THE REPUBLIC OF SOMALILAND
NATIONAL HEALTH PROFESSIONS COMMISSION (NHPC)

REGULATION STANDARDS, TOOLS AND PROCEDURES FOR THE INSPECTION AND ACCREDITATION OF HEALTH TRAINING INSTITUTIONS.

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</table>
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ACCRONYMS

NHPC: National Health Professions Commission
HIV: Human Immune Virus
MDG: Millennium Development Goals
HTI: Health Training Institution
ICT: Information and Communication Technology
ETR: Education, Training and Registration
1.0 Background.

1.1 The National Health Policy.

The Health Policy of the Government of Somaliland requires unified standards in health workforce development, deployment and the utilization of universal access to quality health services. Quality health training is critical as it improves knowledge, attitudes, skills, job satisfaction and motivation of health workers. In addition, the changing demographic patterns, emerging diseases, and efforts made by the Government of Somaliland to achieve the Millennium Development Goals (MDGs) does not only call for increased adequate numbers of health care professionals, but also for a competent and well trained Health Professionals.

1.2 Mandate of National Health Professions Commission.

The mandate to recognize and accredit health training programmes and qualifications lies with the National Health Professions Commission (NHPC) of Somaliland which performs this function in consultation with Ministries of Higher Education and Ministry of Health and therefore, all health training institutions should adhere to the standards set by the commission.

These standards have been developed by NHPC in response to concerns regarding the absence of guidelines to regulate the training and practice of health professionals in the country and this is done in accordance with the legal provisions under National Health Professions Act number 19/2001 which mandates NHPC to;

1.2.1 Document and register all health education institutions
1.2.2 Monitor, supervise and evaluate health training institutions
1.2.3 Decide on the opening of health training institutions
1.2.4 Verify degrees, diploma and certificates awarded by health training institutions.
1.2.5 Verify and monitor qualifications of health professionals and health training institutions
1.2.6 Grant or rescind accreditations from health training institutions and programmes
1.2.7 Terminate a health training institution previously accepted by the Commission due to sub standards
1.2.8 Verify of examinations for health training institutions to ensure adherence to required standards
1.2.9 Monitor and review the quality standards of education.

These standards are therefore intended to provide procedures and guidelines for the establishment, operation, accreditation, supervision and monitoring of Health Training Institutions (HTI's) in Somaliland with the view of standardizing and harmonizing the training of health professionals as required by the national, regional and international bodies.

2.0 Institutional Legal Status

An individual or organization intending to establish a health training institution should ensure that the following requirements have been put in place;

2.1 Certificate of Incorporation or registration with the relevant agency or agencies of government as may be applicable according to the laws and regulations of the country.
2.2 List of Proprietors, Board members, Directors, and Management team as may be applicable.
2.3 Tenancy Agreement or proof of ownership of premises or land title.
2.4 Recommendation letter from the local authorities i.e. District Health Education Office or Local Leaders as may be applicable.

3.0 Procedures for Accreditation for Health Training Institutions:

3.1 Application

The institution must apply to the NHPC by submitting among others the following;

3.1.1 Application form for assessment
3.1.2 Programme(s) to be accredited.
3.1.3 Submission of program curriculum (with its main components of Admission Criteria, Assessment Guidelines and Course Descriptions).
3.1.4 Submission of teaching/learning resources (i.e teachers, teaching aids etc.)
3.1.5 Submission of teacher qualifications and prove of teaching years of
experience.

3.1.6 Three copies of the proposal for key stakeholders (Namely Ministry of Higher Education, Ministry of Health and NHPC).

3.1.7 Signed Memorandum of Understanding with owners of practicum sites.

3.2 Proof of payment of inspection fees.

3.3 Approval by NHPC

3.3.1 Evaluate the submitted proposal and other submitted documents.

3.3.2 Approval of the Curriculum in consultation with Ministry for Higher Education and Ministry of Health.

3.3.3 Provide inspection tools and other requirements to the applicant.

3.4 Inspection Procedure

3.4.1 Selection of the technical team relevant to the proposed programmes.

3.4.2 Selection of appropriate tools and any other relevant materials.

3.4.3 Scheduling and implementation of the inspection program.

3.4.4 Notification of the relevant stakeholders about the planned inspection.

3.4.5 Implementation of Assessment.

3.4.6 Compilation and submission of the inspection report to the NHPC Education, Training and Registration Committee.

3.4.7 Submission of recommendation(s) to National Level Commission for consideration and approval i.e. application accepted, requested to address gaps or application rejected.

3.4.8 Decision of the National Level Commission communicated to the applicant and other relevant stakeholders.

3.4.9 Gazette the approved training institution.

4.0 Categories of Health Training Institutions

There are three categories of health training institutions in Somaliland and
these are;

4.1 Health Training Institutions in Teaching Hospitals.
4.2 Health Training Institutions affiliated with a Hospital
4.3 Independent Health Training Institutions.

