

LAIKIPIA

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KENYA



UNIVERSITY

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OFFICE OF THE VICE-CHANCELLOR

**TENDER NO: LU/TEN/02/2018-2019:
SUPPLY, DELIVERY, ASSEMBLY,
INSTALLATION TRAINING AND
COMMISSIONING OF ENTERPRISE
RESOURCE PLANNING (ERP)**

CLOSING DATE: 1ST NOVEMBER 2018

TIME: 12:00 NOON

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SPECIAL NOTES

1. The tender is for 2018-2019 financial year
2. These notes shall form part of the specification and conditions.
3. The tenderer is required to check the number of pages in the documents and should he find any missing, or duplicate or indistinct, he should inform the Procurement Officer, Laikipia University immediately on Tel: 020-2687301 or in writing to; Laikipia University, P. O. Box 1100-20300, Nyahururu.
4. Should the tenderer be in any doubt about the precise meaning of any item or figure, for any reason whatsoever, he must inform the Procurement Officer in order that the correct meaning may be decided before the date of submission?
5. No liability will be admitted nor claim allowed in respect of errors in the tender due to mistakes in the specifications which should have been rectified in the manner described.
6. Bidders to provide **bid bond of at least 2% of the tender sum** (mandatory).

FORM OF TENDER

Date

Tender No......

TO: Vice Chancellor
Laikipia University
P.O Box 1100-20300
NYAHURURU

Gentlemen and/or Ladies

1. Having examined the tender documents including Addenda No. we the undersigned, offer to Supply, Deliver, Assemble, Install and commission Integrated Resource Planning in conformity with the tender documents at a total annual sum of.....

.....
(Total tender amount in words and figures. Quotation to include all charges and taxes)

Or such other sum as may be ascertained with the schedule of prices attached herewith and made part of this Tender.

2. We undertake, if our Tender is accepted, to supply, deliver, assemble, install and commission library security system in accordance with the delivery schedule specified in the schedule of requirements.
3. We agree to abide by this Tender for a period of 90 days from the date fixed for tender opening of the instructions to tenderers, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
4. Until a formal Contract is prepared and executed, this tender, together with your written acceptance thereof and your notification of award, shall constitute a binding Contract between us.
5. We understand that you are not bound to accept the lowest or any tender you may receive

Dated this _____ day of _____ 20 _____

(Signature)

(In the capacity of)

Duly authorized to sign tender for and on behalf of _____

TENDER SECURITY FORM

Whereas (Name of the tenderer)
(Hereinafter called “the tenderer”) has submitted its tender dated
(Date of submission of tender for the supply, delivery, assembly ,installation and commissioning
of Enterprise Resource Planning (ERP) (herein called “the Tender”)

KNOW ALL PEOPLE by these presents that WE
Of having our registered office
at (Hereinafter called “the Bank” are bound
unto) Laikipia University

This day of 20

THE CONDITIONS of this obligation are:

1. If the tenderer withdraws its Tender during the period of tender validity specified by the tenderer on the Tender form; or
2. If the tenderer, having been notified of the acceptance of its Tender by the procuring entity during the period of tender validity
 - (a) Fails or refuses to execute the Contract form, if required: or
 - (b) Fails or refuses to furnish the performance security, in accordance with the instructions to tenderers.

We undertake to pay to the procuring entity up to the above receipt upon receipt of its first written demand, without the procuring entity having to substantiate its demands, provided that in its demand the procuring entity will note that the amount claimed by it is due to it, owing to the occurrence of one or both conditions, specifying the occurrence conditions or conditions.

This guarantee will remain in force up to including thirty (30) days after the period of tender validity, and any demand in respect thereof should reach the Bank not later than the above date.

(Signature of the Bank) _____ Date _____

Seal _____ Witness Name _____

Signature _____ Date _____

CONTRACT FORM

THIS AGREEMENT made on the ___ day of _____ 20___ Between: Laikipia University, P.O Box 1100-20300, NYAHURURU (hereinafter called “procuring entity”) on one part and

_____ (name of tenderer)
of _____ (City and country of tenderer) (Hereinafter called “the tenderer”) of the other part.

WHEREAS the university invited tenders for supply, delivery, assembly, installation and commissioning of Enterprise Resource Planning to the University and has accepted a tender by the tenderer for the above in the sum of

.....

(Contract price in words and figures) hereinafter called “the contract price”)

NOW THIS AGREEMENT WITNESS AS FOLLOWS

1. In this agreement words and expression shall have the same meanings as are respective assigned to them in the conditions of contract referred to:
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, Viz
 - (a) The Tender form and price Scheduled submitted by the tenderer
 - (b) The Schedule of Requirements
 - (c) The Technical Specification
 - (d) The General Conditions of Contract
 - (e) The Special Conditions of Contract, and
 - (f) The University’s Notification of Award
3. In consideration of the payments to be made by the University to the tenderer as hereinafter mentioned, the tenderer hereby covenants with the University to provide the service and to remedy defects therein in conformity in all respects with the provisions of the contracts.
4. The University hereby covenants to pay the tenderer in consideration of the provision of the services and remedying of defects therein, the Contract price or such other sum as may become payable under the provision of the contracts at the time and in the manner prescribed by the contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year above written

Signed sealed, delivered by _____ the _____ (for the University) Signed sealed, delivered by _____ the _____ (for the tenderer)

In the presence of _____

FIRM'S AUTHORIZATION

TO: Laikipia University

WHEREAS _____

(Name of the firm)

who are established and reputable firm of _____

(Name and/or description of the service)

do hereby authorize

(Name and address of Agent)

To submit a tender, and subsequently negotiate and sign the Contract with you against tender No. _____ for the above services.

(Reference of the Tender)

We hereby extend our full guarantee and warranty as per the General conditions of Contract for the service offered for supply by the firm against this Invitation for Tenders.

(Signature for and of behalf of the firm)

Note: This letter of authority should be in the letterhead of the Firm and should be signed by a person competent.

GENERAL INFORMATION

Introduction

1. Eligible Tenderers

This invitation for Tenders is open to all tenderers eligible as described in the tender documents. Successful tenderers shall complete the Supply, Delivery, Assemble, Installation and Commissioning of Enterprise Resource Planning (ERP) by the intended completion date specified in the tender documents.

Tenderers shall provide the qualification information statement that the tenderer (including all members of a joint venture and subcontractors) is not associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Procuring entity to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the services under this Invitation to tender.

Tenderers shall not be under a declaration of ineligibility for corrupt and fraudulent practices.

2. Eligible Services

All services to be supplied under the contract shall have their origin in eligible source countries. For purposes of this clause, "origin" means the place where the services are mined, grown, or produced. Services are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.

The origin of services is distinct from the nationality of the tenderer.

3. Cost of Tendering

The Tenderer shall bear all costs associated with the preparation and submission of its tender, and the procuring entity, will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.

The Tender Document

4. Contents

The tender document comprises the documents listed below and addenda issues in accordance with clause 6 of these instructions to tenders.

- i. Invitation for Tenders
- ii. General information
- iii. General Conditions of Contract
- iv. Special Conditions of Contract
- v. Schedule of Requirements
- vi. Technical Specification
- vii. Tender Form and Price Schedules
- viii. Tender Security Form
- ix. Contract Form

The Tenderer is expected to examine all instructions, forms, terms, and specifications in the tender documents. Failure to furnish all information required by the tender documents or to

submit a tender not substantially responsive to the tender documents in every aspect will be at the tenderers risk and may result in the rejection of its tender. No other information not attached or indicated herein this document shall be used even if known to any member of the university's evaluation or tender committee. Therefore, evaluation shall be based on the information provided in the submitted document

5. Clarification of Documents.

A prospective tenderer requiring any clarification of the tender document may notify the Procuring entity in writing or by cable (hereinafter, the term cable is deemed to include telex and Email) at the entity's address indicated in the Invitation for tenders. The Procuring entity will respond in writing to any request for clarification of the tender documents, which it receives not later than thirty (30) days prior to the deadline for the submission of tenders, prescribed by the procuring entity. Written copies of the Procuring entities response (including an explanation of the query but without identifying the source of inquiry) will be sent to all prospective tenderer that have received the tender document.

6. Amendment of Documents

At any time prior to the deadline for submission of tenders, the Procuring entity, for any reason, whether at its own initiative or in response to a clarification requested by a prospective tenderer, may modify the tender documents by amendment.

All prospective candidates that have received the tender documents will be notified of the amendment in writing or by cable, and will be binding on them.

In order to allow prospective tenderers reasonable time in which to take the amendment into account in preparing their tenders, the Procuring entity, at its discretion, may extend the deadline for the submission of tenders.

Preparation of Tenders

7. Language of Tender

The tender prepared by the tenderer, as well as all correspondence and documents relating to the tender exchanged by the tenderer and the Procuring entity, shall be written in English language, provided that any printed literature furnished by the tenderer may be written in another language provided they are accompanied by an accurate English translation of the relevant passages in which case, for purposes of interpretation of the tender, the English translation shall govern.

8. Documents Comprising the Tender

The tender prepared by the tenderer shall comprise the following components:

- a) Tender Form and a Price Schedule completed in accordance with paragraph 9, 10 and 11 below.
- b) Documentary evidence established in accordance with paragraph 12 that the tenderer is eligible to tender and is qualified to perform the contract if its tender is accepted;
- c) Documentary evidence established in accordance with paragraph 13 that the services and ancillary services to be supplied by the tenderer are eligible services and services and conform to the tender documents.

9. Tender Form

The tenderer shall complete the Tender Form and the appropriate Price Schedule furnished in the

tender documents, indicating the services to be supplied, a brief description of the services, their country of origin, and prices.

10. Tender Prices

The tenderer shall indicate on the appropriate Price Schedule the unit prices and total tender price of the services it proposes to supply under the contract.

