

(राष्ट्रीय पशु जैव प्रोद्योगिकी संस्थान)

National Institute of Animal Biotechnology

Corrigendum -- Change of Date & specification

Please refer NIAB Tender Details as follows.

Tender ID : 2018_DBTEC_396052_1

Tender Reference Number : NIAB/SP/2018-19/22

Tender Title : Trinocular Research Upright Microscope for dedicated dark field application for Leptospira

The following changes may please be noted before submission of bids with respect to the tender details mentioned above.

In place of old dates mentioned in Tender , please consider following dates.

Document Download End Date :- in place of Existing Old date --- Read As :- 15/11/2018

Bid Submission End date : in place of Existing Old date --- Read As :- 15/11/2018

Bid Opening Date in place of Existing Old date --- Read As :- 16/11/2018

Change in specifications

Please find below changes in specification and bid must be submitted accordingly.

Rest of the tender conditions remains same.

Manager (S&P)

NIAB-Hyderabad

Date:- 30/10/2018

Changes in Specifications

Reference	Existing Specification in Tender	Modified Specification
Name of the item	Trinocular Research Microscope for HBO 50 epi-fluorescence in combination with HAL 50 Halogen Illumination for Bright Field, phase contrast, Fluorescence and dedicated darkfield application for <i>Leptospira</i>	Trinocular Research Microscope for HBO 100 epi-fluorescence in combination with HAL 100 Halogen Illumination for Bright Field, phase contrast, Fluorescence and dedicated darkfield application for <i>Leptospira</i>
Point No.1	Stand Rugged and sturdy stand with built-in stabilized electronic power supply for 12V 50 watts or better Halogen illumination/ LED , suitable for 230V 50Hz power supply, co-axial coarse and fine drive focusing knobs with resolution, low positioned for convenient operation, built-in filter 6 position filter and grey filter set containing 3 grey filters 0.015, 0.06 and 0.25, built-in variable field diaphragm for transmitted light illumination	Stand Rugged and sturdy stand with built-in stabilized electronic power supply for 12V/100 watts or better Halogen illumination/ LED, suitable for 230V, 50-60 Hz power supply, co-axial coarse and fine drive focusing knobs with resolution, low positioned for convenient operation, built-in filter 6 position filter and grey filter set containing 3 grey filters 0.015, 0.06 and 0.25, built-in variable field diaphragm for transmitted light illumination
Point No.4	Illumination It should be with Koehler illumination technique with 50 W halogen lamp. The illumination control knob and ON/OFF switch should be low positioned for convenient operation	Illumination: It should be with Koehler illumination technique with 100W or better halogen lamp/LED. The illumination control knob and ON/OFF switch should be provided for convenient operation
Point No.6	Condenser Abbe Condenser 0.9 / 1.25 with bright field Iris, dark field stop and Phase contrast stops 1, 2 and 3. Dedicated dry dark field condenser up to 40x	Universal condenser (Abbe Condenser 0.9 / 1.25 preferably) with bright field Iris, dark field stop and Phase contrast stops 1, 2 and 3. Dedicated dry dark field condenser up to 40x
Point No.16	Microscope should have powerful transmitted light illumination with 12V/50watt halogen or better / LED illumination.	Microscope should have powerful transmitted light illumination with 12V/100 watt or better halogen / LED illumination.
Point No.23	Infinity corrected high contrast Plan Achromatic objective with magnification 10x/0.25 Ph & Long working distance phase contrast objectives 20x/0.35 and 40x /0.55. Quote Long working distance Plan Achromatic objectives for 63x/0.65 or 60X / 0.80, and 100 x/1.2 to 1.45.	Infinity corrected high contrast Plan Achromatic objective with magnification 10x/0.25 Ph & Long working distance phase contrast objectives 20x/0.35 and 40x /0.55. Quote Long working distance Plan Achromatic objectives for 63x/0.65 or 60X / 0.80, and 100 x/1.2 to 1.45 (oil emersion objective).
Point No.24	Fluorescence light attachment with powerful 50 illumination or better/LED should be quoted. It should have 4x filter turret with UV, blue and green excitation filter sets. The filter sets should be easily insert able and removable by Push & Click method	Fluorescence light attachment with powerful 100 illumination or better/LED should be quoted. It should have 4x filter turret with UV, blue and green excitation filter sets. The filter sets should be easily insert able and removable by Push & Click method. (point 25 in revised specs)

All other points remains unchanged.

