SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

A Deemed to be University
Tamaka, Kolar, Karnataka.

Declared under Section 3 of the UGC Act, 1956
vide MHRD, Government of India Notification No.F-9-36/2006-U.3 (A) dated 25th May 2007

Procurement Policy

Name of the Policy/ Guidelines	Procurement Policy	
Short Description	Policy and guidelines on procurement of various equipment's	
Scope	This policy is applicable to all faculty and non- teaching staff of the constituent colleges and departments of SDUAHER (Deemed to be University).	
Policy status	☑ Original ☐ Revised	
Date of approval of Version 1		
Revision No.	0	
Brief description of last revision	Not Applicable	
Date of approval of current revision	Not Applicable	
Effective date		
Approval Authority	Board of Management	
Responsible officer	Registrar	
Name of the Policy/ Guidelines	Policy and guidelines on welfare measures applicable to teaching and non-teaching staff	
Details of Revision	Date of Revision	Approved by

STANDARD OPERATING PROCEDURE (SOP) FOR

PROCUREMENT AND MAINTAINANCE OF MEDICAL AND OTHER STORES

AT SDUAHER

INTRODUCTION

1.0 Works and Purchase section at SDUAHER is responsible for timely and uninterrupted supply of expendable and non-expendable medical stores and other items to all Depts of the hospital, college and university. It plays a vital role in ensuring full functionality of all the Depts of this premier institution.

1.1 The aim of this SOP is to lay down the detailed process of procurement as enunciated in the circular No. SDUAHER/KLR/ADMN/01/2019-20 dated 23rd April 2019.

INDENTING PROCEDURE

2.0 The requirement of procuring new equipment (eqpt) in a department can be for:

2.1 Upgrading the facilities in the department.
2.2 Requirement as per statutory bodies (MCI etc.).
2.3 Replacement of old equipment which is unserviceable or has outlived its useful life.
2.4 Technology upgrade etc.

3.0 The procedure to be adopted for indenting the equipment and the documents to be submitted with the indent are as follows. (Form for placing indent placed at Appendix A).

3.1 The name of the equipment (including accessories and consumables required/year). If it is a proprietary equipment, then detailed justification as to why no other equipment will serve the purpose.

3.2 The HOD of the Dept to put up the indent to Medical Superintendent/Principal stating whether it is a replacement, upgrade, new equipment, or required as per statutory body requirements etc. A brief justification to be given.

3.3 The qualifying requirements (QR) of the equipment. The QRs to be formulated after discussions with senior faculty members in the Dept and

also keeping in mind the various eqpt that are available in the market. Costly eqpt should have FDA or European CE certification. A sample of Broad Based QRs (BBQR) for 5 Part Differential Fully Automated Hematology Cell Counter and Portable Digital Radiography (DR) system is placed at Appendix B and C to help in formulating QRs for various equipment.

3.4 The list of original equipment manufacturers (OEM) or vendors of the equipment.

3.5 To ascertain the bench mark price, after market survey. In case the eqpt has been bought earlier then the last purchase price.

3.6 To state whether necessary infrastructure exists, or whether new infrastructure has to be constructed.

3.7 Whether the equipment can be used by specialists from other specialties and if so, whether their inputs have been obtained regarding the equipment/accessories.

4.0 The Biomedical engineer to give inputs regarding the number of similar equipment already available (with distribution and serviceability), the maintenance philosophy e.g. years of warranty, CAMC, AMC and likely life of the equipment, power supply i.e. UPS required etc. The indent to be put up to Med Supdt/Principal after obtaining the remarks of biomedical engineer.

5.0 The indent to be forwarded to Registrar of the Academy with recommendations of Medical Superintendent/ Principal. The registrar will verify the existing position of the eqpt from the stores and purchase department.

6.0 The registrar will forward the same to the Vice Chancellor of the Academy. The Vice Chancellor can seek the advice of Pro chancellor Academics or Health Services.

7.0 The Registrar then will approved requests to Purchase Dept for calling of quotations which will be placed before the Works and Purchase Committee. All capital purchases have to be placed before the Works and Purchase committee.

