

कार्यालय संयुक्त संचालक एवं अधीक्षक गांधी
स्मारक चिकित्सालय रीवा म.प्र.

निविदा



2019–2020

एम०डी०आर०यू० में शोध कार्यों के लिये
आवश्यक उपकरणों के क्रय हेतु
ई–निविदा

(प्रथम आमंत्रण)

कीमत रू. 1000/–
(रूपये एक हजार मात्र)

निविदा क्रमांक–05 / 2019–20

ONLINE TENDER SCHEDULE

ई-निविदा विज्ञप्ति क्र 5 / 2019-20

SEQ NO	SCHEDULE	START DATE & TIME	EXPIRY DATE & TIME	ENVELOPES
1	PURCHASE OF TENDER ONLINE	15-07-2019 11.00 AM	03-08-2019 5.00 PM	ENVELOPE A, ENVELOPE B
2	BID SUBMISSION ONLINE	15-07-2019 11.00 AM	03-08-2019 5.00 PM	
3	PHYSICAL SUBMISSION OF BID DOCUMENT	15-07-2019 11.00 AM	05-08-2019 5.00 PM	ENVELOPE A, ENVELOPE B
4	MANDATORY SUBMISSION OPEN	06-08-2019 12.30 PM	-	ENVELOPE A
5	TECHNICAL PROPOSAL OPEN	06-08-2019 12.35 PM	-	ENVELOPE B
6	FINANCIAL BID OPEN	lk`Fkd Is lwpu nh tkosxhA	-	

निविदा में मांगे गए दस्तावेजों की हार्ड कापी 05.08.2019 को सायंकाल 05.00 बजे तक स्पीड पोस्ट/पंजीकृत डाक/स्वयं या अधिकृत प्रतिनिधि उपस्थित होकर कार्यालय संयुक्त संचालक एवं अधीक्षक, गांधी स्मारक चिकित्सालय रीवा म.प्र. 486001 में जमा करे। पोस्टल विलम्ब के लिए कार्यालय किसी भी प्रकार से जिम्मेदार नहीं होगा।

ई-मेल:- jdsupdtgmhrewa@rediffmail.com, Fax-07662-242104

संपर्क:- 07662-242104, +91-9179705483, +91-9644695933 +91-8827730393,
+91-8871535070

निविदा प्रस्तुत करने संबंधी सामान्य निर्देश:-

प्रत्येक निविदादाता को निविदा के रूप में 02 सीलड लिफाफे ए एवं बी एक बड़े आउटर लिफाफे सी में सीलड कर प्रस्तुत करने होंगे।

लिफाफा ए में रखे जाने वाले अनिवार्य दस्तावेजों की सूची:-

1. धरोहर राशि रूपये 1,00,000/- (एक लाख) ऑनलाईन जमा। (सभी ऑनलाईन पेमेंट की रसीद की छायाप्रति संलग्न करना अनिवार्य होगा।

लिफाफा बी में रखे जाने वाले अनिवार्य दस्तावेजों की सूची:-

- 1- **ewy fufonk i i = gLrk{kj , oa l hy l fgr ½Online purchased½**
- 2- **Qe@l l Fkk ds jftLV\$ku dh Nk; ki frA**
3. वित्तीय वर्ष, 2016-17 एवं 17-18 (एसेसमेंट ईयर 17-18 एवं 18-19) का आयकर रिटर्न जमा करने की स्वयं द्वारा सत्यापित छायाप्रति)
- 4- **ukV/jh }kjk l R; kfir fdl h Hkh izdkj dk dj cdk; k u gkus dk ewy 'ki Fk&i =A**
- 5- **100 : - dsuku&T; Mf'k; y LV&ei ij fu/kkZjr ?kkSk.kk i = ½ewy ifr½ ukV/jkbZM**
- 6- **i S dkMZ dh LkR; kfir Nk; ki frA**
- 7- **Okf"kd VuZ vkOj l xdkh izk.k i = l h, - }kjk tkjhA ¼ 25-00 yk[k okf"kd l s de ugh gkuk pkfg; s Ok"K 2017&18½**
- 8- **th, l -Vh- jftLV\$ku dh Nk; ki frA**
- 9- **vf/kdr Mhyj dks fuekZrk dā uh }kjk tkjh v | ru vFkjkbZt\$ku i = dh ewy ifr**

एम0डी0आर0यू0 में शोध कार्यों के लिये आवश्यक उपकरणों के क्रय हेतु नियम एवं शर्तें

1. चिकित्सा महाविद्यालय रीवा के अधीन शोध कार्य हेतु स्थापित **Multi disciplinary research unit** में उपकरण के क्रय हेतु ई-निविदा आमंत्रित की जाती है। निविदा प्रपत्र वेबसाइट <https://mptenders.gov.in/> पर आनलाईन भुगतान कर क्रय किये जा सकेंगे। इसे चिकित्सा महाविद्यालय रीवा की वेबसाइट <http://www.ssmcrewa.com> में भी देखा जा सकेगा।
2. आनलाईन निविदा जमा करने की निर्धारित अवधि के पश्चात प्राप्त निविदाएँ स्वीकार नहीं की जावेगी। आनलाईन निविदा फार्म क्रय करने का मूल्य रू. 1000.00(एक हजार मात्र) निर्धारित हैं यह राशि किसी भी दशा में वापसी योग्य नहीं है।
3. निविदा के साथ अमानती राशि रूपये **1,00,000/- (एक लाख मात्र)** ऑनलाईन जमा करनी होगी। अमानत राशि पर किसी भी प्रकार का ब्याज देय नहीं होगा।
4. प्राइस बिड केवल ऑनलाईन ही भरी जावे तथा भारतीय मुद्रा में ही स्वीकार्य होगी।
5. कृपया प्राइस बिड भरने के पहले समस्त दस्तावेज एवं स्पेशिफिकेशन ध्यानपूर्वक पढ़ एवं समझ लें, उसके पश्चात ही निविदा भरें।
6. निविदाकार को ऑनलाईन क्रय किए हुए निविदा प्रपत्र एवं उसके साथ संलग्न कागजातों के प्रत्येक पृष्ठ पर अपने हस्ताक्षर कर सील लगाना होगा।