5.0 Standards for Accreditations of Health Training Institutions

5.1 Institutional Arrangements

All health training institutions must fulfill the under mentioned requirements to qualify for accreditation in Somaliland;

5.1.1 Availability of vision, mission and core values of the institution.
5.1.2 Availability of approved governance structure of the institution spelling out composition, roles and terms for the board members.
5.1.3 Availability of an approved organizational structure clearly indicating the reporting mechanism.
5.1.4 Availability of approved job descriptions for all technical and administrative staff of the institution.
5.1.5 Appointment of suitable and appropriate qualified technical and administrative staff.
5.1.6 Evidence of registration and licensure of the professional staff with relevant bodies.
5.1.7 Availability of standing committees of the institution responsible for curriculum, student advancement, admissions, and faculty/departments promotion and tenure.
5.1.8 Availability of detailed strategic, business and financial plans.
5.1.9 Evidence of Institution financial capacity to run the proposed educational programme.
5.1.10 Evidence of operating budgets for the initial periods.

5.2 Institutional Infrastructure

The following are the essential infrastructural requirements for accreditation of a health training institution;

5.2.1 Availability of a sign post at a strategic location clearly indicating address
and contacts of the health training institution

5.2.2 Availability of the National flag and other relevant flags

5.2.3 Availability of the required office space i.e. Principal, treasurer, and Academic Registrar, Dean of students, Staff room and Secretary.

5.2.4 Classrooms and multipurpose Hall to accommodate all programs.

5.2.5 Availability of functional clinical/practical teaching sites with adequate and relevant clinical mentors and instructors.

5.2.6 Availability of adequate sanitary and waste management facilities for staff and students,

5.2.7 Availability of support facilities i.e. dining hall, dormitories, kitchen, food store, Sick Bay, indoor and outdoor facilities (See appendix for details)

5.2.8 Adequate utilities i.e. water, lighting, security and communication services.

5.2.9 Availability of safety facilities i.e. institutional fencing, safety gadgets i.e. fire extinguishers, escape routes, lightening arresters and danger bells.

5.2.10 Provision of facilities for the disabled persons.

5.3 Educational Programmes

5.3.1 Definition of overall objectives and outcomes for each of the educational programme.

5.3.2 Provision of general and specific learning objectives for each of the educational programmes.

5.3.3 Availability of relevant and approved curriculum to support the overall objectives and outcomes.

5.3.4 Availability and layout of the required courses/programmes, content.

5.3.5 Availability of a timetable and methods of teaching, assessment and evaluation suitable for particular programme.

5.3.6 Indication of a system for curriculum management and review.
5.4 **Students Admission and General Welfare policies**

All training institutions must have the following in place;

5.4.1 Availability of minimum admission requirements and selection procedures **(according to guidelines of the Ministry of Higher Education)**.

5.4.2 Procedures for assessment, advancement and graduation of students.

5.4.3 Availability of systems for reviewing student performance and making decisions about advancement or dismissal.

5.4.4 Mechanisms to ensure essential student services in the areas of academic counseling and welfare.

5.4.5 Disciplinary procedures providing for appeal mechanisms to ensure due processes.

5.4.6 Standards of conduct for the teacher-learner relations i.e. written policies for addressing violations of such standards.

5.4.7 Availability of the mechanisms for appointment of student leaders and their representation on the institutional bodies.

5.4.8 Mechanisms to establish academic and social associations aimed at promoting students social and academic advancement.

5.5 **Skills and Competency Facilities**

The new training institution has well stocked library, well equipped skills laboratories and well trained teaching staff for the learners to acquire the necessary skills, knowledge and competencies.

