

THE UNITED REPUBLIC OF TANZANIA



**MINISTRY OF HEALTH, COMMUNITY DEVELOPMENT, GENDER,
ELDERLY AND CHILDREN**

**Curriculum for
Basic Technician Certificate
(NTA Level 4)
in
Nursing and Midwifery**

**Approved by the Council on
Valid for Five (5) Years Until
Approval Reference**

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ISBN 978 9987 737 45 1

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June, 2017

FOREWORD

The Ministry of Health Community Development, Gender, Elderly and Children (MoHCDGEC) has committed itself to provide comprehensive and accessible quality health services for all Tanzanians in line with Health Policy 2007, Development vision 2015 and the Sustainable Development Goals (SDGs) 2030.

The review of the Basic Technician Certificate in Nursing and Midwifery curriculum is one of the strategies of ensuring quality health services in line with the Human Resource for Health and Social Welfare Strategic Plan 2014-2019 and Health Sector Strategic Plan 2015-2020 (HSSP IV).

Nursing training has undergone dramatic change in response to societal, institutional and individual needs. Other influences are advances in technology nursing science, effects of globalization as well as free market.

The challenges of today in nursing profession includes among others, the preparation of nurses and midwives of the future. The provision of quality nursing training to learners is the key to nursing education. If nursing training is to have a positive and a significant impact, its curricula must focus on acquisition of appropriate knowledge, skills and attitudes.

This curriculum has taken into consideration the most up to date knowledge, skills and attitudes that meet societal, institutional and individual needs. Generally the curriculum has taken care of the identified gaps during the situational analysis and stakeholders' meetings as well as challenges which were noted in the previous curriculum.

It is the MoHCDGEC's hope that this curriculum will enable the student to acquire the necessary competences needed at this level for the provision of quality health services. It is also anticipated that the stakeholders will find this curriculum useful.

Dr. Mpoki M.Ulisubisya

PERMANENT SECRETARY (HEALTH)

ACKNOWLEDGEMENT

The review of the Basic Technician Certificate in Nursing and Midwifery curriculum involved different stakeholders. The MoHCDGEC appreciates the contributions of the curriculum development experts, educationalists, tutors/teachers, representatives from health training institutions, various hospitals, universities, and professional bodies. Their participation and inputs in meetings and workshops of reviewing this curriculum have been valuable. It is the commitment of these experts that has made this product possible. The MoHCDGEC extends its sincere gratitude to the development partners; American International Health Alliance /Tanzania Nursing Initiative (AIHA/TNI), International Training and Education Centre for Health (I-TECH), Amref Health Africa, Child Birth International (CBI), Engender Health, Johns Hopkins Programme for International Education in Gynaecology and Obstetrics (JHPIEGO) and HelpAge International (HAI) for their financial support.

Sincere appreciation goes to the Nursing and Midwifery Training Section for tireless coordination of the entire process of this curriculum review. Also I would like to thank the Curriculum development experts from National Council for Technical Education (NACTE) and facilitators for their technical support throughout the process of reviewing the Basic Technician Certificate in Nursing and Midwifery curriculum.

Furthermore, I would like to express my special thanks to representatives from the society, graduates, employers, trainers, professional boards including Tanzania Nursing and Midwifery Council (TNMC), Pharmacy Council of Tanzania (PCT), Health Laboratory Practitioners Council (HLPC), professional associations including Tanzania Midwives Association (TAMA) and Tanzania National Nurses Association (TANNA), Medical Association of Tanzania (MAT), Paediatric Association of Tanzania (PAT), and Private Nurses and Midwives Association of Tanzania (PRINMAT) their contributions during situational analysis process provided valuable information that shaped the curriculum to address competences practiced by nurses at work place.

The MoHCDGEC is indebted to Hubert Kairuki Memorial University (HKMU) and Muhimbili University of Health and Allied Sciences (MUHAS) for their libraries services.

I wish to thank all curriculum implementers (tutors) who contributed wide wealth knowledge, skills and experiences in this curriculum review, without which the completion of this activity would have been difficult.

The list of those who contributed to this great job is appended. Therefore, on behalf of the MoHCDGEC I wish to take this opportunity to thank everyone who participated in one way or another in completing this curriculum.

