Thymus Gland, Sectional View.
- 41. Spleen, Panoramic View.
- 42. Spleen, Red and White Pulp.
- 43. Spleen: Development of Lymphocytes and Related Cells.

THE INTEGUMENT:

- 44. Skin: Scalp.
- 45. Sebaceous Gland & Adjacent Hain Follicle.
- 46. Bulb of Hair follicle & Adjacent sweet Gland.

THE DIGESTIVE SYSTEM: THE ACCESSORY

DIGESTIVE ORGANS:

- 47. Lip Longitudinal Section.
- 48. Tongue, Circumvallate Papilla (Cross Section).
- 49. Tongue: Taste Buds.
- 50. Salivary Gland: parotid.
- 51. Salivary Gland: Submandibular.

THE DIGESTIVE SYSTEM: THE STOMACH:

52. Upper Esophagus: Wall (Transverse Section).

53. Stomach: Fundus of Body Region (Transverse Section)

THE DIGESTIVE SYSTEM: THE SMALL & LARGE INTESTINE:

- 54. Small Intestine: Duodenum (Longitudinal Section).
- 55. Small Intestine: Jejunum-Ileum (Transverse Section).
- 56. Intestinal Glands with Paneth and Enteroendocrine Cells.
- 57. Small Intestine: Ileum withe Aggregated Nodules (Peyer's Patch)
- 58. Small Intestine: Sections of Villi.
- 59. Large Intestine: colon Wall (Transverse Section).
- 60. Appendix (Panoramic View, Transverse Section)
- 61. Rectum (Panoramic View, Transverse Section).

THE DIGESTIVE SYSTEM: THE ACCESSORY DIGESTIVE ORGANS:

- 62. Hepatic (Liver) Lobule (Sectional View, Transverse Section).
- 63. Liver: Kuppfer Cells (India ink Preparation).
- 64. Liver: Bile Canaliculi (Osmic Acid Preparation).
- 65. Pancreas (Sectional View).
- 66. Pancreatic Acini (Special Preaparation).
- 67. Pancreatic Islets (Special Preaparation).

THE RESPIRATORY SYSTEM:

- 68. Trachea (Panoramic View, Transverse Section).
- 69. Trachea (Sectional View).
- 70. Trachea (Sectional view, Elastic Fiber Stain).
- 71. Lung (Panoramic View).

THE URINARY SYSTEM:

- 72. Kidney: Cortex and pyramid (Panoramic View).
- 73. Kidneys: Deep Cortical Area And Outer Medulla.

- 74. Kidney Cortex: The Juxtaglomerular Apparatus.
- 75. Ureter (Transverse Section).
- 76. Ureter Wall (Transverse Section).
- 77. Urinary Bladder, Superior Surface: Wall (Transverse Section).
- 78. Uninary Bladder:Mucosa (Transverse Section).

THE ENDOCRINE SYSTEM:

- 79. Hypophysis or Pituitary Gland (Panoramic view, Sagittal Section).
- 80. Hypophysis or Pituitary Gland (sectional View).
- 81. Thyroid gland (General View.
- 82. Thyroid Gland: Follicles (Sectional View).
- 83. Thyroid Gland: Parafollicular Cells.
- 84. Adrenal (Suprarnal) Gland.

THE MALE REPRODUCTIVE SYSTEM:

- 85. Testis.
- Seminiferous Tubules, Straight Tubles, Rete Testis & Ductuli Efferentes (Efferent Ducts).
- 87. Prostate Gland Withe Prostatic Urethra.
- Prostate Gland (Sectional View, Section from Main Prostatic Glands)

THE FEMALE REPRODUCTIVE SYSTEM:

- 89. Ovarian Cortex, Primary and growing follicles.
- 90. Ovary: Wall of a mature follicle.
- 91. Uterine tube: Ampulla (Panoramic view, Transverse Section).
- 92. Uterine tube: Mucosal Folds, Early proliferative phase).
- 93. Uterine tube: mucosal Folds, Early pregnancy.
- 94. Uterus: Proliferative (Follicular) Phase.
- 95. Mammary Gland, Inactive.
- 96. Mammary Gland During First half of Pregnancy.
- 97. Mammary gland during Seventh month of Pregnancy.
- 98. Mammary Gland during Lactation.