Prices indicated on the Price Schedule shall be entered separately in the following manner:

- i. The price of the services quoted EXW (ex works, ex factory, ex warehouse, ex showroom, or off-the-shelf, as applicable), including all customs duties and sales and other taxes already paid or payable:
- ii. Charges for inland transportation, security, and other local costs incidental to delivery of the services to their final destination; and

Prices quoted by the tenderer shall be fixed during the Tenderers performance of the contract and not subject to variation on any account. A tender submitted with an adjustable price quotation will be treated as non-responsive and will be rejected, pursuant to paragraph 22.

11. Tender Currencies

Prices shall be quoted in the following currencies:

- a) For services that the tenderer will supply from within Kenya the prices shall be quoted in Kenyan shillings; and
- b) For services that the tenderer will supply from outside Kenya, the prices shall be quoted in Kenya shillings.

12. Tenderers Eligibility and Qualifications

Pursuant to paragraph 1 of section III, the tenderer shall furnish, as part of its tender, documents establishing the tenderers eligibility to tender and its qualifications to perform the contract if its tender is accepted.

The documentary evidence of the tenderers eligibility to tender shall establish to the Procuring entity's satisfaction that the tenderer, at the time of submission of its tender, is from an eligible source country as defined under paragraph 1 of section III.

The documentary evidence of the tenderers qualifications to perform the contract if its tender is accepted shall establish to the Procuring entity's satisfaction.

- a) That, in the case of a tenderer offering to supply services under the contract which the tenderer did not manufacture or otherwise produce, the tenderer has been duly authorized by the services' Manufacturer or producer to supply the services; (**attach evidence of authorization**)
- b) That the tenderer has the financial, technical, and production capability necessary to perform the contract;
- c) That, in the case of a tender not doing business within Kenya, the tenderer is or will be (if awarded the contract) represented by an Agent in Kenya equipped, and able to carry out the Tenderer's maintenance, repair, and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specification;
- d) That, the tenderer shall declare to be willing to do business with Laikipia University and shall allow credit facilities and acceptable trade terms.

13.Services Eligibility and Conformity to Tender Document

Pursuant paragraph 2 of this section, the tenderer shall furnish, as part of its tender, documents establishing the eligibility and conformity to the tender documents of all services which the tenderer proposes to supply under the contract.

The documentary evidence of the eligibility of the services shall consist of a statement in the Price Schedule of the country of origin of the services offered which shall be confirmed by a certificate of origin issued at the time of shipment.

The documentary evidence of conformity of the services to the tender documents may be in the form of literature, drawings, and data, and shall consist of:

- a) A detailed description of the essential technical and performance characteristics of the services;
- b) A list giving full particulars, including available sources and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the services for a period of two (2) years, following commencement of the use of the services by the Procuring entity; and
- c) A clause-by-clause commentary on the Procuring Entity's Technical Specifications demonstrating substantial responsiveness of the services and services to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specification.

For purposes of the commentary to be furnished pursuant to paragraph 13.3 (c) above, the tenderer shall note that standards for workmanship, material, and equipment, as well as references to brand names or catalogue numbers designated by the Procurement entity in its Technical Specifications, are intended to be descriptive only and not restrictive. The tenderer may substitute alternative standards, brand names, and/or catalogue numbers in its tender, provided that it demonstrates to the Procurement entity's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

14.Tender Security

The tenderer shall furnish, as part its tender, a tender security for the amount specified in the Invitation to tender.

The tender security is required to protect the Procuring entity against risk of Tenderer's conduct which would warrant the security's forfeiture, pursuant to paragraph 14.7.

The tender security shall be denominated in Kenyan Shillings or in another freely convertible currency, and shall be in the form of a bank guarantee or a bank draft issued by a reputable bank or insurance firm located in Kenya or abroad, in the form provided in the tender documents or another form acceptable to the Procuring entity and valid for thirty (30) days beyond the validity of the tender.

Any tender not secured in accordance with paragraph 14.1 and 14.3 will be rejected by the Procuring entity as non-responsive, pursuant to paragraph 22.

Unsuccessful Tenderer's tender security will be discharged or returned as promptly as possible as but not later than thirty (30) days after the expiration of the period of tender validity prescribed by the Procuring entity.

The successful Tenderer's tender security will be discharged upon the tenderer signing the contract, pursuant to paragraph 30, and furnishing the performance security, pursuant to paragraph 31.

The tender security may be forfeited:

- a) If a tenderer withdraws its tender during the period of tender validity specified by the procuring entity on the Tender Form; or
- b) In the case of a successful tenderer, if the tenderer fails:
 - i. To sign the contract in accordance with paragraph 30
 - or**
 - ii. To furnish performance security in accordance with paragraph 31.

15. Validity of Tenders

Tenders shall remain valid for 90 days or as specified in the tender documents after date of tender opening prescribed by the Procuring entity, pursuant to paragraph 18. A tender valid for a shorter period shall be rejected by the Procuring entity as non-responsive.

In exceptional circumstances, the Procuring entity may solicit the Tenderer's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The tender security provided under paragraph 14 shall also be suitably extended. A tenderer may refuse the request without forfeiting its tender security. A tenderer granting the request will not be required nor permitted to modify its tender.

16. Format and Signing of Tender

The tenderer shall prepare two copies of the tender, clearly marking each "ORIGINAL TENDER" and "COPY OF TENDER", as appropriate. In the event of any discrepancy between them, the original shall govern. Failure to submit two copies as said, the tender shall be rejected by the Procuring entity as non-responsive hence not being subjected to evaluation.

The original and all copies of the tender shall be typed or written in indelible ink and shall be signed by the tenderer or a person or persons duly authorized to bind the tenderer to the contract. The latter authorization shall be indicated by written power-of-attorney accompanying the tender. All pages of the tender, except for unamended printed literature, shall be initiated by the person or persons signing the tender.

The tender shall have no interlineations, erasures, or overwriting except as necessary to correct errors made by the tenderer, in which case such corrections shall be initiated by the person or persons signing the tender.

SUBMISSION OF TENDERS

17. Sealing and Marking of Tenders

The tenderer shall seal the ORIGINAL and each COPY of the tender in separate envelopes, duly

marking the envelopes as "ORIGINAL" and "COPY". The envelopes shall then BE SEALED IN AN OUTER envelope.

The inner and outer envelopes shall:

- a) Be addressed to the Procuring entity at the following address:

Laikipia University
P.O Box 1100-20300

NYAHURURU

- b) Bear, (the category name) the Invitation for tenders, and the words: "DO NOT OPEN BEFORE," (date) at (time).

The INNER ENVELOPES shall also INDICATE THE NAME AND ADDRESS of the tenderer to enable the tender to be returned unopened in case it is declared "LATE".

If the outer envelope is not sealed and marked as required by paragraph 17.2, the Procuring entity will assume no responsibility for the tender's misplacement or premature opening.

18. Deadline for Submission of Tenders

Tenders must be received by the Procuring entity at the address specified under paragraph 17. not later than **1st November 2018 at 12:00 NOON**

Late applications shall not be accepted whatsoever and all applications must be dropped **in the Tender Box Located at the Security Office in the main entrance** at the main campus in Nyahururu as said in the advertisement and not any other place, office or campus

The Procuring entity may, at its discretion, extend this deadline for the submission of tenders by amending the tender documents in accordance with paragraph 6, in which case all rights and obligations of the Procuring entity and candidates previously subject to the deadline will thereafter be subject to the deadline as extended.

19. Modification and Withdrawal of Tenders

The tenderer may modify or withdraw its tender after the tender's submission, provided that written notice of the modification, including substitution or withdrawal of the tenders, is received by the Procuring entity prior to the deadline prescribed for submission of tenders.

The Tenderer's modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions of paragraph 17. A withdrawal notice may also be sent by cable, but followed by a signed confirmation copy, postmarked not later than the deadline for submission of tenders.

No tender may be modified after the deadline for submission of tenders.

No tender may be withdrawn in the interval between the deadlines for submission of tenders and the expiration of the period of tender validity specified by the tenderer on the Tender Form. Withdrawal of a tender during this interval may result in the Tenderer's forfeiture of its tender security, pursuant to paragraph 14.7.

20. Opening of Tenders

The Procuring entity will open all tenders in the presence of tenderers' representatives who choose to attend, at **1st November 2018 at 12:00 Noon**. The tenderers' representatives who are present shall sign a register evidencing their attendance.

As each tender is opened, the following shall be read out loud and recorded in a document to be called the tender opening register-

- a) The name of the person submitting the tender;
- b) The total price (tender sum) of the tender including any modifications or withdrawals or discounts made before the deadline for submitting tenders except as may be prescribed
- c) The presence or absence of requisite tender security and such other details as the Procuring entity, at its discretion, may consider appropriate, what will be announced at the opening.

The Procuring entity will prepare minutes of the tender opening.

21. Clarification of Tenders

To assist in the examination, evaluation and comparison of tenders the Procuring entity may, at its discretion, ask the tenderer for a clarification of its tender. The request for clarification and the response shall be in writing, and no change in the prices or substance of the tender shall be sought, offered, or permitted.

Any effort by the tenderer to influence the Procuring entity in the Procuring entity's tender evaluation, tender comparison or contract, award decisions may result in the rejection of the tenderer's bid.

22. Preliminary Examination

The Procuring entity will examine the tenders to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the tenders are generally in order.

Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected. If the candidate does not accept the correction of the errors, its tender will be rejected, and its tender security may be forfeited. If there is a discrepancy between words and figures, the amount in words will prevail.

The Procuring entity may waive any minor informality or non-conformity or irregularity in a tender which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any tenderer.