FINANCIAL POWERS

3. The financial powers for procurement are as follows

(a) Vice Principal, SDUMC	:Rs.25,000/- in each occasion
(b) Principal, SDUMC	:Rs.50,000/- in each occasion
(c) Dean, AH & BS	:Rs.50,000/- in each occasion
(d) Medical Superintendent, RLJH&RC	:Rs.50,000/- in each occasion
(e) Executive Engineer, SDUAHER	:Rs.50,000/- in each occasion
(f) Registrar, SDUAHER	
(g) Vice Chancellor, SDUAHER	:Rs.2,00,000/- in each occasion

TENDERING FOR THE ITEMS/EQPT

8. Vendor Registration

1 Vendor registration to be carried out by the procurement section by March of every year, by constituting a committee. Application to be obtained by open advt from the vendors which should include copy of PAN, TAN, GSTIN, License and photograph of the applicant. If required the committee members can visit the office address to verify the genuineness of the vendor.

2 The vendor registration to be done category wise i.e. Stationary, Electrical items, Electronic items, IT items, cleaning materials, General stores etc.

3 Various items are available at a competitive price on the Govt e Market (GeM). The Academy purchase committee may also be registered on this site.

4 For items which are routinely consumed a rate contract may be entered into.

Bidding Process

1 The tender document should include the BBQRs, The quantity required, the duration of the warranty, AMC/CAMC. The vendor to quote the cost of AMC/CAMC for the duration as asked for in the tender documents. In case of AMC the cost of spares of items that are likely to be replaced to be quoted. In case of quotation being in foreign currency the exchange rated to be fixed as on date of supply order.

2 Provision to demonstrate the eqpt at the hospital, to form part of the tender document. If that is not possible, then arrangement to demonstrate the eqpt at any institution in or around Bengaluru to be made by the vendor.

3 For costly equipment, a two bid system to be followed i.e. the technical and commercial bids to be obtained separately in two sealed covers (at the time of submitting the bid). The technical bid to be opened first and technical evaluation of the eqpt to be carried out by a team consisting of HOD of Dept or his/her representative, biomedical engineer and one independent person. In case an eqpt is rejected, the reason for the same to be mentioned.

4 Commercial bids of all vendors whose qualify in the technical bid to be opened thereafter and a comparative statement made. The financial bids of those who do not qualify should not be opened and should be returned to the vendor.

5 In case of resultant single vendor, retendering to be done.

6 The comparative statement to be put up to Works and Purchase committee for decision.

Receipt of Eqpt

7 On receipt of eqpt the **installation certificate** to be issued only after the HOD of the Dept and Biomedical engineer has certified satisfactory installation. The certificate regarding **satisfactory functioning** to be issued after few weeks/ months of the eqpt being in actual use.

8 **Eqpt Log Book.** All eqpt will have an 'Eqpt Log Book'. All initial entries up to cost will be filled up by procurement section. Subsequent entries will be made by Dept as follows:-

i. Inventory no
ii. Nomenclature (Generic)
iii. Manufacturer
iv. Model No.
v. Source of supply (Gift/ Univ/etc)
vi. Supply order No. and date
vii. Name, address, email and phone No. of supplier
viii. Cost of Eqpt: INR/FE……
ix. Under warranty up to: ……
x. Under CAMC/AMC up to: ……

xi. Date Eqpt became non-functional/Functional
xii. Date of visit of service engineer and signatures
xiii. Date Eqpt made functional
xiv. Details of repair/replacement of spare parts with cost

15. **Inspection of Medical Eqpt.** Annual inspection of all medical eqpt will be carried out by the biomedical engineer in July with proper intimation to all HODs. A report to be submitted to Medical Supdt/Principal.

