



त्रिभुवन विश्वविद्यालय  
**शिक्षण अस्पताल**



तार-टुथमेड  
महाराजगञ्ज  
काठमाडौं, नेपाल।

पत्र संख्या :-

मिति :

सूचना

२०८२।०९।२३

यस त्रि.वि.शिक्षण अस्पतालको लागी तपसीलमा उल्लेखित सामाग्री खरिद गर्नु पर्ने भएकाले उक्त सामाग्री आपूर्ति गर्न इच्छुक इजाजत प्राप्त सप्लायर्स/कम्पनी/फर्महरूले यो सूचना प्रकाशित भएको मितिले सात(७) दिन भित्र आवश्यक सम्पूर्ण कागजात सहित शिलबन्दी दरभाउपत्र अस्पतालको सामान्य प्रशासन शाखा "क" मा पेश गर्नुहुन सूचित गरिन्छ। साथै थप जानकारीको लागी सामान्य प्रशासन शाखा 'क' मा सम्पर्क गर्न सकिनेछ।

तपशिल :

S.N.	Particulars	Unit	Quantity
1.	Defibrillator (D.C. Shock)	set	1 (one)

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सरस्वती गुरुज्ञ

प्रमुख  
सामान्य प्रशासन 'क'

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*Dhital*



## 1. Price Schedule for Machine

1	2	3	4	5	6	7	8
Item	Description	Unit	Quantity	Unit price (Site Delivery)	Total price in figure (cols. 4 x 5)	Total price in words	Remarks
1	<b>Defibrillator (D.C. Shock)</b>	Set	1(One)				
<b>Total Amount</b>							
<b>Add 13% Value Added Tax</b>							
<b>Total Including VAT</b>							

Total Price ..... (in words)

Signature and Stamp of Bidder \_\_\_\_\_

**TUTH**

Note: In case of discrepancy between unit price and total, the unit price shall prevail

## 2. Schedule of Requirements

The delivery schedule expressed as days/weeks/months stipulates hereafter a delivery date which is the date of delivery to the final destination where the Goods is required to be delivered.

No.	Description	Quantity	Place of Delivery	Delivery schedule days/weeks/months from date of Purchase Order
	<b>Defibrillator (D.C. Shock)</b>	1 (One) Set	TUTH, Maharajgunj, Ktm.	Seven Days



## Technical Specification of Defibrillator (D C Shock)

S.N.	Purchaser's Specifications	Comply Yes/No	Catalog page /No
	<b>Defibrillator (with Monitor)</b>		
	<b>Manufacturer</b>		
	<b>Brand</b>		
	<b>Type / Model</b>		
	<b>Country of Origin</b>		
<b>1</b>	<b>Description of Function</b>		
1.1	Defibrillator is required for reviving the heart functions by providing selected quantum of electrical shocks with facility for monitoring vital parameters.		
<b>2</b>	<b>Operational Requirements</b>		
2.1	Used in emergency, critical care and Operation Theatre departments to meets various resuscitation and monitoring needs.		
<b>3</b>	<b>System Configuration</b>		
3.1	Defibrillator must be Biphasic, light weight (not more than 8 kg), portable and latest model with complete accessories.		
3.2	Machine should have ready for use indicator to show machine functioning status, even in switched-off mode.		
3.3	Machine should conduct automated self-test when switched on and perform self-tests on an hourly, daily, and weekly basis.		
<b>4</b>	<b>Technical Specifications</b>		
4.1	Should have both AED (Automated External Defibrillator) and Manual capabilities in Biphasic mode.		
4.2	System shall be user friendly, lightweight and easily transportable.		
4.3	The defibrillation shock should be delivered using biphasic waveform which delivers a maximum energy 2J to 360J in manual mode.		
4.4	Should be capable of performing synchronized & asynchronized cardioversion.		
4.5	Shock delivery should be via hands-free multifunction defibrillator electrode pads or paddles, including switched internal paddles of the same make (price to be quoted separately).		
4.6	Should be upgradable for vital parameters like SPO2, NIBP & EtCO2, IBP and non-invasive pacing along with wireless connection to CMS.		
4.7	Machine should have ECG monitoring facility with 3-5 lead ECG monitoring capability.		
4.8	The AED must provide both audible and visual indication of the presence of, or a change to a potentially shock able rhythm when it is not in the analyze mode.		
4.9	Should be used for neonatal/pediatric and adult defibrillation.		
4.10	The defibrillator using defibrillation pads should be used on adults. For pediatric/neonates, it should use the pediatric/neonate energy reduced defibrillation electrodes.		
4.11	Should have 3-5 lead ECG monitoring capability.		
4.12	It should operate on AC power supply or internal battery.		