Prior to the detailed evaluation, pursuant to paragraph 23, the Procuring entity will determine the substantial responsiveness of each tender to the tender documents. For purposes of these paragraphs, a substantially responsive tender is one which conforms to all the terms and conditions of the tender documents without material deviations. The Procuring entity's determination of a tender's responsiveness is to be based on the contents of tender itself without

recourse to extrinsic evidence.

If a tender is not substantially responsive, it will be rejected by the Procuring entity and may not subsequently be made responsive by the tenderer by correction of the nonconformity.

23. Evaluation and Comparison of Tenders

The Procuring entity will evaluate and compare the tenders which have been determined to be substantially responsive, pursuant to paragraph 22.

The Procuring entity's evaluation of a tender will exclude and not take into account:

- a) In the case of services manufactured in Kenya or services of foreign origin already located in Kenya, sales and other similar taxes, which will be payable on the services if a contract is awarded to the tenderer; and
- b) Any allowance for price adjustment during the period of execution of the contract, if provided in the tender.

The Comparison shall be of ex-factory/ex-warehouse/off-the-shelf price of the services offered within Kenya, such price to include all costs, as well as duties and taxes paid or payable on components and raw material incorporated or to be incorporated in the services.

The Procuring entity's evaluation of a tender will take into account, in addition to the tender price and the price of incidental services, the following factors in the manner and to the extent indicated in paragraph 23.5 and in the technical specifications:

- a) Delivery schedule offered in the tender;
- b) Deviations in payment schedule from that specified in the Special Conditions of Contract;
- c) The cost of components, mandatory spare parts, and services;
- d) The availability in Kenya of spare parts and after-sales services for the equipment offered in the tender;

Pursuant to paragraph 23 the following evaluation methods will be applied:

a) Delivery Schedule

- i. The Procuring entity requires that the services under the Invitation for Tenders shall be delivered at the time specified in the Schedule of Requirements.
- ii. Tenders offering deliveries longer than the procuring entity's required delivery time will be treated as non-responsive and rejected.

b) Deviation in payment schedule

Tenderers shall state their tender price for the payment of schedule outlines in the special conditions of contract. Tenders will be evaluated on the basis of this base price. Tenderers are, however, permitted to state an alternative payment schedule and indicate the reduction in tender price they wish to offer for such alternative payment schedule. The Procuring entity may consider the alternative payment schedule offered by the selected tenderer.

c) Spare parts and after sales services facilities

Tenderers must offer items with service and spare parts back-up. Documentary evidence and locations of such back-up must be given. Where a tenderer offers items without such back-up in the country, he must give documentary evidence and assurance that he will establish adequate back-up for items supplied.

24. Contacting the Procuring entity

Subject to paragraph 21, no tenderer shall contact the Procuring entity on any matter relating to its tender, from the time of the tender opening to the time the contract is awarded.

Any effort by a tenderer to influence the Procuring entity in its decisions on tender evaluation, tender comparison, or contract award may result in the rejection of the Tenderer's tender.

Award of Contract

25. Post – qualification

In the absence of pre-qualification, the Procuring entity will determine to its satisfaction whether the tenderer that is selected as having submitted the lowest evaluated responsive tenders is qualified to perform the contract satisfactorily.

The determination will take into account the tenderer financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the tenderers qualifications submitted by the tenderer, pursuant to paragraph 12.3, as well as such other information as the Procuring entity deems necessary and appropriate.

An affirmative determination will be a prerequisite for award of the contract to the tenderer. A negative determination will result in rejection of the Tenderer's tender, in which event the Procuring entity will proceed to the next lowest evaluated tender to make a similar determination of that Tenderer's capabilities to perform satisfactorily.

26. Award Criteria

Subject to paragraph 10.23 and 28 the Procuring entity will award the contract to the successful tenderer(s) whose tender has been determined to be substantially responsive and has been determined to be the lowest evaluated tender provided further that the tenderer is determined to be qualified to perform the contract satisfactorily.

27. Procuring entity's Right to Vary quantities

The Procuring entity reserves the right at the time of contract award to increase or decrease the quantity of services originally specified in the Schedule of requirements without any change in unit price or other terms and conditions.

28. Procuring entity's Right to Accept or Reject Any or All Tenders

The Procuring entity reserves the right to accept or reject any tender, and to annul the tendering process and reject all tenders at any time prior to contract award, without thereby incurring any liability to the affected tenderer or tenderers or any obligation to inform the affected tenderer or tenderers of the grounds for the Procuring entity's action.

29. Notification of Award

Prior to Tender Award, the Procuring entity will notify the successful tenderer in writing that its tender has been accepted.

The notification of award will constitute the formation of the Contract.

Upon the successful Tenderer's furnishing of the performance security pursuant to paragraph 31, the Procuring entity will promptly notify each unsuccessful Tenderer and will discharge its tender security, pursuant to paragraph 14.

30. Signing of Contract

At the same time as the Procuring entity notifies the successful tenderer that its tender has been accepted, the Procuring entity will send the tenderer the Contract Form provided in the tender documents, incorporating all agreements between the parties.

Within thirty (30) days of receipt of the Contract Form, the successful tenderer shall sign and date the contract and return it to the Procuring entity.

31. Performance Security

Within thirty (30) days of the receipt of notification of award from the Procuring entity, the successful tenderer shall furnish the performance entity, the successful in accordance with the Conditions of Contract, in the Performance Security Form provided in the tender documents, or in another form acceptable to the Procuring entity.

Failure of the successful tenderer to comply with the requirement of paragraph 30 or paragraph 31 shall constitute sufficient grounds for the annulment of the award and forfeiture of the tender security, in which event the Procuring entity may make the award to the next lowest evaluated candidate or call for new tenders.

32. Corrupt Fraudulent Practices

The Procuring entity requires that tenderers observe the highest standard of ethics during the procurement process and execution of contracts. In pursuance of this policy, the Procuring entity:

- a) Defines, for the purposes of this provision, the terms set forth below as follows:
"corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
- b) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Procuring entity, and includes collusive practice among tenderer (prior to or after tender submission) designed to establish tender prices at artificial non- competitive levels and to deprive the Procuring entity of the benefits of free and open competition; Will reject a proposal for award if its determines that the tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in questions; Will declare a firm ineligible, either indefinitely, or for a stated period of time, to be awarded any contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a contract

Furthermore, tenderers shall be aware of the provisions stated in the General Conditions of Contract.

SUMMARY OF EVALUATION PROCESS

1. PRELIMINARY EVALUATION UNDER CLAUSE 22 (MANDATORY)

Your tenders shall be examined for the following compulsory Criteria:

1. Form of Tender (Duly filled, signed and stamped)
2. Should have been in operation for the last 3 years (attach certificate of registration/ Incorporation)
3. Bid Bond (2% of tender sum in bank guarantee or bankers cheque or cash deposit)
4. Duly filled, signed business questionnaire
5. TAX Compliance Certificate in the Company`s name
6. VAT/PIN Certificate (attach copies)
7. Current Trading License (attach current trade license)
8. Audited Financial Accounts (for the last 3 years)
9. Must provide a list of reputable clients.

NB: ATTACH DOUMENTARY EVIDENCE.

2. TECHNICAL EVALUATION

This shall include the following:

		Points
1.	Proven Experience of the firm in projects of similar sector and magnitude	3
2.	Human Resource: Staff qualifications and experience in relevant projects	3
3.	Technical Quality of the Proposed ERP Solution	70
	i) General Features of the ERP System (1 Points) ii) Integrated Financial Management (25- Points) iii) Procurement (5 Points) iv) Hostels – online booking (2 Points) v) Academics - (15 Points) vi) Students Portal (3 Points) vii) Staff portal (2 points) viii) Human Resource & Payroll Management (8 Points) ix) Library (2 Points) x) Timetabling (2 points) xi) Transport (2 points) xii) Research (1 Point) xiii) Medical (2 Points)	
4.	Non- Functional Requirements	18
	i) Technical Platform (1 Point) ii) Implementation Methodology (3 Points) iii) System Security (5 Points) iv) System maintenance (2 Point) v) Training (2 Points) vi) System Architecture (diagram showing components' linking) (1 Point) vii) Integration with existing systems (3 Points)	
5.	Financial Stability (Attach Certified Financial Statement for the last 3 years)	6
	i) Liquidity (3 Points) ii) Profitability (3 Points)	
	Grand Total	100

Tenders will proceed to Financial Evaluation stage only if they comply with Technical Evaluation. Minimum score **70 points** and above

3. FINANCIAL EVALUATION OF TECHNICALLY QUALIFIED BIDDER

Financial score shall be computed using the following formula

$$FS = 20 \times FM / F$$

Where: FM is the lowest evaluated priced responsive bid
F is the price of the bid under consideration

Prior to award, the tenderer will be invited for presentation.

The lowest responsive bidder in financial evaluation will be recommended for award.

TENDER QUESTIONNAIRE

Please fill in BLOCK LETTERS

- 1. **Full** names of applicant
- 2. **Full** address of applicant to which correspondence shall be sent
.....
.....
- 3. **Physical location** of the tenderer
Building.....Floor
- Street.....
- Town.....
- 4. Telephone number(s) of applicant
- 5. **Fax** address of applicant
- 6. E-mail address of applicant
- 7. **Name** of applicant’s representatives to be contacted on matters of the supply during the contract
 - i. phone number.....
 - ii. phone number
 - iii. phone number
- 8. **Details** of applicant’s nominated agent (if any) to receive tender/quotation notices.