Appendix A

FORM FOR INDENTING EQUIPMENT

1. Name of the equipment:
(a) Accessories
(b) Consumables

2. Whether the equipment
(a) New equipment / proprietary equipment
(b) For replacement
(c) Technology upgrade
(d) Required as per statutory body
(e) Others

3. Justification

4. Board based Qualifying requirements (BBQR) –Attached

5. List of original equipment manufacturers / vendors
(a)
(b)
(c)
(d)
(e)

6. Bench mark price Rs

7. If equipment purchased earlier, name of the equipment, year of purchase and cost.

8. Any additional infrastructure required.

9. Whether the equipment can be used by other specialty. If so comments of HOD of that specialty.

Date:

Comments of Biomedical Engineer

10. Whether similarly equipment is available, if yes distribution and serviceability

11. Maintenance of equipment
(a) Warranty
(b) AMC / CAMC
(c) Power supply, whether UPS required or not

Date:

12. **Remarks of Medical Superintendent**

Date:

13. **Remarks of Registrar**

Date:

14. **Vice Chancellor**

Approved / Not Approved

Date:

Appendix B

BBQR FOR 5 PART DIFFERENTIAL FULLY AUTOMATED

HAEMATOLOGY CELL COUNTER

1. It should be fully automated flow Cytometer based 5 part differential hematology cell counter with automated reticulocyte count offering automatic start-up, shut down and sample analysis.
2. It should have following random access discrete analysis modes: CBC, CBC + differential, & CBC + Retic + differential.
3. It should give the following parameter: WBC, RBC, HGB, HCT, MCV, MCH, MCHC, PLT, NEUT%, LYMPH%, MONO%, EOS%, BASO%, NEUT#, LYMPH#, MONO#, EOS#, and BASO #, RET#, RWD, PDW, MPV, PCT, IRF.
4. It should have histograms for RBC and platelets and scatter grams for differential counts.
5. The system must perform a flow cytometer based three dimensional true 5 – part differential leucocyte count with laser based scatter.
6. It should have high throughput of at least 70 samples per hour in all the four discrete analysis modes.
7. Should have multi-channel analysis for better resolution. Use cyanide free method for the hemoglobin measurement. Fluorescence base semiconductor laser flow cytometer for WBC/BASO and differential channel. Fluorescent dye/semi-conductor/ laser flow cytometer for reticulocyte analysis.
8. It should be able to provide ratio of immature granulocytes.
9. The system should allow blood samples through closed vial, open vial as well as pre-dilution mode sampling.
10. The sample volume should be less than 200 ul and there should be automatic probe wipe and wash.
11. It should have comprehensive information processing system using latest computer with capability to store at least 5000 samples data with histograms and scatter grams.
12. It should have quality assurance system with at least 20 control files of 100 runs each.
13. It should have sample autoloader with facility of continuous loading of sample.
14. Online UPS of appropriate wattage with 30 minutes backup should be supplied with machine.

15. The company must provide training to staff at each site. Startup kit should be bought with the eqpt for 1000 cycles.
16. Should have extended analysis time for cytopenic sample.
17. 365 liter frost free refrigerator be provided for keeping the reagents at a temperature range of 2-8°C.

Appendix C

BROAD-BASED QUALITATIVE REQUIREMENTS (BBQR)

PORTABLE DIGITAL RADIOGRAPHY (DR) SYSTEM

1. **General**

a) The offered Model should be the latest, compact, easily transportable Digital Radiographic system with articulated/telescope arm suitable for bedside X ray forward patients, intensive care units and operation theaters.
b) The unit should be a digital system with flat panel detector.
c) It should be FDA and European CE certified.
d) It should have AERB type approval.
e) There must be at least one installation of the system in India with a satisfactory performance certificate from the user.
f) All technical information in the tender document must be supported by original product data sheets.
g) Compliance sheets must be strictly under the headings given under the tender document and should be supported by data sheets.

2. X – Ray Generator

a) Micro – processor controlled high frequency X – Ray Generation
b) Power output of generator should be 30K W or more to give at least 300 mA at 100 kV
c) Radiographic K V Range should be 40 to 125kV or more with an increment of 1 kV per step
d) mA Range (Rad) : 450Ma
e) Exposure time (Rad): 4msor less to 5 see or more
f) mAs Range (Rad) : 1 to 360Mas
g) Please specify mA and second separately and not mAs alone
h) Digital display of mAs and kV and electronic timer should be available.