5.5.1 Skills laboratories equipped with the necessary equipments, reagents, models, materials or supplies.

5.5.2 Library well stocked with up to date, relevant reading books and materials.

5.5.3 Computer laboratory with functional ICT equipments and internet connectivity.

5.5.4 Relevant academic staff in appropriate ratios for theory and practical.
### 6.0 Appendices

#### Appendix I: Inspection Standards Score Matrix

<table>
<thead>
<tr>
<th>STANDARD 1: INSTITUTIONAL ARRANGEMENTS</th>
<th>The Heath Training Institution should have clear governance and management systems/structures with qualified staff to operate it.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CRITERIA</strong></td>
<td><strong>4</strong></td>
</tr>
<tr>
<td>5.1.1 Health Training Institution’s Vision, Mission and Core Values in place.</td>
<td></td>
</tr>
<tr>
<td>5.1.2 Approved governance structure specifying composition, roles and terms of board members in place.</td>
<td></td>
</tr>
<tr>
<td>5.1.3 Approved organizational structure indicating reporting mechanisms in place.</td>
<td></td>
</tr>
<tr>
<td>5.1.4 Approved job descriptions for all technical and administrative staff of the institution in place.</td>
<td></td>
</tr>
<tr>
<td>5.1.5 Appointment letters of suitable and appropriate qualified technical and administrative staff.</td>
<td></td>
</tr>
<tr>
<td>5.1.6 Evidence of registration and licensure of the professional staff with relevant bodies in place.</td>
<td></td>
</tr>
<tr>
<td>5.1.7 Standing committees of the institution responsible for curriculum, student advancement, admissions, and faculty/departments promotion and tenure in place.</td>
<td></td>
</tr>
<tr>
<td>5.1.8 Detailed strategic, business and financial plans in place.</td>
<td></td>
</tr>
<tr>
<td>5.1.9 Evidence of Institution financial capacity to run the proposed educational programme in place.</td>
<td></td>
</tr>
<tr>
<td>5.1.10 Operating budgets for the initial periods in place.</td>
<td></td>
</tr>
</tbody>
</table>

**Total Score**

**Comments & Recommendations:**

**Key : Score Interpretation Per Criteria**

<table>
<thead>
<tr>
<th>Score Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum score = 40</td>
</tr>
<tr>
<td>Minimum acceptable score = 24</td>
</tr>
<tr>
<td>Score</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>CRITERIA</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>5.2.1 Sign post at strategic location clearly indicating address and contacts of the health training institution in place.</td>
</tr>
<tr>
<td>5.2.2 National flag and other relevant flags in place</td>
</tr>
<tr>
<td>5.2.3 Required offices i.e. Principal, Treasurer, Academic Registrar, Dean of Students, Secretary and Staff room available.</td>
</tr>
<tr>
<td>5.2.4 Classrooms and multipurpose hall to accommodate all programs available.</td>
</tr>
<tr>
<td>5.2.5 Functional clinical /practical teaching sites with relevant clinical mentors and instructors available.</td>
</tr>
<tr>
<td>5.2.6 Adequate sanitary and waste management facilities for students and staff available.</td>
</tr>
<tr>
<td>5.2.7 Support facilities i.e. dining hall, dormitories, kitchen, sick bay, indoor and outdoor facilities available.</td>
</tr>
<tr>
<td>5.2.8 Adequate unities i.e. water, lighting, security, and communication services available.</td>
</tr>
<tr>
<td>5.2.9 Safety facilities i.e. institutional fencing, safety gadgets, fire extinguishers, escape routes, lightening arresters and danger bells in place.</td>
</tr>
<tr>
<td>5.2.10 Facilities for the disabled persons in place</td>
</tr>
</tbody>
</table>

**Total Score**

**Comments and Recommendations**
<table>
<thead>
<tr>
<th>Key : Score Interpretation for Criteria</th>
<th>Score Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 = Excellent Performance (Meets all requirements)</td>
<td>Maximum score= 36</td>
</tr>
<tr>
<td>3 = Very Satisfactory (Meets most requirements)</td>
<td>Minimum acceptable score= 22</td>
</tr>
<tr>
<td>2 = Satisfactory (Meets some requirements)</td>
<td><strong>Inspectors Remark</strong></td>
</tr>
<tr>
<td>1 = Unsatisfactory (Does not meet many of the requirements)</td>
<td>Pass</td>
</tr>
<tr>
<td>0 = Not available (Required standards not in place)</td>
<td>Fail</td>
</tr>
</tbody>
</table>
**STANDARD 3: EDUCATIONAL PROGRAMMES**

The new training institution has defined the overall curriculum objectives, curriculum outcomes, curriculum model, curriculum map, course objectives, programme evaluation and human resource needs necessary for the planned educational programme.

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.3.1 Overall Objectives and outcomes of each of the educational programme in place.</td>
<td></td>
</tr>
<tr>
<td>5.3.2 General and specific learning objectives for each of the educational programmes in place.</td>
<td></td>
</tr>
<tr>
<td>5.3.3 Relevant and approved curricular to support the overall objectives and outcomes in place.</td>
<td></td>
</tr>
<tr>
<td>5.3.4 Layout of planned courses/programmes in place.</td>
<td></td>
</tr>
<tr>
<td>5.3.5 Time table and methods of teaching, assessment and evaluation methods suitable for each particular programme in place.</td>
<td></td>
</tr>
<tr>
<td>5.3.6 System for curriculum management and review in place</td>
<td></td>
</tr>
</tbody>
</table>

**Total Score**

**Comments & Recommendations:**

**Key : Score Interpretation for Criteria**

- **4** = Excellent Performance (Meets all requirements)
- **3** = Very Satisfactory (Meets most requirements)
- **2** = Satisfactory (Meets some requirements)
- **1** = Unsatisfactory (Does not meet many of the requirements)
- **0** = Not available (Required standards not in place)

**Score Remarks**

- Maximum score=24
- Minimum acceptable score=15

**Inspectors Remark**

- Pass
- Fail
### STANDARD 4: STUDENTS ADMISSIONS AND GENERAL WELFARE POLICIES

The health training institution has defined student admission policies, student welfare support systems and disciplinary codes for students.