This is essential if the applicant does not sell direct to consumers

Address.....
Telephone

Fax or Email address,

CONFIDENTIAL BUSINESS QUESTIONNAIRE

You are requested to give the particulars indicated here below:

You are advised that it is a serious offence to give false information on this form

PART 1 – GENERAL

- a) Business Name
- b) Location of business premises Country Town.....
- c) Street/Road
- d) Building and floor number
- e) Plot Number
- f) Postal Address Telephone No.
- g) Nature of Business
Specialization
- h) Valid Business Permit No. (attach copy)
- i) Tax compliance certificate No. (PIN, VAT etc.) in applicant’s name
(Attach copy)
- j) Evidence of the company’s technical capacity in terms of trained staff to assemble, install and commission security system evidence)
- k) Name of your Bankers
Branch
- l) Your trade terms (mode or payment- cash or credit credit period allowed
..... days)
- m) Bankers approval on the applicant’s liquidity, suitability and credit limitation (approved, signed, stamped by the bank & attached)
- n) Name and Telephone of business’ contact person
- o) Any other

NATURE OF BUSINESS

PART 2 (A) – SOLE PROPRIETORS

- a) Your name in full Age
- b) Nationality Country of Origin
Citizenship details

PART 2 (B) – PARTNERSHIP

Give details of partners as follows: -

NAME	NATIONALITY	CAPITAL
1.
2.
3.

PART 2 (C) REGISTERED COMPANIES

a) **Private or Public**

.....

b) State the nominal and issued capital of the company: -

Nominal KShs

.....

Issued KShs.

.....

c) **Details of Directors:**

NAME	NATIONALITY	SHARES
1.
2.
3.

If Kenyan Citizen, indicate under “Citizenship Details” whether by birth, naturalization or registration

PART 3

In the event of this tender being accepted in part or in full within the stipulated days I/We agree to supply against an order signed by an officer of the University authorized to do so, those services accepted in this tender to the quoted delivery points and date and that failure on my/our part to meet these requirements constitute a breach of contract.

Tenderer’s Name.....
Tenderer’s Signature
Tenderers Designation
Full Address: P. O. Box
Tel. No.
Fax No/ Email
Date
Witnessed By
Address
Telephone No.
Signature of Witness.....
Date

SPECIFIC INSTRUCTIONS TO TENDERERS

1. Form of Tender attached hereto and all blanks in this Form of tender and in the schedules shall be completed.
2. No alterations shall be made on the Form of Tender.
3. The Tenderer (whether his tender is accepted or not) and all other recipients of the specification and documents (whether they submit a tender or not), shall treat the details of the specification and documents attached hereto as private and confidential.
4. The procuring entity does not bind itself to accept the lowest or any tender and will not be responsible for or pay for expenses or losses which may be incurred by any Tenderer in the preparation of the tender.
5. The tenderer will be deemed to have been awarded when a formal notice is given to the Tenderer that the Client has accepted the Tenderer's bid.
6. Failure on the part of the Tenderer to furnish the information requested or to comply with these instructions may be a cause for rejection of the bid.
7. The tender shall remain valid for ninety days (90) from the date of tender opening
8. The rates given for the task shall form part of the contract.
9. The rates inserted thereof shall include the cost of tools, implements and any other equipment necessary for successful performance.

APPLICANTS THREE REPUTABLE CLIENTS IN THE LAST THREE YEARS

This part to be filled by at least three applicants' clients other than Laikipia University who should also give reference letter(s)

1. Name of 1st Client (Organization) (*Attach evidence*)

- i. Name of Client (Organization)
- ii. Address of client (organization)
- iii. Telephone No. of client
- iv. Duration of contract
- v. Name of officer recommending on behalf of the client.....
- vi. Designation of the officer recommending.....
- vii. Signature of the officer recommending.....
- viii. Official Stamp and date of the Client (Organization).....
- ix. Magnitude and nature of business

2. Name of 2nd Client (Organization) (*Attach evidence*)

- i. Name of Client (Organization)
- ii. Address of client (organization)
- iii. Telephone No. of client
- iv. Duration of contract
- v. Name of officer recommending on behalf of the client.....
- vi. Designation of the officer recommending.....
- vii. Signature of the officer recommending.....
- viii. Official Stamp and date of the Client (Organization).....
- ix. Magnitude and nature of business

3. Name of 3rd Client (Organization) (*Attach evidence*)

- i. Name of Client (Organization)
- ii. Address of client (organization)
- iii. Telephone No. of client
- iv. Duration of contract
- v. Name of officer recommending on behalf of the client.....
- vi. Designation of the officer recommending.....
- vii. Signature of the officer recommending.....
- viii. Official Stamp and date of the Client (Organization).....
- ix. Magnitude and nature of business

ERP EXPECTATION

7.1. INTEGRATED FINANCIAL MANAGEMENT MODULE

The system must be integrated and supports both managerial and financial functions. The expectations on each of the modules are as follows:

7.1.1. GENERAL LEDGER

All modules must be fully integrated with the General Ledger (GL) so that processing will be straight forward and reliable. It must accommodate complex business models including features that are unique to our institution.

Expected Reports

The system should be able to generate a GL report. The GL report **MUST** contain all the transactions for a given period listed by account. Other features that must be supported by the GL include the following.

- a) A Condensed Trial Balance
- b) GL report
- c) Expanded Trial Balance
- d) The system should be able to produce the following Financial Statements that must comply with the **IPSAS Format**; Public Sector Accounting Standard Board (**PSASB**)- Monthly, Quarterly and Yearly
 - i. Statement of Comprehensive Income with comparative figures
 - ii. Statement of Financial Position with comparative figures
 - iii. Statement of cash flows with comparative figures
 - iv. Statement of changes in equity with comparative figures
 - v. Notes to the Financial statements with comparative figures
- e) Flexible multi-level account structure with at least levels to cater for University, Schools and Campuses.
- f) User defined calendars
- g) Flexible closing dates
- h) Unlimited budget plans that allow importing and/or exporting an unlimited number of budgets from popular spreadsheet or other custom budgeting systems.
- i) Multi journal entry types, standard journal entries recurring, statistical, reversing journal entry templates and subsidiary application journal.
- j) Complex and flexible allocation based on percentage, usage factors or actual data. Revenue and cost to be redistributed based on user-defined rules, viable allocation (statistical and financial), step down and net allocations.
- k) Financial report writer. An unlimited number of completely customized financial statements based on user-defined, row and column templates and organizational structures.
- l) On-line drill down account analysis from account balances or financial statements all the way to the source transaction in general ledger or sub-ledger.
- m) Automatic consolidation of figures and adjusting entries.
- n) Automatic inter-units/department balancing
- o) Distribution templates to be set up in advance for use during journal entry.
- p) Multi-currency reporting
- q) Clear audit trail

Expected Reports

- i. Chart of accounts listing
- ii. Class/sub-class listing
- iii. General ledger report
- iv. Journal entry listing
- v. Work in progress listing e.g. documents waiting for action by specific users.
- vi. Recurring journal entry listings
- vii. Trial balance
- viii. Cash book
- ix. Income and expenditure
- x. Balance sheet
- xi. Cash flow statement
- xii. Investment reports
- xiii. Transactions listing
- xiv. Batch listing
- xv. Posting journals
- xvi. Aged analysis of debtors
- xvii. Bank Reconciliation

7.1.2. ACCOUNTS PAYABLE (EXPENDITURE)

The system must provide for a full cycle of vendor transactions from the Purchase Requisition Note, (PRN), Local Service Order (LSO) and Local Purchase Order (LPO) to cheque disbursements. It should on minimum meet the following features. The system must provide for payment vouchers that work the way the University and its organs operate. It must allow for expenses to be allocated across multiple accounts.

Expected Features

- a. Ability to integrate fully with Procurement
- b. Ability to capture supplier invoice
- c. Ability to allocate a supplier invoice to a cost center.
- d. Ability to define default payment terms
- e. Ability to control payments as per the stipulated terms.
- f. Ability to hold disputed supplier invoice and payment.
- g. Ability to generate Payment Vouchers
- h. Ability to automatically assign voucher numbers.
- i. Ability to allocate payments to suppliers' invoice.
- j. Ability to pay supplier invoice in part
- k. Ability for multiple invoices from a single vendor to be paid on one cheque with supporting detail on cheque stub or remittance advice.
- l. User-defined vendor categories: Vendor categories are user definable and can be used to group contractors, employees, teaching and vendors for purpose analysis.
- m. Vendors default account number: Expenses accounts can be set up for each vendor so that they will automatically default during voucher entry.
- n. Recurring vouchers accounts: Permits for creating of weekly, monthly and quarterly recurring reports.
- o. On-line drill down analysis: Full drill down from the invoice to the payments and vice-versa

information.

- p. Flexible payment approval: To allow selecting vouchers for payment based on vendor, vendor group, Company name, Voucher number, Invoice number, voucher priority, voucher amount.
- q. Allow sorting by due date, vendor number, vendor payment group, invoice number voucher number payment priority or open amount.
- r. Payment controls: Vouchers can be paid based upon due date, priority, category, payment type, group vendor or any combination.
- s. Both vendors and payment vouchers can be put on hold to prevent processing of requisitions, orders, invoices and payments.
- t. Recovery and accumulation of VAT for settlement
- u. Full creditor reconciliation including deposits - disbursements and adjustments, as well as the ability to import transactions vendors register or other types of files.

Expected Reports

- i. Aged payables
- ii. Vendor details report
- iii. Vendor summary
- iv. Vendor (creditors) payment proposal (Monthly)
- v. Vendor register
- vi. Payment distributions
- vii. Payment voucher listings
- viii. Recurring payment vouchers schedule listings
- ix. Creditors listing report by code and name
- x. Payment on hold report
- xi. Cheque register for creditors
- xii. Disbursement of cheques
- xiii. VAT returns
- xiv. LPO register
- xv. Creditors mailing labels
- xvi. Statutory reports
- xvii. System auto generation messages

7.1.3. PROJECTS ACCOUNTS

Expected Features

- a. Creation of project Names
- b. Creation of project numbers
- c. Creation of project coordinators
- d. Creation of project location
- e. Setting up specific project budgets
- f. Setting up project beneficiaries
- g. linked up to procurement module
- h. Linked up to the creditors module
- i. Linked up to the imprest module
- j. Linked up to the cashbook module
- k. Linked up to final accounts

- i. Unlimited project categories

Expected Reports

- i. Budget vs. Actual reports
- ii. Project Bank reconciliation statements
- iii. Project progress report (Disbursement vs. Expenditure)
- iv. Project cash flow status report
- v. Project cost valuation b/f and c/f, per project
- vi. Project cost addition during the year
- vii. Project contractor payment statement/status
- viii. Project Consultants/Architects Report.