Dr. Otilia F. Gowelle

DIRECTOR OF HUMAN RESOURCES DEVELOPMENT

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ABBREVIATIONS

ABC	Airway, Breathing and Cardiac
AIDS	Acquired Immune Deficiency Syndrome
AIHA	American International Health Alliance
BRELA	Business Registrations and Licensing Agency
CA	Continuous Assessment
CBET	Competency-Based Education and Training
CBI	Child Birth International
DACUM	Develop a Curriculum.
DVD	Digital Video Disc
GIT	Gastro Intestinal Tract
GPA	Grade Point Average
GUI	Graphical User Interface
HAI	HelpAge International
HIV	Human Immunodeficiency Virus
HKMU	Hubert Kairuki Memorial University
HLPC	Health Laboratory Practitioners Council
HMIS	Health Management Information Systems
HSSP	Health Sector Strategic Plan
ICT	Information Communication Technology
I-TECH	International Training and Education Center for Health
JHPIEGO	John Hopkin Education for Gynaecology and Obstetric
LCD	Liquid Crystal Display
MAT	Medical Association of Tanzania
MIT	Ministry of Industry and Trade
MoHCDGEC	Ministry of Health Community Development, Gender, Elderly and Children
MoHSW	Ministry of Health and Social Welfare
MTUHA	Mpango wa Taarifa za Utoaji wa Huduma za Afya
MUHAS	Muhimbili University of Health and Allied Sciences
NACTE	National Council for Technical Education
NGO	Non-Governmental Organization
NSEGPE	National Strategy for Economic Growth and Poverty Elimination
NTA	National Technical Award
PAT	Paediatric Association of Tanzania
PCT	Pharmacy Council of Tanzania
PHC	Primary Health Care
PLO	Principals Learning Outcomes
PRINMAT	Private Nurses and Midwives Association of Tanzania
SDGs	Sustainable Development Goals
TAMA	Tanzania Midwives Association
TANNA	Tanzania National Nurses Association
TB	Tuberculosis

TBS	Tanzania Bureau of Standards
TIC	Tanzania Investment Centre
TNI	Tanzania Nursing Initiative
TNMC	Tanzania Nursing and Midwifery Council
TRA	Tanzania Revenue Authority
TV	Television
UNICEF	United Nation Children Education Funds
VCD	Video Compact Disc
VCR	Video Cassette Recorder
WHO	World Health Organization

EXECUTIVE SUMMARY

Since 2008 the Ministry of Health Community Development, Gender, Elderly and Children adopted Competency Based Education and Training (CBET) system for nursing and midwifery training using CBET curricula. These curricula therefore, had been due for review based on stakeholder's inputs and views about the current nursing and midwifery practice in the country as well as responding to NACTE's requirements of reviewing the curriculum after five (5) years of use.

Since inception of CBET for nursing and midwifery training in the country, many changes have happened including knowledge and technological advancement, population increase, emerging and re-emerging of diseases, and changes in labour market. These changes led the training curricula for nurses and midwives to be outdated and therefore necessitated the review of this curriculum.

The purpose of this reviewed curriculum is to address the knowledge and skills gap due to technological advancements in order to enable the graduates to be responsive to the current needs of the society and meet the demands of the labour market.

Entry into this program will involve those who at least have Certificate of Secondary School Education Examination and passed science subjects; Biology, Chemistry, Physics and English as per minimum set grades. Pass in Mathematics is an added advantage.

This curriculum is built on modular system. Learning outcomes are stated in three levels which include Principal learning outcomes (broad/ exit outcomes), Enabling outcomes and Sub-enabling outcomes (Process Outcomes). Sub enabling outcomes constitutes the modules. Within the period of one year, there are two semesters in which a learner completes a total of 120 credits. Teaching and learning process involves student centred and problem solving approaches which includes classroom sessions, skill laboratory practices, clinical practices and field work experiences utilizing different teaching and learning aids; in which all these are tied with student's assessment for acquisition of the competences.

In this revised curriculum, some of the competencies which were missing, for instance key population issues and care for the elderly were added. All of these changes have come as part of addressing knowledge and technological advancement, societal and labour market demands as well as making the curriculum more user-friendly.

