

**GUIDELINES FOR EVALUATION
AND ASSESSMENT FOR
ENROLMENT OF A
PHARMACEUTICAL
TECHNOLOGIST**

Published by the Pharmacy and Poisons Board
Lenana Road, P.O. Box 27663-00506, Nairobi, KENYA

First published 2005

Second published 2013

Copyright © 2013 Pharmacy and Poisons Board

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system - electronic or mechanical, including photocopy, recording, or any other information storage or transmitted in any form or by any means without the prior written permission of the copyright holder.

TABLE OF CONTENTS

Forward.....	iv
Acknowledgement í	v
Executive Summaryí	vi
Eligibility criteria for Evaluation and Assessment í í í í	1
Application procedureí í í í í í í í í í í í í í í í í í	2
Documentation required for pre-enrolment assessment í	2
Language proficiencyí í í í í í í í í í í í í í í í í í	3
Evaluation of documentsí í í í í í í í í í í í í í í í í	3
Examination feesí í í í í í í í í í í í í í í í í í í	3
Rules and Regulation for candidatesí í í í í í í í í	3
Examination Outcomesí í í í í í í í í	5
Structure of the examinationí í í í í í í í í í í í í	6
Level I Examinations.....	6
Level II Examinations.....	7
Level I:Basic Medical, Chemical & Pharmaceutical Sciences.....	9
Level II: a) Applied Pharmaceutical Sciences.....	16
b) Pharmacy Practice.....	18
Annex I: Suggested Reference Materials.....	20
Application form for Evaluation and Assessment for Enrolment as a Pharmaceutical Technologist	21
Application checklist	23
Applicant's declaration form.....	24
How to lodge your application.....	25

FOREWARD

The mission of the Pharmacy and Poisons Board is to ensure the availability of quality pharmaceutical services in Kenya. These services must satisfy the requirements of all for the prevention, diagnosis and treatment of diseases using safe, efficacious, high quality and cost effective pharmaceutical products.

The attainment of the mission and its objectives requires well trained and ethical pharmaceutical personnel. Pharmaceutical Technologists form an important part of these personnel and whose critical mass requires a well laid out training programme.

The harmonized national curriculum for Diploma in Pharmaceutical Technology course whose objective was to standardize training and the provision of pharmaceutical services in Kenya was developed and approved in 2003 through concerted efforts of the Ministry of Education, Science and Technology, Ministry of Health, Kenya Institute of Education, Kenya National Examination Council, Kenya Medical Training College and the Pharmacy and Poisons Board.

In line with the amendments to Cap 244, The Statute Law (Miscellaneous Amendments) Act No. 2 of 2002 dated June 2002 and the (amendment) rules in legislative supplement No. 31, legal notice No. 9 of 6th August 2004, the Pharmacy and Poisons Board has set criteria for Evaluation and Assessment of candidates who have undergone training at Diploma level in Pharmaceutical Technology.

öGuidelines for Evaluation and Assessment for a Pharmaceutical Technologistö were first published in 2005 by the Pharmacy and Poisons Board (PPB) to outline the criteria and prerequisite for enrolment as a Pharmaceutical Technologist in Kenya. However, a lot of changes have been seen in the legal, regulatory, training and practice environment over the years. These have necessitated the review of the guidelines and hence the publication of this version of the öGuidelines for Evaluation and Assessment for Enrolment of a Pharmaceutical Technologistö

The development and review of these guidelines has been a big achievement for the Board in the implementation of assessing the competencies acquired by Pharmaceutical Technologists during training. They form part of the standards harmonization efforts. The achievement of success and quality in training and practice of Pharmaceutical Technologists as contemplated by the Board requires active participation of all stakeholders.

Thank you.

Dr. Kipkerich C. Koskei, OGW
REGISTRAR, PHARMACY AND POISONS BOARD

ACKNOWLEDGEMENT

The Pharmacy and Poisons Board acknowledges the contribution of the following members of its Training and Assessment Committee in the development of the first edition of the guidelines:

1. Dr. E. F. Odhiambo
2. Prof. G. Muriuki
3. Dr. J. Ombogo
4. Dr. K. A. M. Kuria
5. Dr. K. Yano
6. Mr. E. Ndubi
7. Mr. A. Ochieng
8. Mr. G. Kitale
9. Mrs. D. Too

Special gratitude is extended to Dr. S. Kimathi, Dr. A. Mohamed and Mr. J. L. Plekwa of the Pharmacy and Poisons Board- Training and Assessment Secretariat.