7.1.4. ACCOUNTS RECEIVABLE (REVENUE)

Expected Features

This module provides for the efficient processing of invoices,

- a. Credit notes and debit notes,
- b. Processing receipts,
- c. Accounts receivable adjustments,
- d. Refunds set up customer ledgers,
- e. Processing prepayments,
- f. Processing miscellaneous receipts,
- g. Processing unrealized exchange gain and loss accounts.
- h. Invoicing Leasehold and others Customers.

Expected Reports

- i. Customer listing
- ii. Customer transactions
- iii. Deposit slips,
- iv. Invoices
- v. Overdue receivables
- vi. Receipts printing
- vii. Receipt inquiry i.e. receipts deposited to a selected bank or to display information for a receipt for which you have only the receipt number
- viii. Individual Leasehold and other customers Statements

7.1.5. MEDICAL EXPENSES

Expected Features

- a. Maintenance of staff details like PF No, list of dependents, medical entitlements
- b. The details of the hospital or doctor
- c. Record invoiced amounts
- d. Show details of NHIF rebates
- e. Automatic invoicing for staff who exceed their entitlements

Expected Reports

- i. Medical refunds to individual members of staff and cumulative claims to date.
- ii. Medical fee paid and the dates.
- iii. List of approved service providers.
- iv. List of staff members who have exceeded their entitlement and the amount.
- v. Quarterly reports/monthly/yearly.

7.1.6. INSURANCE EXPENSES

Expected Features

- a. Maintenance of details of brokers and underwriters
- b. Maintenance of details of various policies, the assets covered and their renewal dates
- c. Linked to the Fixed Assets Module
- d. Maintenance of register of insurance payments
- e. Generate automatic alerts on the due dates.

Expected Reports

- i. Policies paid, amount and date.
- ii. Outstanding claims, the amount and due date.
- iii. List of assets covered, policies and the amount.

7.1.7. IMPREST MANAGEMENT

The system is expected to control and manage the issuance of imprest to staff, the accounting of imprest and the recovery of unaccounted for imprest from the salaries of the staff involved.

Expected Features

The system should among others include the following: -

- a. Generate imprest forms and automatically number the documents serially
- b. Specify the envisaged accounting date
- c. Automatic alerts for overdue unaccounted for imprest
- d. Linked to the Payroll module for recovery of unaccounted for imprest
- e. Embedded controls to stop issuance of further imprest to staff with an existing unaccounted for imprest.
- f. Online approvals of imprest.
- g. Be able to cancel unwanted imprest.
- h. Passing of Journal Vouchers on accounted for Imprest.
- i. Maintain an up to date Imprest Register.

Expected Reports

- i. Age analysis of unaccounted imprest and general Receivables.
- ii. Cumulative balances analysis
- iii. Payment reconciliation
- iv. Individual statement/reports
- v. Quarterly/monthly/yearly reports
- vi. Imprest recovery reports

- vii. Automatically generate payroll recoveries
- viii. Auto-Generate underspent receipts analysis
- ix. Imprest ledger by staff.
- x. Imprest Register
- xi. Journal Vouchers Report Summary
- xii. Cancelled Imprest Schedule

7.1.8. CLAIMS MANAGEMET

- a) Generate ordinary, medical and salary refunds, Claims forms and automatically number them serially.
- b) Online approval of all Claims.
- c) Maintain an up to date Claims register.

Expected Reports

- i. Claims register
- ii. Salary Refunds Schedule

7.1.9. CASH OFFICE MODULE:

Expected Features

- a) Support for unlimited number of bank accounts with ability to pre-define each bank /cash account.
- b) On line drilldown account analysis from various Banks/ Bank Statements all the way to the source transaction in the general-ledger and to migrate information to the Spread Sheets.
- c) Create an alarm features for a pre-determined amount payable at a time in each bank account
- d) Flexible payment approval. To allow vouchers for payment based on priority.
- e) Automatic receipting and posting all the way to the general ledger accounts
- f) Automatic generation of Payments, a cheque writer both for Kalamazoo type of cheque and ordinary cheque and posting direct to the general ledger.
- g) Flexible approval for selection of deposits and cash withdrawals.
- h) Cash management
- i) Record transfers between bank accounts
- j) Add bank accounts to chart of accounts
- k) Reversing payments
- l) Returned (bounced) customer cheques
- m) Support for unlimited number of users (Personal Claims, Expenditure, Student Finance, Salaries, Bookshop etc.) hence the system should provide a User Defined Categories.

Expected Reports

- i. Cash Book
- ii. Petty cash Report
- iii. Cash flow movement report on daily, monthly, YTD, Annual basis.
- iv. Cash reconciliation report, Investments Reports
- v. Payment voucher listings and the status

- vi. Payments on hold report
- vii. Cheque payment register, Cash Management

Point to Note:

CASH OFFICE OPERATES AS A CENTRAL POINT FOR CASH FLOWS AND IS THUS AN AGENT FOR ALL SECTIONS.

7.1.10. BANK RECONCILIATION

Expected Features

- a) The System must support bank reconciliations across multiple banks and allow financial charges to be allocated across multiple accounts.
- b) Full bank and Cash reconciliations including deposits, disbursements and adjustments.
- c) Flexibility to import transactions from various banks systems.
- d) Post bank charges and interest. It should be able to be integrated with banking with the banking system

Expected Reports:

- i. Bank reconciliation Statements
- ii. List of cancelled cheques for a defined period.
- iii. Bank reconciliation Summary.
- iv. Bank Reconciliation by detail

7.1.11. INCOME GENERATING ACTIVITIES (IGA)

The University operates income generating units like farm, book shop and staff catering.

Expected Features

- a) Ability to capture products and services
- b) Classification of products as per the IGA
- c) Creating of price list
- d) Ability to use credit and debit memos
- e) Tracking of stock levels
- f) Generating of customer invoices
- g) Ability to adjust stock levels after stock taking.
- h) Ability to create customers
- i) Ability to generate cash sale receipts.
- j) Ability to generate an invoice for a customer
- k) Ability to integrate with ETR machine.

Expected Reports

- i. Inventory reports by stock and Value
- ii. Ability to report on fast moving items.
- iii. Income & Expenditure for IGA.

7.1.12. STUDENTS' FINANCE

Expected features

- a) Ability to integrate all the transactions related to students with GL
- b) Ability to set fees structure.
- c) Ability to define University fees policy
- d) Ability to integrate with Admissions Department
- e) Ability to track mandatory fees for students joining from second year of study.
- f) Ability to generate invoices to eligible students only. Clearly demonstrate how this is done.
- g) Ability to generate receipts on every payment and allocate to specific line items e.g. tuition, Accommodation, Supervision, Activity, Field Attachment etc.
- h) Ability to handle fee refunds.
- i) Illustrate the ability of capturing the overpayments by students and subsequently do a fair reporting. Illustrate how the overpayments are used.
- j) Ability to trail all transactions of the students as they occur.
- k) Illustrate the ability to handle sponsor's funds.
- l) Illustrate the ability to upload data from the bank statement directly into the system and update the student accounts appropriately.
- m) Illustrate the ability to cancel an erroneous receipt.
- n) Illustrate the ability to do students' fees adjustment in case of an error during fees structure set up.
- o) Illustrate the ability to reverse a single invoice for a student.
- p) Illustrate ability to integrate to examinations department and controls put in place to ensure that only eligible students get exam cards.
- q) Integration with the Library management system,
- r) Ability to maintain a HELB control a/c
- s) Students to view and download their statements of account online

Expected Reports

Ability to generate the following reports: -

- i. Ability to generate daily fee collection report (Global)
- ii. Ability to generate daily fee collection report with the following conditions
 - a. Per bank
 - b. Per personnel
 - c. Per bank and personnel
 - d. Per school/department/program/year of study/ campus etc.
- iii. Student fees balance summary (Global)
- iv. Students fees balance with the following conditions
 - a. Per student type i.e. SSP/GSSP
 - b. Per Campus
 - c. Per Campus Vs SSP/GSSP
 - d. Per School Vs Program
 - e. Per Programme Vs Year of study etc.
 - f. Per mode of study
- v. Demand letters to students with outstanding fees balance by a defined criterion. The demand letters can be e-mailed to the corporate e-mail accounts of students.

- vi. List of students who have overpaid fees.
- vii. Students with zero balance
- viii. Drilling of students' balances with user set criteria e.g. students whose balance is greater than kshs 10,000.
- ix. List of Students who have paid to votes like Field Trips/ Teaching Practice.
- x. Print exam cards for students who meet the minimum fees balance as may be set by the University.
- xi. Student fees collection summary per vote head.
- xii. Students Fees balance summary per vote head.
- xiii. Periodic fees collection report e.g. Monthly, Quarterly, Annually etc.
- xiv. Ability to produce ad hoc reports.

7.1.13. BUDGET AND VOTE BOOK CONTROL

The system should incorporate a Budget, Planning and Vote Book Control module that will enable LU generate their Budgets, Revise (reallocate) and Vire (Transfer) them. The module should manage the preparation of budget from the various variable e.g. salaries, operational costs etc. It should facilitate the virement of the budgets from one vote to another, comparison of actual against budget.

The budget module should also be used for generation of both Original and revised estimates. The system should be used to generate estimates for forwarding to Treasury, MOE and Parliament.

