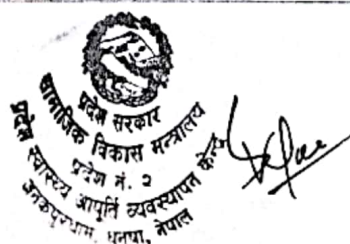


Binocular Microscope

S.N.	Purchaser's Specifications	Bidder's Offer
	Binocular Microscope	
	Manufacturer	
	Brand	
	Type / Model	
	Country of Origin	
1	Description of Function	
1.1	Binocular microscopes consist of two or more than two magnifying lenses. One can view individual cells, even living ones. It has high magnification.	
2	Operational Requirements	
2.1	Binocular compound microscope with illumination system is required.	
3	System Configuration	
3.1	Binocular Microscope Compound, complete system with complete accessories.	
4	Technical Specifications	
4.1	Body: Binocular, sturdy, stable base body with focus adjustment controls.	
4.2	Eye Piece: Paired, high quality, (the image of the object as seen through the binocular eyepiece must be well defined centrally in at least 2/3 field of view), achromatic, wide field, 10x without inbuilt pointer. The eyepiece must be aplanatic and have a minimum field number of 18. Dioptre adjustment must be present on one/ both eye pieces or on the eye piece tube.	
4.3	Objective: Three objectives 10x, 40x, 100x. 10x and 40x objectives must have numerical apertures of 0.25 and 0.65 respectively and must be of spring loaded type or otherwise. 100x must have numerical aperture of 1.25 and must be of oil immersion and spring loaded type. Suitable prominent marking must be provided on 100x for easy identification. Unbreakable containers to be provided for storing the objectives. All objectives must be wide field, achromatic and par focal. Marking for the Objectives: Each objective must be engraved with the following information: <ul style="list-style-type: none"> Name of the manufacturer Magnification and numerical aperture, for example, 10x/0.25 100x objective must be engraved with the word 'Oil'. Changing from one objective to another or reintroducing the same objective by rotation of the nosepiece, the object at the centre of the field must not appear displaced by more than 0.02 mm in the object plane in any direction.	
4.4	Nose Piece: Revolving nose piece to accommodate a minimum of three objectives with click stops. It must be provided with ribbed grip for easy rotation mounted on a precision ball bearing mechanism for smooth and accurate alignment. Extra ports if any must be fitted with dust proof metallic/ebonite caps.	
4.5	Stage: Uniformly horizontal, mechanical stage having dimensions of length 140 mm (+/- 20mm) with fine Vermeer graduations (minimum reading accuracy of 0.1 mm). The stage must be provided with spring loaded slide holder for exact positioning of specimen/ slide. It must be designed with convenient sub-stage vertical coaxial adjustment for slide manipulation. The stage must have ball-bearing arrangement to allow smooth travel in transverse directions i.e. 80 mm (+/-5mm) and front to back	



S.N.	Purchaser's Specifications	Bidder's Offer
	direction, 50mm (+/-5mm)	
4.6	Sub-stage Condenser: Abbe-type condenser, numerical aperture (N.A.) 1.25 focusable with rack and pinion arrangement incorporating a spherical lens and an iris-diaphragm. The condenser must have a filter holder and removable/ swing in/ out blue filter (suitable for bright field Microscopy)	
4.7	Sub-stage illuminator: The system must have a build-in variable light source (Illuminator). This light source must have a 20 W, 6 V Halogen lamp. The circuitry for the light source must include a constant voltage supply. The system must be provided with a step down transformer and an on-off switch and intensity control. The lamp must be provided with a lamp socket which has the facility for easy replacement of the bulb.	
4.8	Power Supply: Voltage 220 V, 50 Hz AC. Must have one on-off power switch, 3 core power cord with a 3 point male plug. The system must have an inbuilt protective/ safety device to withstand fluctuations of voltage from 140 V to 280 V.	
4.9	The fuse for the halogen lamp must be easily accessible to the operator.	
4.10	A Plano-concave mirror in fork mounting must be supplied which would be attachable to the base for field use (where power is not available).	
4.11	The Illuminator must have a build-in field diaphragm for Kohler illumination.	
4.12	Eye Piece Tubes: Binocular eye piece tubes, inclined at 45 degrees, rotatable through an angle of 360 degrees, having inter-pupillary distance range of 54-74 mm or wider, covering the above mentioned range.	
4.12	Focusing Knob: Co-axial coarse and fine focusing knobs capable of smooth fine focusing movement over the full range of coarse travel. The fine focusing movement must have sensitivity of two microns or less (finer) over the entire coarse focusing stop safety arrangement must be provided.	
4.13	All optical parts including objectives, eye pieces and prisms must have anti-reflective coating which also gives anti-fungal property.	
4.14	All metallic parts must be corrosion-proof, acid-proof and stain-proof.	
4.15	Each Microscope must be supplied with Blue filters. The Blue filter must be packed in the box and not fixed on the Microscopes.	
5	Accessories, spares and consumables	
5.1	Accessories: <ul style="list-style-type: none"> • 100x oil immersion objective – 01 no. • Halogen bulb. (6volts, 20w) – 6 nos. • Fuses – 6 nos. • 25 ml immersion oil bottle – 01 no. • Roll of lens tissue paper – 1 roll • Lens cleaning solution – 100 ml. • Anti-static cleaning brush – 01 no. 	
5.2	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).	
6	Operating Environment	
6.1	The product offered shall be designed to be stored and to operate normally under the conditions of the purchaser's country. The conditions include Power Supply, Climate, Temperature, Humidity, etc.	
6.2	Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable	



S.N.	Purchaser's Specifications	Bidder's Offer
	must be at least 3 metre in length.	
6.3	Suitable voltage corrector/stabilizer shall be supplied	
7	Standards and Safety Requirements	
7.1	Must submit ISO13485:2003/AC:2007 for Medical Devices AND	
7.2	CE or USFDA approved product certificate.	
8	User Training	
8.1	Must provide user training (including how to use and maintain the equipment).	
9	Warranty	
9.1	Comprehensive warranty for 2 years after acceptance.	
10	Maintenance Service During Warranty Period	
10.1	During the warranty period supplier must ensure corrective/breakdown maintenance whenever required.	
11	Installation and Commissioning	
11.1	The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.	
12	Documentation	
12.1	User (Operating) manual in English.	
12.2	Service (Technical / Maintenance) manual in English.	
12.3	List of important spare parts and accessories with their part numbers and costing.	
12.4	Certificate of calibration and inspection from factory.	