7. निविदा के लिफाफे के ऊपर निविदाकार द्वारा सुस्पष्ट लिखावट में एम0डी0आर0यू0 में शोध कार्यों के लिये आवश्यक उपकरणों के क्रय निविदा वर्ष 2019–20 अंकित की जानी चाहिये।
8. चिकित्सालय की भण्डार क्रय समिति को किसी भी अथवा समस्त निविदाओं को बिना कारण बताये अमान्य करने का अधिकार होगा।
9. सामान्यतः न्यूनतम मूल्य दर की निविदा को स्वीकार किया जावेगा, तथापि क्रय समिति शासनहित/जनहित में समग्र रूप से विचार करते हुये अन्यथा निर्णय लेने हेतु अधिकार सम्पन्न होगी।
10. स्वीकृत निविदा, स्वीकृति की तिथि से सामान्यतः 18 माह की समयावधि तक अथवा आगामी निविदा स्वीकृत किये जाने तक प्रभावशील रहेगी।
11. आवश्यकतानुसार उपकरणों का निःशुल्क इंस्टॉलेशन, तथा डेमोन्स्ट्रेशन देना आवश्यक होगा।
12. स्वीकृत निविदा प्रभावशील रहने की अवधि में जनहित की आवश्यकता के अनुरूप निविदा के निबंधन एवं शर्तों में परिवर्तन करने का अधिकार चिकित्सालय की क्रय समिति के पास सुरक्षित है।
13. निविदा के अनुमोदित होने के उपरान्त निविदाकार द्वारा यदि आपूर्ति में हीला-हवाली या टाल-मटोल करके विलम्ब किया जाता है, तो आवश्यकता के अनुरूप खुले बाजार से खरीद की जावेगी। इसमें अधिक भुगतान की वसूली निविदाकार के देयको से वसूल कर लिया जावेगा। इसके बावजूद यदि अधिक भुगतान की वसूली शेष रह जाती है तो जमा अमानत राशि 1,00,000/- (एक लाख मात्र) से काट लिया जावेगा।
14. एम0डी0आर0यू0 में शोध कार्यों के लिये आवश्यक उपकरणों के क्रय के क्रय हेतु किसी भी प्रकार का अग्रिम भुगतान नहीं किया जावेगा तथा किसी भी राशि पर ब्याज देय नहीं होगा।
15. निविदाओं के संबंध में क्रय समिति का निर्णय सभी निविदाकारों को मान्य एवं बंधनकारी होगा।
16. निविदा में संलग्न प्रपत्रों को पूर्ण कर निविदा के साथ संलग्न किया जावे।
17. सफल निविदाकार को कार्य प्रारम्भ करने के पूर्व रु. 1000/- के नान-ज्यूडिशियल स्टाम्प पर 15 दिवस के भीतर उपरोक्त शर्तों के अधीन अनुबंध पत्र निष्पादित करना होगा एवं अनुबंध निष्पादन पश्चात कार्यादेश जारी होने के 30 दिवस के भीतर प्रदायगी प्रारम्भ करनी होगी।
18. इस निविदा में स्वीकृत दरें एच.एल.एल./मध्यप्रदेश पब्लिक सर्विस हेल्थ कार्पोरेशन भोपाल द्वारा स्वीकृत निविदा दर के प्रभावशील होने के दिनांक तक ही प्रभावी रहेंगी।
19. उपकरण उच्च गुणवत्ता के तथा आई.एस.ओ./आई.एस.आई./सी.ई. सर्टिफाईड निर्माता कंपनी का ही होना चाहिए। उपकरणों के स्पेशिफिकेशन में कोई भी बदलाव स्वीकार्य नहीं होगा।
20. प्रदायकर्ता/निर्माता कंपनी द्वारा प्रदाय किए गए उपकरणों की वारंटी/गारंटी अवधि समाप्त होने के पश्चात् ए.एम.सी./सी.एम.सी. सेवाएं देना अनिवार्य होगा।
21. उपकरणों की प्रदायगी FOR संजय गांधी स्मृति चिकित्सालय रीवा(एम.डी.आर.यू.) होगा।
22. उपकरणों से संबंधित कोई भी जानकारी प्राप्त करने के लिए वैज्ञानिक-संजय कुमार पाण्डेय-8349979940 एवं विनीत शाह-9340309714 से संपर्क किया जा सकता है।
23. प्रदाय किए गए उपकरणों का भुगतान इंस्टॉलेशन/डिमॉन्स्ट्रेशन पश्चात चालू हालत होने पर नोडल अधिकारी के अनुशंसा के पश्चात ही किया जावेगा।
24. किसी भी कानूनी विवाद की स्थिति में न्यायालय रीवा होगा।

संयुक्त संचालक एवं अधीक्षक,

तकनीकी बिड हेतु प्रपत्र:- बी

(पूर्ण रूप से भर कर एवं हस्ताक्षरित कर लिफाफे को सील बंद करें एवं लिफाफे पर प्रपत्र बी स्पष्ट रूप से उल्लेखित करें)
निविदाकार द्वारा तकनीकी बिड हेतु प्रस्तुत की जाने वाली जानकारी

स. क्र.	तकनीकी मापदण्ड हेतु अनिवार्य दस्तावेज	निविदाकार के द्वारा टिक किया जावे। पृष्ठ क. दर्शाये		परीक्षण समिति द्वारा टिक किया जावे।	
		हां	नहीं	हां	नहीं
1.	धरोहर राशि रूपये 1,00,000/- (एक लाख) ऑनलाईन। (सभी ऑनलाईन पेमेंट की रसीद की छायाप्रति संलग्न करना अनिवार्य होगा।				
2.	मूल निविदा प्रपत्र हस्ताक्षर एवं सील सहित (Online purchased)				
3.	फर्म/संस्था के रजिस्ट्रेशन की छायाप्रति				
4.	वित्तीय वर्ष, 2016-17 एवं 17-18 (एसेसमेंट ईयर 17-18 एवं 18-19) का आयकर रिटर्न जमा करने की स्वयं द्वारा सत्यापित छायाप्रति)				
5.	नोटरी द्वारा सत्यापित किसी भी प्रकार का कर बकाया न होने का मूल शपथ-पत्र				
6.	100 रु. के नान-ज्यूडिशियल स्टाम्प पर निर्धारित घोषणा पत्र (मूल प्रति) नोटराईज्ड				
7.	पैन कार्ड की सत्यापित छायाप्रति				
8.	वार्षिक टर्न ओवर संबंधी प्रमाण पत्र सी.ए. द्वारा जारी। (रु 25.00 लाख वार्षिक से कम नहीं होना चाहिये वर्ष 2017-18)				
9.	जी.एस.टी. रजिस्ट्रेशन नं. की छायाप्रति।				
10.	vf/kdr Mhyj dks fuekrk dāuh }kjk tkjh v ru vFkjkbtzku i = dh ewyifr				

निविदाकर्ता संस्था प्रमुख के हस्ताक्षर

निविदाकर्ता संस्था प्रमुख का नाम

(स्पष्ट अक्षरों)

संस्था का नाम एवं पूर्ण पता एवं सील

—घोषणा—पत्र—

(100/- रूपये के नान-ज्यूडिसियल स्टाम्प पेपर पर नोटराईज्ड कराकर प्रस्तुत किया जाये)

1. मैं/हम भारत का/के नागरिक हूँ/है।
2. मैं/हम भारतीय संविदा अधिनियम के अनुसार निविदा कार्य के लिए सक्षम हूँ/हैं।
3. मुझे/हमें म.प्र. शासन के किसी भी विभाग द्वारा निविदाकार्य से बहिष्कृत नहीं किया गया है।
4. मैं/हम किसी ऐसे कान्ट्रेक्टर, जो कि म.प्र. शासन के किसी विभाग द्वारा बहिष्कृत किया गया हो, न तो अभिकर्ता हूँ/है और न ही उसके लिये कार्य करता हूँ/करते है।
5. मेरे/हमारे द्वारा निविदा की शर्तों के अलावा अन्य कोई शर्तें प्रस्तुत नहीं की गयी है। यदि अन्य कोई शर्तें प्रस्तुत की गयी है, तो उसे अमान्य माना जाये।
6. श्यामशाह चिकित्सा महाविद्यालय/संजय गांधी स्मृति चिकित्सालय/गांधी स्मारक चिकित्सालय रीवा के किसी अधिकारी/कर्मचारी से संबंध नहीं है।
7. मेरे /हमारे द्वारा इस निविदा में भरी मूल्य दर से कम मूल्य दर की निविदा मध्यप्रदेश राज्य के किसी संस्था या कार्यालय में प्रस्तुत नहीं की गई है।
8. मेरे/हमारे द्वारा सफ़लाई किए गए उपकरणों की गुणवत्ता की जिम्मेदारी मेरी/हमारी होगी।
9. हमारी संस्था के विरुद्ध सी.बी.आई0/लोकायुक्त/ई.ओ.डब्ल्यू/शासकीय कार्यालय इत्यादि में कोई जाचं लबित नहीं है और न ही सक्षम न्यायालय मे आपराधिक प्रकरण दर्ज है और न ही दण्डित किया गया है।
10. मेरे द्वारा प्रस्तुत जानकारी सही है। असत्य पाये जाने पर मेरे विरुद्ध विधिसम्मत कार्यवाही किए जाने पर मैं स्वयं उत्तरदायी रहूंगा।