Importing a budget

The system should have a facility of importing budgets to Excel;

Budget Control

The system should control budget expenses on 1/12, or ¼ rule.

Reporting

The module should

- a) Produce a detailed/summary report by expense code(s) or department. (Active codes only)
- b) Produce a general summary report (All departments) by expense code(s). (Active codes only)
- c) Produce report by date range e.g. monthly or Quarterly.

7.2. PROCUREMENT, STORES & INVENTORY MANAGEMENT

7.2.1 PROCUREMENT

This module should provide the tools required to help procurement managers adhere to the rules and regulations guiding public procurement.

Expected Features

- a) Fully integrated with finance module.
- b) **Pre-qualified Suppliers:** The system should be able to capture and store all records of pre-qualified suppliers of various items with the price list in every financial year.
- c) **Tender Award:** The system should be able to award automatically by use of predefined criteria. However, manual awarding should also be allowed because of the Accounting Officer's approval.
- d) **Request for Quotation (RFQ):** Ability to generate Request for Quotations from the system.

- e) **Purchase Requisition Note (PRN):** The system should be furnished with tools to enable auto generation of PRNs
- f) **Local Purchase Orders (LPO):** The system should allow easy and efficient ordering by automatically generating LPOs.
- g) **Local Service Order (LSO):**The system should allow easy and efficient ordering by automatically generating LSOs.
- h) **Goods Received Note (GRN):** The system should be able to generate GRN for received items.
- i) **Track LPO Status:** The system should allow users to be able to track status of orders from the time they are raised to the time they are completed.
- j) **Departmental Budgets:** The system should give an option to restrict ordering within departmental budgets in any given financial year or any defined budget periods (such as quarters).
- k) Ability to link PRN to the LPO
- l) The system should allow the different types of costing methods for inventory
- m)The system should allow creation and display of the procurement plan for departments and the consolidated plan.
- n) The system should allow supplier management in terms of ratings, appraisals, assessments and evaluations etc.
- o) The system should be able to show rejected or goods returned records.
- p) Ability to track partial delivery
- q) Online approvals

Expected Reports

- i. List of all items with their classifications (Perishable, stock able, fixed assets)
- ii. Departmental procurement Plans
- iii. Consolidated Procurement Plan
- iv. A summary of procurement plans by department
- v. List of all registered suppliers with the classifications
- vi. Summary of re-evaluated suppliers with scores
- vii. Summary of approved LPO/LSO
- viii. Summary of cancelled LPO/LSO
- ix. Summary of serviced LPO/LSO
- x. Summary of partial deliveries
- xi. Summary of all purchases by type of purchase
- xii. Summary of delivered goods/services by period
- xiii. Reports on Youth Women and Persons with Disability
- xiv. Summary of rejected supplies
- xv. Issue Analysis by departments and period
- xvi. Inventory level listings (expiry periods)
- xvii. Stock levels with the costs and values
- xviii. Inventory unit activity reports
- xix. Rejected or Goods returned.
- xx. Approved purchase orders
- xxi. Supplier management in terms of ratings, appraisals, assessments and evaluations etc.

7.2.2 STORES AND INVENTORY MANAGEMENT

This module should allow the stores department to distribute and track stock levels of all items in the University ranging from stationery required in administration to food stuffs required in the kitchen.

Expected Features

This module should have the following features:

- a. Ability to generate Stores Requisition Note (SRN) by the user department.
- b. **Maximum Stock Level:** The system should allow the user to define the maximum stock level per item.
- c. **Re-order level:** The system should alert the users when reorder level falls due.
- d. **Minimum Stock Level:** The system should alert the user whenever stock levels hit the minimum threshold.
- e. Maintain Stock ledgers per item
- f. Have full audit trail of all stock movements
- g. Stock history
- h. Serial Number tracking
- i. Bin Locations
- j. Unit of measure configurable
- k. Expiry date tracking in case of perishables
- l. Update stock by Goods Received Notes
- m. Inventory counts changes and adjustments
- n. Update Asset Register.

Expected Reports

- i. Issue/Receiving analysis
- ii. Transaction history per inventory item
- iii. Inventory level listings
- iv. Inventory movement
- v. Stocktaking report
- vi. Inventory status by location
- vii. Inventory valuation summary & detail
- viii. Summary of Invoices forwarded to Finance
- ix. Updated asset register.

7.3. HOSTELS & ACCOMMODATION MANAGEMENT

The system must provide features for the allocation of rooms to students and the collection of accommodation fees from students. The collection and refund of room deposit must also be incorporated.

Expected Features

- a) Capture list of hostels and their respective capacities
- b) List of rooms and their respective capacities
- c) Room rates
- d) Allocate rooms to students who have paid fees only
- e) Put controls in place to limit student's allocation to specific gender
- f) Put controls to limit allocation to students in session only
- g) Hostel item(s) allocation

- h) Reserved rooms for students with disability
- i) Capture damages caused by students and invoice appropriately.
- j) Room clearance every semester.
- k) System should be able to capture details of on non-residential students
- l) Online booking of accommodation.

Expected Reports

- i. Allocated Room
- ii. Occupancy Rate
- iii. Beds space available per hostel by gender
- iv. Accommodation fees collected per hostel, campus, school etc.
- v. Hostel bed capacity status
- vi. Occupants by Student Type i.e. SSP and GSSP.
- vii. Accommodation items and their respective prices in case of charges.
- viii. Combination of different conditions to achieve a desired report.

7.4. ACADEMIC AND STUDENT MANAGEMENT

7.4.1. ADMISSIONS AND REGISTRATION MODULE

Expected Features

- a) Illustrate the ability to capture applicants
- b) Ability to upload KUCCPS students directly from the spread sheets.
- c) Ability to capture list of campuses
- d) Ability to capture list of Schools, Departments and programmes and areas of specialization.
- e) Ability to store cohorts.
- f) Ability to capture student's status e.g. teaching practice, holiday, on session, deferred etc.
- g) Ability to store modes of study e.g. Evening/Regular
- h) Illustrate how a new student is admitted into a programme.
- i) Illustrate how a Continuing Student Reports.
- j) Provide feature to sign Nominal Roll

Expected Reports

- i. Generate admission / registration reports and forms
- ii. Generate Admission/Regret letters
- iii. List of students with the following conditions
 - a) Per campus
 - b) Per school
 - c) Per department
 - d) Per specialization
 - e) Per year of study
 - f) Per class
 - g) Per student sponsor type i.e. SSP or GSP
 - h) Per study mode
 - i) Per student's status
 - j) Per gender
 - k) Per accommodation status i.e. resident or non-resident

- l) Per source
- m) Per county, per ethnicity
- n) Deferred students
- o) Discontinued students
- p) Suspended students
- q) Deceased students
- r) Pass List
- s) Combination of different conditions to achieve a desired report.

7.4.2. ACADEMIC AND EXAMINATION MODULE

The academic module should store comprehensive School data including Departments with the associated programs and Program units, academic years and semesters lecturers, courses, Curriculum, unit registration, marks among others.

The system should integrate all academic data to produce various reports like transcript, student performance analysis and many more. Among the many requirements that will facilitate its application include the following.

Expected Features

- a) The system should be able to capture all the programs offered in the University as per the catalogue and categorize them in their special specializations either core, compulsory or elective.
- b) The system should be able to address program unique combinations.
- c) The system should be able to link the examination module with the portal for unit registration and for lecturers to input marks online.
- d) The system should be able to store lecturers' details
- e) Capture class attendance by students and enforce the 80% rule
- f) Capture class attendance by lecturers
- g) The system should be able to store course details i.e. course per program attached to a department, school and the Dean
- h) The system should be able to store curriculum details.
- i) The system should be able to register program details, units per program, per semester, per academic year, per department and per school. Should capture/store details such as unit CFs, Hours, semester/academic year on offer etc.
- j) A lecturer should enter marks once and lock it. Once entered and saved, the system should not allow for any alteration of examination marks and CAT marks by the Lecturer.
- k) Allow for only published results to be available on the student online portal.
- l) Automatically maintain a historical audit trail of all grade entries or changes to a transcript.
- m) Automatically calculate Dean's List and other academic standings
- n) Perform grade distribution and class analysis reports
- o) Track Academic performance of students by class, programme, or campus, mode of study among others.
- p) Tracking students who have applied for graduation
- q) The system should allow for attaching of notes to students results data to help with tracking examination results issues.
- r) Archive student examination records for future reference

- s) Students with credit transfers should be indicated and the courses where the transfers are given are indicated.
- t) Course Registration should be done on the portal
- u) The system should be able to generate examination mark sheet.
- v) The system should factor examination moderation.
- w) The system should be able to compute cumulative and current averages according to the given formula.
- x) The grading of the students' marks is as specified in the University Statute with the capacity to allow changes when needed.
- y) Academic record for graduating students
- z) Illustrate the following practices.
 - i. Unit Creation.
 - ii. Curriculum Set-Up
 - iii. Unit Registration
 - iv. Marks Entry
 - v. Generation of Transcripts
 - vi. Performance analysis

Expected Reports

To produce a variety of reports to be presented and discussed in a variety of forums

- i. Nominal roll for students who have cleared fees
- ii. Departmental Mark sheets
- iii. Consolidated Mark sheets per programme per class
- iv. School board reports
- v. Senate reports
- vi. Exam cards
- vii. Generate the final academic transcript
- viii. List of graduating applicants.
- ix. Generation of lists for:
 - a) The Pass List
 - b) The Retake/ Supplementary List
 - c) Incomplete Results List
 - d) The Grade Distribution Statistics
 - e) The Deferment List
 - f) The Discontinuation List
 - g) Suspension List
 - h) Inter-School/Departmental Transfer List
 - i) Retake List
 - j) Exchange Pass List
 - k) Deceased List
 - l) Special Exams List
 - m) Class attendance list
 - n) Retakes Carried Over List
 - o) Graduation list-student should only appear in this list after having taken the minimum university core courses, all compulsory courses for that particular

programme, having no pending retakes, with no missing marks and having met the minimum CF.