Part - C: MICROSCOPIC HISTOLOGY GLASS SLIDES

1ST MBBS MICROSOCOPIC HISTOLOGY GLASS SLIDES. (Tissue Section)

- 1. Elastic Cartilage.
- 2. Hyaline Cartilage.
- 3. White fibro cartilage.
- 4. Bone t.s.
- 5. Bone I.s
- 6. Skeletal muscle t.s.
- 7. Cardiac muscle.
- 8. Optic nerve.
- 9. Spinal ganglion.
- 10. Sympathetic ganglion.
- 11. Medium size artery.
- 12. Aorta.
- 13. Inferior vena cava.
- 14. Lymph node.
- 15. Spleen.
- 16. Tonsil.
- 17. Thymus.
- 18. Mucous gland
- 19. Serous gland.
- 20. Mixed gland.
- 21. Pancreas.
- 22. Oesophagus.
- 23. Stomach fundus.
- 24. Pyloric end of stomach.
- 25. Duodenum.
- 26. Jejunum.
- 27. Ileum.
- 28. Large intestine
- 29. Appendix.
- 30. Liver.
- 31. Gall bladder.

- 32. Lung.
- 33. Trachea.
- 34. Kidney.
- 35. Ureter.
- 36. Urinary baldder.
- 37. Testis.
- 38. Epididymis.
- 39. Vas deferns.
- 40. Prostate.
- 41. Ovary with griffin follicle & corpus luteum.
- 42. Fallopian tube.
- 43. Uterus.
- 44. Placenta.
- 45. Thyroid with parathyroid.
- 46. Suprarenal gland
- 47. Pituitary gland.
- 48. Spinal cord.
- 49. Cerebellum.
- 50. Cerebrum
- 51. Skin t.s.
- 52. Skin l.s.
- 53. Thick skin.
- 54. Tongue.
- 55. Retina.
- 56. Cornea.
- 57. Umbilical cord.
- 58. Eyelid.
- 59. Lacrimal gland.
- 60. Active mammary gland.
- 61. Mixed nerve.

Part – D: LIST OF MODELS ON MEDICAL EMBRYOLOGY:

1. EMBRYONIC DEVELOPMENT

- FROM 1ST. week to 7 week.
- 2. Various Stages of Mitosis.
- 3. 1st. & 2nd Meiotic Divisions.
- 4. Events occurring during the 1st. And 2nd maturation division.
- 5. Normal Maturation Division.
- 6. Embryo at the end of 3^{rd} . Week.
- 7. Maturing Follicle.
- 8. Maturation of Oocyte.
- 9. Spermatogenesis in human.
- 10. Important stages in transformation of the human spermatid in to spermatozoon.

11. Abnormal Germ Cell in Male & Female.

FIRST WEEK OF DEVELOPMENYT:

- 12. Changes occurring in the primordial follicle during the first half of the ovarian cycle.
- 13. Graafian follicle just before rupture.
- 14. Relationship of fimbriae and ovary.
- 15. Development of the zygote from the two-cell state to the late morula stage.
- 16. Section of a 107=-cell human blastocyst.
- 17. Events taking place during the 1st. Week of human development.

SECOND WEEK OF DEVELOPMENT:

- 18. 9-Day human blastocyst.
- 19. 12-Day human blastocyst.
- 20. 13-Day human blastocyst.

THIRD WEEK OF DEVELOPMENT:

- 21. A Schematic view of an implantation site at the end of the 2^{nd} . Week.
- 22. A Schematic view of the dorsal side of the germ disc from a 16 day embryo.
- 23. Formation of notochord.
- 24. Development of a villus.
- 25. Longitudinal section through a villus at the end of the 3rd week of development.
- 26. A presomite embryo and the trophoblast at the end of the 3^{rd} week.

EMBRYONIC PERIOD.....3rd.to 8th weeks:

- 27. 16 Day presomite embryo.
- 28. 19 Day presomite embryo.
- 29. Dorsal view of human embryo of 22-days seven distinct somites is visible on each side of neural tube.
- 30. Lateral view of a 14-somite embryo.
- 31. Transverse section showing development of the mesodermal germ layer day 17, day 19, day 20 day, 21.
- 32. Successive stages in development of a somite 4 stages.
- 33. A transverse section through a 21 day embryo in the region of the mesonephros.
- 34. Extraembryonic blood vessel formation in the villi.
- 35. Sagittal middling sections of embryos at various stages of development to demonstrate cephalocaudal folding and its effect on position of the endoderm-lined cavity.
- 36. Transverse section through embryos at various stages of development to show the effect of lateral folding on the endoderm-lined cavity.