The following individuals are acknowledged for their contributions in the development of this second edition.

1. Dr. Fred M. Siyoi - Deputy Registrar, PPB
2. Dr. Ronald Inyangala - Director, Business Support Services, PPB
3. Dr. Evans M. Mwangangi - Member, Training and Assessment Committee (TAC)
4. Mr. Abdi O. Jama -Member, Training and Assessment Committee (TAC)
5. Dr. Edward F. Odhiambo -Chairman, Training and Assessment Technical Committee (TATC)
6. Dr. Beatrice K. Amugune -Member, Training and Assessment Technical Committee (TATC)
7. Dr. Apollo O. Maima -Member, Training and Assessment Technical Committee (TATC)
8. Dr. Peter N. Karimi -Member, Training and Assessment Technical Committee (TATC)
9. Mr. Godwin M. Kitale -Member, Training and Assessment Technical Committee (TATC)
10. Mr. Erastus K. Ndubi -Member, Training and Assessment Technical Committee (TATC)
11. Mr. Jackson K. Kirui -Member, Training and Assessment Technical Committee (TATC)
12. Ms. Eunice M. Shankil -Member, Training and Assessment Technical Committee (TATC)
13. Dr. Joseph K. Chavutia -Resource Person
14. Dr. Charles G. Githinji -Resource Person
15. Dr. Mikal Ayiro M. -Secretariat
14. Mrs. Dorcas C. Too -Secretariat
15. Mr. Joshua Plekwa -Secretariat

EXECUTIVE SUMMARY

These reviewed guidelines outline the prerequisite for enrolment of Pharmaceutical Technologists in Kenya. The eligibility criteria for evaluation and assessment list the basic academic requirements to be met by candidates before application. The documentation requirements are also listed herein.

The evaluation and assessment of professional examination has been split into two parts; Level I and Level II. The level I examination examines the candidates in the basic medical, chemical and pharmaceutical sciences. This is administered before candidates proceed for a compulsory seven (7) months internship program. The Level II examination is administered after the successful completion of internship and examines the candidates on the knowledge of applied pharmaceutical sciences, Law and Ethics. At this stage, the Board anticipates that the candidates would be able to practically solve pharmaceutical problems at hand, and hence enrollable.

A. ELIGIBILITY CRITERIA FOR EVALUATION AND ASSESSMENT

The Evaluation and Assessment is to ensure that all candidates who are assessed meet the basic requirements in Pharmaceutical Sciences for purposes of enrolment.

Level I Candidates shall:

- i. Have passed Kenya Certificate of Secondary Education (KCSE) with an average grade of C (plain) or its equivalent.
- ii. Have cluster subjects of C (plain) in English or Kiswahili languages, Chemistry (or Physical Science), Biology (or Biological Science) and Physics or Mathematics.
- iii. Be a holder of Diploma in Pharmaceutical Technology or its equivalent from a Pharmacy and Poisons Board (PPB) approved institution.
- iv. Have been indexed by the Pharmacy and Poisons Board.
- v. Kenya Certificate of Education (KCE) or its equivalent;
 - Division II with credit in Biology, Chemistry, Mathematics / Physics
 - Kenya Advanced Certificate of Education (KACE) or its equivalent with sciences is an added advantage.

Level II Candidates shall:

- i. Have passed Kenya Certificate of Secondary Education (KCSE) with an average grade of C plain (plain) or its equivalent.
- ii. Have cluster subjects of C (plain) in English or Kiswahili languages, Chemistry (or Physical Science), Biology (or Biological Science) and Physics or Mathematics.
- iii. Be a holder of Diploma in Pharmaceutical Technology or its equivalent from a Pharmacy and Poisons Board approved institution.
- iv. Have been indexed by the Pharmacy and Poisons Board.
- v. Have passed Level I examination and successfully completed the prescribed seven (7) months internship period.
- vi. Kenya Certificate of Education (KCE) or its equivalent;
 - Division II with credit in Biology, Chemistry, Mathematics / Physics
 - Kenya Advanced Certificate of Education (KACE) or its equivalent with sciences is an added advantage.