- p) Provisional transcripts, students should be able to print them on the portal.
- q) Official Academic Transcript (should not be available on Portal)

7.4.3. TIME TABLING MODULE

This system should enable Academic staff to easily schedule classes and efficiently use the available spaces for teaching at various campuses. The following functionalities are expected:

- a) Lecture rooms and their capacity
- b) Labs category and their capacity
- c) Demonstration Units
- d) Handling of blocks
- e) The system should allow updating time table.
- f) The module should be totally self-checking and should not allow for any conflicts. It should allow for both manual and automatic resolution of room allocation conflicts
- g) Event calendar: The system should maintain different type of upcoming events date and time.
- h) Room allocation based on size

Expected Reports

- a) Produce time table reports based on
 - i. Room
 - ii. Class
 - iii. Course
 - iv. Labs
 - v. Lecturer
 - vi. Master timetable
 - vii. Enable online query of timetable schedules

7.4.4. STUDENTS PORTAL

Students portal is expected to provide online services to students and should have the following features

- i) Online course registration/enrollment for student who have signed nominal roll
- ii) Online signing of nominal roll.
- iii) Should allow students to register for semesters online
- iv) Allow students to view their fee balance online.
- v) Online booking of hostels/rooms on first come first served basis
- vi) Viewing & downloading fee statements
- vii) Students should be able to view their attendance records online.
- viii) Students can view academic holds online and receive instructions to resolve holds.
- ix) System should provide alerts to students on their fee balance status, exam results, etc.
- x) Students should be able to manage their profile online.
- xi) Students should be able to communicate with institutional departments online.

- xii) Students should be able to view class and exam timetables online.
- xiii) Digital notice board where students can be informed of the latest updates.
- xiv) Lecturers evaluation
- xv) Graduation application
- xvi) Print examination card
- xvii) Online Clearance
- xviii) Printing Letter of offer
- xix) Fees refunds claim
- xx) Inter-School/ Programme Transfer
- xxi) Student leave/off deferment application
- xxii) Registration of library users
- xxiii) Submission of Research progress report
- xxiv) Registration of project
- xxv) Disciplinary appeals
- xxvi) Should not allow discontinued, deceased, deferred students login it should simply display their status.
- xxvii) Login should be tied to status i.e. active, continuing, freshmen, deferred.
- xxviii) Provision to set active registration period for the portal as defined by the University statutes.

7.5. HUMAN RESOURCES AND PAYROLL MANAGEMENT.

7.5.1. Human Resource Module:

The system should address all aspects regarding personnel management for the employment of an employee. It keeps the entire file for an employee's basic details, photo, employment details, detailed contacts, personal information (including personal file number, job designation, department/section, PIN Number, NHIF, NSSF, Pension, Passport, driving license details including expiring dates), benefits, reviews, dependents', documents attachments (all documents could be scanned and attached here) and an entire section for making any notes. The Human Resource module also includes four major sub modules which include Personnel Management, Time & Attendance, Leave Management, and Employee Self-service.

Expected Features

The Human Resource module should contain on minimum the following features.

- a) Employee details & photo capturing
- b) Section or department the employee belongs.
- c) Employee service history.
- d) Leave and absence management.
- e) Carefully monitors employee suspension, discharge, disciplinary action.
- f) Keeps record of employee training, awards and appraisals.
- g) Track employee attendance with the use of either fingerprints or smartcard.
- h) Gives alerts and keeps record of personal information including license, VISA and other cards expiry dates.
- i) Documents can be scanned and stored electronically.
- j) Provide the easiest way to organize employee files. Store all your confidential information in one place.
- k) Schedule reminders for performance reviews, benefit eligibility, probation periods, birthdays, anniversaries, training, reports and other events.

- l) Track all employee's performance reviews including past reviews. Create management's comments under each employee. Automatically schedule the next performance or disciplinary review.
- m) Document all salary and job changes. View the salary history of each employee online including salary, bonuses and all deductions. Quickly view work history such as promotions and length of employment in a position.
- n) Track vacation and leaves – Input institution's vacation and leave policies and the system should track the number of days available based on years of service.
- o) Store and view all employee documents. View scanned images like resumes, applications, and accident reports stored by employee. One should also be able to link to Word, Excel and PDF files.
- p) Track individual skills; store required courses, certifications and grades received. Document all awards, accomplishments and recognition each employee has received over the years.
- q) Maintain an accurate history of all incidents and accidents. Enter all medical assessments per-formed for regulations.
- r) Control confidential information with various security levels for different users.
- s) Document all written and verbal warnings. Capture employee and supervisor comments plus disciplinary actions.
- t) Store job descriptions, minimum skill requirements and salary grade levels by position.
- u) Access to contact information quickly in a medical emergency.
- v) Track union membership status, start and end dates, contract expiry dates and seniority.
- w) Easily export employee information to Microsoft Word, Excel or PDF.
- x) Time & Attendance – Track employee attendance with the use of either fingerprints or smart-card

Expected Reports

- i. List of all employees by gender, region, district, county and ethnicity.
- ii. List of employees on leave
- iii. List of employees due for appraisal
- iv. List of employees who have left the organization
- v. Skills inventory report
- vi. Staff turnover report
- vii. Alerts on staff member's birthday
- viii. Employees trained in a given year
- ix. List of employees/dependent's on tuition fee waiver.
- x. List of employees nearing retirement (5 years, 4years, 3 years, 2 years, 1year)
- xi. List of all employees under various combinations
- xii. List of staff on study leave

7.5.2. Payroll Module

The payroll Module should automate the employee's salary and other benefits payments process by gathering data on employee remuneration, calculating various deductions and taxes and generating periodic pay cheques and pay slips.

Expected Features

- a) Ability to electronically integrate with the GL, Cash Book and other third party software

- e.g. e-banking.
- b) Ability to automatically process employee salary and benefits
- c) Ability to calculate various employee deductions and taxes.
- d) Ability to run real-time data communication between human resource and finance sections.
- e) Ability to electronically integrate/export employee information to Microsoft excel, word or PDF.
- f) Ability to document all salary and job changes, view salary history of each employee online including salary, bonus and all deductions etc.
- g) Ability to generate a detailed Audit Trail of payroll transactions/changes.
- h) Link job scales to salary and allowances payable to each grade
- i) Automatically post annual increments on the due dates.
- j) Supports unlimited number of employees and staff classifications
- k) Employee banking details e.g. bank, branch, account number, account type
- l) Unlimited number of user definable tables e.g. PAYE, NSSF, NHIF, Pensions, Unions,
- m) User defined rounding system
- n) Bonus and arrears payments
- o) Direct electronic salary remittance to banks
- p) Tracking of loans and amounts due to financial institutions
- q) Maintain historical information for unlimited number of years
- r) Ability to automatically send payslips to employees through the e-mail.
- s) Ability to automatically stop salary at end of Contract or Employment.

Expected Reports

The system should allow the user to select fields to extract data and generate reports with various formats such as tables, graphs, bar charts etc. The system should be flexible such that it can pick relevant data from various tables in the database and generate any ad hoc report that may be required by the management from time to time. Among the reports the system is expected to provide are: -

- a) Report on Salary Payments on monthly, YTD, Annual basis.
- b) Report on tax payments, pension payments etc.
- c) Reports on payroll costs as defined by user e.g. in terms of basic pay, house allowance and other financial benefits on the basis of cost centre-department, school as may be defined by the user.
- d) User defined payslip format
- e) Bank remittances list
- f) Bank registers
- g) Payroll journal
- h) Company totals
- i) Employee details
- j) User specified transaction reports
- k) Cost centre reports
- l) Statutory reports e.g. P9, P9A, P10, P10A etc.
- m) Audit trail reports
- n) Exceptional reports e.g. staff earning salaries beyond their grades

7.5.3. STAFF PORTAL

Staff portal is expected to provide online services to staff and should have the following features:

- a) Should allow staff to view and retrieve/download pay slip
- b) Leave application - to enable staff apply for leave, view leave days' balance, approval by Head of Departments
- c) Staff should be able to apply for overtime request
- d) Leave approvals to be done online.
- e) Imprest/subsistence/claim medical claim form application - form to be accessed online and filled by applicant online
- f) Portal to allow HOD to view and approve application forms.
- g) Imprest posted to debtors.
- h) Enable checking of status and show who has approved in required status
- i) Give user a notification of approval.
- j) Part time Lecturing Form
- k) External Examiner Application Form
- l) View Employee Data
- m) View Employee Data sheet
- n) Newsletter/Bulleting
- o) Enable staff to fill requisitions on the portal
- p) Show approval status and levels
- q) Notifications on requisitions approved
- r) Request for information materials
- s) Registration of library users
- t) Request for internal research funding
- u) Submission of Research progress report
- v) Registration of project
- w) Bio data medical form
- x) Appraisal
- y) Staff review request
- z) Disciplinary appeals
- aa) Employee clearance
- bb) Stores requisition
- cc) Purchase requisition
- dd) Repair request
- ee) Transport request
- ff) Driver schedule
- gg) Vehicle booking estimate
- hh) Staff portal notice board.
- ii) Should not allow staff who are deceased, dismissed, retired, resigned or on suspension to login; it should simply display their status.
- jj) Login should be tied to status.

7.5.4. SMS

- a) Bulk SMS
- b) Should access contacts from the system
- c) Should query database

- d) Does not allow replies
- Should have Laikipia University name

7.6. RESEARCH MODULE.

Expected features

- a) The system should be able to register ongoing research projects.
- b) Ability to track progress of the projects
- c) Register researchers
- d) Register the financiers of the researchers.
- e) Keep a database of the research outputs/outcomes.
- f) Register/maintain information on publications by University staff.
- g) Maintain a research equipment and assets inventory.