दिनांक:

(निविदाकार के हस्ताक्षर)

नाम—

पूरा पता—

फोन एवं मोबा. न.—

गवाहों के नाम, पते एवं हस्ताक्षर

1.

2.

		Connections and Connectivity	USB & HDMI		times calibration of machine is mandatory to supply with machine.
		Description	Micro volume Spectrophotometer, with cuvet capability		
		Detector Type	2048-element linear silicon CCD array		
		MDD classification	Approved Class II a		
		Lamp	Xenon Flash		
		Measurement Time	<3 sec		
		No. of Samples	1		
		Sample Volume	0.2-2.0µL		
		Spectral Resolution	=1.8nm (FWHM at Hg 253.7)		
		System Requirements	Latest desktop branded PC suitable for the above system with Intel i7 processor, 16GB RAM, 1 - 2 TB HDD, 21" LCD/LED Flat Touch panel Monitor, Latest ODD, Backlit Keyboard, Mouse, USB, Interface Ports, Ethernet Network Port, inbuilt WIFI, Windows 10 OS or latest professional with colour printer etc.		
		Type	Nano drop Spectrophotometer		
		Wavelength Accuracy	±0.5nm		
		Wavelength Range	150-840nm		
		Light Source	Light Emitting Diodes		
		Pathlength	0.2 to 0.8 mm		
		Absorbance Range (10 mm equivalent)	0 - 30 OD		
		Typical Measurement Reproducibility	0.002		
		Warranty	Three years on site		
3	Gel documentation system	<ul style="list-style-type: none"> ➤ CCD Camera: Monochrome CCD Camera Suitable for Scientific Imaging with minimum 10 Mega pixels of CCD resolution & 21 Mega Pixels of image resolution (or) More.-Motorized Zoom Lens: Minimum F 1.2 (or) Better, 8-64mm / 12 to 75 mm Motorized Zoom Lens with Zoom, Aperture and Focus controls through Software. ➤ Computer Connectivity: USB, HDMI & Port C Compatible. ➤ Emission Filters: UV Mid Pass Filter suitable for Ethidium Bromide detection ➤ Filter Holder: Minimum 2 Positions (or) more. 		01 Nos	<ul style="list-style-type: none"> ➤ Warranty: 3 Years comprehensive on-site warranty for complete system including computer and colour Laser printer with 5 year AMC. * Comprehensive training for lab staff and support services till familiarity with the system.
		<ul style="list-style-type: none"> ➤ Dark Room Hood & Built-in Illumination Light Sources: 302/312 nm, mid-range UV Transilluminator (Filter Size 25 - 34 cm x 26 - 36 cm) pull out drawer type; Trans UV to White Light Converter screen / Fold Down white light illuminator; Epi White Light Illumination. ➤ The Gel doc must be having facility to read chemiluminescence. ➤ Computer : Latest desktop branded PC suitable for the above system with Intel i7 processor, 16GB RAM, 1 - 2 TB HDD, 21" LCD/LED Flat Touch panel Monitor, Latest ODD, Backlit Keyboard, Mouse, USB, Interface Ports, Ethernet Network Port, inbuilt WIFI, Windows 10 OS or latest professional etc. 			
		Laser Printer: Laser jet colour Printer, A4 & A3 both Size compatible,			

		<p>Minimum 1200x1200 dpi and above, 35PPM or higher model with scanning and auto duplex printing facility to be offered</p> <p>➤ Software: Fully automated Software for Image Acquisition, Image Optimization, and Image Analysis & Image Export. Export of Images with User Specified Publishing - Resolution (dpi) & Publishing-dimension should be compulsorily available. Multiple Export Options like 8 bit tiff, 16 bit tiff, .bmp, png, jpg should be available enabling the user to export images to third party software's for advanced image analysis/optimization.</p> <p>Tools for compliance with US FDA 21 CFR Part 11 regulations.</p> <p>➤ Operating voltage: 230 volts, 50Hz A.C</p> <p>➤ Warranty: 3 Years comprehensive on-site warranty for complete system including computer and colour Laser printer with 5 year AMC.</p>		
4	Biochemical autoanalyzer	<p>Defined objectives of machines</p> <p>➤ For analysis of serum, plasma, urine, cerebrospinal fluid (CSF), hemolysate, hormone, vitamins and whole blood for HbA1C</p> <p>Test Requirements</p> <p>➤ A discrete patient prioritized automated random access clinical chemistry analyzer, for chemistries, immunoglobulins, hormone, vitamins, drug assay etc. in blood/urine/fluid with ISE electrolyte analyzer (Na⁺, K⁺, Cl, Ca Bicarbonate, Mg etc.). Independent calibration of photometer and electrolyte analysts and an open reagent system.</p>	01 Nos	<p>➤ Comprehensive warranty for 5 years and 5 years AMC after warranty Performance report in the last 5 years from major hospitals should be enclosed.*</p> <p>Comprehensive training for lab staff and support services till familiarity with the system.</p> <p>* Complementary test kit for all parameters to conduct 300 - 500 tests is mandatory to supply with machine.</p>
		<p>Technical Requirements</p> <p>➤ Analytical Mode: End point as well as Kinetic, Automatic, discrete, Random Access.</p> <p>➤ On board parameters: Minimum 40-70 parameters.</p> <p>➤ Through put: Minimum 400 test/hour and ISE test (300-400 tests with). continuous loading facility to be provided.</p> <p>➤ Sample Volume: Minimum 2 – 15 µl/test.</p> <p>➤ Reagent Volume: Maximum 100-300 micro litre for single reagent. Multi-reagent facility should be provided.</p> <p>➤ Error Check: Automatic flagging for errors.</p> <p>➤ Auto dilution facility: For high value samples.</p> <p>➤ Repeat Run facility: Facility to check the results by repeat run on the desired samples</p> <p>➤ Sample clot and Probe crash detection facility: For excluding erroneous analysis</p>		