3. X – Ray Tube

a) Output should match the output of the Generator
b) It must have a rotating anode thermally protected X – Ray tube with 2700 rpm or more
c) One focal spot or more with a minimum size of 1mm or less
d) Anode heat storage capacity of tube should be120KHU or more
e) It should have an in-built manual collimator with light source for easy positioning and auto switch-off of light source

f) The interval time between two exposures should be 10 s or less

4. Portable unit and Retractable Arm

a) The entire system including the X Ray Generator and tube, Control panel, battery and workstation should be single unit mounted on wheels
b) The unit must have an effective braking system for parking transport and emergency braking
c) It must have an articulated / telescopic arm for maximum positioning flexibility in any patient position
d) The articulated/telescopic arm must be fully counterbalanced and should be fully collapsible to enable transport though doors and lifts
e) It should have facility for tube rotation for all directions
f) All cables should be concealed in the arm system
g) The mobile unit should be motorized for ease of transportation with battery backup for the motor

5. Integrated workstation and Control panel

a) Compact Touch – Control panel
b) Following features should be available on the control panel
    i. Machine ON/OFF Switch
    ii. Digital Display of KV, mA & mAs
    iii. KV, mA & mAs increase and decrease switches
    iv. Anatomical programming should be provided in which KV and mAs are automatically selected depending upon the part of the body to be X – Rayed
    v. There should be capability of storing user- defined APR setting
c) A detachable exposure switch with cord of at least 5 m length should be provided and a remote - controlled exposure with a range of 5 m or more
d) A work station should be integrated on the portable unit with a touch screen of 15 or more and 1024 x 1024 matrix or more
e) It should have a memory of at least 2000 images at highest resolution
f) Images should be at a minimum of 5 megapixel resolution completed suite of DICOM functions should be available on the in-built console and the independent workstation supplied.

6. Flat-Panel Detector

a) It should have a wireless flat panel detector of size 14 x 16 or more
b) The detector should be of amorphous silicon with cesium lodide type
c) The detector pixel matrix size should be 2 k or more with a DQE of at least 65%
d) Pixel size should be 200 microns or lessor

e) Spatial resolution should be 2.5 line-pairs per mm or more
f) The image viewing time after exposure should not exceed 10 s
g) The Unit should have a detector storage compartment
h) The detector weight should not exceed 4.5 kg inclusive of battery
i) The detector battery should be in-built or removable Li-ion/ Li-ion capacitor rechargeable type with at least one spare battery and charging station.

7. Independent Workstation for Post – processing

a) An independent work station for post – processing should be provided with suitable stand at least two wheel mounted revolving chairs and 2k Va or more UPS for 30 minutes backup
b) It should have a 2 MP or more diagnostic medical grade multi format grey scale display monitor of at least 19 size
c) The processor should be quad-core or better with in-built graphics card with minimum 8 GB RAM and 1TB storage or more offering storage of at least 50,000 images or more at highest resolution.
d) It should have a DVD writer and a USB port for recording images on CD/DVD or USB drives
e) The workstation software should support the following:
    i. Patient list with capability of DICOM work list Query/Search on a variety of patient demographics
    ii. DICOM, viewing, windowing, Zoom, Pan, Magnify, Annotate, Mark, Measure and Reporting.
    iii. Connectivity to DICOM printers with multi-format options for printing and toe external storage devices and DICOM network.
    iv. The system should be fully network ready with capability for functioning with an existing or future PACS/RIS/HIS
    v. DICOM Modality work list (DMWL) and modality Pre-procedure setup should be enable on the main workstation.

8. Power requirement sand Battery back – up

a. The unit should operate on single phase power supply with plug in facility to any standard will outlet with automatic adaptation to line voltage 180 to 240 Volts 15 Amp plug
b. The machine should be able to run on main even at zero battery charge as well as on complete battery supply
c. It should be capable of acquiring at least 100 digital radiographs or have a backup of at least 120 minutes while on battery
d. The system should have a separate battery to power the motor to move the machine

e. The batteries should be able to be charged from a normal 15 A 230V single phase socket in less than 6 hours

9. Accessories

a. CVI of at least 5 kVA rating should be provided
b. Four numbers of Zero lead aprons of simple pieces wrap – around types of at least 3 sizes and protective shields for Gonads, Thyroid respectively
c. Slim LED view boxes of standard make (4 in 1 panel) with independently adjustable brightness and On/Off switch -2nos