

Date: - 18<sup>th</sup> February 2016

# Corrigendum

for

# **Equipments required for Department of**

# Anatomy

NIT Issue Date	:	21 <sup>st</sup> January 2016.
NIT No.	:	Admn/Tender/Anatomy /2015-AIIMS.JDH
Pre Bid Meeting held on	:	08 <sup>th</sup> Februray,2016 at 11:00 AM
Last Date of Submission	:	24 <sup>th</sup> February, 2016 at 03:00 PM
Revised Last Date of Submission	:	03 <sup>rd</sup> March, 2016 at 03:00 PM

## 1. The following revised and Additional specification will be Added:-

## 1. Page No. 02, Chapter-I, S.No. 10:

10	Admin/Tender/Anatomy/10/2015- AIIMS.JDH	Motorized upright Fluorescence Research Microscope	1	28,000
Read				
Deleted	1			

## 2. Page No. 02, Chapter-I, S.No. 11:

11	Admin/Tender/Anatomy/11/2015- AIIMS.JDH	Cytogenetics workstation	1	46,000
Read				

Deleted

## 3. Page No. 02, Chapter-I, S.No. 14:

For

14	Admin/Tender/Anatomy/14/2015- AIIMS.JDH	Ultra Centrifuge	1	5,000
Read				

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# 4. Page No. 03, Terms & Conditions, Point No. 7, Sub Para No. ii): ii) For goods imported directly from abroad:

All the goods ordered shall be delivered and Installed at AIIMS, Jodhpur within **60 days** from the date of opening of Letter of Credit for shipment. **Read** 

## For goods imported directly from abroad:

All the goods ordered shall be delivered and Installed at AIIMS, Jodhpur within **90 days** from the date of opening of Letter of Credit for shipment.

# 5. Page No. 14, Item No. 05, Epi-Fi attachment for Nikon eclipse Ts 100 Microscope, Point No.2:

## For

Fluorescence filter cube holder(2 filter cubes mountable, 1 empty position), Heat absorbing filter, Lamphouse for 50 W mercury lamp

## Read

Fluorescence filter cube holder(2 filter cubes mountable, 1 empty position), Heat absorbing filter, Lamphouse for 130 W mercury lamp

Microscope Stand:	Motorized Z-focus drive with minimum step resolution of 10nm-	
•	15nm with dedicated TFT touch screen. 8-10 Position motorized	
	fluorescence filter turret, 6-7 position motorized nosepiece facility	
	with slot for DIC.	
<b>Observation Tube:</b>	Trinocular Observation tube with inclination angle of 30 degree.	
	Field of view 22mm or more. Three way light distributions of	
	100:0/20:80/0:100.	
Condenser	Swing-out condenser suitable for all magnifications.	
Revolving	Motorized nosepiece with a slot of minimum 6-7 positions with	
Nosepiece:	DIC slot.	
Eyepieces	Paired Wide field Eyepieces of 10X with minimum field of view	
	about 22mm or better, focusable & adjustable diopter setting	
Illumination:	12V 100W transmitted Halogen illumination or high transmitted	
	LED.	
Objectives	Plan Apochromat 4X/5X	
	Plan Apochromat 10x/0.40	
	Plan Apochromat 20x/0.75 (Spring)	
	Plan Apochromat 40x/0.90 (Spring)	
	Plan Apochromat 60x or 63x /1.35 (Oil, Spring)	
	Plan Apochromat 100X/1.40 (Oil, Spring)	
	Automatic change in objectives or filter turret should be recognized	
	by the system and the system should automatically align the	
	components.	
Mechanical Stage	Right hand mechanical stage with two slide holder.	
Fluorescence	It should have 8-10 position or better reflector turret mount for	
Attachment:	mounting different filter cubes.	
Fluorescence	High Intensity 130W Mercury or 120W metal halide Illumination.	
Illumination	The light source should be fiber coupled to the microscope with	
	lifespan of at least 2000 hrs.	
Fluorescence	Complete fluorescence filter set for all FISH Applications	
Filters	(a) One complete filter block for DAPI	
	(b) One complete filter block for FITC	
	(c) One complete filter block for TRITC	
	(d) One complete filter block for FITC/TRITC (Dual Band)	
	(e) One complete filter block for DAPI/FITC/TRITC (Triple Band)	
	(f) One complete filter block for Spectrum Aqua	
	All the filters should be narrow band pass filters.	