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.4.1 Minimum admission requirements and selection procedures in place.</td>
<td></td>
</tr>
<tr>
<td>5.4.2 Procedures for assessment, advancement and graduation of students in place.</td>
<td></td>
</tr>
<tr>
<td>5.4.3 System to review students’ performance and make decisions of advancement or dismissal in place.</td>
<td></td>
</tr>
<tr>
<td>5.4.4 Mechanisms to ensure essential students services in the areas of academic counseling and welfare are in place.</td>
<td></td>
</tr>
<tr>
<td>5.4.5 Disciplinary procedures provide for appeal mechanisms to ensure due processes in place.</td>
<td></td>
</tr>
<tr>
<td>5.4.6 Standards of conduct for the teacher-leaner relationship for addressing violations of such standards are in place.</td>
<td></td>
</tr>
<tr>
<td>5.4.7 Mechanisms of appointment of student leaders and their representation on institution bodies are in place.</td>
<td></td>
</tr>
<tr>
<td>5.4.8 Mechanisms to establish academic and social associations aimed at promoting students social and academic advancement in place.</td>
<td></td>
</tr>
</tbody>
</table>

**Total Score**

**Comments & Recommendations:**
<table>
<thead>
<tr>
<th>Key: Score Interpretation for Criteria</th>
<th>Score Remarks</th>
</tr>
</thead>
</table>
| 4 = Excellent Performance (meets all requirements) | Maximum score=32  
Minimum acceptable score=20 |
| 3 = Very Satisfactory (Meets most requirements) |  |
| 2 = Satisfactory (Meets some requirements) |  |
| 1 = Unsatisfactory (Does not meet many of the requirements) |  |
| 0 = Not available (Required standard not in place) |  |

**Inspectors Remark**

Pass  
Fail
The new training institution has adequate books, skills laboratories and teaching staff necessary for the learners to acquire skills, knowledge and competencies.

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.5.1 Skills laboratories equipped with the necessary equipments, reagents, models, materials or supplies in place.</td>
<td></td>
</tr>
<tr>
<td>5.5.2 Library with up to date, relevant reading books and materials in place.</td>
<td></td>
</tr>
<tr>
<td>5.5.3 Computer laboratory with functional ICT equipments with internet connectivity in place</td>
<td></td>
</tr>
<tr>
<td>5.3.4 Relevant academic staff in appropriate ratios for theory and practical in place in (1: 10: 1)</td>
<td></td>
</tr>
</tbody>
</table>

**Total Score:**

**Comments and recommendations:**

**Key : Score Interpretation for Criteria**

<table>
<thead>
<tr>
<th>Score</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Excellent Performance (meets all requirements)</td>
</tr>
<tr>
<td>15</td>
<td>Very Satisfactory (Meets most requirements)</td>
</tr>
<tr>
<td>10</td>
<td>Satisfactory (Meets some requirements)</td>
</tr>
<tr>
<td>5</td>
<td>Unsatisfactory (Does not meet most of the requirements)</td>
</tr>
<tr>
<td>0</td>
<td>Not available (Required standard not in place)</td>
</tr>
</tbody>
</table>

**Score Remarks**

- Maximum score=80
- Minimum acceptable score= 48

**Inspectors Remark**

- Pass
- Fail
### Score Matrix Contd.

<table>
<thead>
<tr>
<th>STANDARD</th>
<th>Maximum Score</th>
<th>Minimum acceptable Score</th>
<th>Attained Score</th>
<th>Remark (Pass/Fail)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Institutional Arrangement</td>
<td>40</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Institutional Infrastructure</td>
<td>36</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Educational Programmes</td>
<td>24</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Students Admissions &amp; General Welfare</td>
<td>32</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Skills and Competencies</td>
<td>80</td>
<td>48</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>212</strong></td>
<td><strong>129</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Overall Recommendation:**

- A minimum acceptable score must be attained for each standard.
Appendix II: Implementation procedures

6.1 Self Assessment

The NHPC supplies approval protocols to new HTI on receipt of application.

6.2 Preliminary Visit by Secretariat

NHPC secretariat to visit a new HTI without notice or at the request of the applicant.

6.3 NHPC Inspectorate Team

The NHPC constitutes an inspectorate team to evaluate the eligibility of new HTI

6.4 Review of Documents

NHPC Inspectorate Team reviews approval tool and analyses documents provided

6.5 Inspection Visit to HTI

Inspection Team visits HTI, conducts meetings with staff, studies available records and inspects facilities

6.6 Inspection Report

Inspection team compiles report and forwards findings to ET committee of NHPC in four weeks

6.7 Report Consideration

ETR committee receives studies and makes a recommendation for Commission decision.