Therefore, the curriculum has addressed most issues and concerns relevant to this level which emerged from training institutions, society, employers, and graduates. To effectively implement this curriculum, it is recommended that tutors are adequately oriented in order to capture the updates; and also resources for implementing the curriculum at the training institutions are adequate.

PART I: BACKGROUND INFORMATION

1.0 INTRODUCTION

The Ministry of Health Community Development, Gender, Elderly and Children in its efforts to strengthen nursing training in Tanzania developed competency based curricula under the guidance of NACTE, which started to be implemented in 2008. The first students under this curriculum graduated in 2010.

The review of the Basic Technician Certificate in Nursing and Midwifery curriculum aims at producing high quality products and responding to ever changing needs of the community as well as global technological innovations. Also, it aimed at addressing challenges observed on and experienced by the graduates.

The curriculum review was conducted following NACTE guidelines involving document review, conducting situation analysis, as well as developing learning outcomes/competencies, identifying assessment criteria, benchmarking and establishing learning modules.

2.0 PROGRAMME RATIONALE AND PHILOSOPHY

2.1 Programme Rationale

The human resource for health strategic plan of Ministry of Health and Social Welfare (MoHSW) 2014-2019 stipulated that the total number of health facilities in the country in 2013 was 6,876 according to the new staffing levels guideline (2014), out of these 5,913 are dispensaries, 711 Health centres, 219 district level hospitals, 25 regional referral hospitals and 8 national, zonal and specialized hospitals. The minimum number of health workers in health services in these facilities is 145,454. The actual number of health workers available is 63,447 and the shortage is 82,007, which is about 56.38%. There is a great challenge of rapidly aging work force which will exacerbate the crisis.

Despite the existing network of primary health facilities, accessibility to health care services is still inadequate and the availability of quality health care is inadequate. . The Maternal and Child Mortality rates are quite high standing at 450 per 100,000 live births and 58 per 1,000 live births respectively (UNICEF, 2012) The Government intends to increase number of trained health care workers and improve accessibility to be less than five (5) kilometers to health facility. As the number of trained health care workers increase and distance to health facility reduced, mortalities among women in reproductive age and children will be reduced. On the same context, the country will be able to cope with a high burden of diseases from malaria, HIV/AIDS, TB and Leprosy, malnutrition and micronutrient deficiencies, child illnesses, accidents and non-communicable diseases.

The main objective of the National Health Policy is to improve the health and wellbeing of all Tanzanians, with a focus on those most at risk, and to encourage the health system to be more responsive to the needs of the people. This objective cannot be achieved without

having appropriately trained nurses and midwifery and other health workers. According to WHO's World Health Report 2006, health workers are crucial for producing good health through the performance of health systems as they constitute a significant share of the labour force and perform key social roles in all societies.

Tanzania Vision 2025, National Strategy for Economic Growth and Poverty Elimination (NSEGPE), Health for All, Primary Health Care (PHC) and Sustainable Development Goals (SDGs) are not achievable without an appropriately prepared and deployed health workforce. Training of health workers is crucial for achieving equity-oriented national health goals.

Nursing like many other professions is affected by the rapid changes currently taking place in the society, science and technology. It is also shaped by changing demography, epidemiology, health systems and consumer preference in the labour market. Strategic planning actions should focus on investing in people, especially pre-service education to promote quality care and equity by correcting nursing and midwifery skill imbalances and in-service training to enhance the performance of the health workers.

In this regard the Basic Technician Certificate in Nursing and Midwifery curriculum cannot remain static; it must be responsive to changes in nursing practice due to changing technology, the demands of the society and should address the gaps observed in the previous curriculum.

The curriculum has been reviewed in line with the above considerations, which provides for a creation of a life-long learning culture, leading to acquisition of more knowledge, skills and wider understanding in nursing and midwifery practice.

Therefore, the rationale for this programme is to produce nurses and midwives who will be more responsive to the dynamic needs and demands of the society.

2.2 Programme Philosophy

Philosophy describes set of values and beliefs that guide all learning experiences of the curriculum. It is the basic foundation that directs all further planning, organization, implementation and evaluation of the curriculum. This programme is geared towards producing innovative, creative and flexible nurses who will cope with the dynamic changes of the profession, technology and socio-economic needs.