Full Specifications for reference

Name of the Item	Trinocular Research Microscope for HBO 100 epi-fluorescence in combination with HAL 100 Halogen Illumination for Bright Field, phase contrast, Fluorescence and dedicated darkfield application for <i>Leptospira</i>
Qty	1 Set

	Trinocular Research Upright Microscope for dedicated dark field application for <i>Leptospira</i> Qty -1 no
1	Stand Rugged and sturdy stand with built-in stabilized electronic power supply for 12V/100 watts or better Halogen illumination/ LED, suitable for 230V, 50-60 Hz power supply, co-axial coarse and fine drive focusing knobs with resolution, low positioned for convenient operation, built-in filter 6 position filter and grey filter set containing 3 grey filters 0.015, 0.06 and 0.25, built-in variable field diaphragm for transmitted light illumination
2	Nosepiece 5x revolving nosepiece (capable of accommodating up to 5 objectives) mounted on ball bearing with highly precise click
3	Binocular Phototube Binocular Phototube should be of infinite tube optics. The Eyepiece tubes should be ergonomically designed with inclination. The binocular phototube should generate images of upright and unreversed type. The eyepiece tubes should be tillable upwards / downwards for convenient positioning. The interpapillary distance should be adjustable between 55-75 mm.
4	Illumination: It should be with Koehler illumination technique with 100W or better halogen lamp/LED. The illumination control knob and ON/OFF switch should be provided for convenient operation
5	Mechanical Stage Ball bearing mounted X-Y mechanical with low positioned co-axial knobs, right handed, with scanning area of 75x50 mm or wider. The stage should be coated with anodized surface.
6	Universal condenser (Abbe Condenser 0.9 / 1.25 preferably) with bright field Iris, dark field stop and Phase contrast stops 1, 2 and 3. Dedicated dry dark field condenser up to 40x
7	Objectives The microscope should be offered with high contrast Plan- Achromatic Objectives with infinity colour corrected optics. The magnification / numerical aperture of the objectives should be plan Achromatic 10x/0.25 phase, 20 x/0.40, 40x/0.55/0.65 phase and 60X / 0.80 or 63X/0.65 Oil Iris
8	Eyepieces Wide field focusing eyepieces with minimum 22mm or better field of view with soft rubber soft eyecups and is suitable for spectacle wearers. It should be marked with ± 5 dioptre settings. The eyepieces should be suitable for graticulate insertion.
9	Digital SLR camera (24megapixel) or better with attachments
	Modular Inverted Research Microscope for viewing <i>Leptospira</i> infected cells with phase contrast, Fluorescence & Camera attachment Qty:1 no
10	The microscope should be of modular design with infinity optics and possibility to upgrade to various applications at later stage.
11	The microscope should be capable of Bright field, Phase contrast, DIC, varel contrast, Hoffmann contrast and Plas DIC techniques and Fluorescence.
12	Microscope stand Rugged and sturdy stand with modular design for future up gradation to various techniques
13	Co-axial coarse and fine focus knobs ergonomically positioned either side of the microscope stand for convenient operation with adjustable focus stop.
14	Operating Voltage 230Volts, 50-60 Hz.
15	Power ON/OFF switch and illumination regulation control knobs to be located close to the focus knobs for ease of operation.