	<ul style="list-style-type: none"> ➤ Self diagnosis and trouble shooting: For minor day-to-day problem 		
	<ul style="list-style-type: none"> ➤ Calibration & quality control : Linear/ Non-Linear/ Multipoint 		
	<ul style="list-style-type: none"> ➤ Onboard Bar Code Facility: Bar Code ID for sample tube and Reagent Identification Facility 		
	<ul style="list-style-type: none"> ➤ Reagent storage facility: Onboard refrigeration of 50 – 80 reagent bottles 		
	<ul style="list-style-type: none"> ➤ Stat facility – refrigerated: Separate provision for Urgent Samples 8 – 15 preferred with refrigeration 		
	<ul style="list-style-type: none"> ➤ LAN interface facility : Online data transmission facility through LAN to the Computer Network of the Hospital along with necessary software 		
	<ul style="list-style-type: none"> ➤ Reagent system: Open system capable of working on reagent from any of the firms. 		
	<ul style="list-style-type: none"> ➤ Measurement: Mono & Biochromatic with polychromatic correction for interfering substances. 		
	<ul style="list-style-type: none"> ➤ Cuvette washing system: Inbuilt with automatic cuvette absorption measurement facility 		
	<ul style="list-style-type: none"> ➤ Probe system: Separate probe for reagent and sample 		
	<ul style="list-style-type: none"> ➤ OPTICAL SYSTEM: a) Light Source: Halogen/ Xenon Lamp b) Wave Length Range:- 340 – 800 nm with polychromatic correction. c) Optical Detection: Diffraction grating d) O.D. Range : 0 – 2.5 		
	<ul style="list-style-type: none"> ➤ Computer specification:- CPU core i7 or above, 2.7 GHz and above; 8 GB RAM; 2 TB Hard Disk Drive; High Speed latest ODD: Serial, parallel, USB & HDMI ports ; Backlit Keyboard, Mouse and Mouse Pad; Preloaded latest MS Windows 10 professional or above; Full HD or QHD Monitor size 19" or above ; Laser color printer; latest internal modem & wifi receptor; latest 3 year professional anti-virus. 		
	<p>System Requirements and essentialities</p>		
	<ul style="list-style-type: none"> ➤ Deionizer : With suitable water output capacity. 		
	<ul style="list-style-type: none"> ➤ Trial kits for various parameters, multi-calibrators and multicontrols.-02 set 		
	<ul style="list-style-type: none"> ➤ ISE Electrodes for Na, K and Cl measurements-02 set 		
	<ul style="list-style-type: none"> ➤ Data Processor Computer with printer etc as specified above-01 		
	<ul style="list-style-type: none"> ➤ All consumables required for installation and standardization of system to be given free of cost 		
	<p>Certifications compliances and Environmental Factors</p>		

	<ul style="list-style-type: none"> ➤ Shall meet IEC-60601-1-2: 2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility. or should comply with 89/366/EEC; EMC-directives. 		
	<ul style="list-style-type: none"> ➤ The unit shall be capable of being stored continuously in ambient temperature of 0 - 50deg C and relative humidity of 15-90% 		
	<ul style="list-style-type: none"> ➤ The unit shall be capable of operating in ambient temperature of 18-35 deg C and relative humidity of less than 70% 		
	Complete installation of the system including water input and drainage system has to be installed		
	Power Supply		
	<ul style="list-style-type: none"> ➤ Power input to be 220-240VAC (Single Phase), /400-440 V (3 Phase)/ 50Hz as appropriate fitted with Indian plug. 		
	<ul style="list-style-type: none"> ➤ Voltage corrector/stabilizer of appropriate ratings meeting ISI Specifications.(Input 		
	<ul style="list-style-type: none"> ➤ 160-260 V and output 220-240 V and 50 Hz) 		
	Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system		
	Safety Certification and norms Compliance		
	<ul style="list-style-type: none"> ➤ Should be USFDA , CE,UL or BIS approved product 		
	<ul style="list-style-type: none"> ➤ Manufacturer/Supplier should have ISO certification for quality standards 		
	<ul style="list-style-type: none"> ➤ Comprehensive warranty for 3 years and 7 years AMC after warranty 		
	<ul style="list-style-type: none"> ➤ Comprehensive training for lab staff and support services till familiarity with the system. 		
	<ul style="list-style-type: none"> ➤ Attach original manufacturer's product catalogue and specification sheet. Photocopy/ computer print will not be accepted. All technical data to be supported with original product data sheet. 		
	Should be compliant with IEC 61010-1:(or any international equivalent eg EN/UL 61010) covering safety requirements for electrical equipment for measurement control and laboratory use		
	Documentation		
	<ul style="list-style-type: none"> ➤ User/Technical/Maintenance manuals to be supplied in English. 		
	<ul style="list-style-type: none"> ➤ Certificate of calibration and inspection. 		
	<ul style="list-style-type: none"> ➤ List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / 		

		technical manual.		
		➤ List of important spare parts and accessories with their part number and costing.		
		➤ Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.		
		➤ Performance report in the last 5 years from major hospitals should be enclosed.		□
5	HPLC	<p>1- Solvent delivery system (Pump, Binary / Quaternary gradient)</p> <p>The system should have at least two pumps and support minimum of two solvents with a feature of variable dynamic mixture gradient for optimum performance with high pressure mixing. The system should work in isocratic, gradient and semi & fully preparative mode.</p> <p>Vacuum degassing: The built in online degasser with at least one channel per solvent and one channel for sample manager wash solvents should be provided with machine. The degassing has a provision to effectively remove/reduce ghost peaks.</p> <p>Operating pressure should be 6000 psi or better suitable for both analytical and semi-preparative applications.</p> <p>Flow rate should be 0.01 to 10 mL/min with at least 0.001 ml increments or better</p> <p>It should have leak sensors as standard and safe leak handling.</p> <p>Flow accuracy should be ±1% or better.</p> <p>Flow precision should be ±0.07% RSD or better.</p> <p>Should have pump seal wash function which will be equipped with wash system to flush the rear of the high pressure seal & the plunger</p> <p>Injection synchronization between pump and sample manager for retention time reproducibility</p> <p>System should work in the pH range of 2 to 12 or more</p> <p>Injection and Fraction collection should perform with same instrumental platform</p> <p>The instrument should be able to collect fractions even at 10 ml/min flow rate</p> <p>Suitable solvent tray that can accommodate four solvents bottles of 1L capacity and the solvent spill from this tray must not affect the instrument.</p> <p>A suitable fraction collection assembly compatible with the system should be provided. The fraction collector should operate with the same software provided in the HPLC system and it should also have provision to collect the fractions for analytical and semi-preparative samples.</p> <p>The auto sampler vials/test tubes for fraction collection with variable volume capacity should be provided in addition to the vials/test tubes coming long with the instrument (500 Nos).</p> <p>One manual rheodyne injector with all necessary accessories should be provided. The loops volume of 20 µl, 100 µl and 500 µl should be provided.</p> <p>2- Auto sampler/Sample manager and column temperature compartment</p> <p>The auto sampler tray should have capacity to hold minimum of 30 Nos of 12 ml or more and 100 Nos of 1.5 ml vials. The auto sampler</p>	01 Nos	<p>The system should have GLP/GMP compliance and should strictly meet 21 CFR Part 11 guidelines. The system should enable for audit trails, electronic signature and other requirements related to GLP compliance. Further, required IQ and OQ reports should be generated to meet GLP regulatory requirements during installation and operation by your service personnel. All the necessary accessories, consumables, software etc should be provided. Full system from the single vendor and no refurbished parts should be added to the system 5 years comprehensive warranty should be provided. The warranty shall cover the maintenance of the instrument along with replacement of spares, accessories, consumables etc as and when required</p>