Nursing is an art and science of caring, and therefore nurses believe that:

- The enjoyment of the highest attainable standards of health and nursing care is the fundamental right of the human being irrespective of gender, sex, age, race, religion, socio-cultural differences, political affiliation, economic or social background;
- The practice of nursing is humanitarian in nature and requires knowledge, skills and attitudes in respect of compassion, respect and empathy, ethical and legal consideration in the provision of care;
- Environment influences individuals, families and community at large. Therefore, a nurse must acknowledge the different interaction patterns in the environment and the

impact of interaction to health and illness;

- Education is a continuous process that embraces new technology and community demands and therefore a nurse shall keep abreast with current health development to render quality cost– effective services;
- The learner is a unique individual with past experiences and needs, which should be respected. She/he has the responsibility for her/his own learning and self-development through active participation; and
- Teamwork spirit is a key to effective results. Training institutions shall maintain collaboration between team players.

It is, therefore, expected that the graduates from this level will have aspirations to pursue higher qualifications in nursing profession and translate their believes into practice.

3.0 VISION AND MISSION OF THE TRAINING PROGRAMME

3.1 Vision

To have competent nurses and midwives who will provide nursing and midwifery care effectively at different health care settings and cope with existing and emerging health issues.

3.2 Mission

To establish conducive and sustainable training environment that will allow students and graduates to perform competently and aspire for attainment of higher knowledge, skills and attitudes in promoting health, preventing diseases and caring for the sick as well as rehabilitating the debilitated individuals in all settings.

4.0 PROGRAMME GOAL

The goal of this programme is to improve the overall quality of health care delivery through competently trained nurses and midwives who are confident, dynamic, well informed, with moral integrity and able to work flexibly in different contexts in meeting the demands of the society.

4.1 Programme Objectives

The objectives of this program are to:

- i. Enrol learners with desirable entry qualifications into the programme
- ii. Engage qualified and competent trainers in the facilitation of students learning.
- iii. Distribute adequate and appropriate resources for enabling the teaching and learning process
- iv. Create conducive environment for teaching and learning in schools, clinical and Community settings
- v. Monitor teaching and learning processes in schools, clinical and community settings
- vi. Evaluate students' acquisition of knowledge, skills and attitude in schools, clinical and community settings
- vii. Create strategies for formative and summative programme evaluation

- viii. Produce competent Nurses and Midwives who will provide quality health care in Tanzania

5.0 ADMISSION REQUIREMENTS

5.1 Minimum Requirement

The course is open to candidate who has a Certificate of Secondary Education Examination (CSEE) with minimum grade of “C” in Biology and Chemistry, pass at grade “D” in Physics/ Engineering Science and English language, pass in Mathematics is an added advantage.

6.0 PRGRAMME STRUCTURE

6.1 Overall Structure

This programme comprises of nine (9) core and three (3) fundamental modules spread over a period of two semesters. Each semester shall have fifteen (15) instructional weeks and two (2) weeks for examinations.

6.2 Modules of the Progarmme

The modules broadly represent the main areas of activity in nursing and midwifery training. These modules are taught in such a way to ensure that students gain an appreciation of the nature and complexities of real life in provision of health services. In order to achieve an integration of these modules there will be considerable use of various teaching and learning methods mentioned in section 7.0 The modules for the Basic technician in Nursing and Midwifery are classified as Fundamental and Core

6.2.1 Fundamental Modules

Fundamental modules provide range of skills, knowledge and principles appropriate to a Basic Technician Certificate in Nursing and Midwifery while contributing to the effective study of the main theme of the programme. The fundamental modules provide a viable foundation for further studies and lifelong learning. In this curriculum the fundamental modules are: Basic Computer Applications, Communication Skills and Entrepreneurship.

6.2.2 Core Modules

The core modules provide the development of the main theme of the programme. They broadly represent the main areas of activity in Nursing and Midwifery area. These modules are taught together with fundamental modules so as to ensure that students gain an appreciation of the nature and complexities of real life in health service delivery. In order to achieve an integration of these modules there will be considerable use of integrative clinical and lectures, and assignment work and case studies will be used in the modules. In this curriculum the core modules are: Infection Prevention and Control, Professionalism in Nursing, Human Atomy and Physiology, Parasitology and Entomology, Application of Nursing Process and Theories in Nursing Care, Basic Clinical Nursing, Basic Pharmacology, Basics Health Information Management and Disaster and Emergency Preparedness.

