Bundelkhand Institute of Engineering & Technology, Jhansi Short Term Tender Notice No. BIET- 1/2017

The tender documents for the **Purchase of Lab Equipment / Computer of M.Tech Biomedical Engg. Program** Tender can be downloaded from the website, www.bietjhs.ac.in or can be obtained from the store & purchase section. A separate demand draft for the cost of tender documents is required along with tender documents.

docur	nents.
Tende	er opening and submission details are given below-
1.	Name of firm with contact number & Email Address
2.	Tender cost (Non refundable) is Rs. 1150/-
3.	Tender submission is up to 28.03.2017 at 2:00 PM
4.	Tender opening on 28.03.2017 at 2:30 P.M.

5. Opening place of tender is conference room, administrative block BIET Jhansi.

Signature & Seal of Tenderer

M.Tech Biomedical Engineering

Particular of EMD

LAB No.	Laboratory	EMD (In Rupees)
BIO-1	Image Trinoculor Microscope	10,000/-
BIO-2	Digital Blood Pressure Meter (Portable)	400/-
BIO-3	LCD Projector	1,000/-
BIO-4	PC (Desktop Computer)	12,000/-

M- Tech Bio Medical Engineering

PC Desktop Computer

Tender Proforma

Sr.	Particular	Qty	Rates in	Cost in
No			Rs.	Rs.
1.	Desktop Computer	15		
	Processor: Intel i5 Ram: 8GB DDR4 Hard disk: 1 TB Operating System: Window 10 (64bit)			
	DVD+RW Software: Microsoft Office Speakers, Mouse, Keyboard, Monitor and UPS(600VA) with each system			
	Total			

Signature & Seal of Bidder

M- Tech Bio Medical Engineering

LCD Projector

Tender Proforma

Sr.	Particular	Qty	Rates in	Cost in
No			Rs.	Rs.
1	LCD Projector	01		
	Digital LCD projector, max 200inch screen, 1080p, Lumens: 3000, with HDMI,VGA,USB,LAN,AV port supported Built-in speaker, wireless supported			
	Total			

Signature & Seal of Bidder

M- Tech Bio Medical Engineering

Image Trinoculor Microscope

Tender Proforma

Sr.	Particular	Qty	Rates in	Cost in Rs.
No			Rs.	
1	Image Trinoculor	02		
	Microscope with 3MP			
	-			
	Microscopy Camera and			
	Image Analysis Software			
	Technical Specification for			
	with Image Analysis software			
	SPECIFICATION			
	IMAGE EDITING			
	1. Cut, Copy, and Paste.			
	2. Selected copy by free hand AOL			
	controlled by four arrow keys			
	available on keyboard or mouse			
	with zoom preview.			
	3. Crop, duplicate, restore			
	4. Resize			
	5. Compression			
	6. Conversion to other format BMP,			
	JPG, TIF, PNG, GIF & PSD 7. Flood fill or spray with selected			
	color at selected portion.			
	8. Grid creation; 5X5, 10X10 &			
	100X100 lines.			
	9. Drawing tool curve, line, square,			
	and circle with node control and			
	provision to change color &			
	thickness of the line.			
	10. Write text in any color or font.			
	11. Pointer to place on an object in			
	four directions with provision to			
	change its color & thickness.			
	12. Eraser works only on line, arrow			
	or on any drawing tool.(not on			

orı	gin	ıal	ıma	ge)

- 13. Camera Lucida
- 14. Montage feature to merge stored image together. Useful to Merge different focuses of same image.
- 15. Image stitching.
- 16. Highlighter.
- 17. Pixel by Pixel Correction by key board.
- 18. Multiple image folder with Search facility.
- 19. Filter application on selected area

VIEW

- 1. Zoom in/out
- 2. Zoomed preview
- 3. Rotation at 90, 180,270 or custom
- 4. Image flipping; horizontal or vertical axis
- 5. Intensity histogram.
- 6. Image Information
- 7. Redo/Undo on all operations.
- 8. Ruler in Various units.
- 9. Slide show.

IMAGE PROCESSING

- 1. Background subtraction and contrast enhancement of color or monochrome images
- 2. Arithmatic image functions (Boolean Math; Add, AND, OR, XOR, DIFF, MIN, MAX, +, -, /, *, And Simple).

ROUTINE FILTERS

Invert, Brightness, Contrast, Hue, Saturation, Blur, Noise Remove, Emboss, Engrave, Gamma R, Gamma G, Gamma B, Yellow, Magenta, Cyan, Mosaic, Smooth, Desaturation, Pseudo Color, Colorize, Oilify, Despeckle, Postarize.