FETAL MEMBRANE & PLACENTA:

- 37. Human embryo at the beginning of the 2nd. Month of development.
- 38. Structure of villi at various stages of development.
- 39. The Relation of fetal membranes and wall of the uterus.
- 40. Placenta in the second half of pregnancy.
- 41. Full term placenta.
- 42. Development of dizygotic twins. Each embryo has its own amnion.
- 43. The relation of fetal membranes in monozygotic twins.

SPECIAL EMBRYOLOGY.

- 44. Development of the limb buds.
- 45. Formation of the vertebral column at various stages of development.
- 46. Thoracic region of a 5 week embryo. (T. section)
- 47. Transverse section through an embryo of approx. 19days.
- 48. Transverse Section through embryo at various stages of development.
- 49. Development of the diaphragm. 5th week.

CARDIOVASCULAR SYSTEM:

- 50. Developing Heart tube.
- 51. Fromation of single heart tube from paird primordial.
- 52. Formation of Cardiac loop.
- 53. Section through the heart of a 30 day embryo showing the primary interventricular foramen and entrance of the atrium into the primitive left ventricle.
- 54. Dorsal views of two stages in the development of the sinus venosus at 24 days, 35 days.
- 55. Final stages in development of the sinus venosus and great veins.
- 56. Atrial septa at various stages of development.
- 57. Formation of the atrioventricular valves and chordate tendineae.
- 58. Normal atrial septum formation.
- 59. Section through the heart of an embryo at the end of the 7th week.
- 60. Main intraembryonic and extraembryonic arteries and veins.
- 61. Aortic arches at the end of the 4th week and 6th week.
- 62. Double aortic arch.
- 63. Main components of the venous and arterial systems in a 4-mm embryo.
- 64. Development of the viteline and umbilical veins during 4th & 5th week.
- 65. Development of viteline and umbilical veins in the 2^{nd} and 3^{rd} months.
- 66. Development of inferior vena cava, azygos vein and superior vena cava.
- 67. Human Virculation before birth.
- 68. Human circulation after birth.

RESPIRATORY SYSTEM:

- 69. Successive stages in development of the respitatory diverticulum.
- 70. Successiv stages in development of the traches and lungs... 6 weeks & 8 weeks.
- 71. Lungs buds into the pericardioperitoneal canals.

DIGESTIVE SYSTEM:

- 72. Sagittal sections through embryos at various stages of development to demonstrate the effect of cephalocaudal and lateral flexion on position of the endoderm-lined cavity.
- 73. Successive stages in development of the respiratory diverticulum and esophagus through partitioning of the foregut.
- 74. Transverse sections through the region of the duodenum at various stages of development.
- 75. Successive stages in development of pancreas.
- 76. Pancreas during 6th week of development.
- 77. Successive Stages in development of the cecum and appendix.

UROGENITAL SYSTEM:

- 78. T section through embryos at various stages of development to show formation of nephric tubules.
- 79. Relationship of hindgut and cloaca at the end of the 5the week.
- 80. Development of the renal pelvis, calyces and collecting tubules of the metanephros.
- 81. Development of a metanephic excretory unit.

- 82. Development of the urogenital sinus into the urinary bladder and definitive urogenital sinus.
- 83. T Section throught the testis in the 8th week of development.
- 84. T section of the ovary at the 7th week of development showing degeneration of the primitive sex cord.
- 85. Genital duct in the 6^{th} week of development in the male.
- 86. Formation of uterus & vagina at various stages.
- 87. Development of the external genitalia in the female at 5 moths gestation.
- 88. Desecent of testis.

HEAD & NECK:

- 89. Development of the pharyngeal arches.
- 90. Pharyngeal pouches as out pocketing of the foregut.
- 91. Development of the pharyngeal clefts & pouches.
- 92. Ventral view of the palate, gum, lip & nose.
- 93. Formation of tooth at successive stages of development.

EAR:

- 94. Development of Scala tympani and scala vestibule.
- 95. Development of organ of corti.
- 96. Development of semicircular canals.

EYE:

- 97. Section of the eye of a 7-week embryo.
- 98. Development of the iris and ciliary body.
- 99. Transformation of the optic stalk in to the optic nerve.