6.3 Module Coding

The system of coding has adopted a combination of letters and numbers, which have specific meaning. For example Anatomy and Physiology module is coded as **NMT 04102** where:

NM- Represents the name of the programme “Nursing and Midwifery”

T –Represents the qualification at the respective level “Technician”

04 - Represents the respective NTA Level “NTA level 4”

1 -Indicates the semester in which the module is conducted “Semester 1”

02 - Represents the serial number to which a particular module is assigned in the respective programme “Module 2”

6.4 The Distribution of Modules in the Semester

The distribution of Module in the semester is as indicated in Table No: 1 and 2.

Table 1: Module Details for Semester 1

Module Code	Module Title	Classification	Module Credits
NMT 04101	Infection Prevention and Control	Core	15
NMT 04102	Professionalism in Nursing	Core	7
NMT 04103	Human Anatomy and Physiology	Core	14
NMT 04104	Basic Computer Applications	Fundamental	6
NMT 04105	Communication Skills	Fundamental	10
NMT 04106	Parasitology and Entomology	Core	5
Total Credits			57

Table 2: Module Details for Semester 2

Module Code	Module Title	Classification	Module Credits
NMT 04207	Application of Nursing Process and Theories in Nursing Care	Core	13
NMT 04208	Basic Clinical Nursing	Core	20
NMT 04209	Basic Pharmacology	Core	10
NMT 04210	Basics of Health Information Management	Core	4
NMT 04211	Disaster and Emergency preparedness	Core	13
NMT 04212	Entrepreneurship	Fundamental	3
Total credits			63

6.5 Scheme of Study

The scheme of study for semesters is as indicated in table 3 and 4.

Table 3: Scheme of Study for Semester I

Code	Module Title	Hours per week					
		Lecture	Tutorial	Practical		Assignment	Module Credit
				Skills Lab	Clinical		
NMT 04101	Infection Prevention and Control	3	1	3	2	1	15
NMT 04102	Professionalism in Nursing	1.5	0.5	1	1	0.5	7
NMT 04103	Human Anatomy and Physiology	4	2	2	-	1	14
NMT 04104	Basic Computer Application	1	0.5	2	-	0.5	6
NMT 04105	Communication Skills	2	1	1	2	1	10
NMT 04106	Parasitology and Entomology	1	0.5	1	-	0.5	5
		12.5	5.5	10	2	4.5	57
Total Credits							57

Total hours per week = 38

Table 4: Scheme of Study for Semester II

Code	Module Title	Hours per Week					
		Lecture	Tutorial	Practical		Assignment	Module Credit
				Skills Lab	Clinical		
NMT 04207	Application of Nursing process and theories in nursing care	2	1	2	3	0.5	13
NMT 04208	Basic Clinical Nursing	2	1	3	6	1	20
NMT 04209	Basic Pharmacology	2	1	1	2	0.5	10
NMT 04210	Basics of Health Information Management	1	-	-	2	-	4
NMT 04211	Disaster and Emergency preparedness	2	0.5	3	2	0.5	13
NMT 04212	Entrepreneurship	1	0.5	-	0.5	0.5	3
Total Credits							63

Total hours per week =42 hours

6.6 Summary of the Modules

Table 5: Summary of the Module

MODULE CODE	MODULE NAME	Semester I	Semester II
NMT 04101	Infection Prevention and Control		
NMT 04102	Professionalism in Nursing		
NMT 04103	Human Anatomy and Physiology		
NMT 04104	Basic Computer Applications		
NMT 04105	Communication Skills		
NMT 04106	Parasitology and Entomology		
NMT 04207	Application of Nursing Process and Theories in Nursing Care		
NMT 04208	Basic Clinical Nursing		
NMT 04209	Basic Pharmacology		
NMT 04210	Basics of Health Information Management		
NMT 04211	Disaster and Emergency preparedness		
NMT 04212	Entrepreneurship		

7.0 METHODS OF STUDY

7.1 Teaching Methods

The programme utilises a broad range of study methods and approaches. These include lectures, lecture discussion, tutorials, assignments, demonstration, skills laboratory practice, study tours, case study, role plays, group discussion, field visits, simulation, gallery walk, coaching, clinical conference and supervised practice.