#### 6. Page No. 16, Item No. 10, Motorized Upright Fluorescence Research Microscope:

Corrigendum for Equipment required in Anatomy Department at AIIMS Jodhpur

## 7. Page No. 17, Item No. 11, Cytogenetics WorkStation:

For

	Digital CCD camera with high sensitivity and low noise.			
	$\Box \qquad \text{Chip size should be } 2/3"$			
Monochrome	$\Box$ High resolution of 1360x1024 pixels with pixel size of 6.45			
CCD Camera	x 6.45um			
CCD Camera	$\Box \qquad \text{Digitization depth} - 12 \text{ bit}$			
	$\Box$ Frame rate of 17 frames per second (fps) in full resolution			
	$\Box$ C-mount adapter 0.63x			
	Database Management Software – A modern paperless laboratory			
	design management software.			
	Manage data, compare chromosomes and produce comprehensive			
	reports to ensure optimal chromosomal analysis statistical analysis			
	and cross-case comparison of all the data.			
Karyotyping &	As a powerful search tool to filter specific cases and cells by any			
Fish System with	field and/or subtext. A flexible image gallery for viewing of all case			
Software	images.			
	Support multiple languages, Thumbnail images of RAW, Processed			
	FISH or completed images should be seen in database. The utility to			
	create a report from a freehand combination of chromosomes from any case/s and allow their enhancement with ideograms, comparison			
	etc., generate highly configurable customized reports (Word/PDF).			
	cte., generate inging configurable customized reports (word/1D1).			
	□ Software for Karyotyping analysis - Ability to handle G-,R-			
	,Q- banding, polyploid cells and markers (both bright field and			
	fluorescent metaphases), automatic contour to widen and shrink the			
	chromosome in one click, ability to add missing telomeric regions			
	directly in karyotype view, ability to score, count and analyze			
	chromosomes, Ability to display spine and centromere of all			
	chromosomes, annotate and prepare the customized ideograms,			
	Support of ISCN ideogram with 300, 400, 550, 700 and 850 band			
	resolutions, Automatic Relocation of Previously found cells. Advanced automation offering background uniformity correction,			
	automatic segmentation of touching chromosomes, optimized image			
	enhancement, contrast and band sharpness, '			
	, p			
	FISH Softwara			
	<b>FISH Software</b> – Ability for full karyotyping support with unique band enhancement			
	Ability for full karyotyping support with unique band enhancement			
	Ability for full karyotyping support with unique band enhancement and signal sharpening. Support for automated filter wheels, Z-			
	Ability for full karyotyping support with unique band enhancement			
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	to extract the exact data required.
	<ul> <li>Should compatible to Color Karyotyping upgrade</li> <li>Should compatible to mFISH/ mBAND upgrade</li> </ul>
	<ul> <li>MULTI SPECIES KARYOTYPING SOFTWARE:</li> <li>To Support Multiple Species, any number of chromosomes, flexible karyotype template, should work under same karyotyping software as human with same capabilities and functions.</li> <li>Support any number of chromosomes and classes, even hundreds of chromosomes in a karyotype.</li> <li>Design of any number of lines and groups at each line in the karyotype.</li> </ul>
	<ul> <li>Free definition of text for each chromosome class, including any option of sex chromosome.</li> <li>Dynamic update of Karyotype, to support the most highly abnormal aberrations and ploidy without any need to change the karyotype design or template.</li> <li>Supporting various staining schemes in bright field and fluorescence Fast Training mechanism based only on a single to a small number</li> </ul>
	of metaphases.Multiple classifiers to support any animal and plant karyotype.Automatic karyotyping based on trained data, supporting ploidy.Predefined Ideograms for several species with capability to add
	custom or additional Ideogram for new species.
Workstation	Compatible latest branded computer Intel i5 processor 3.6 GHz with at least 4GB Ram, 500GB HDD, 1GB Graphic memory, Windows 7 professional 64 bit, 24 inch TFT screen, Compatible online UPS with 30 minutes backup to support the entire system.
Certificates	Complete hardware system should be European CE/ USFDA certified. Cytogenetic software should be FDA cleared.

## **OPTIONAL:**

## SPECTRAL KARYOTYPING:

#### Features for SKY/MFISH software:

- □ Ability to analyze chromosomes on colour/spectral properties.
- $\Box$  Precise and robust accuracy.
- □ Image to be captured in single focusing.
- □ Accurate quantification of nonspecific staining.
- □ Accurate background subtraction/correction.
- $\Box$  Invariant to dye intensity variation.
- $\hfill\square$  Intuitive easy-to-use tools to analyze subtle rearrangements and complex translocations.

□ Acquision should provide interferometer based spectral data and its bandwidth should be under software control.

 $\hfill\square$  Multi-function tool which eliminates the need for switching between other functional tools.

- $\Box$  Spectral range: 400-1000 micron.
- $\Box$  Spectral resolution of 6nm at 400nm.

□ Live view for focus with full spectral data. Simultaneous measuring of all wavelengths.

 $\Box$  Extract quantitative per pixel information on molecular/stain content.

**mCounter** – Counting by intuitive use of the mouse and keyboard to replace existing lab counters and to enable easy spot count for numerical changes, or classify cells according to their signal pattern, instantly providing statistics for customized reports.

**Multi Species support**: Dynamic karyotype table to fit any species type. A predefined library for multiple species and capability to add custom ideograms of animal or plant species.

**Read** Deleted

# 8. Page No. 20, Item No. 12, Co2 water-jacketed incubator, Point No.1:

For Inner total volume 180 to 190 liters. Read Inner total volume 170 to 190 liters.

