KITALE NATIONAL POLYTECHNIC

QUALITY MANAGEMENT SYSTEM BASED ON ISO 9001:2015 STANDARD

ICT PROCEDURE MANUAL

KNP/PM/ICT/ 02

VERSION: C

REVISION: 1

Authorized by: _____ **Principal**	**Sign:**	**Date: 25TH OCT 2021**
Issued by: _____ **Management Representative**	**Sign:**	**Date: 25TH OCT 2021**

CIRCULATION

NAME	COPY NO.
Principal	1.
Deputy Principal Administration	2.
Deputy Principal Academics	3.
Registrar	4.
Dean of students	5.
Management representative	6.
HOD Agriculture	7.
HOD Building and civil engineering	8.
HOD Business	9.
HOD Electrical /electronic	10.
HOD Hospitality Management	11.
HOD IT	12.
HOD Liberal studies	13.
HOD Maths and Applied sciences	14.
HOD Mechanical Engineering	15.
Examinations Officer	16.
Finance Officer	17.
Procurement Officer	18.
HOD Guidance and Counseling	19.
HOD Library	20.
Industrial Liaison Officer	21.
PC Coordinator	22.
Sports Officer	23.
External Auditor	24.

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PROCEDURE NUMBER 1: DATA CLASSIFICATION AND BACKUP

1.0   GENERAL

1.1   PURPOSE

The purpose of this procedure is to ensure efficiency in data classification and backup protection in KNP.

1.2   SCOPE

This procedure applies for all the data classification activities in KNP

1.3   REFERENCES

a) KNP ICT Policy 2009

1.4   TERMS DEFINITION

a) Data-raw material in any /Recorded information an any form

b) Classification-Grouping of data according to characteristics

c) MIS – Management information system

1.5   PRINCIPAL RESPONSIBILITY

The head of ICT shall be responsible for ensuring that this procedure is followed and maintained.

1.6   INTERFACES/INTERACTIONS

a) Finance for timely signing of requisitions

b) Procurement For Acquisition And Provision Of Materials

c) all HODs for co-operation in terms of availing data to be backed up in folders

1.7   PERFORMANCE TARGET

The performance shall be measured through the overall performance of the Department basing on;

PERFORMANCE TARGET	MONITORING AND MEASUREMENT
Timely backup	Review the filled data backup form against stipulated timelines
Safety of all backed-up data	Observe the safety of the cabinet/the back up storage area
Easily retrieved data	Conducting periodic retrieval tests

1.8   RESOURCES

The resources to be used in the process are listed below:-

a) Equipments such as; external hard disks, Cds, flash, safe/cabinet, computers,

b) MIS officer, IT technicians

c) Internet

d) Office space

e) Stationery

1.9   INPUTS AND OUTPUTS

INPUTS	OUTPUTS
Departmental data	Backed up data on secondary storage/cloud
MIS systems	Dully filled data backup forms
Backup media	
Backup forms	

2.0   METHOD

2.1   This procedure shall start with ICT officer issuing termly data backup schedule second week of every term. The schedule shall comprise; issue date, department, backup date, type of data to be backed up. The data to the backed up shall be classified as; MIS and departmental data.

2.2   The MIS data shall be backed up regularly depending on the frequency of MIS transactions. Classification of MIS data shall be done as stated in 2.2 through 2.5

In classifying departmental data, the ICT officer shall:

2.2.1   Sort the departmental databases files as labelled. The files shall be labelled either as applicable:

a)   Confidential-database file that would not expose The Polytechnic to loss if disclosed, but ought to be protected to prevent unauthorised disclosure.

b)   High risk-database file that would cause severe damage to the department/institute if disclosed or modified

c)   Public-database that may be freely disseminated

2.3.   Confirm from the source department, the category i.e. public/ high risk/ confidential and label the database as detailed above

2.4   In creating data back-ups, the ICT officer shall ensure:

a)   Creation of new folder and name it e.g. "Back up PROCUREMENT January, 2010"

b)   Creation of new folders and name them as per the various classification specifying the back up period e.g. "Backup confidential ICT January, 2010"

c)   Putting of the various databases files in their respective classification and departmental folders

2.5   This procedure shall be deemed complete upon the ICT officer storing the backup data in safe custody.

LIST OF APPLICABLE RECORDS/REPORTS

a) Updated Data backup schedule

b) Filled Data back-up forms

c) Back-up media-CDs, External Hard disks

PROCEDURE NUMBER 2: ACCESS CONTROL AND INFORMATION SECURITY

1.0   GENERAL

1.1   PURPOSE

The purpose of this procedure is to ensure effectiveness in controlling access to information in KNP