6.8 Final Report

Commission decision communicated to HTI and other relevant stakeholders for attention or further actions in six weeks.

6.9 Gazette of HTI

The accredited HTI is gazette for public awareness
Appendix III: Way forward

- The NHPC should ensure that massive sensitization and community awareness is conducted to all stakeholders’ i.e. professional associations, ministry of health and higher education, local leaders and their communities. This can be done using Radios, Televisions, Newspapers and the community forums.
- The NHPC should ensure that these guidelines are updated as much as possible and circulated to stakeholders and to the general public so that self assessment can be promoted in the short term.
- The NHPC should determine on an interim period during which sensitizations and awareness creation can be done before the enforcement of these guidelines.
- Review the guidelines and NHPC systems as new experiences are gained and lessons are learned.
Appendix: IV: Infrastructure and environment

1.1 Land and environment

- Land (minimum of 2 acres for rural and 0.5 acres for urban areas) with:
  - Evidence of ownership, (Agreements and Land title)
  - Clearly demarcated by a natural/ artificial fence
  - Unpolluted environment i.e. Noise, smell, smoke, industrial wastes.
  - Neat compound, with walk ways, trees and friendly for Learning.

1.2 An administration block with:

- Offices for the Principal, Secretary, Bursar/Accountant, Registrar, Heads of department, staff common room/ Boardroom
- Adequate ventilation, lighting
- Adequate furniture
- Notice board
- Suggestion box
- Store
- Hand washing facilities
- Functional toilets for males and female with provision for people with disabilities

1.3 Classrooms permanent structures with:

- Adequate space (size) to accommodate 40 students (1 square meter / student for the tutor desk and chair.)
- Well plastered, painted and neat
- Entrances and exit with lockable doors
- Adequate windows and ventilation
- Black/White/ board (2metres away from the front desk, 1 metre above the ground)
• Echo free walls
• Cemented floors
• Leak free roof with permanent roofing material with a ceiling
• Adequate toilets sensitive to Gender and disability
• Furniture (disability sensitive)

1.4 Library in permanent structures with:-
• Adequate space (1-2 sq m per student) well ventilated and light
• One main entrance door and a fire exit and lockable doors (1.2 m)
• Windows allowing entry of adequate natural light, burglar proofed and meshed
• Echo free
• Plastered and painted walls
• Cemented floors
• Iron sheets roof with a ceiling

1.5 Skills Laboratory Structure
• Adequate space (1-2 sq m per student) well ventilated and light
• One main entrance door and a fire exit and lockable doors (1.2 m)
• Windows allowing entry of adequate natural light, burglar proofed and meshed
• Echo free
• Plastered and painted walls
• Cemented floors
• Iron sheets roof with a ceiling
• Ward robes
• Sluice room
• Adequate running water

1.6 Computer laboratory Structure
• Adequate space (1-2 sq m per student) well ventilated and light
• One main entrance door and a fire exit and lockable doors (1.2 m)
• Windows allowing entry of adequate natural light, burglar proofed and meshed
• Echo free
• Plastered and painted walls
• Cemented floors
• Iron sheets roof with a ceiling
• Power supply with an alternative sources
• Safety appliances
• Adequate computers and accessories at a ratio of 1 computer to 4 Students with Internet connectivity

1.7 Dormitories for Male and Female students (if a boarding HTI)
• Office for the Warden
• Adequate lighting and ventilation
• Safety precautions (lightening and fire extinguisher)
• Adequate space per bed (As per public health specifications)
• Entrance and exit doors and emergency exit
• Dustbins for wastes
• Functional toilets and bathrooms

1.8 Dining hall structure
• Well plastered, painted and neat
• Entrances and exit lockable doors
- Adequate windows and ventilation
- Black/White/ board (2 metres away from the front desk, 1 metre above the ground)
- Echo free walls
- Cemented floors
- Leak free roof with permanent roofing material with a ceiling
- Adequate toilets sensitive to Gender and disability
- Furniture (disability sensitive)
- Adequate space (1.5 sqm per student), lighting and ventilation
- Windows with wire mesh
- Hand washing facilities
- Well drained waste water channels
- Running water
- Offices for Caterer, Store keeper and Security Officers

1.9 Kitchen Structure:-
- Cemented shelves
- Windows with wire mesh, and burglar proof
- Safety precautions (lightening and fire extinguisher)
- Toilet for the kitchen staff
- Well ventilated
- Chimney
- Hand wash basins
- Well drained waste water channels
- Running water

1.10 Food store Structure:-
- Shelves
- Lockable cupboards
- Wooden racks (palice)
- Windows and doors with Burglar proof and wire mesh
- Appropriate ventilation system

1.11 Examination hall Structure:
- Adequate space 1sq m between desks, lighting, ventilation
- Desks and Chairs
- Exit and entrance lockable doors
- White/black board
- Notice board
- Safety precautions (lightening and fire extinguisher)
- Functional toilets for Male and Female with hand washing facilities

1.12 Laundry i.e., Running water, Hangers, Drying lines, Well draining and waste water channels (If Applicable)
- Ironing facilities (flat iron, ironing board, sockets)
- Indoor and outdoor recreation facilities e.g. Table tennis, volley ball, Football pitch, basket balls, pool table, chase boards.