B. APPLICATION PROCEDURE

A candidate who meets the eligibility criteria above should obtain an Application form for Evaluation and Assessment for Enrolment as a Pharmaceutical Technologist from the Registrar, Pharmacy and Poisons Board and shall be required to:

- i. Pay a prescribed non-refundable application fee
- ii. Submit a duly filled and completed Evaluation and Assessment application form at least three (3) months before the examinations date.

C. DOCUMENTATION REQUIRED FOR PRE-ENROLMENT ASSESSMENT

1. Duly filled and signed application form for evaluation and assessment for enrolment as a Pharmaceutical Technologist.
2. Pharmacy and Poisons Board student's Index card.
3. Certified copy of the National Identity card or Passport.
4. Certified copy of the K.C.S.E certificate or its equivalent.
5. Certified copy of Diploma in Pharmaceutical Technology or its equivalent.
6. Certified academic transcripts for each academic year of training completed for the Diploma in Pharmaceutical Technology (or its equivalent), showing numbers of years, subjects, contact hours and examination results (marks, grades) obtained.
7. Evidence of enrolment as a pharmaceutical Technologist in the country where the training was obtained (where applicable).
8. Evidence of supervised practical attachment (for Level I) and internship (for Level II).
9. Two current coloured passport size photographs (indicate name & ID. No. behind).

NOTE:

- If documents are in a language other than English or Kiswahili, they must be translated and certified by an official translator or relevant authority.
- All certificates obtained from foreign institutions must be equated by the Kenya National Examination Council or Commission for University Education.
- The original documents must be presented to the Pharmacy and Poisons Board upon request.
- **Presentation of any fraudulent document is a criminal offence. This shall attract prosecution and barring from sitting the Pharmacy and Poisons Board's professional examinations for life.**

D. LANGUAGE PROFICIENCY

Non East African Community citizens must show proficiency in English and / or Kiswahili. Evidence of proficiency will be required.

E. EVALUATION OF DOCUMENTS

The application shall undergo assessment by a committee appointed by the Registrar, Pharmacy and Poisons Board for recommendation to sit for Board examinations. The committee shall assign each of the applicants to the appropriate level of examination (level I or Level II).

F. EXAMINATION FEES

Candidates whose documents have been evaluated and accepted will be required to pay a prescribed non-refundable examination fee at least two months before the examinations.

For the current prescribed rates, visit the Pharmacy and Poisons Board website: www.pharmacyboardkenya.org.

G. RULES AND REGULATIONS FOR CANDIDATES

Verification of Candidates

- Only candidates who meet the basic minimum eligibility criteria for evaluation and assessment will be allowed to sit for PPB examinations.
- All candidates must produce:
 - An examination card bearing a recently taken photograph which must be displayed throughout the examinations.
 - A National Identity card or a Passport as an identification document.
 - The Pharmacy and Poisons Board Student's Index card.

Conduct in the Examination Room

- It is the responsibility of the candidate to confirm the dates and the venue of the examinations from the Pharmacy and Poisons Board offices or by visiting the Pharmacy and Poisons Board website: www.pharmacyboardkenya.org.
- It is the responsibility of the candidates to avail themselves at the venue of the examination on the set dates and time.

- All candidates should be seated in the examination room at least fifteen(15) minutes prior to the start of the examination.
- No candidate shall be allowed into the examination room thirty (30) minutes after the examination has started.
- No candidate shall be allowed to leave the examination room thirty(30) minutes after the start and within the last thirty (30) minutes to the end of the examination.
- Candidates shall sit as directed by the invigilators.
- Silence and order shall be maintained throughout the examination session.
- Mobile phones and any other electronic gadgets shall not be allowed into the examination room.
- Any reading or unauthorized materials and bags shall not be allowed into the examination room.
- Candidates shall not start writing or opening the question paper until allowed doing so by the invigilator.
- Candidates shall be required to be decently dressed.
- No communication shall be allowed between candidates.
- Sharing of stationery, calculators and other items shall be prohibited between candidates.
- Only scientific calculators will be allowed in the examination room.
- Eating and smoking shall not be allowed in the examination room.
- Drunkenness and disorderliness shall not be allowed in the examination room.
- Appropriate language and mannerism shall be observed in the examination room.
- All examination materials shall be left in the examination room.