1.2   SCOPE

This procedure applies to all access control and information security in KNP

1.3   REFERENCES

a) KNP ICT Policy 2009

1.4   TERMS AND DEFINITIONS

a) **Access –**Ability to deny or permit the use of a particular resource

b) **Access rights –** refers to the right of possession or use of data

c) **Data control-** mechanisms used to control data access

d) **Assigned Users-** those who have been appointed or allotted some task or responsibility in a network

e) **Virus–**Programme written to replicate by attaching copies of itself to other objects within the system, and normally having a detrimental effect

f) **Prevention –** Applying measures to protect from harm or damage

g) **Intrusion-** Unauthorised access

h) **ICT Assets** - Comprises all ICT Hardwares & Softwares, Infrastructure and Information

1.5   PRINCIPAL RESPONSIBILITY

The HOD ICT department shall be responsible for ensuring that this procedure is followed and maintained.

1.6   INTERFACES/INTERACTIONS

a) Procurement for procuring of stationery, antivirus and internet service provider

b) Finance for facilitation of requisitions

c) HODs for co-operation

d) MIS /computer users for co-operation

1.7 PERFORMANCE TARGET

The performance shall be measured through the overall performance of the Department basing on;

PERFORMANCE TARGET	MONITORING AND MEASUREMENT
Timely issue of access rights	Review System users list against stipulated timelines

Effective monitoring of system users	Review System log files against users rights
Timely installation and updating of antivirus	Compare antivirus installation form against stipulated timelines
Timely asset scan	Review Duly filled asset scan forms against stipulated timelines

1.8 RESOURCES

The resources to be used in the process are listed below:-

a) Computers,LAN,

b) MIS officer, IT technicians

c) Antivirus,firewall,internet,

d) Office space and stationery

1.9 INPUTS AND OUTPUTS

INPUTS	OUTPUTS
MIS	List authorized users accessing the mis system
System users	
Antivirus	System log files
Wi-fi hotspot system	List installed and updated computers
	List of intrusion detection

2.0   METHOD

2.1   This procedure shall start with the ICT officer requesting HODs to submit a list of NEW system users and the level of their access rights to the Polytechnic owned networks and MIS for configuration.

2.2   In determining the level of access rights, the HOD shall use the following criteria:

a) Nature of officer's work

b) duties responsibilities bestowed on the officer

2.3   Upon receipt of the list, the ICT officer shall within a day configure the Polytechnic owned networks and server's to suit the given rights. In configuring the server's the ICT officer shall:

a) Log in as the administrator

b) Access the user rights

c) Review and give the user rights as per the request

d) Save and log off

2.3   In ensuring effective control over the users access rights the ICT officer shall:

a) Configure the system to prompt users to change their passwords after every sixty days.

b) Disable log-in accounts for terminated / transferred employees within one day of the termination/transfer.

3.0 LIST OF APPLICABLE RECORDS/FORMS

a) System generated log files

b) Updated System users list

PROCEDURE   NUMBER 3: ASSET ASSESSMENT, REPAIR AND MAINTAINANCE OF ICT EQUIPMENT

1.0   GENERAL

1.1   PURPOSE

The purpose of this procedure is to ensure that the assessment, repair and maintenance of ICT assets is conducted effectively and efficiently.

1.2   SCOPE

This procedure applies to all ICT assets in KNP

1.3   REFERENCES

 KNP ICT Policy 2009

1.4   TERMS AND DEFINITIONS

a) **Network**–A connection of two or more computers for the purpose of sharing resources and other equipments

b) **PC –** personal computer

1.5   PRINCIPAL RESPONSIBILITY

The ICT Head of Department shall be responsible for ensuring that this procedure is followed

1.6   INTERFACES/INTERACTIONS

a) Finance for financial facilitation

b) Procurement for acquisition and provision of materials

c) Departments for co-operation in terms of reporting faulty equipments on time

d) Computer users for feedback

1.7 PERFORMANCE TARGET

The performance shall be measured through the overall performance of the Department basing on;

PERFORMANCE TARGET	MONITORING AND MEASUREMENT
Accurate assessment of new ICT equipments	Inspection and acceptance form showing that the new equipments meet the user's specifications
Prompt identification of idle assets	Review List of idle assets against stipulated timelines
Timely installation and Updating of softwares	Observing Updated softwares in the institute computers
Effective general computer and network maintenance	Review of complains from ICT users