	should also have provision for 4 ml vials holding capacity (minimum 50 Nos)		<p style="text-align: center;">for the said warranty period. Five years AMC should be provided for the whole instrument including software workstation, HPLC modules etc.</p>
	Injection volume range should be 0.1 to 5000 µL as standard loop		
	Accuracy should be ±1% or better		
	Auto sampler with auto-dilution and auto-addition capabilities is preferable		
	It should have capacity to hold three or more columns in column compartment		
	The sample carryover should be less than 0.1% or better		
	Design must ensure isolation of electrical components from liquid flow path		
	Column temperature range should be programmable from ambient (25°C) to 85°C in 1°C increments.		
	Safe leak handling must be provided with leak sensors.		
	There should be some option to track the column usage information		
	Column temperature stability should be ±0.1°C or better.		
	Column temperature accuracy should be ±0.5°C or better.		
	Auto sampler vials (500 Nos each of 1.5 ml, 4 ml and 12 ml or more) should be provided in addition to the vials comes along with the instrument.		
	The columns C ₁₈ , C ₈ , HILIC or equivalent columns specific to carbohydrates, amino acids, fatty acids and chiral separations for both analytical semi-preparative applications should be separately (A total of 15 columns should be provided).		
	Necessary guard columns with respect to above said columns should be mentioned separately (A total of 10 Nos should be provided).		
	Autosampler syringes (5 Nos each for analytical and semi-preparative injections) should be provided .		
	3- PDA detector		
	Wave length should be in the range of 190-1100 nm or more settable in 1 nm increment		
	The PDA detector should be suitable for both fully automated analytical and semi-preparative applications.		
	The flow cells of detector for analytical applications (2 Nos) and semi-preparative applications (2 Nos) should be provided in addition to the ones comes along with the instrument. The flow cells should have temperature controlled option for stable baseline and faster stabilization		
	The D ₂ lamps (3 Nos) and W lamps (3 Nos) should be provided separately in addition to the ones comes along with the instrument		
	The detector must have linearity of 5% at 2.0 AU		
	The detector must have wavelength accuracy of ±1 nm		
	The detector must have guaranteed lamp life of not less than 2000 hours		
	The detector should have lamp optimization software facility which guarantees low noise performance without lamp change and compensates for lamp degradation over time		
	Data acquisition range should be 80 Hz or more		
	The detector must able to operate in 3D and 2D simultaneously		
	The detector should have low volume long path length flow cells for optimum performance and to achieve highest sensitivity.		
	4- Evaporative Light Scattering Detector (ELSD)		
	High-sensitivity ELSD with operation upto 120°C or more		
	Light source: LED 480 nm or better		

	Detector: Photomultiplier Tube Digital Signal Processing with at least 2000 hr warranty	
	Temperature range: Evaporator 25-120°C (in 1°C increments)	
	Temperature range: Nebulizer: 25-90 °C (in 1°C increments)	
	Effluent Flow Rate: 0.2-5 mL/min	
	Digital output: 80Hz or better	
	Should have safety features such as gas shutoff valve and vapour and leak detection	
	The gas cylinders with GC/IOLAR grade gas required for ELSD operations along with joint free SS pipeline with double stage gas regulators and traps (moisture, hydrocarbon etc.) should also be mentioned separately with installation expenses.	
	Scattering angle: 60 degrees or better	
	5- Data Station	
	The chromatography software should be capable to control all modules such as pump, auto sampler, PDA and RI detector without any up gradation and have capability to robust peak integration, report formatting, qualitative and quantitative processing with effective detection of low level peaks on noisy or sloping baseline. Should have automatic method transfer capabilities from fully automated analytical to semi-preparative applications.	
	A latest suitable and compatible computer (i7 processor, 2 TB HDD, 16GB RAM or more) with 26" TFT/LCD touch monitor, complete backlit keyboard and mouse with one pair of compatible wireless, in built modem & wifi and multifunctional laser colour printer of A3 size with scanning and auto duplex printing facility for HPLC chromatographs and data (One set).	
	Mobile control:	
	Mobile Control must be provided to control HPLC. The app must run on Android Oreo / Android P or Windows 10 tablets. Only authorized operators can change the HPLC parameters using Mobile control unit. One can check the status of HPLC system via WLAN range. Mobile Control must display all important parameters of selected HPLC devices on one screen. Settings of the devices can be easily changes sliders or by entering numeric values. Mobile Control must allow to program methods for each device and complete HPLC system.	
	Necessary tool kit for routine maintenance of the system.	
	Compatible UPS system with atleast 10 KVA with built-in isolation transformer capable of taking inductive loads with atleast 2 hours backup from Luminous/APC with vertical batteries stand to support the whole system (One).	
	Optional items:	
	The quote for the pre column derivatization kits/system should be provided as an optional item	
	A stand-alone automated solid-phase extraction system of latest model with at least 6 samples per hour extraction efficiency will all accessories, including computer and software with 21 CFR part 11 compliance should be supplied as an optional item	
	Important Note:	
	The system should have GLP/GMP compliance and should strictly meet 21 CFR Part 11 guidelines. The system should enable for audit trails, electronic signature and other requirements related to GLP compliance. Further, required IQ and OQ reports should be generated to meet GLP regulatory requirements during installation and operation by your service personnel. All the necessary accessories, consumables, software etc should be provided.	

		Full system from the single vendor and no refurbished parts should be added to the system		
		Three years comprehensive warranty should be provided. The warranty shall cover the maintenance of the instrument along with replacement of spares, accessories, consumables etc as and when required for the said warranty period.		
		Five years AMC should be provided for the whole instrument including software workstation, HPLC modules etc.		
6	FTIR	Item: Fourier transformation infrared spectrometer	01 Nos	* Comprehensive warranty for 5 years and 7 years AMC after warranty Performance report in the last 5 years from major hospitals should be enclosed.* Comprehensive training for lab staff and support services till familiarity with the system.
		1. Spectral range : 500 to 6000cm-1		
		2. Wave number accuracy : <0.05cm-1@2000cm-1		
		3. Resolution : 0.75cm-1 resolution freely adjustable from 0.75cm-1 to 256cm-1		
		4. Optical components : should be znSe beam splitter & windows, capable to suit weather change effects in the laboratory including high humid atmosphere and the system should be kept "ON" only when it is in use.		
		5. Light source : High intensity ceramic globar source with high throughput stable Energy & long life		
		6. Detector : Room temperature stabilized DLATGS (Deuterated L-alanine doped Triglycene Sulphate) detector		
		7.Signal to noise ratio : > 55.000:1(1min measurement time, spectralresolution 4cm-1)		
		8. Wave number precision: <0.0005cm-1@2,000cm-1(SD of 10repeat measurements)		
		9. Photometric accuracy: <0.1%T		
		10. Temperaturestability 100% line : <1% per°C		
		11. Measurement modes: Transmittance and reflectance with attenuated total reflection (ATR) and ZnSe for analyzing liquid, powder, gel, paste, thin film etc. without sample preparation. 10 Year warranty on ATR crystal to offered		
		12. Interferometer: Rigid mounting, permanent aligned, high stability. It should be stable and protected to tilt & shear.		
		13. The optics are sealed and desiccated and all mirrors should be gold coated to ensure maximum throughput & sensitivity.		
		14. The unit should have a diode laser for alignment/background signal, with 10 years of life.		
		15 . The system should have slip clutch pressure applicator for sample holding and typical working distar or sample height -20mm or more.		
		16. The ATR crystal plate should be exchangeable and also have a sensor for automatic electronic recognition and optimization.		
		18. PC-Connectivity : System should be compatible to connect it with a PC through Ethernet, remote control via W-LAN (TCP/IP) or equivalent.		