Missing to sit for scheduled examination

- Any student who misses all or part of the Pharmacy and Poisons Board examination shall be deemed not to have completed assessment for enrolment as a Pharmaceutical Technologist.
- A student who has not completed assessment for enrolment shall be required to take the whole examination afresh upon payment of the prescribed fee.

Cheating in examinations

- **Cheating in examination is a serious offence punishable by expulsion from the examination room and for the rest of the examination period.**
- Any candidate found cheating will not be allowed to sit for any Pharmacy and Poisons Board examinations for a period of 24 months.
- Cheating includes but not limited to:

- Copying.
- Being in possession of unauthorized material/literature.
- Making reference to unauthorized material.
- Glancing at other candidates papers.
- Communicating with other candidates.

Consequences of Misconduct

- Any candidate who contravenes any of the above rules shall be liable to disqualification from the examination.
- A candidate who fails to present himself/herself for the examinations, after paying the prescribed fee shall forfeit the fee.
- Any aggrieved candidate may seek redress from the Registrar, PPB.

H. EXAMINATION OUTCOMES

- The final mark shall be the average of the percentage scores in the individual papers,
- The pass mark shall be 50% of the aggregate mark.
- Candidates will receive communication on the examination results from the Registrar, Pharmacy and Poison Board.
- Candidates who pass Level one (I) examinations will be allowed to proceed for the prescribed supervised internship program.
- Candidates who pass Level two (II) examinations will be eligible for enrolment as Pharmaceutical Technologists.
- A candidate who fails in Level one (I) examinations may be allowed to re-sit for the same for a maximum of two (2) times. If the candidate is unsuccessful in the second re-sit, he/she shall be recommended for a one year re-training in a Pharmacy and Poisons Board approved institution before being allowed for further re-sits.
- A candidate who fails in Level two (II) examinations shall be allowed to re-sit up to a maximum of two (2) times. If the candidate is unsuccessful in the second re-sit, he/she shall be recommended for a one (1) year re-training in a Pharmacy and Poisons Board approved internship site before being allowed for two (2) further re-sits.
- A candidate who has undergone re-training shall provide documentary evidence that the re-training was completed successfully before being allowed to sit for the examination.
- Any aggrieved candidate may seek redress from the Registrar.

DEADLINES

The applicant shall personally present his/her application to the office of Registrar, Pharmacy and Poisons Board three (3) months before the examination date. Evaluations are done throughout the year. However, if the applicant wishes to be considered for the next examinations sitting, all documents, applications and fee must be submitted on/before three months to scheduled examination date.

**DEADLINE DATE:
THREE (3) MONTHS BEFORE THE EXAMINATION**

I. STRUCTURE OF THE EXAMINATIONS

I. Level I Examinations

- Level I examination shall consist of two papers; paper I and paper II.
- It is important to note that these two papers will be done on the same day. Paper I will be done in the morning and paper II in the afternoon, unless otherwise advised by the Pharmacy and Poisons Board.

Paper I

- This shall be a 3 hour paper consisting of 100 multiple choice questions (MCQs) and 20 short answers questions (SAQs).
- The Examination shall cover the following subjects:
 - i. Human Anatomy
 - ii. Medical Physiology
 - iii. Biochemistry
 - iv. Medical Microbiology and Parasitology
 - v. Inorganic Chemistry
 - vi. Physical Chemistry
 - vii. Organic Chemistry
 - viii. Biostatistics
 - ix. Computer applications

Paper II

- This shall be a 3 hour paper consisting of 100 MCQs and 20 SAQs.
- The examination shall cover the following subjects:

- i. Pharmaceutical Chemistry
- ii. Analytical Chemistry
- iii. Pharmacognosy
- iv. Pharmaceutics
- v. Pharmacology

II. Level II Examinations

Level II examination shall consist of two written papers (paper I and paper II) and an oral examination. It is important to note that these two papers will be done on the same day.