1.13 Staff quarters; Staff quarters in permanent structures with adequate facilities
- Good compound
### Appendix V: Equipment Requirements for Medical Laboratory

#### 1.0 Mandatory Equipment’s

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Minimum No.</th>
<th>Ratio</th>
<th>Diploma</th>
<th>Certificate</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Autoclave 15 Ltrs</td>
<td>1</td>
<td>1:40</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>2. Water Bath 25 Ltrs</td>
<td>1</td>
<td>1:40</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>3. Ph Meters</td>
<td>2</td>
<td>1:20</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>4. Anaerobic Jars</td>
<td>8</td>
<td>1:5</td>
<td>✔</td>
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<tr>
<td>5. Incubator 25 Ltrs</td>
<td>1</td>
<td>1:40</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>6. Water Still</td>
<td>1</td>
<td>1:40</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>7. De Ionizer</td>
<td>1</td>
<td>1:40</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>8. Binocular Microscopes</td>
<td>12</td>
<td>1:3</td>
<td>✔</td>
<td>✔</td>
<td></td>
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<tr>
<td>9. Analytical Balace (0.001g Sensitivity)</td>
<td>1</td>
<td>1:40</td>
<td>✔</td>
<td>✔</td>
<td></td>
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<tr>
<td>10. Centrifuge (8tubes)</td>
<td>5</td>
<td>1:8</td>
<td>✔</td>
<td>✔</td>
<td></td>
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<tr>
<td>11. Burnsen Burners</td>
<td>20</td>
<td>1:2</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>12. Tripod Stand</td>
<td>20</td>
<td>1:2</td>
<td>✔</td>
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<tr>
<td>13. Safety Cabinet</td>
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<td>1:40</td>
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<tr>
<td>14. Refrigerator 5ft</td>
<td>2</td>
<td>1:20</td>
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<td>15. Mechanical Shaker</td>
<td>2</td>
<td>1:20</td>
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<td>16. Mechanical Mixer</td>
<td>2</td>
<td>1:20</td>
<td>✔</td>
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<tr>
<td>17. Inoculating Loops And Wires</td>
<td>40 Each</td>
<td>1:1</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>18. Assorted Glassware/Apparatus</td>
<td>Adequatelly</td>
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<tr>
<td>19. Cool Box</td>
<td>2</td>
<td>1:20</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>20. Deep Freezer</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>21. Colorimetry</td>
<td>10</td>
<td>1:4</td>
<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>22. Spectrophotometer</td>
<td>1</td>
<td>1:40</td>
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<td>✓</td>
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<tr>
<td>23. Flame Photometer (Ion Selective Electrolyte Analyzer)</td>
<td>1</td>
<td>1:40</td>
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<tr>
<td>24. Electrophoretic Tank</td>
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<tr>
<td>25. Haemoglobinometer (Sahli Apparatus)</td>
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<tr>
<td>26. Microheamatocrit Centrifuge</td>
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<td>1:40</td>
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<tr>
<td>27. Sphygmomanometer (Bp Machine)</td>
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<tr>
<td>28. Esr Stands And Tubes Westegren (10 Tubed) Wintrobe (5 Tubed)</td>
<td>4 Stands</td>
<td>1:10</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 Stand</td>
<td>1:10</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>29. Neuber Chamber (Improved)</td>
<td>20</td>
<td>1:2</td>
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<td>✓</td>
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<tr>
<td>30. Fuchs Rosenthal</td>
<td>20</td>
<td>1:2</td>
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<tr>
<td>31. Stethoscope</td>
<td>2</td>
<td>1:20</td>
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<tr>
<td>32. Tally Counter Single Key</td>
<td>12</td>
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<tr>
<td>33. Tally Counter Multiple Key</td>
<td>12</td>
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<tr>
<td>34. Manual Tissue Processing Set</td>
<td>1</td>
<td>1:40</td>
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<td>35. Microtome</td>
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<td>1:40</td>
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<tr>
<td>36. Hot Plate</td>
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<td>1:40</td>
<td>✓</td>
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<tr>
<td>37. Hone And Strope</td>
<td>1</td>
<td>1:40</td>
<td>✓</td>
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<td>38.</td>
<td>Grouping Tiles</td>
<td>40</td>
<td>1:1</td>
<td>✓ ✓</td>
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<tr>
<td>39.</td>
<td>Pestles And Motors</td>
<td>10</td>
<td>1:4</td>
<td>✓ ✓</td>
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<tr>
<td>40.</td>
<td>Kato Technique Kit</td>
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<td>41.</td>
<td>Timers</td>
<td>40</td>
<td>1:1</td>
<td>✓ ✓</td>
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<tr>
<td>42.</td>
<td>Lab Stools</td>
<td>40</td>
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<td>✓ ✓</td>
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</tr>
<tr>
<td>43.</td>
<td>Temperature Monitoring Thermometers</td>
<td>4</td>
<td>1:10</td>
<td>✓ ✓</td>
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</tr>
<tr>
<td>44.</td>
<td>Colony Counters</td>
<td>1</td>
<td>1:40</td>
<td>✓ ✓</td>
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<tr>
<td>45.</td>
<td>Stop Watches</td>
<td>40</td>
<td>1:1</td>
<td>✓ ✓</td>
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</tr>
<tr>
<td>46.</td>
<td>Wash Bottles</td>
<td>Adequate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47.</td>
<td>Assorted Staining Jars</td>
<td>Adequate</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>48.</td>
<td>Biurett Stands</td>
<td>40</td>
<td>1:1</td>
<td>✓ ✓</td>
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<tr>
<td>49.</td>
<td>Test Tube Racks</td>
<td>40</td>
<td>1:1</td>
<td>✓ ✓</td>
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</tr>
<tr>
<td>50.</td>
<td>Adjustable Automatic Pipettes</td>
<td>10</td>
<td>1:4</td>
<td>✓ ✓</td>
<td></td>
</tr>
<tr>
<td>51.</td>
<td>Computers</td>
<td>20</td>
<td>1:2</td>
<td>✓ ✓</td>
<td></td>
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</tbody>
</table>
### 2.0 Optional Equipment’s