CENTRAL NERVOUS SYSTEM:

- 100. Dorsal view of a late presomite embryo. Of 18 days.
- 101. Dorsal view of human embryo at aprox. Day 22.
- 102. Various stages of development of a neuroblast.
- 103. Origion of nerve cell and various type of glial cells.
- 104. Terminal end of the spinal cord in relation to that of the vertebral column at various stages of development.
- 105. Various types of spina bifida.
- 106. T section through the caudal part of the metencephalon.
- 107. Saggittal section: development of the cerebellum.
- 108. Stages in the development of the cerebellar cortex.
- 109. Development of gyri and sulci on the lateral surface of the cerebral hemisphere.
- 110. Formation of sympathetic ganglia.

NEW MODELS OF EMBRYOLOGY:

- 1. Frontal view of the developing heart (behind the pericardial sac).
- 2. An oblique section extending from the roof of primitive atrium to the floor of ventricle showing septation.
- 3. An oblique section from the roof of primitive atrium to the floor of primitive ventricle showing formation of foramen secundum.
- 4. An oblique section from the roof of primitive atrium to the floor of primitive ventricle showing formation of foramen ovale.
- 5. Spiral aorto-pulmonary septum-transverse section (viewed from above).
- 6. Sagittal section through the enddermal cloaca.
- 7. Sagittal section through the primitive urogenital sinus.
- 8. Embryonic vessels, after the formation of embryonic folds.

- 9. Left lateral view of endothelial heart tube showing sacculations and formation of bulbo-ventricular loop.
- 10. Altered position of sacculated heart, after the formation of bulbo-ventricular loop.
- 11. Oblique section from the roof of sinus venosus to the floor of primitive atrium.
- 12. Left lateral view of the interior of atrium, ventricle and bulbus cordis.
- 13. Right lateral view of the interior of atrium, ventricle and bulbus cordis.
- 14. Interior of the bulbo-ventricular cavity and formation of inter-ventricular septum.
- 15. Blood streams in the bulbo-ventricular loop of heart.

Part – E: GLASS JARS OF DIFFERENT SIZES (MAKE: BOROCIL)

Approx. 100 pcs. Of Glass Jars of different sizes of Borocil make required for displaying Specimen in the Museum.

<u>Group – B: Department of Forensic Medicine</u>

Sl. No.	Name of items with specification	Units	
1.	Models made of fiber in a wooden cabinet with unbreakable glass – List attached	45	
2.	Specimen set of poison containing poisonous substance only for visual study in a jar packing on acrylic base with description on the cited side table showing type, vernacular name, lethal dose, sign and symptoms, treatment, post mortem changes, and other important information.	100	
	Poisons should include; corrosives, Irritant, (Metallic, & Non metallic)., vegetable poisons, Narcotics, Poisonous animals, Neurotics poisons, Cerebral and Spinal poisons, Cardiac, Peripheral and mechanical poison		
3.	Showcase : Seasoned wood, teak- sunmica covered, with 4 tier system to display 50 poisons, visible from both sides. Sliding glass doors with lock & key on 10" high stand base.	2 units each for 50 poisons	
4.	Weapons set of 100 with wooden showcase fitted with sliding glass in front. Commonly used in India includes weapons producing abrasions, bruise, lacerated wound, incised wound, penetrating wound, perforating wound, chop wound, firearm wound, road traffic accident.	100	
5.	Showcase: Seasoned wood with vertical display with detachable mode of each weapon, Sliding glass doors with lock & key.	2 each for 50 weapons	
6.	Stethoscope of reputed company	4	
7.	Human Skeleton material (original bone) A model stand with 5 pronged base	1	
8	Human frontal bone		
9	Human mandible – 16 teeth	15	
10	Human maxilla (each)	15	
11	Human occipital bone		
12	Human Parital bone		
13	Human complete Skeleton	15	
14	Human Sternum	15	
15	Human Hyoid bone	10	
16	Human Clavicle – each side	10	
17	Human Scapula	10	
18	Human rib bone set (both sides)	2	
19	Human Atlas vertebra	2	
20	Human axis vertebra	2	
21	Human bone of both sides	5	
22	Human ulna (both sides)	5	