Paper I will be done in the morning and paper II in the afternoon, unless otherwise advised by the Pharmacy and Poisons Board.

Paper I

- This shall be a 3 hour paper consisting of 100 multiple choice questions (MCQs) and 20 short answers questions (SAQs).
- The examination shall cover the following subjects:
 - i. Medicinal Chemistry
 - ii. Pharmaceutics
 - iii. Pharmacognosy
 - iv. Clinical Pharmacology and Therapeutics

Paper II

- This shall be a 3 hour paper consisting of 100 MCQs and 20 SAQs.
- The examination shall cover the following subjects:
 - i. Pharmacy Practice
 - ii. Forensic pharmacy and Ethics
 - iii. Social and Administrative Pharmacy
 - iv. Drug Supply Management

Oral Examination

There shall be an oral examination (viva voice) for level II candidates. The date, time and venue of the examination shall be notified accordingly.

The Pharmacy and Poisons Board reserves the right to change without notice any information or requirements contained herein.

LEVEL 1

(i) Human Anatomy

- Histological and cytological methods
- The cell
- Embryology
- The anatomical organization of the body (cell, tissues, organs and systems)
- The musculoskeletal system
- Lymphatic system
- Nervous system
- The endocrine system
- The digestive system
- The cardiovascular system
- The respiratory system
- The urinary system
- Reproductive system
- The integumentary system (skin, hair, nails)
- Dentation
- Body cavities
- Blood
- Connective tissues
- Adipose tissues
- The sensory organs

(ii) Medical Physiology

- Physiologic principles for biological control
 - Homeostasis
- Cell physiology
- Functional organizations of the body (cell, tissues, organs, systems)
- Nervous system
 - Nerve physiology
 - Peripheral nervous system
 - Central nervous system
 - Autonomic nervous system
- Endocrine system
- Gastrointestinal system
- Cardiovascular system
- Respiratory system
- Reproductive system

- Renal system
- Special Sensory organ Physiology
 - Vision
 - Hearing
 - Smell
 - Taste
- Muscle Physiology
- The Skin

(iii) Biochemistry

- Macromolecules and their metabolism i.e. Carbohydrates, lipids, protein and nucleic acids
- Micronutrients
- Vitamins
- Enzymes
- Molecular genetics

(iv) Medical Microbiology and Parasitology

- Introduction to microbiology
- Microbiological techniques
- Bacteriology
- Nutrition of micro organism
- Bacterial morphology and genetics
- Transmission of bacteria and related micro organisms
- Pathogenicity
- Immunology
- Bacteria of medical importance
- Virology
- Protozoa
- Helminthes
- Mycology
- Vectors

(v) Chemistry

(a) Inorganic Chemistry

- The periodic table
- The Alkali Metals and their compounds
- The Alkaline Earth Metals and their compounds
- The Earth and their Compounds (Group III)
- The group IVA Elements and their Compounds
- The group V Elements and their Compounds
- The group VIA Elements and their Compounds
- The Halogens and their Compounds

- The Coinage Metals and their Compounds
- The Volatile Metals and their Compounds
- The Noble Gases.
- The transition Elements and their Compounds
- Laboratory Work
- Chemistry of Hydrogen

(b) Physical Chemistry

- Atomic structure
- Electronic theory and Chemical Bonding
- Energies and Bonding
- State of matter
- Phase Equilibrium
- Chemical Equilibrium
- Rate of Chemical Reactions
- Conductance and Electrolysis
- Thermo Chemistry

(c) Organic Chemistry

- Bonding
- Benzene and Aromaticity
- Hydrocarbons and derivatives
- Aromatic homologues
- Cyclic, Polycyclic and heterocyclic Hydrocarbons
- Alcohols
- Phenols
- Ethers
- Carbonyl compounds
- Carboxylic acid derivatives
- Amines-aliphatic
- Amines-aromatic
- Alkyl halides
- Arylhalides