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Minimum Requirement</th>
<th>Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Haematological analyzers</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2. Refrigerated centrifuge</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3. Automatic knife sharpener</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4. Automatic tissue processor</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5. Automatic staining machine</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6. Blood bank refrigerator</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7. Freezing microtome</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>8. Plasma extractor</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>9. Bleeding unit</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>10. Automated centrifuge</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>11. Fluorescence microscope</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>12. Radiation counter/scintillator</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>13. Elisa equipment (washer and reader)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>14. Counting equipment (CD4/CD8)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>15. Immunofluorescent equipment</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>16. Inverted microscope</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equipment Description</td>
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</tr>
<tr>
<td>---</td>
<td>-------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>18.</td>
<td>Chromatographic sets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>♦ Glc – gas liquid chromatography</td>
<td></td>
</tr>
<tr>
<td></td>
<td>♦ Hplc - high pressure liquid chromatography</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Thermocycler</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Microtome (rotary or rocking)</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>Air dryer</td>
<td></td>
</tr>
</tbody>
</table>
3.0 Laboratory Assorted Glass/Plastic Ware / Apparatus.

- Conical flasks
- Beakers
- Cover slips
- Petri dishes
- Pipettes
- Slides
- Universal bottles
- Boiling tubes
- Mac cartney bottles
- Bijou bottles
- Durham tubes
- Pyrex tubes 75x16 mm
- Flat bottomed flasks
- Stirring rods
- Sieves
- Test tube/slide racks
- Applicator sticks
- Forceps
- Funnels
- Handlenses
- Rubber bangs
- Test tubes
- Centrifuge tubes
- Spatula
- scarples
- Transfer pipettes
Appendix VI: Skills Lab for Nurses and Midwives

Engraved, functional instruments, equipment and models

1.0 Major Equipments

1.1 Hospital beds
1.2 Delivery bed
1.3 Baby cot
1.4 Accessories
   - Backrest
   - Fracture Boards
   - Trapeze/Lifting Pole
   - Bed cradle
   - Bed block/Bed elevator
   - Air ring or sheep skin
   - Foot rest
   - Bed table
   - Side rails
   - Sand bags
1.5 Screen
1.6 Trolley
1.7 Food trolley
1.8 Tray
   - Big trays
   - Small trays
1.9 Drip stand or infusion stand
1.10 Furniture
   - Stools
   - Hand chairs
   - Comfortable chairs
   - Lockable linen cupboard
   - Lockable drug cupboard
   - Double locked cupboard for Narcotic drugs
1.11 Dirty Linen container
1.12 Hand wash equipment
1.13 Sink
1.14 Pedal bin
1.15 Buckets (waste disposal according to protocol)
1.16 Attached sluiced rooms with
   - Bed pans
   - Urinals
• Sputum mugs
1.17 Bells
1.18 Wall clock
1.19 Stretcher
1.20 Wheel chair