4.13	Should have rechargeable battery back-up facility. Fully charged battery should deliver approximately 90 discharges or more or 4 hrs ECG monitoring. Bidder to specify the type of battery used.		
4.14	Should have integral thermal printer capable of printing self-tests.		
4.15	Should have continuous 8 hours waveforms storage facility. It should have capacity to store at least 50 events of 30 minutes in length.		
4.16	Should print the ECG, event summary, configuration & self-test report on 50 mm or bigger inbuilt thermal recorders.		
4.17	Should have event summary facility for recording and printing at least 50 events and 50 waveforms		
4.18	Must comply with AHA (American Heart Association) & ACLS (Advanced/pediatric Cardiac Life Support) requirements, AAMI DF requirements		
4.19	<b>Control Panel</b> <ul style="list-style-type: none"> <li>Control panel should have a high-resolution LCD 8 inch or larger with bright back-light display, capable of displaying 3 waveform channels simultaneously.</li> <li>Audio and visual alarms should be provided.</li> <li>Audible indication should be available during AED mode.</li> <li>Must be able to display ECG, HR indicator, battery status, and shock indicator.</li> <li>HR limit and shockable rhythms alarms should be provided.</li> </ul>		
4.21	Energy dischargeable buttons should be provided on the unit as well as on paddles.		
4.22	Should have charging time of less than 7 seconds for maximum energy, with a charging indicator.		
4.23	Machine should have patient contact indicators on paddles for immediate feedback on patient-paddle contact for ensuring maximum shock efficacy.		
4.24	Machine should deliver shock only when correct impedance is found (indicated by green color on paddles)		
4.25	Should have factory-integrated compensation for chest impedance for a range of 25 to 175 or 0-250 ohms or better.		
4.26	Must have an electrode contact-quality indicator to minimize the risk of ineffective defibrillation.		
<b>5</b>	<b>Accessories, spares and consumables</b>		
5.1	<ul style="list-style-type: none"> <li>Paddles Adult/Pediatric (pair) – 1 set</li> <li>Complete set of ECG leads along with mother cable – 1 set</li> <li>ECG Rolls – 1 set</li> <li>AED pads – 1 no. each</li> </ul>		
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).		
<b>6</b>	<b>Operating Environment</b>		
6.1	The system 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	Must work on 220-240V/ 50 Hz AC Single phase fitted with appropriate plugs and sockets. The mains cable minimum 3 meter long.		
<b>7</b>	<b>Standards and Safety Requirements</b>		
7.1	Must submit ISO13485:2003/AC:2007 for Medical Devices <b>AND</b>		
7.2	CE (93/42 EEC Directives) or USFDA approved product certificate.		
<b>8</b>	<b>User Training</b>		
8.1	The Supplier should conduct user training for this equipment to enable operators to use the equipment properly. The training should include the use of all operational functions of the equipment, as well as routine checks and maintenance expected by users.		
<b>9</b>	<b>Warranty</b>		
9.1	Comprehensive warranty for 3 years after acceptance and other 2 yrs service warranty		
<b>10</b>	<b>Maintenance Service During Warranty Period</b>		
10.1	During the warranty period supplier must ensure planned preventive maintenance (PPM) along with corrective/breakdown maintenance whenever required.		
<b>11</b>	<b>Installation and Commissioning</b>		
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.		
<b>12</b>	<b>Documentation</b>		
12.1	User (Operating) Manual in English		
12.2	List of important spare parts and accessories with their part numbers and costing		
12.3	Certificate of calibration and inspection from factory.		