7.2 Teaching Aids

Television(TV), set, Digital video Disc (DVD), Video Compact Disc (VCD), Video cassette recorder (VCR),Projectors, camera, Charts and Models, Textbooks, Computers, Boards, Flip charts, Markers and various equipment in skills laboratory and demonstration rooms.

8.0 ASSESSMENT

8.1 Objective of Assessment

The objective of assessment is to set a comprehensive system of measuring the achievement of the learning outcomes. It provides a yardstick for which the expected outcomes and benchmarking items are evaluated.

8.2 Principles of Assessment

Assessment will:

- Reflect the aims and objectives of the overall scheme, and the learning outcomes of the module.
- Be designed to assist student learning, in particular their development as self-directed learners and the acquisition of key skills.

- (iii) Be varied, to facilitate motivation and in recognition of the need to adopt approaches, which enable students to demonstrate that they have fulfilled learning objectives.
- (iv) Reflect progression through studying modules and semesters, with increasingly more complex methods being associated with higher order skills.

8.3 Assessment Components

8.3.1 Continuous Assessment

The intention of continuous assessment is to measure the theoretical ability and practical performance of students. There will be different methods of conducting continuous assessment depending on the nature of the module during a semester, which will be supervised by institutional tutor(s). The continuous assessment component shall carry a weight of 40%.

8.3.2 End of Semester Examinations (SE)

End of Semester Examinations shall comprise a written examination and a practical examination. The written examination for each module shall comprise of one paper divided into five sections to be conducted for duration not exceeding three hours but not less than two hours. Practical examination shall be conducted within a period of one hour, whereby 40 minutes will cover practical and 20 minutes will be for oral examination and evaluation. The semester examination component shall carry a weight of 60%.

8.4 Assessment Methods

8.4.1 Written Examinations

The written examinations are intended to measure the theoretical ability of learner and evaluate their performance. These examinations will be conducted for not less than two and half hour (2½) duration. The Examination shall be supervised and marked by the trainers of the training institutions as per regulatory authority accepted procedures and standards

8.4.2 Clinical/Practical Examinations

The practical/clinical examinations are intended to measure student's skills in performing various practical tasks. The practical examination will be conducted in skills laboratory and clinical area. Students will be exposed to simulated situations in skills laboratory during Objective Structured Practical Examination (OSPE) or actual settings (health facility) to perform tasks under observation. There will be a minimum of two practical /clinical examinations per each completed module during the semester. Institution may provide for the required assessment instruments and decide upon the number of practical/clinical area attachment for a given module in a semester.

8.4.3 Assignments

The aim of assignments is to reinforce the learning process by involving the participation of the students in finding the solution to a given question or problem which require decision-making. They include tasks given to students apart from written tests and examinations, for example case study so as to enhance self-development. Assignments may be administered in a form of written work or practical exercises that are done individually or in a group. The

required number of assignments and assessment instruments in a semester will be indicated under each module

8.4.4 Practical Procedure/Experience book

Practical procedure / experience books will be used to assess students' acquisition of clinical competencies. This practical experience book will be used during continuous assessment and as eligibility criteria for end of semester examinations.

8.4.5 Competence Test

The intention of competence tests is to measure the practical capability of learners through actual doing of a particular task or skill. Competence tests should better be carried at the end of module because it combines the different knowledge and skills required to perform a given activity and will be monitored and assessed through the use of record of practical instructions and experience books.

8.5 Criteria for Benchmarking

Benchmarking is a means of determining the learner's achievement based on the statements of criteria that indicate what the learner is expected to do in order to demonstrate that has successfully realized the sub-enabling outcomes.

The statements are formulated basing on the tasks the learner is expected to perform to realize the respective outcome. In this curriculum, benchmarks comprise of performance statement indicating the criteria for measuring learner's ability at satisfactory, good, and excellent levels.