2.0 Linen
• Bedcovers
• Blankets
• Bed sheets
• Pillows (big pillow, small pillows
• Long Mackintosh
• Draw mackintosh
• Small Mackintosh
• Mackintosh pillow case
• Dressing mackintosh
• Hand towels
• Big towels
• Small towels
• Pillow covers
• Draw sheets
• Patients gown
• Baby’s clothes
• Mosquito nets
• Small hand towels
• Tray covers
• Plastic aprons
• Mackintosh cape
• Face flannels
• Dressing towels
• Drapes

3.0 Sundries
• Gloves (sterile surgical, clean gloves)
• Heavy duty gloves
• Cotton
• Gauze
• Syringes and needles
• Cannulas
• Sharps safety box
• Toilet papers
• Bandages
• Masking tape
• Strapping
• Soap dish
• K.Y Jelly / any lubricant
• Sticks with cotton buds
• Vaseline or any lubricant
• Sticks with cotton buds
• Vaseline or any lubricant
• Tourniquet
• Infusion sets/giving sets (fluids, blood)
• Surgical blades
• Suturing materials (catgut and silk)
• Drainage bags
• Spigot or stoppers
• Drainage tubes
• Colostomy adhesive/colostomy bag
• ‘Y’ shaled irrigation set
• Three way Foley’s catheter
• Catheters (Foley’s, suction, nasal, rectal, flatus, nasogastric tube, rubber tubing and others
• Penile sheath
• Gum boots
• Pads/perineal swabs
• Slides, lancets

4.0 Observation equipment
• Thermometers
• Sphygmomanometer
• Stethoscope
• Wall thermometer
• Weighing scale (infants)

5.0 Urine testing equipment
• Rack of test tubes
• Reagents
• Dropper/pipette
• Urinometer
• Litmus paper
• Uristix
• Spirit lamp or candles or paraffin lamp

6.0 Minor Equipments
• Artery forceps
• Dissecting forceps
• Sponge holding forceps
• Mouth gag
• Tongue clip
• Tongue depressor
• Airway tube
• Kidney dishes/receivers
• Bowls
• Gallipots
• Jugs
• Funnels
• Basins
• Buckets
• Ear syringe
• Auroscope set
• Cheatal forceps and its container
• Scissors (straight, curved, cord, episiotomy)
• Torch
• Ophthalmoscope
• Tuning fork
• Dissecting aural forceps
• Nasal speculum
• Patella hammer
• Tape measure
• Vaginal speculum (sims, cuscos, ovards)
• Protoscope
• Injection dishes
• Aneurysm needle
• Needle holder
• Curved blunt hooks for cut down set
• Mosquito artery forceps
• Oxygen cylinder and its fittings
• Sinus forceps
• Probe
• Dressing forceps
• Sterilizing drums
• Small drum for dressings
• Small drums for swabs
• Suction machines (electrical, manual)
• Winchester bottle
• Measuring jar
• Douche can
- Lumbar puncture needles
- Spinal manometer
- Tracheal dilators
- Tracheal tubes
- Trochar and cannula
- Rubber tubing clip
- Towel clip
- Brush, comb, nail cutter or razor blade
- Uterine sound
- Curates (double, single)
- Dilators (different size)
- Vaccine carrier

7.0 **Traction equipment**
- Splints (different sizes)
- Balkan beam
- Gallows traction (spreader, extension cord)
- Pulley
- Weights
- Thomas’ splint
- Walking calliper splint
- Plaster bandages for P.O.P application
- stockinet

8.0 **Daily and weekly cleaning material**
- Liquid soap
- Vim
- Dusters
- Long broom
- Hand broom
- Hand brush
- Dust pan
- Scrubbing brush
- High dusting broom
- Wiper
- Mop
- Floor polish if necessary

9.0 **Family Planning method**
- Oral contraceptives
- Implants
- Intra uterine Devices
- Models
- Barrier methods
• Injectables
• Natural methods charts etc.

10.0 **Demonstration models**
• Manikin model (male model)
• Foetal skulls
• Pelvis
• Baby dolls – different size
• Madam zoe
• Pregnant Model
• Breast Model

11.0 **Additional Equipment for basic Midwifery Procedures**
• Gestational Wheel
• Foetal stethoscope
• Height scale
• Domiciliary kits
• Delivery kits
• Cord clamps
• Episiotomy scissors
• Bulbs syringes
• Cord ligatures
• Suturing needle
• Ambu bag
• Endotracheal tube
• Vacuum extraction apparatus

12.0 **Sample of drugs for demonstration**
• Drugs from oral administration
  - Anti malarials
  - Antibiotics
  - Mild analgesics
  - Anthelemiths
• Drugs for parental Administration/injectables
  - Anti malarials
  - antibiotics
• Drugs for tropical administration
  - Antibiotics
  - antifungal

13.0 **Cutlery for patients (cups, plates, cutlery)**

14.0 **Stationery**
• TPR charts
• Fluid balance charts
• Partographs
• Antenatal cards
- Lab forms
- Medical form five
- Admission charts
- Immunization cards
- Others specify