SPECIAL FILTERS & KARNELS

High Boost, High Spatial, Low Pass Spatial, Ranking (Max, Med, Min), Point detection, Line detection, Homogeneity

EDGE DETECTION

Laplacing, Sobel, Kirsch, Prewitt Gradient, Shift & Difference, Combine, Contrast Base, Quick, Range And Variance. **MORPHOMETERY**

Skelotizing, Pruning, SKIZ, Histogram Equalization, Histogram Smoothing, Histogram Peak, Histogram Valley, Segmentation by Over/Under and Quantized, Contouring, Dilation / Erosion on Binary, Gray & colored Images, Opening/ Closing on Gray & Binary Images, Special Opening/Closing, Split/Combine Of RGB, YUV, YIQ, XYZ, & HSL, Changing any Image to 1, 4, 8 & 24 Bits, Medial Axis. Transformation, Halftone. Image Addition, Image Average, Image Subtraction, Image Multiplication.

MEASUREMENT

- a) Spartial calibration
- b) Line measurements for Distance, Length, Width, Perimeter, Angle, Three Point Radius.
- c) Area by enclosed line controlled by four arrow keys available on keyboard arrows with zoomed preview.

COUNT AND CLASSIFICATION

Identification of objects in an image, count them, obtain several features measurements. Objects identification by user or automatically. User defined classification on basis of size or intensity

THRESHOLD PARTICLE MEASUREMENT: Manual, Auto bright and Auto dark methods to identity intensity range defined object to be measured. Various calculation & measurements available for selected Particle are; Dimensions, Area, Perimeter, Ferrite Length, Min/Max Radius, Thread Length, Thread Width, Fiber Length, Fiber Width.

MORPHOMETERY

Roundness, Shape, Orientation, Elongation, Equal Circular Diameter, Equal Sphere Volume. LOCATIONAL

Centroid X, Centroid Y, Major X1,	
Major Y1, Minor X1, Minor Y1,	
Major X2, Major Y, Major X2,	
Minor Y2, Box X1, Box X2, Box Y,	
Box Y2 & Box Area.	
SEGMENTATION	
Centroid X, Centroid Y, Major X1,	
Major Y1, Minor X1, Minor Y1,	
Major X2, Major Y, Major X2,	
Minor Y2, Box X1, Box X2, Box Y,	
Box Y2 & Box Area.	
Packed with Micrometer Slide for	
calibration for the microscope and	
the All in one Image Viewer and	
Capturing Device.	
Technical Specification of	
Trinocular Microscope	
STAND:- Ergo shaped, corrosion	
resistant, Anti mould treated	
VIEWING HEAD:- Siedentopf	
Trinocular Tube, Inclined 30	
degree, 360 degree Rotatable, IPD:	
55-75mm, Diopter Adjustment on	
Let Ocular. Anti Fungal Treated.	
EYEPIECES:- High Eyepoint,	
Wide Field, Anti Fungus Treated	
Wide Field Eyepieces: WF10X	
(Field of Line 18mm.), Optional	
WF 10X 20mm) WF 16X.	
NOSEPIECE:- Low Friction &	
Fully Parfocal Reverse (Backward)	
Quadruple Revolving nosepiece.	
OBJECTIVES:- VDA Series DIN	
Semi-Plan Achromatic Objectives:	
4X,10X,40X(S),100(0,S)	
WORKING:- Double Layers with	
Mechanical Sliding Stage, Double	
Slide Holder Moving Up and Down.	
Area:132mmx142mm, Moving	
Range:75mm (X) x40mm(Y).	
FOCUSING SYSTEM:- Coarse	
and Fine Focusing Coaxal, Coarse	
Degree of Tightness Based of Your	
Custom, Fine Precision Scale:	
0.002mm	
CONDENSER:- Centerable	
condenser NA1.25 with Iris	
Diaphragm and Filter, Moving Up	
and Down	
ILLUMINATION:- Built-in	
Critical Super Bright LED Lamp,	

Brightness Adjustable.		
Diiginiiess Aujustavie.		
Technical Specification 3 MP		
Microscopy Camera Solutions		
wherescopy camera polations		
Ultra 3 CMOS 3.0 MP Camera		
Sensor & Size : 3.1M/MT9P001©		
1/2.5'' (5.451X4.088)		
Pixel(μm) : 3.2X3.2		
G Responsively Dynamic range		
SNRmax :1.0 V/lux-sec 61B 43B		
FPS/Resolution: 8@2048X1536,		
22@1024X768, 43@680X510		
Binning: 1x1, 2x2, 3x3		
Exposure: 0.244ms~2000ms		
Spectral Range: 380-650nm (with		
IR-cut Filter		
White Balance: ROI White		
Balance/ Manual Temp Tint		
Adjustment/NA for Monochromatic		
Sensor: Color Technique Ultra-		
Fine TM Color Engine/NA for		
Monochromatic Sensor		
Capture/Control API: Native		
C/C++, C#/VB.NET, DirectShow,		
Twain and Labview		
Recording System: Still Picture		
and Movie		
Cooling System* : Natural		
Power Supply: DC 5V over PC		
USB Port		
Total		
Total		