(vi) Biostatistics

- É Data collection and organization
- É Measures of central tendencies
- É Measures of dispersion
- É Correlation
- É Skewedness
- É Statistical tests
- É Application of statistics in pharmacy

(vii) Pharmaceutical Sciences

(a) Pharmaceutical Chemistry (Inorganic and Analytical)

Inorganic Pharmaceutical Chemistry

- Water
- Acids & Bases
- Preservation, sterilization and stabilization
- Alkaline metals and ammonium compounds
- Alkaline earth compounds
- Fluid & electrolyte replenishes
- Fluoride and dental health
- Iodine as antithyroid agent and others
- Mineral Supplements
- Medicinal agents for control of pH
- Germicides and related compounds
- Radiopharmaceuticals

Analytical Pharmaceutical Chemistry

- Physical analytical techniques
- Determination of impurities
- Gravimetric methods
- Determination of pH Values
- Volumetric determinations
- Spectroscopy and spectrophotometry

(b) Pharmaceutics

- Colloidal state and disperse systems
- É Rheology
- É Filtration
- É Milling
- É Mixing
- É Drying
- É Basic pharmaceutical calculations
- É Biopharmaceutics
- Drug nomenclature

(c) Pharmacognosy

- Natural sources of drugs
- Extraction of crude drugs
- Plant taxonomy
- Carbohydrates
- Glycosides
- Tannins
- Lipids
- Volatile oils
- Resins and resin combinations
- Alkaloids
- Vitamins
- Pesticides
- Herbicides
- Toxic plants substances

(d) Pharmacology

- General principles of pharmacology
- Central Nervous System Drugs
- Autonomic Nervous system Drugs
- Neuromuscular junction Blockers
- Anti-parkinsonism Drugs
- Biogenic Amines
- Cardiovascular system Drugs

- Gastro Intestinal Tract Drugs
- Haemopoietic Systems Drugs
- Reproductive system Drugs
- Endocrine System Drugs
- Vitamins
- Chemotherapy Agents
- Antimicrobial agents
- Dermatological Agents.
- Antivirals and antiretrovirals

(viii) Computer applications

1. Basic elements and components of computer system
2. Basic computer software packages
 - Word processing
 - Spread sheets
 - Ms. Excel
 - Presentation programs
 - Graphics program
3. Application of computers in practice of pharmacy: Database programs
 - Definitions
 - Uses in pharmacy setting
 - Advantages & Disadvantages
 - Data processing
 - Enterprise resource planning software
4. Search engines and internet browsers. e.g. access to on line libraries, Google, Wikipedia.

LEVEL II

(A) APPLIED PHARMACEUTICALS SCIENCES

(i) Pharmaceutical Chemistry

Organic Pharmaceutical Chemistry (Medicinal Chemistry)

- Physical and chemical factors in medicinal chemistry
- Drug metabolism
- Central Nervous System Agents
- Pharmacodynamic agents
- Chemotherapeutic agents
- Hormonal agents and related compounds

(ii) Pharmaceutics

- The Prescription
- Dosage forms
- Solid dosage forms
 - Capsules
 - Tablets
 - Suppositories and pessaries
- Semisolid dosage forms
 - Ointments
 - Creams
 - Liniments
 - Gels
- Powders
- Solutions
- Emulsions
- Suspensions
- Injections
- Ophthalmic products
- Micellar solubilization
- Aerosols
- Drug stability
- Drug incompatibility and interactions

(iii) Clinical Pharmacology and Therapeutics

- Central Nervous System Drugs
- Autonomic Nervous system Drugs
- Neuromuscular junction Blockers
- Anti-parkinsonism Drugs
- Biogenic Amines
- Cardiovascular system Drugs
- Gastro Intestinal Tract Drugs
- Haemopoietic Systems Drugs
- Reproductive system Drugs
- Endocrine System Drugs
- Vitamins
- Chemotherapeutic Agents
- Antimicrobial agents
- Dermatological Agents
- Antivirals and antiretrovirals