		19. Input power : 230 VAC, 50Hz, single phase as per Indian standard		
		20. The unit should also be capable of automatic instrument test i.e, Operational and performance Qualification(OQ/PQ) with built NIST traceable polystyrene film for Regulatory requirement to meet NABL accreditation and guide line.		
		21. Software features v: The unit should be supplied with a user friendly full functioning Data measurement and processing software compatible to Window 8 or higher version. The software should include search Capabilities as well as the possibility to create user own libraries. System should be supplied with library for explosive materials and S/W should have built in Quantitative function and should be upgradable to Multi component Quantitative function.		
		22. Warranty: Thewhole system should have a warranty of minimum two years from the date of Installation and commissioning of the equipment and ten years for inter interferometer and laser diode.		
		Other general specifications:		
		1. The supplier should confirm his capability to support maintenance after the warranty period, either directly or through his service representative positioned in India.		
		2. The suppliers should include the following in their offer: i. Point wise confirmation of compliance as per specifications, clearly mentioning deviations (if any). ii. A list of customers in India with contact details, to whom similar systems have been supplied iii. Detailed technical catalogue/data sheets indicating all the parameters of the quoted unit.		
		Budder Qualification Criteria: 1. Only original manufacturer sortheirauthorizedsalesandservice representativesareeligible tobid. The vendor should provide authorization certificate from the original manufacturer.		
7	-80⁰C Deep Freezer	Type	Vertical	01 Nos Comprehensive warranty for 5 years. After Sales Service & demonstration cum training should be available promptly.
		Input voltage of Deep Freezer	230+/-10% V, 50Hz	
		Voltage stabilizer	5KVA External stabilizer	
		Chamber temperature range	-50°C to -86°C	
		Weight	300 to 500 Kg	
		Shelf Weight	50 to 90 kg	
		Display	LCD / LED 7" – 10 "	
		Smart Connectivity	USB & HDMI backup support.	
		MDD classification	Approved Class II a & Class III	
		Dimensions (external) (W x D x H) in mm	(800 – 1080) x (820 – 1120) x (1920 – 2320)	
		Dimensions (internal) (W x D x H) in mm	(540 – 820) x (480 – 780) x (1080 – 1420)	
		Inner chamber volume	300 to 500 Liters	
		Number of trays	3 to 5 adjustable stainless steel trays	
		Number of compartments	4 to 5 compartments	
		Inner doors	4 to 5 Nos. made of stainless steel	
		Door insulation	115 to 150 mm thick PUF insulated door with rubber gasket sealing	
		Cabinet insulation	115 to 150 mm thick PUF insulation	

		Door lock	Handle with self door opening facility		
		Heating near the door opening	Using the discharge line of compressor		
		Outer cabinet material	1.5 to 2.0 mm thick CRCA/HDGI sheet-powder coated		
		Inner chamber material	1.2 – 1.4 mm thick stainless steel sheet		
		Wheels	Best in class with height adjustment and lock ability.		
		Refrigerant	Primary R404a / R 290 / R 410 (CFC FREE) Secondary R 508 b / R 718 / R 170 (CFC FREE)		
		Compressor	Two hermetically sealed (Hitachi / Haier / Sharp / General/ OEM)		
		Temperature sensing method	RTD.		
		Temperature sensor	RTD sensor - PT100		
		Chart range	-100°C to +50°C Alarms and indications		
		Secondary compressor ON	Visual		
		Primary compressor ON	Visual		
		High/Low temperature	Audio-Visual		
		Door open	Audio-Visual		
		Battery low	Audio - Visual		
		Power ON	Visual		
		Power fail	Visual		
		Display resolution of controller	0.1°C		
		High temperature alarm	Set value +10°C		
		Low temperature alarm	Set value -10°C		
		Manufacturing standards	Highest Compliance		
		Standards & Approval	CE, EURoHS, & ENERGY STAR		
		Warranty	for a minimum period of three years		
8	Microwave Synthesizer	Microwave assisted focused monomode organic synthesis systems should be able to handle the synthetic reactions involving routine organic, organometallic, Nano materials synthesis, fluorination, caustic solutions, catalysts using palladium, non-polar solvents like toluene, hexane etc.		01 Nos	<p>* The synthesizer should be provided with 5 years of comprehensive warranty and thereafter 5 years of AMC should be covered.</p> <p>* Training of staff and prompt visit of company technical persons for addressing of machine errors & issue should be arranged immediately as per the lab staff needs.</p>
		➤ Power output: Microwave power of minimum 500 W or higher			
		➤ Microwave power field density : 6000 Watts /liter or more			
		➤ Maximum Pressure & Temperature: 25 bar and 300 ⁰ C or greater for 10mL as well as 30ml reaction vessels for scale up reactions without re-optimization of parameters.			
		➤ System must be able to effectively heat polar as well as non-polar solvents like Toluene, Dioxane, etc. to elevated			

		temperature without heating aids.		
		➤ Temperature Measurement: IR measurement as standard facility with multi point calibration for accurate temperature measurement of reactions.		
		➤ Integrated Pressure Sense or to measure. Display as well as document reaction pressure.		
		➤ Should have inbuilt magnetic stirrer device with variable speed from 0 rpm upto at least 1000 rpm or more to ensure uniform temperature in the reaction.		
		➤ Self- tuning cavity for optimum heating efficiency with all vessel types.		
		➤ Should be supplied with Glass Vials of 10ml, 20ml, 30 ml & 50ml capacity with sustainable material of construction and allow for multiple reaction runs to be conducted in the same vial.		
		➤ Must be supplied with a vessel made of material of at least 10ml capacity to allow for carrying out reaction involving metallic particles, in- situ fluorination, caustic solutions of high alkaline pH such as Na OH at elevated temperatures and reactions using other aggressive reactants to avoid breakage of glass vessels during operation and it must have unlimited reusability for reduced cost of operation.		
		➤ Sealing of reaction vessels should be easy and without use of any tools.		
		➤ Heating Performance benchmarks with glass vessels and without any heating aids:		
		• System should have ability to heat 20mL Ethanol to 200 ⁰ C in around 2 - 5 min.		
		• System should have ability to heat 5mL Toluene to 200 ⁰ C in around 3 - 6 min		
		➤ Large inbuilt Touch screen display with capability for online graphical display of reaction parameters like pressure. Power and temperature and review of previous reaction runs.		
		➤ Direct printout to PDF files or export of data to excel via USB or HDMI ports.		
		➤ Suitable air compressor for operation of the instrument and cooling of reaction vials after a reaction is over should also be quoted.		
		➤ Consumables: Stir Bars for bath 10mL, 20mL as well as 30mL vessels, Caps Silicone Septum must be quoted in the main offer along with the instrument for trouble free operation.		
		➤ Optional Fiber optic Ruby Thermometer with ability to measure internal reaction temperature		