1.8 RESOURCES

The resources to be used in the process are listed below: -

a) Repairs and maintenance tool kit, blowers

b) It technicians, MIS officer

c) Software; antivirus, OS, application software, internet

d) Office space, cabinets

1.9 INPUTS AND OUTPUTS

INPUTS	OUTPUTS
Software	installed software properly working
Hardware repairs and maintenance request form	Repair and maintenance report
	Duly filled asset scan form
Large turnover of machines	List of idle assets
Idle assets	

2.0   METHOD

2.1   This procedure shall start with the ICT officer determining the need for an ICT Asset Assessment and repair and maintenance using the following considerations

a) Whenever a large turnover of assets (for example when a large number of computers are bought)

b) Identification of idle assets(done yearly)

c) Upgrading of software

d) Repair and maintenance schedule

e) User complaint on efficiency and effectiveness of ICT equipment

f) Examination timetables

2.2   Prior to an assessment, the ICT officer shall ensure availability of an ICT ASSET ASSESSMENT CHECKLIST. This checklist shall be used by the technical personnel as a guide to conducting ICT asset assessments.

2.3   The ICT officer shall run an asset assessment as per procedure no 2 clause 2.7.

2.4   In case of large turnover asset scan shall be guided by:

a) Whether hardware meets user specifications or not

b) What software is installed on the device?

2.5   If a non-conformance is found, the ICT officer shall advice the procurement office not to accept the asset. If the asset meets user's specifications the asset shall be received and issued to the user department.

2.8 For repairs, ICT officer shall within 2 weeks to the end of every term prepare a schedule for repair and maintenance of all ICT Equipment within The Polytechnic and forward to the HODs for information.

2.9 the ICT officer shall identify the type of service guided by asset assessment report

2.10 The ICT officer shall instruct the technical personnel to perform minor repairs:

a) Checking and cleaning virus

b) Software installation

c) Blowing and general computer maintenance

2.11 The maintenance report shall include:

a) List of computers serviced

b) Status of the installed softwares

c) recommendations

2.12 The ICT officer shall forward the recommendation to the HOD IT who shall act upon the recommendation.

2.13 In case major repairs are required such as:

a) Computer hardware and software repairs

b) Network and wireless repairs

2.14.1 The HOD IT shall request the procurement officer as per the procurement procedure to undertake tendering of repair services.

2.14 This procedure shall be deemed complete upon the ICT officer ensuring that all the computers are repaired and maintenance done as per the schedule.

3.0 LIST OF APPLICABLE RECORDS/FORMS

a) Filled ICT equipments complains form

b) Filled Asset assessment form

c) Duly filled inspection and acceptance forms

PROCEDURE NUMBER 4: WEBSITE MANAGEMENT

1.0   GENERAL

1.1   PURPOSE

The purpose of this procedure is to ensure that the polytechnic website is functioning properly and is well updated with current news and events.

1.2   SCOPE

This procedure applies to the polytechnic website

1.3   REFERENCES

KNP ICT Policy 2009

1.4   TERMS AND DEFINITIONS

Website–A group of world Wide Web pages containing hyperlinks to each other and made available online by an individual, company, educational institution, government or organization

1.5   PRINCIPAL RESPONSIBILITY

The ICT Head of Department shall be responsible for ensuring that this procedure is followed

1.6   INTERFACES/INTERACTIONS

a) Finance for financial facilitation-payment of hosting fees

b) Procurement for acquisition of developers for upgrading the website

c) Departments for co-operation in terms of bringing the departmental updates

d) Website developers for technical support

1.7   PERFORMANCE TARGET

The performance shall be measured through the overall performance of the Department basing on;

PERFORMANCE TARGET	MONITORING AND MEASUREMENT
A working website that is updated and online	Observing and opening the website address to see if it is updated
Timely updates of the website	Observing and opening the website address to see if it is updated
Current content of the website of news, adverts, events,	Observing and opening the website address to see if it is updated

1.8   RESOURCES

The resources to be used in the process are listed below: -

a) Stationery

b) Internet

c) Camera

1.9 INPUTS AND OUTPUTS

INPUTS	OUTPUTS
Website update request memo	
Termly memos to departmental heads requesting of new updates for website	request memo and the updated website

2.0 METHOD

2.1 This procedure shall start with the ICT officer requesting the management and the heads of departments through a letter to forward their write-ups for the polytechnic website update for that term. This shall be done during the first week of the term.

2.2 Once the write-ups are received, the ICT officer shall within the same day update the website for the said term.

2.3 This procedure shall be deemed complete upon the ICT officer ensuring that the polytechnic website is updated with the current news, adverts and events.

3.0 LIST OF APPLICABLE RECORDS/FORMS

a) Website update request memos

b) Updated website