23	Human radius (both sides)	5
24	disarticulated human vertebral column -24 vertebra with sacrum and pelvis	
25	Hip bone – both sides	10
26	Sacrum	10
27	Соссух	10
28	Human femur bone – both sides	5
29	Human tibia bone – both sides	5
30	Human fibula bone- both sides	5
31.	Pressure washer sprayer for cleaning PM Room (Heavy Duty) 165 Bar Pressure minimum	1
32.	Suction Machine	2
33.	Fogging Machine (with liquid)	1

<u>Group – C: Department of ENT</u>

<u>Technical Specifications:</u> 1. BERA (Brain Evoke Response Audiometry)				
Sr. No.	Specification no.	Descriptions		
1	Channels	2 or more		
2	Transducer	insert earphone, bone vibrator, headphones		
3	Stimilus type	Clicks, pure tones, modulated tones, speech stimulus and user defined sound files up to 16 khz		
4	Stimulus Frequencies	0 hz - 16 khz frequency may be presented simultaneously		
5	Stimulus Modulation depth	Amplitude (100 %), frequency (20 %)		
6	Stimulus Modulation rate	0.1 to 106/sec		
7	Duration	25 to 500,000 micro seconds		
8	Polarity	Condensation, rarefaction and alternating		
9	Intensity	0 to 120 dB SPL		
10	Rate	0.1 to 100/sec		
11	Masking	Narrow band, broad band (notched noise)		
12	Electrodes	1)No inverting, 2)inverting, 3)ground		
13	Filters	1) High pass (1Hz - 30 Hz), 2) Low pass (300 Hz to 500 HZ for ASSR & 1500 HZ for BERA. 3)Slope (6 dB/ octave), 4) 50 or 60 Hz notch filter (-12 dB/Octave)		
14	Amplification	* 10000		
15	Artifact rejection	Common mode rejections: >95 dB at 500 Hz and >115dB at 60 or 50 Hz (With notch filter on at that frequency)		
16	Sweeps (Stimuli)	Variable (0 to 32000)		
17	Features for ASSR	Stimulus- Modulated tone, clicks-up to 125 dB SPL		
		□ Freq.: 250 – 8000 Hz		
		 Multiple frequencies may be tested simultaneously for both ears 		
		 Automatic generation of Audiogram in SPL/HL & Phasor diagram (both Frequency & intensity based phasors) 		
		□ FFT values along with spectrum graph should be displayed		
		Analysis algorithm- FFT with F-test or phase coherence		
18	Other Features	 Automated response detection and threshold information for each tested frequency with the use of computerized spectral techniques. 		
		Image: Multiple frequencies may be tested simultaneously for both ears.		
		Phasor diagram and frequency amplitude graph for easy response interpretation.		
		 Output in nHL,SPL,User modifiable frequency specific SPL to nHL conversion table. Instrument Must be FDA approved and manufacturer should 		
		have ISO certification.		
		Data Acquisition- protocol generation for automatic acquisition.		

2. Two Channel Diagnostic Audiometer with following features

Test Signals: Pure tone, Pulse tone, and Warble tone, Narrow Band, Speech Band and White Noise. Frequency: 125Hz to 8 KHz High Frequency: up to 16 KHz Intensity: -10 dB to 120dB HL (Air Conduction) -10 dB to 70dB HL (Bone Conduction) In step of 5,2 and 1 dB Inputs: CD/tape, microphone, external masking, patient microphone, patient response. SISI, DLI, ABLB, Carhart decay test, Stenger test Tests: Power supply: Mains 100-240 V~, 50/60 Hz DD45/TDH 39, B71, Microphone, Patient Switch Accessories: Features like Free field with built in power amplifier, LCD Display, channel sweep, tracking and interlock. Medical CE Mark

3. Oto - Acaustic Emission with Features

Measurement type: T	EOAE and DPOAE		
Frequency range: 1	.5 to 4 kHz (TEOAE)		
2 to	5KHz(DPOAE)		
Stimulus intensity range:	40 to 65 dB SPL		
Maximum output:	90 dB SPL		
Probe:	Inbuilt (Suspended) and External both		
Stimulus sampling rate:	31.25 kHz		
Power supply:	Batteries - AA cells		
Battery life:	Typical 300 tests		
Storage:	Up to 250 Tests		
Probe weight:	Light Weight up to 300 g		
Display:	LCD-display		
Operating noise:	< 50 dB SPL		
Accessories:	Instrument with cradle, external mini probe,		
PC-interface:	Serial RS 232		
Standards:	IEC 601-1 according to medical directive 93/42/EEC FDA 510 (k) #980533 23.3.1998		