This curriculum comprises examples of benchmarks of the selected few competencies. It is expected that the module facilitators are going to use the examples given to develop the benchmarks for each learning outcome of the respective module and use them during assessment of learners.

9.0 MANAGEMENT OF ASSESSMENT

The management of assessment and its mode of conduct for Training Institution shall be those approved by the regulatory bodies. The Examination committee shall be responsible to ensure that the end of semester examinations are conducted according to established procedures, guidelines and regulations. Students shall be oriented on assessment procedures for each module.at the beginning of the semester.

10.0 EXAMINATIONS REGULATIONS

The examination regulations include:

- a) End of semester examinations results must be released within three weeks from the date of completion of examination.
- b) Each module taught in a semester will be examined separately at the end of semester.
- c) A learner will be eligible for the end of semester examination if has successfully passed continuous assessments for each module.

- d) A learner who fails to attain 50% of continuous assessment for each module shall not be allowed to sit for end of semester examination.
- e) A learner who did not sit for the end of semester examination for any module due to acceptable reason(s), shall have to do the examination for that module before progressing towards next semester.
- f) A learner who attains GPA of 2.0 or above should be allowed to supplement the failed module not later than four weeks after released of results.
- g) A learner who fails end of semester examination with GPA less than 2.0 should be discontinued from the programme.
- h) A learner who fails two supplementary examinations for any module shall be discontinued from studies.
- i) A learner who falls seriously sick just before or during end of semester examinations or is hospitalised will be allowed to sit the examinations when condition has stabilized; when next offered.
- j) A learner who feels unable to attempt end of semester examination for any module for genuine reason, should present his/her case in writing four weeks before the date of end of semester examination to the Examination Committee of an institution for consideration.
- k) A learner will be deemed to have passed the end of semester examination if has achieved a minimum of 50% of the set marks for both theory and practical examination for each module.

11.0 GRADING SYSTEM

All assessed work shall be graded according to the following grading system which specifies range of scores for different grades, grade points and their definitions, as shown in Table 6.

Table 6: The Range of Scores for Different Grades; Grade points and Definitions

Score Range	Grade	Grade point	Definition
80 – 100	A	4	Excellent
65 – 79	B	3	Good
50 – 64	C	2	Satisfactory
40 – 49	D	1	Below average
0 – 39	F	0	Failure
-	I	-	Incomplete
-	Q	-	Disqualification

11.1 Computation of Grade Point Average (GPA)

Grade Point Average (GPA) refers to the system of judging students' performance. It is computed from marks achieved by students in each module by combining results of Continuous Assessment (CA) and end of module Semester Examinations (SE)

- a) A cumulative grade point average (cum GPA) for each candidate shall be computed using the following formula

$$\text{Cumulative GPA} = \frac{\text{Sum of } (P \times N)}{\text{Sum of } N}$$

Where **P** represents a grade point assigned to a letter grade scored by the student in a module and **N** represents the number of credits associated with the module

- b) The Grade Point Average (GPA) shall be computed and truncated to single decimal point.

11.2 Classification of Awards

The computed Grade Point Average (GPA) shall be classified as shown in Table 7.

Table 7: Classification of awards

Class of Award	Cumulative GPA
First Class	3.5 – 4.0
Second class	3.0 – 3.4
Pass	2.0 – 2.9
Failure	0.0 – 1.9

An award shall be given to candidates who satisfy the following criteria:

- Has successfully completed all modules for the NTA Level 4 award
- Has achievement of a minimum Grade Point Average (GPA) of 2.0

PART II: CURRICULUM DETAIL

1.0TITLE OF THE QUALIFICATION:

Basic Technician Certificate in Nursing and Midwifery

2.0PURPOSE OF THE QUALIFICATION:

This qualification is intended for a person who will apply basic knowledge, skills, ethical principles, guideline and standards in performing basic nursing care to patient/client in health facility and community.

3.0NTA LEVEL:

NTA level 4

4.0COMPETENCY LEVEL DESCRIPTOR:

The holder of the qualification will be able to apply skills and knowledge at routine level under supervision of a licensed nurse as a learner.