## 9. Page No. 20, Item No. 12, Co2 water-jacketed incubator, Point No.3:

For

Temperature Control Method - Direct Heat and Water Jacketed using PID microprocessor **Read** 

Temperature Control Method - Water Jacketed using PID microprocessor

## 10. Page No. 20, Item No. 12, Co2 water-jacketed incubator, Point No.4:

**For** Temperature Range Ambient +3°C to 60°C **Read** Temperature Range Ambient +5°C to 55°C or 60°C

#### 11. Page No. 20, Item No. 12, Co2 water-jacketed incubator, Point No.5: For

Temperature Recovery time (after 1 min. door opening, 98% from initial value) - 4 minutes **Read** 

Temperature Recovery time (after 1 min. door opening, 98% from initial value) 4 - 6 minutes

# 12. Page No. 20, Item No. 12, Co2 water-jacketed incubator, Point No.9: For

Alpha numeric character display screen and message screen.

#### Read

System should have Audible on/off, Access Code, HEPA Filter change Reminder, RS-485 Interface, Automatic Tank Selector, Audible/Visual Alarms, Display Temp/RH (selectable), Display CO2/O2 (selectable).

## 13. Page No. 20, Item No. 12, Co2 water-jacketed incubator, Point No. 10: For

Alpha numeric message for HEPA filter replacement. **Read** Deleted

## 14. Page No. 20, Item No. 12, Co2 water-jacketed incubator, after Point No.10: Add Point No.11

System should be supplied with CO2 cylinder, Two stage CO2 regulator and a Online UPS of suitable rating with minimum half hour backup.

## 15. Page No. 20, Item No. 12, Co2 water-jacketed incubator, after Point No.11: Add Point No.12

System should be European CE marked and UL listed.

#### 16. Page No. 20, Item No. 12, Co2 water-jacketed incubator, after Point No.12: Add Point No.13 IR/Tc sensor.

## 17. Page No. 20, Item No. 12, Co2 water-jacketed incubator, after Point No.13: Add Point No.14

Interior Type 304, stainless steel Exterior 18 gauge, cold-rolled steel, powder coated. **18. Page No. 20, Item No. 12, Co2 water-jacketed incubator, after Point No.14:** 

## Add Point No.15

Humidity PAN should be supplied as a standard with the system.

#### 19. Page No. 20, Item No. 12, Biologic Safety Cabinet Class II A, Point No.4 For

Dimensions (Cabinet Size): 4 to 6 feet. The interior of the cabinet shall be of stainless steel or equivalent material and must be smooth to ensure no risk of cuts to the users. **Read** 

Dimensions (Cabinet Size): 4 feet. The interior of the cabinet shall be of stainless steel or equivalent material and must be smooth to ensure no risk of cuts to the users.

#### 20. Page No. 20, Item No. 13, Biologic Safety Cabinet Class II A, Point No.5 For

In order to ensure consistent and reliable down flow velocity across the supply HEPA filter over the life of the cabinet, the cabinet must use a pressure sensor to detect Pressure drop across the supply filter. The pressure sensor must be encased in order to protect the sensor form temperature, humidity and other environmental phenomena that can impact the sensor's performance.

Read

In order to ensure consistent and reliable down flow velocity across the supply HEPA/ULPA filter over the life of the cabinet, the cabinet must use a pressure sensor/true velocity sensor to detect pressure drop across the supply filter/for down flow velocity. The pressure sensor must be encased in order to protect the sensor form temperature, humidity and other environmental phenomena that can impact the sensor's performance.

## 21. Page No. 20, Item No. 13, Biologic Safety Cabinet Class II A, Point No.11

For Should be USFDA/ CE/ BIS approved product Read Should be NSF/ANSI 49, approved product

## 22. Page No. 20, Item No. 13, Biologic Safety Cabinet Class II A, Point No.13

**For** UPS backup for 3 hrs duration **Read** UPS backup for 1 hr duration

#### 23. Page No. 20, Item No. 13, Biologic Safety Cabinet Class II A, Point No.14 For

Warranty should cover UPS and batteries **Read** Deleted

## 24. Page No. 21, Item No. 14, Ultra Centrifuge:

For

- 1. Working Voltage == 220-230 Volts
- 2. RPM / g 100,000 RPM / 800,000g
- 3. Temperature 00 400°C
- 4. Easy Protocol Set up
- 5. Rotar Tracking Facility
- 6. Password Protected

- 7. User Defined Programed
- 8. With brushless DC motor for a smooth and quiet operation, low noise level (less than 60 db at Max. RPM)
- 9. Capacity 1.5 ml (2.00ml) x 12 tubes (rotor included) Automatic
- 10. Maximum speed 13,500 rpm (fcf 12,225 x g)
- 11. Speed Control +/- 10RPM Rotor Requirements : (a) Angular (b) Swing out with compatible tubes and adaptors
- 12. Short acceleration and braking times
- 13. Digital timer function with continuous running mode (99 hrs. 59 min)
- 14. High performance micro-processor based control
- 15. LCD-Touch Screen Display
- 16. Stabilizer: Good Quality Compatible and Robust. Capacity – 1KVA Input voltage 145-270 volt

Output - 200-240 volt

## Read

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Administrative Officer AIIMS, Jodhpur