16	Microscope should have powerful transmitted light illumination with 12V/100 watt or better halogen / LED illumination.
17	Microscope should have a quintuple (5x) precision revolving nose piece with provision for DIC sliders.
18	Binocular tube with 45deg inclination with Siedentop swivelling eyepiece tubes and with inter pupillary distance adjustment range 55-75mm.
19	The microscope stand should have provision to attach a camera without replacement of the Binocular tube.
20	Microscope should have a hard coat anodized specimen stage with 230x230mm size to accommodate various specimen holders.
21	It should have a provision to attach an object guide with long coaxial X-Y drive knobs and holders for various specimen containers like Petri dishes, slide, The Coarse focus -4 mm per rotation, Fine focus - 0.4 mm or better per rotation and the total focusing range should be 13 mm
22	Long working distance condenser with 0.55NA, working distance of 50mm and with slider for Bright field, Phase. It should have a provision to upgrade to PlasDIC, Varel contrast and Hoffman modulation contrast.
23	Infinity corrected high contrast Plan Achromatic objective with magnification 10x/0.25 Ph & Long working distance phase contrast objectives 20x/0.35 and 40x /0.55. Quote Long working distance Plan Achromatic objectives for 63x/0.65 or 60X / 0.80, and 100 x/1.2 to 1.45 (oil emersion objective).
24	Pair of wide field 10x eyepieces with FOV of 22mm or more with focusable front lens and with rubber eyecups suitable for spectacle wearers and should have a provision to insert measuring graticules.
25	Fluorescence light attachment with powerful 100 illumination or better/LED should be quoted. It should have 4x filter turret with UV, blue and green excitation filter sets. The filter sets should be easily insert able and removable by Push & Click method.
26	Digital Camera: Digital Microscopy Camera: Sensor Model Sony or any other brand, CMOS Sensor Pixel Count 5 Megapixel or better, Pixel Size 2.42 μm x 2.42 μm or better 36 FPS at 1ms with 2,464 \times 2,056 Pixel Count (H \times V). Spectral Range Approx. 400 nm – 720 nm, coated Hoya C5000 IR Cut Filter; RGB Bayer col Mechanical Stage Ball bearing mounted X-Y mechanical with low positioned co-axial knobs, right handed, with scanning area of 75x50 mm or wider. The stage should be coated with anodized surface.or filter mask; Range of Integration Time 100 μs to 4 s ; Live Image 36 frames/s @ max 2,464 \times 2,056 pixels ; Readout Mode Quad-Port readout ; Digitization 8 and 12 Bit/ Pixel ; Interfaces USB 3.0 SuperSpeed (5 Gbit/s) ; Optical Interface C-Mount (17.5 mm) 0.63X ; Full Well Capacity (typical) 10,500 e ; Readout Noise (typical) 2.2e ; Cooling : Temperature stable at 25 $^{\circ}\text{C}$ for ambient temperatures between 18 $^{\circ}\text{C}$ and 30 $^{\circ}\text{C}$. Software: Camera should be come with software should have shading correction, features to reduce dark current, flat field correction. Measurement Tool should facilitate calibration of any camera to the microscope with display of calibrated bar & measurements in the live image. Must store measurements along with the captured images. Programmable resolution selected from wide variety of different camera resolutions for both live and captured images.
27	Provide branded computer with LCD/LED SCREEN (32 inch in lieu of monitor) ; processor: i5 or above; processor speed: 3.1GHz or above; minimum 8GB memory & 512 GB storage; Windows operating system and printer (Windows and Mac compatible; laser colour; functions: print, cop scan, fax & email; speed: 27 PPM or more; auto-duplex printing; Ethernet & Wi-Fi options; table top model) for image acquisition, analysis and documentation
28	Provide suitable UPS with minimum of one hour power backup
29	Final cost in the quote should include the cost of all the above-mentioned items
30	Warranty: Minimum for 1 year

	Optional item:
1.	AMC: For 3 years