(B) PHARMACY PRACTICE

(i) Dispensing

- Handling of prescription
- Filling
- Patient counselling
- Labelling
- Storage

(ii) Compounding

- Mixing
- Clarification and filtration
- Size reduction
- Drying
- Calculations for compounding and dilutions
- Extemporaneous preparations
- Storage and supply process of drugs
- Good Laboratory Practices
- Good Manufacturing Practices

(iii) Evaluation and testing of finished products

- Organoleptic evaluation
- physical and chemical analysis
- In-process control tests
- Quality Control and Quality Assurance

(iv) Social and Administrative Pharmacy

- Communication skills
- Behavioural sciences
- First Aid and disaster management
- Principles of management
- Public health, Environmental issues & Preventive healthcare
 - Waste and waste disposal
- Mental Health

- Counseling Psychology
- Medical records
- Identification and use of clinical instruments
- Marketing
- Description of various diseases status
- Rational drug therapy
- Poisoning

(iv) Drug Supply Management

- Health systems
- Selection of Drugs
- Procurement of drugs
- Distribution and storage of drugs
- Rational Use of drugs
- Post Market Surveillance and Pharmacovigilance
- Inventory Management
- Pharmacy design
- Safety in the Pharmacy
- Good Distribution Practices
- Essential Drugs List and treatment guidelines
- Donations guidelines

(v) Forensic Pharmacy and Ethics

- The Constitution of Kenya
- Pharmacy and Poisons Act
- Narcotic Drugs and Psychotropic Substances Act
- Public Health Act
- Drugs, Cosmetics and other chemical substances
- Labour laws and industrial relations
- Industrial disputes and settlements
- General provisions of factory Act
- Professional code of Ethics

ANNEX I

SUGGESTED REFERENCE MATERIALS

- 1) Principles of Biochemistry, Lehninger, 5th Edition.
- 2) Biochemistry, Stryer, 4th Edition/W. H. Freeman & Co.
- 3) Drug Stability: Principles and Practice: Castesen M. Dekke, 2nd Edition.
- 4) Communication skills in Pharmacy Practice, W. Tindall, R. Beardsley, C. Kimberlin, Williams & Wilkins.
- 5) Medical Terminology: A programmed Systems Approach /G. Smith., et al / Delmar.
- 6) Modern Pharmaceuticals, Drugs & the Pharmaceutical Sciences; Banker & Rhodes M. Dekker.
- 7) Pharmaceuticals Principles of solid Dosage Forms; Cartensen Technomic.
- 8) Remington: The science and Practice of Pharmacy. Volume I & Volume II /A.R. Gennaro, Edition/Mark Publishing Co.
- 9) Review of Medical Physiology/Ganong/McGraw-Hill.
- 10) Goodman and Gilman: The Pharmacological Basis of Therapeutics/Hanman, et al / McGraw-Hill.
- 11) Wilson and Grisvold: Textbook of Organic Medicinal and Pharmaceutical Chemistry/Delgado & Remers/ Lippincott Williams and Wilkins.
- 12) British Pharmacopoeia (B.P).
- 13) British Pharmaceutical Codex (B. P. C).
- 14) Martindale: The extra Pharmacopoeia.
- 15) Text book of Pharmacognosy /Trease & Evans.
- 16) The Pharmacy and Poisons Act. Cap 244.
- 17) Narcotics Drugs and Psychotropic substances (Control) Act No. 4 of 1994.
- 18) Food, Drugs and Chemical Substances Act. Cap 254.
- 19) The Public Health Act. Cap 242.
- 20) The State Corporations Act Cap 446.
- 21) The Kenya National Pharmaceutical Policy (KNPP).
- 22) The National Treatment Guidelines.

REPUBLIC OF KENYA



MINISTRY OF MEDICAL SERVICES
PHARMACY AND POISONS BOARD

Application Form for Evaluation and Assessment for Enrolment as a Pharmaceutical Technologist

PLEASE READ THE ACCOMPANYING EXPLANATORY' NOTES BEFORE COMPLETING THIS FORM. MAKE SURE YOU PROVIDE ALLTHE DOCUMENTS REQUIRED AND SIGN THE DECLARATION FORM.