Diagnostic OAE

OAE system with TEOAE, DPOAE, SOAE, DP Growth, USB plug-n-play connection to PC, Light weight and battery free

TEOAE

- Click stimulus or configurable tone pulses
- Configurable stimulus intensity
- In-the-ear calibration
- Real time stimulus and probe fit monitoring
- Contra lateral noise suppression of TEOAE

DPOAE

- High frequency DPgram up to 8 points per octave
- Preset and customized stimuli
- Programmable L1 and 2 level, frequency ratio, points/octave, frequency range, manual/automatic/intelligent frequency progression
- DP I/O growth rate analysis

4. TECHNICAL SPECIFICATIONS OF IMPEDANCE AUDIOMETER

Tests:

- Tympanometry
- Ipsi and contralateral reflexes
- Eustachian tube function (With intact and perforated eardrums)
- High frequency tympanometry

Tympanometry mode:

Probe frequency intencity:	226Hz <u>+</u> 1%, 85 dB spl		
High frequency:	678 Hz, 800 Hz, 1000 Hz		
Pressure range:	Automatic +200 to - 400 daPa		
	Manual +200 to -600 daPa		
Volume range:	0,1 to 6,0 ml		
Accuracy:	<u>+</u> 5% or 10 daPa		
Test time:	<3 seconds		
Reflex mode:			

Itemen mouer	
Test Frequency:	500, 1000, 2000, 4000 Hz <u>+</u> 2 %
Noise stimuli:	WN/ HP/ LP
Test method:	ipsilateral, contralateral
Intensities ipsilateral :	70 to 105 dB HL
Intensities contralateral:	70 to 120 dB HL with TDH 39 contra phone
ipsilateral reflex test :	with AGC
Intensity setting:	Automatic or manual

Reflex decay mode: Test time:

10 sec auto tone present

+300 to -400 daPa

Eustachian tube mode:

Pressure range:

General:

1,		
EC		
th ears		
eds (pump speed, accuracy, reflex mode)		
Lightweight adjustable hand held probe with built in control light and switch		
In built fast and virtually silent thermal printer		
4 sec / 12 sec (Test results of both ears)		
ast adjustable		
) Hz 25 VA		

eds (pump speed, accuracy, reflex mode) I held probe with built in control light and swit ent thermal printer both ears) ast adjustable 0 Hz 25 VA		

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a. Models:

S. N.	Name of the Model Required	Sl. No.	Name of the Models Required
1.	Leprosy	15.	Elephantiasis (Leg)
	Pure Neurotic Type		
	Truberculoid Type		
	Lapromatous		
-		1.6	
2.	Kala Azar	16.	Silicotic Lung
3.	Measles	17.	Cut Section of Fluoride in Teeth
4.	Chicken Pox	18.	Sources of Vitamin A
			Sources of Vitamin B
			Sources of Vitamin C
5.	Phrenoderma	19.	Sources of Iron, Calcium, Iodine
6.	Bitot's Spot	20.	Model Village
7.	Scabies (Hand)	21.	Sanitary Well
8.	Marasmous	22.	Hand Pumps
9.	Kwashorker	23.	Water Purifying Systems (Activated Sludge
			Process)
10.	Trachoma	24.	Slow Sand Filter and Rapid Sand Filter
11.	Anemia	25.	Sanitary Toilets (Westerns & Indian Style)
12.	Diphtheria Patch (C.S. Of Throat)	26.	Horrok's Apparatus
13.	Angular Stomatities		
14.	Mumps		

b. Models Depicting Life Cycle:

S. N.	Name of the Model Required	Sl. No.	Name of the Models Required
1.	E. hystolitica	11.	Fasciolupsis busci
2.	A Duodenale	12.	P.vivas
3.	Ascaris Lumbricoides	13.	Treapanosoma cruzi
4.	W.bancrofti	14.	T.gambiense
5.	H.nana	15.	Anopheles mosquito
6.	Taenia Saginata & Solium	16.	Culex mosquito
7.	L.donovani	17.	Aedes mosquito
8.	L.tropica	18.	F.argentipes
9.	Trichuris trichura	19.	Helminthic eggs found in human stool
10.	T.spiralasis	20.	Sand Fly