M- Tech Bio Medical Engineering

Digital Blood pressure Machine

Tender Proforma

Sr No.	Particular	Qty	Rates in Rs.	Cost in Rs.
1	Digital Blood pressure Machine (portable) Type of Product: Digital Arm Bp Monitor Measurement In Pressure : 0-300 mm Hg Measurement In Pulse : 40-200 beats/minute Accuracy In Pressure: ?3 mm Hg Accuracy In Pulse: ?5 % of Display reading Case recording	02		
	Total			

Signature & Seal of Tenderer

Submission of the Tender:

- 1. Sealed tenders in along with earnest money amounting to the value mentioned with each item in the tender document in form of demand draft only. The tenders should reach to undersigned latest by 28 March up to 2: OO P. M.
- 2. Tenders should be submitted either in person or by post in sealed envelopes on which the name of department, item quoted; tender number and date along with name and address of the firm will be written.
- 3. Tender cost (non refundable) (ii) Earnest Money (iii) Proof of PAN and TIN registration document (iv) Standing of the firm (v) Major supplies executed in recent past (vi) Authorized dealer certificate from OEM & Commercial terms and conditions. The rates must be quoted in both figures and words. Any overwriting and/or cutting must be duly attested failing which tenders are likely to be rejected.
- 4. Tender Cost and Earnest money amounting to the value given in the tender document for each Lab should also be submitted with the tender in the form of separate Demand Drafts drawn in favour of Director, BIET, Jhansi.
- 5. Earnest money and Cost of Tender in the form of Bank Drafts must be placed in a separate sealed envelope by writing "Earnest Money" on top of the envelope.
- 6. All the envelopes as above must be kept and sealed in a big envelop. The name of items quoted, enquiry/tender no and the opening date should invariably be mentioned on the top of big envelope.
- 7. Sealed tenders should be sent to Director, Bundelkhand Institute of Engineering and Technology (BIET) Campus, Kanpur Road, Jhansi -284128 latest by 28 March at 2: 00 P.M. . The sealed tenders may be dropped in the box kept at Store and Purchase section at BIET, Jhansi.

Terms and Conditions for Submission of Tenders

- 1. Firms will have to attach the list of customers to whom they have supplied similar items in previous year along with performance reports. Total turnover of the firm must be atleast 50 Lacs per year in the last three years consecutive years. A certificate to these effects should be issued from the sales tax department.
- 2. The descriptive and illustrative literature of the quoted item in original must accompany with the tender.
- 3. Tenders received after the closing date and stipulated time shall not be considered and the institute shall not be responsible for any postal delay.
- 4. Tender should be valid atleast for a period of 04 months. (04 Months from opening date of tender).
- 5. Our terms of payments are strictly after receipt of material and check at our institute regarding the quality and working experience.
- 6. The rates should be quoted FOR store, Bundelkhand Institute of Engineering and Technology (BIET) Campus, Kanpur Road, Jhansi -284128. Inclusive of all taxes/excise duty/fright/package/forwarding expenses/insurance etc.
- 7. Firm shall be solely responsible for defective supplies and losses caused to institute on account of defective supply.
- 8. Tenders brought personally should be dropped into tender box.
- 9. Suppliers must be registered with sales tax department and they should state registration no.
- 10. Quantity of items may increase or decrease or may be cancelled upto any extent.

- 11. No sales tax form "C" or "D" etc for concessional rate shall be provided by the institute.
- 12. All tender must be accompanied by EMD as mentioned in the tender document in the form of Demand Draft drawn in favour of Director, Bundelkhand Institute of Engineering and Technology (BIET) Jhansi.
- 13. Tenders deviating from above terms and conditions shall be rejected straight way without assigning any reason thereof.
- 14. EMD will be forfeited if the equipment's are not supplied in given time.
- 15. If required, the firms have to supply the sample of the items.
- 16. If certain equipment/material needs to be checked/tested at site of the firm, all expenditure (including TA/DA) of our expert members shall be borne by the firm concerned.
- 17. Penalty: The firm, which is not able to supply the equipment's/materials mentioned in purchase order by the due date, shall be liable to pay a penalty equal to 0.10 % of the value of purchase order per day. However this can be waived of by the Director under special circumstances.
- 18. **Payment: -** Ninety percent of contract price shall be paid to the supplier after the delivery / commissioning / testing and completion of the work. The remaining 10% of contract price shall be paid to the supplier within 30 days after satisfactory working.
- 19. Director has every right to extend the due date if so required but all the tenders will be opened together.
- 20. Deduction of TDS (Income Tax & VAT) as per Govt. Rules.
- 21. The firm must provide original Guarantee/Warrantee card as issued by the manufacturer, as the case may be.
- 22. The Director BIET, Jhansi may reject any or all quotations/tenders without assigning any reasons.
 - 23. All disputes subject to Jhansi Jurisdiction only.

For BIET, Jhansi