Expected reports

- i. Publications report by staff
- ii. Reports on resources output/outcomes
- iii. Report on research donations.

7.7. LIBRARY MANAGEMENT

Expected features

The library module should contain the following features.

7.7.1. Circulation:

The system should provide support for issues (check-outs), returns (check-ins), reservations, renewals, reminders (to those with borrowed items), barcode reader, fines (calculations and payments) user profiles and issuance of notification letters. Other features for circulation will include:

- i. Taking statistics on issues and borrowers visiting the library.
- ii. Preparing overdue and recall notes.
- iii. Renewals of books.
- iv. Collection of fines.
- v. Compilation of list of defaulters and daily financial collection by individual users plus accumulatively collected.
- vi. The system should be able to provide information to answer queries from users.
- vii. The system support for e-mail communication between library staff and the users, e.g. posting of overdue item notices to affected users.
- viii. The system should be able to provide for recall, overdue and fine notices.
- ix. The system should be able to generate reports on certain activities to be used by library management for decision making e.g. number of loan items, defaulters and financial transactions on daily and monthly basis.

7.7.2. Maintenance File:

- i. The system should be able to maintain a list of the members of the library with different groups.
- ii. The system should be able to allow creation of unlimited number of categories of users with different maximum number of items to borrow, maximum number of days to stay with the borrowed item(s) and the fine charges for those who overstays with the item(s).

7.7.3. Patrons Management:

The module is should be furnished with tools to enable changing the information about members or

viewing their details.

- i. Creating and editing member records
- ii. Finding and Viewing patron records
- iii. Printing patron cards
- iv. Collecting fees and dues

7.7.4. Cataloguing:

The system should capture and store details of all the items in the library (catalogued).

The system should allow definition of types of items and loaning categories (e.g. short loans). The catalogue module is equipped with the Z39.50 standard such that if you are connected to the internet, you only need to enter the ISBN number and the software will query the internet servers such as Library of Congress. Apart from the main catalogue, the system should provide an Online Public Access Catalogue (OPAC) that is used by library users to search the library.

7.7.5. Administration:

The system should have an option where overall system settings are done. This include creating staff (librarian accounts), database maintenance, log files, departments, barcode generation and other tools like internet browser and email facilities.

OPAC: The system should enable a user to determine the availability of materials in the library through many access points such as use of keywords, author, subject and title, Keyword, ISBN/ISSN.

Serials.

Reserves

Others key details include:

- i. No of materials borrowed
- ii. Reservations, with details of the person reserving the material.
- iii. Prepare overdue, damaged and non-returned materials
- iv. A client identifies the information material to be borrowed
- v. Rules to define the maximum and duration when material can be borrowed.
- vi. Material recalling

7.7.6. Receiving (Discharging) of Library resources

The Librarian receives the information material(s) from the client

Check out the material checking on return date, and if overdue

7.7.7. Inter Library Loan

The Circulation Librarian, teaching staff or students identifies materials that are requested for and not available in the library.

The circulation Librarian identifies a library which has the required information material.

Captures information of the borrower so that could be marked as borrowed on the library

Recall in case of need that may arise

7.7.8. Reservation of information materials at reserve section

Identifies information materials to be reserved and present them to reserve counter.

Reports to be generated

- i) Registered users

- ii) Subject usage analysis
- iii) Issues
- iv) Receipts
- v) Overdue records
- vi) Inter-Library Loans
- vii) Catalogue
- viii) Requests
- ix) Reservations
- x) Recall
- xi) Books for repair

7.8. MEDICAL MODULE

7.8.1. Health Records

- a) Register students/staff (clients) on the admission day.
- b) Verification of clients records on subsequent visits
- c) Compilation of monthly reports.
 - a. Clients registered daily
 - b. Patients treated daily

7.8.2. Nursing Procedure

- a) Taking the vital signs upon verification of details.
- b) Nurses prioritize patients based on health status.
- c) Nurses take the patient for consultation.
- d) Nurses can receive clients/patients from clinicians to administer treatment as per clinical instruction, admit patient or facilitate referral of the patients.
 - i. Admit patient
 - ii. Refer patient
 - iii. Give medication and treatment
 - iv. Take serial observation as Observation

7.8.3. Clinical Services

- a) Clinicians check the data of the clients/patient and the triage done by the nurses.
- b) Clinicians capture patient history, detailed examination, makes a provisional diagnosis, records investigations and final care plan
- c) Clinicians may request laboratory/radiological investigation
- d) Clinicians prescribe medication
- e) Admit the patient
- f) Refer patient
- g) Review of inpatients
- h) Discharge the patient

7.8.4. Pharmacy.

- a) Requisitions of drugs, surgical and medical equipment
- b) Order drugs from the pharmacy main store.
- c) Receive a prescription from the patient or nurse cost of the prescription.

7.8.5. Medical Laboratory.

- a) Capture all the particulars of all the Laikipia University students, staff and the outsiders seen at the LUMC.
- b) Capture all the tests done and a feature for future expansions as per copy of price list issued.

- c) Enter all the clinical details of the patient i.e. investigations, clinical notes
- d) A feature for Medical Laboratory charges on cash, credit (invoice) and exemptions to payments for certain tests e.g. HIV testing.
- e) It should be able to give the numbers of patients attended at the Laboratory tested, which are positives or negatives for various diseases and give a summary report daily.
- f) The module should be able to communicate with other sections e.g. clinicians, triage, doctor, pharmacy, HTC/VCT.
- g) It should be able to store, retrieve and give accurate results (records)
- h) It should be able to exit the patient and queue the waiting patients.

7.8.6. Medical Accounts

The following are the medical accounts sections specifications:

- a) Invoice from Pharmacy, Lab and Nursing section which should flow clients Name, ID, date and cost of the drugs or service.
- b) It should indicate whether student, staff or outsider. NB students are non-paying but the cost of drugs or service should be incorporated.
- c) It should be able to give the following options:
 - (i) Cash basis
 - (ii) Credit
 - (iii) Exempted/subsidized e.g. TB drugs
- d) It should be able to retrieve old information on monthly basis for the various categories e.g. students, staff and outsiders.
- e) It should give exit points to allow the next client in the system. (queuing system)
- f) Report: - On credit (debtors), Daily, monthly, quarterly annually and specific period.

7.8.7. Medical Stores

Supply Chain Management and inventory tracking between Suppliers, main store, ancillary stores (Nursing, Pharmacy and Lab).

7.9. TRANSPORT MODULE.

The module shall be guided by the NTSA transport requirements

8 NON FUNCTIONAL REQUIREMENTS

SYSTEM ADMINISTRATION MODULE

Security

a) Authentication

1. Creation of user accounts for Laikipia University with the login name as payroll number for staff & registration number for students as the unique identifier and system generated passwords which the system will then email to users the respective users. The payroll number and registration number for staff and students respectively should serve as usernames for single sign on.
2. Passwords validation to ensure password strength should have a minimum of 8 characters.
3. System to force users to change password upon first login to their user accounts in the system.

4. Password to be set to expire after 2 months/60 days. System should force users to change after 2 months/60 days.
5. Should not allow password reuse for security purposes.
6. Disable login upon 3 attempts of wrong credentials and notify system administrator.
7. Enabling of locked accounts to be done by the System Administrator /super user only and once enabled should have system generated password sent to user's email.
8. Time out system when idle after 5 minutes when users are logged in but do not have any activity.
9. Have module administrators and process owner for each and every module in the system.
10. System user accounts validation to ensure each user has 1 account in the system

b) Authorization

1. Creation of user groups; each module to have user groups, with each user group having their roles clearly defined.
2. Assigning of user rights to be based on the user groups and roles.
3. Each module to have users with higher authority (departmental super user).
4. Rights and roles to be clearly defined in the system.
5. No use of 'admin' as username.

c) Audit trail

1. Summarizes all user activity in the system.
2. Keeps records of all transactions even history.
3. It should be flexible to enable filtering per:
 - module
 - user id & activity/transaction
 - period – time, date,
 - entity – students/staff
 - activity/transaction
 - date/time, who, user activity, workstation, mac address, module
4. System to automatically notify administrator of any malicious/suspicious activity
 - Suspicious changes in finance, marks, approvals – imprest, salary, leave, deletes
 - Adding/deleting users

d) Backup & restoration

1. Automated/Scheduled backup with flexibility; full, incremental, differential
 - Proposed Monday – Thursday incremental backup
 - Fridays – Full backup
2. Enable testing of the backups stored to know if they have the correct status of the backup.
3. Backup restoration & roll back to database and system be enabled on the system

e) Reports

1. Should have viewing, modification, customization
2. Enable system administrator to customize reports that best fit the user and as per arising needs based on all data in the system.

3. All modules to have customizing of reports based on parameters of all data in the system.
4. All to have system format and also flexibility to be in different formats; pdf, excel
5. Querying utility

f) Documentation

1. Inbuilt help within the system for each module the user is accessing and tooltips.
2. Entire system to have elaborate documentation including all modules, database structure,
3. Documentation of system software used and compatibility, licenses
4. System Updates and versions should be documented
5. General maintenance of the system should be documented.
6. Dormant users – system should automatically disable your account after 3 months of inactivity for staff.
7. HR to notify ICT enable them to re-assign user rights based on user transfers between departments.
8. Portal activity should point to the mirrored server, which shall then write to the main server.
9. System updates to be done centrally on the main server.
10. SLA to be specific on code, licenses, general maintenance, period.

WORK FLOW

Interlinks all related modules.

System to send alerts of approval requests and give onscreen popups alerts once user is logged onto the portal/system.