		simultaneously along with IR sensor and simultaneous display of both. IR and Ruby temperature on screen should be quoted separately.			
		➤ The system must be upgradable with an auto sampler with minimum 24 reaction vessels handling (10mL and 30mL) for unattended operation.			
		➤ The system must be upgradable with an integrated camera for monitoring the reactions with display on the screen of the instrument.			
		➤ The synthesizer should be provided with 3 years of comprehensive warranty and thereafter 5 years of AMC should be covered.			
		➤ Training of staff and prompt visit of company technical persons for addressing of machine errors & issue should be arranged immediately as per the lab staff needs.			
9	Hb Electrophoresis	GEL ELECTROPHORESIS UNIT		01 Nos	Comprehensive warranty for three years. After Sales Service & demonstration cum training should be available promptly
		1- The Mini Horizontal Gel Box system should offer extended run length and improved resolving area for complex analysis in a mini gel format			
		2- These system should be designed for rapid separation of hemoglobin molecules or Agarose gels and should be ideal for sickle cell analysis			
		3- The system should have a Dimension of 15 cm W x 22 cm L x 9.5 cm H			
		4- UV transmissible gel tray with fluorescent graduation on the base of the gel tray. The Gel tray dimensions should be 9 cm W x 11 cm L with grooves (8.7 cm L x 1.2 cm H) on The side for gripping the gel tray. It should have two comb slots on the same tray area.			
		5- The gel tray should have stable silicone gaskets, so that no separate casting tray is required It should provide two combs, 10 and 14 tooth each			
		6- Buffer capacity should be 600 ml for the buffer tanks and optimum gel runs with a fill line indicator for buffer levels along the unit side			
		7- Max electrode separation in 19 cm with a Maximum Voltage of 150 V, such that it has 5 volts per cm of electrode seoration (5 V x 19 cm = 95 V)			
		8- It should have a buffer chamber with color coded sealed platinum electrodes which are very sturdy and long lasting than the generally offered silver electrodes			
		ELECTROPHORESIS POWER SUPPLY			
		1. It should be ergonomically designed equipment, which is light weight and occupies less table space. Dimensions should be approximately 300 x 200 x 100, weighing about 3.0 kg which makes them portable.			
		2. To increase the user's safety, none of the outlets has to be directly wired to the earth The terminals have to be floating and have deeply recessed contacts .			
		3. It must be robust to provide uninterrupted service for years			

		4. Specific output control for both voltage and current specifications Ability to change the voltage from 10 - 300 V as minimum of 250 volts will be required for electrophoresis run, Current to be adjusted from 4-400 mA			
		5. The supply must be integrated with digital displays to provide error free and precise output settings. To be provided with 3 digit display			
		6. It must have built in timer for unattended runs. This prevents the need for continuous monitoring and eliminates risk of sample over runs. It should be Programmable from 1 minute to 999 minute with digital display			
		7. Provision for running multiple gels at single time. To serve this purpose it should be provided with four outputs and power of 75 W			
		Notes-			
		Comprehensive warranty for three years. After Sales Service & demonstration cum training should be available promptly			
10	Vertical gel Electrophoresis	Vertical gel apparatus: 10 – 14 cm (Length) x 8 – 12 (Breadth) x 8 - 14 cm (Height), 6-12 samples, glass plate (10 x10 cm), comb capacity of 10µl -50µl and gel caster.		01 Nos .	Comprehensive warranty for three years. After Sales Service & demonstration cum training should be available promptly.
		Gel imaging system with UV transilluminator (white light and UV light), built in with 10MP – 20MP camera; 1D – 2 D Gel analysis Software.			
		Digital power pack (output 10 – 300 V) with output terminals, timer, 4-6 digit, 2 row LED display and start/stop function			
		Note:-			
		Comprehensive warranty for three years. After Sales Service & demonstration cum training should be available promptly.			
11	Western blotting system	1. System should be convenient – for simultaneously transfer up to four mini sized gels or two midi sized gels. Designed for rapid semi dry transfer of proteins from polyacrylamide gels to Nitrocellulose or PVDF membranes in 5-10 minutes		01 Nos .	Comprehensive warranty for three years. After Sales Service & demonstration cum training should be available promptly
		2. Should have integrated power supply with blotting Software and the blot Cassette (for blotting with Color coded cassettes and electrodes to ensure proper orientation).			
		3. Pre-programmed methods for Low MW, Mixed Range MW, High MW, Standard Semi Dry, 1.5 mm gels or unknown size gels			

		4. USB port should be there for program transfer.			
		5. Easy touch programming for access to pre-programmed transfer methods based on the gel			
		6. Number, gel size and molecular weight range of proteins using color LCD/LED menu touch screen and also to easily create, run and save custom transfer methods.			
		7. Should have Audible alarm for End of run.			
		8. Should come with cooling unit.			
		9. Should be a modular system.			
		10. Should be European CE Declaration of conformity / USA FDA Certified.			
		11. Should be able to store 20 or more programmable methods.			
		12. Should be an open system which accepts accessories and consumables from different suppliers also.			
		Note			
		Comprehensive warranty for three years. After Sales Service & demonstration cum training should be available promptly			
12	Florescence microscope	* The optical system should be of color correction for infinity with antifungal coating.		1 Nos	Comprehensive warranty for three years. After Sales Service & demonstration cum training should be available promptly
		* Sturdy stand of anti rust material with long life built-in power supply LED illumination min 50000 hrs. life provides cool light good for live specimen with input voltage from 110-240V, 50Hz.			
		* Should provide a comfortable user sit in position for reducing user stress.			
		* 6 position objective nose-pieces.			
		* 3 position Trinocular head with 10X22 m FOV eyepieces dipole displacement (+5 to -5) upper eyes lid (pair) intra with inter papillary distance of at least 50 – 70 mm adjustable to accommodate observer height.			
		* Co-axial coarse and fine focusing on rack and pinion. Tension adjustment control provided.			
		* Ultra hard Ceramic stage.			
		* Universal turret type swing-out condenser for bright field, dark field, phase contrast studies with N.A. 0.9 - 1.25			
		* 12. Objectives:			
		Infinity plan achromatic 2/2.5x			
		Infinity plan achromatic 5x NA 0.12WD > 11.5 mm			
		Infinity plan achromatic Phase 10x NA 0.25 WD > 11.5 mm			