I. PERSONAL DETAILS

a) Title: Dr. () Mr. () Mrs. () Miss () Ms. () Other () { Tick(ç)where applicable}

b) Surname:.....

First name: Other names:.....

c) Sex: Male () Female ()

d) Date of Birth: Day: í í í Month: í í í Year: í í í

e) Country of birth: í
 f) Nationality: í
 g) County of residence: í
 h) Address:

i) Permanent Postal Address:

P.O. Box: í í í í í í Code: í í í í í í Town: í í í í í ..í í í í í í ...

(ii) Physical Address: í ...

(iii) Personal Mobile No: í í í í í í í í í .Home Telephone No: í í í í í í í í

(iv) Email address: í .

(v) Name of the next of Kin: í í í í í í í í í í í í ..Telephone No.: í í í í í í í í .

II. EDUCATION BACKGROUND:

Name of Primary School and Address:	Name of Secondary School and Address:
Start Date:	Start Date:
Finish Date:	Finish Date:
No. of Years:	No. of Years:
Qualification:	Qualification:
Country:	Country:

III. POST SECONDARY EDUCATION:

(Relevant to Pharmacy)

Name of Institution: í

Contact Address of the Institution: í

County: í í í í í í í í í í í í Country: í

Qualification: í í í í í í í í í í í í í

Year qualification obtained: í .í í í

Duration of Training: Start: í í í í í í í í

Finish: í í í í í í í í í í í í í

IV. OTHER RELEVANT TRAINING:

Name of Institution: í

Contact Address of the Institution: í

County: í í í í í í í í í í í í Country: í

Qualification: í í í í í í í í í í í í í

Year qualification obtained: .í í í í

Duration of Training: Start: í í í í í í í í í í Finish: í í í í í í í í í í í í í

Application checklist

Documents that you must include with this application are:

- Duly filled application form for evaluation and assessment for enrolment for a Pharmaceutical Technologist. []
- Pharmacy and Poisons Board student's Index card. []
- Certified copy of National Identity card or Passport. []
- Certified copy of the K.C.S.E certificate or its equivalent. []
- Certified copy of Diploma in Pharmaceutical Technology or its equivalent. []
- Certified academic transcripts for each academic year of training completed for the Diploma in Pharmaceutical Technology (or its equivalent), showing numbers of years, subjects, contact hours and examination results (marks, grades) obtained. []
- Evidence of enrolment as a pharmaceutical Technologist in the country where the training was obtained (where Applicable). []
- Evidence of supervised practical attachment (for Level I) and internship (for Level II). []
- Two current coloured passport size photographs (indicate name & ID. No. behind). []

Applicant's declaration form

This declaration must be read, understood and signed by the applicant.

I í
of P.O. Box í í í í í í í í í í í í í í í í í í í í í í í í do hereby declare that:

- i. The information I have supplied on this form and any attachment is complete, correct and up to date.
- ii. I undertake to inform the Pharmacy and Poisons Board (PPB) of any change to my circumstances (e.g. address) while my application is being considered.
- iii. I authorize the Pharmacy and Poisons Board to make any inquires necessary to assist in the assessment of my qualifications and to use any information supplied in this application.
- iv. I have read, understood and commit myself to abide with the rules and regulations in the guidelines.

Applicant's Signature: í í í í í í í í í í í í í í í
.....

Date: í
.....

Witnessed by: **(For Pharmacy and Poisons Board)**

Signature:

Date:

How to lodge your application:

1. Detach or download the application form (Evaluation and Assessment for Enrolment as a Pharmaceutical Technologist).
2. Fill the said form completely and appropriately.
3. Submit in person the completed form to the Registrar, Pharmacy and Poisons Board together with the **original and copies** of the other required documents indicated in the checklist.

Any enquiries to be addressed to:

**The Registrar
Pharmacy and Poisons Board
Lenana Road
P.O. Box 27663-00506
NAIROBI**

**Email Address: training@pharmacyboardkenya.org
info@pharmacyboardkenya.org**

Website: www.pharmacyboardkenya.org

**Telephone 020 2716905/6, 3562107 or if calling from overseas please telephone +254
0733-884411/0720608811**

Working days: Monday-Friday.