	<p>Infinity Plan apochromatic Phase 20x NA 0.50 WD > 1.1mm</p> <p>Infinity Semi plan apochromatic phase 40x NA 0.80 WD 0.40mm</p> <p>Infinity Semi plan apochromatic phase 100x oil NA 1.30 WD > 0.17 mm.</p> <p>One extra lens according to the need.</p> <p>* Epi fluorescence illumination system and 100 W mercury illuminations, filter blocks for UV, blue and green excitation. The system should have filter blocks on a turret.</p> <p>* Polarizer and for transmitted light.</p> <p>* Computer requirement: PC workstation with Core i5 or i7 processor CPU, 19" & above LCD/LED Monitor, 1 TB HDD, Super ODD, 8GB RAM. Backlit Key board, Mouse.</p> <p>* All consumables required for installation and standardization of system to be given free of cost.</p> <p>* One additional mercury halogen lamp.</p> <p>* The unit shall be capable of being stored continuously in ambient temperature of Upto 50deg C and relative humidity of 15-90%</p> <p>* Power input to be 230 +/- 10% V AC, 50Hz fitted with Indian plug.</p> <p>* UPS of suitable rating with voltage regulation and spike protection for 60 minutes back up.</p> <p>* Certified to be compliant with Electrical Safety Standard for Medical Equipment IEC- 60601-1-1 OR equivalent BIS OR international standard for electrical safety.</p> <p>* User/Technical/Maintenance manuals to be supplied in English.</p> <p>* List of Equipment available for providing calibration and routine preventive Maintenance Support.</p> <p>* Three years comprehensive warranty & well established service network AMC/CMC rates for next 5 years to be provided separately along with rates of fluorescent microscope.</p> <p>Digital Camera</p> <p>Digital camera with the following features: Recent model with 12 mega pixels or more CCD camera with appropriate lens system mounted.</p> <p>Image analysis: system for capture, morphometry, thresh holding (grey level profiling) and analysis, annotation, etc.</p> <p>Note:-</p> <p>Comprehensive warranty for three years. After Sales Service & demonstration cum training should be available promptly</p>		
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13	Flow cytometer	1. Quoted system should have the following 4 essential solid-state lasers:	01 Nos	Comprehensive warranty for five years. After Sales Service & demonstration cum training should be available promptly
		a. 355nm UV Laser		
		b. 405nm violet laser;		
		c. 488nm blue laser;		
		d. 630-640nm red laser		
		The system must be future upgradable to at least 1 more laser. All the laser path should be spatially separated.		
		2. System must have the ability to detect at least 18 parameter (at least 16 independent fluorescence channels/detectors) including one forward and one side scatter simultaneously.		
		3. System should have dedicated beams-spots for each laser with fixed aligned optics.		
		4. All the fluorescence detector, channels and side scatter channel must be designed with photo multiplier tube (PMT) or equivalent for achieving best resolution even for dimly stained population.		
		5. System should be able to acquire 30,000 events per sec or more for rare event analysis.		
		6. The system should provide superior sensitivity to measure of events with low antigen expression and application with dim fluorescence attaining which is achievable by high efficiency, low-noise.		
		7. The quoted system should have custom setting for variable flow rates. The system should be have pulse Height, Area and Width information available for all parameter simultaneously .		
		8. The system should have unrestricted fluorescence compensation from 0 to >100% between all fluorescent channels.		
9. System should be used on hydrodynamic focusing and with latest available advanced technologies.				
10. System should have automated fluidics startup and shutdown procedures.				
11. Quoted model should have future upgradable option of high throughput plate loader module for various high throughput application of 96 well plates and higher directly.				
12. Compatible workstation with latest hardware configuration and high resolution LCD/LED monitor(s) along with laser printer should be supplied by the vendor.				
13. System software should have automatic compensation features and be				

		capable of compensating data in real time across all fluorescence channels.		
		14. Dedicated perpetually licensed offline analysis software should be provided along with the system.		
		15. Compatible UPS for at least 60min standby time must be provided along with the system.		
		16. Start-up kit sufficient for 1.5 year should be provided along with multi parametric validation kit.		
		The following also apply: The instrument should include a startup kit for calibration, spare parts and cleaning reagents, as necessary, for 1.5 year of operation. In addition, apart from a sales team, the company selling the instrument should have a direct and strong presence in Madhya Pradesh, India for technical and engineering support.		
		Note:-		
		Comprehensive warranty for five years. After Sales Service & demonstration cum training should be available promptly		
14	PCR Workstation	* Class 100 vertical laminar flow air		1 Nos . * Comprehensive warranty for three years. * After Sales Service & demonstration cum training should be available promptly.
		* Should have microprocessor controlled electronic circuitry		
		* Should have LCD display to show measured parameters like stage velocity, total using time, UV/FL lamp on/off etc.		
		* The air purification should be done through class 100 HEPA filter, with efficiency of 99.99% or above with 0.3 um particle removal		
		* Should have a pre-filter of 3-30 um particle removal, and it should be recyclable.		
		* The cabinet should give class 100 purity		
		* Should have a wind velocity of 0.30-0.50 m/sec Filters-combines an ISO 5 (FS209E) Class 100 clean air environment. 99.99%- efficient HEPA filter and disposable prefilter.		
		* Alarms – monitors the effectiveness of the workstation and alerts the operator if the HEPA filter or UV bulb needs replacement.		
		* Exterior dimensions (H × W × D): approximately 32 - 40"x 34 - 42"x 26 - 34"		
		* Interior working area 24 - 32" (W × D): approx.		
		* Exterior: stainless steel or epoxy powder-coated metal.		
		* Interior: stable formed stainless steel.		
		* UV shelf with integrated pipette		

	holder		
	* Side panels transparent, able to absorb wavelengths below 400 nm.		
	* Overhead UV light for DNA decontamination of 15W/254 nm		
	* Spare parts - Two UV lamps.		
	* Should be FDA or CE or BIS approved product		
	* Certification: EN12469 OR equivalent		
	* Electrical safety requirements: UL 61010-1, EN 61010-1, IEC 61010-1		
	* Timer and key lock for UV lamp; timer operates only when key lock is on.		
	* Overhead white light; 15 W; at least 800 lux.		
	* At least two plug outlets built into the chamber; AC 110 ± 10 V; 60 Hz; 5A fuse.		
	* Should come with support stand with castor wheels		
	* Should be supplied with following accessories		
	2 Ergonomic foot rest.		
	2 Ergonomic lab chair		
	Electricity requirements		
	Supply voltage: 230 ± 10 V, AC, 50/60 Hz.		
	* Voltage and plugs to be adapted to meet the country requirements. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.		
	* Power consumption: Depends on the electrical equipment used inside the workstation; maximum 1200 W.		
	* Conform to electrical safety standards IEC 60601-1, UL 61010-1, EN 61010-1.		
	* Protection class (in accordance with EN 60529).		
	* Designed not to interfere with circuit radio (in accordance with EN 55014).		
	Documentation		
	* Manufacturer's certificate - The manufacturer must have a management system certified to ISO 9001 and a type-test certificate of relevant optical and mechanical tests.		
	* Quality and safety standards met by the product must be listed.		
	Operation, maintenance and installation		
	* Operation and maintenance manual - At least one set of operation, maintenance and service manuals written at least in English and preferably		

	also in the official national language of the country requesting the workstation.		
	* All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, should be provided with machine. .		
	Spare parts		
	* Each workstation to be accompanied by an authorized list of accessories and spare parts.		
	* Set of fuses for the workstation.		
	* Two UV lamps.		
	Warranty: 3 year comprehensive and with next 5 year AMC.		
	* Warranty period starts from successful installation at site		
	* Breakdown calls to be attended as and when required		
	* Preventive Maintenance to be carried out annually.		

नोट:- कृपया प्राईस बिड भरने के पहले समस्त दस्तावेज एवं स्पेशिफिकेशन ध्यानपूर्वक पढ़ एवं समझ लें, उसके पश्चात ही निविदा भरें।

निविदाकर्ता / सेवादाता के हस्ताक्षर
नाम एवं पूर्ण पता
संस्था की सील