5.0MINIMUM CREDIT

The minimum credits at this level: 120

6.0MAXIMUM CREDITS

Total credits at this level 120

7.0ENTRY REQUIREMENTS.

Admission to the programme is open to candidate who has a Certificate of Secondary Education Examinations (CSEE) with minimum grade of “C” in Biology and Chemistry, and pass at grade “D” in Physics/Engineering Science and English language. Pass in Mathematics is an added advantage.

8.0DATE OF CURRICULUM REVIEW:

July, 2017

9.0 PRINCIPAL LEARNING OUTCOMES, CREDIT VALUES AND ASSESSMENT CRITERIA

Principal Learning Outcomes	Credit Values	Assessment Criteria
1. Apply knowledge and skills of infection prevention and control in providing care to patient/client with different health conditions.	15	<ul style="list-style-type: none"> a) Equipment and materials are processed according to Infection Prevention and Control (IPC) standards and techniques b) Sterile procedures are performed according to IPC principles and technique c) Knowledge and skills of microbiology are applied in prevention and control of infections
2. Apply communication, customer care and basic entrepreneurial skills in providing care to patient/client with different health conditions.	18	<ul style="list-style-type: none"> a) Therapeutic communication is properly utilized in providing nursing and midwifery care b) Clients are guided according to principles of customer care c) Health talks are conducted according to the principles and skills of communication d) Patient's rights are protected according to the principles of advocacy e) Basic skills of entrepreneurship are applied in provision of health care services
3. Apply knowledge of sciences and ethics in provision of nursing and midwifery care.	67	<ul style="list-style-type: none"> a) Ethical principles are applied in providing nursing and midwifery care b) Medicine administration is performed according to the principles of pharmacology c) Patient/Client assessment is conducted according to principles of anatomy and physiology d) Fluid and electrolyte balance is maintained according to knowledge of biochemistry e) Infectious diseases are controlled according to knowledge of microbiology and parasitology f) Nursing and midwifery procedures are performed according to knowledge of nursing and midwifery science g) Nursing and midwifery process is applied in providing nursing and midwifery care
4. Apply basic knowledge and principles of first aid in providing emergency care.	10	<ul style="list-style-type: none"> a) Patients with cardiopulmonary emergencies are cared according to principles of first aid b) Patients with injuries are cared according to principles of first aid c) Patients with poisoning are cared according to principles of first aid d) Patients with shock are cared according to the

		<p>principles of first aid</p> <p>e) Patients with metabolic emergencies are cared according to principles of first aid</p> <p>f) Victims of disasters and emergency are given first aid according to principles of disasters and emergency preparedness</p>
5. Apply basic knowledge of information management to maintain health records and documentations.	10	<p>a) Information is recorded according to basic knowledge and skills of information management</p> <p>b) Health records are kept according to the knowledge and skills of information management</p> <p>c) Information is shared according to the knowledge and skills of information management</p> <p>d) Reports are prepared according to the knowledge and skills of information management</p> <p>e) Information Communication and Technology (ICT) equipment are properly applied in managing information.</p>
TOTAL CREDIT	120	

10.0 PRINCIPAL OUTCOMES AND ENABLING OUTCOMES

Principal Learning Outcome	Enabling Outcome
1. Apply knowledge and skills of infection prevention and control in providing care to patient/client with different health conditions	1.1 Utilize IPC principles and technique in providing nursing and midwifery care
	1.2 Utilize IPC knowledge and skills in managing waste in health care setting
	1.3 Utilize knowledge of microbiology in preventing and controlling infections
2. Apply communication, customer care and entrepreneurial skills in providing care to patient/client with different health conditions.	2.1 Utilize knowledge and skills of communication in providing nursing and midwifery care
	2.2 Utilize principles of customer care in attending patient/client
	2.3 Apply principles and skills of advocacy in providing nursing and midwifery care
	2.4 Apply basic skills of entrepreneurship in providing health care services
3. Apply knowledge of sciences and ethics in provision of nursing and midwifery care	3.1 Apply professional legal and ethical principles and guidelines in providing nursing and midwifery care
	3.2 Utilize knowledge and principles of pharmacology in administration of medicines
	3.3 Describe the anatomy and physiology of human body
	3.4 Apply knowledge of biochemistry in provision of nursing and midwifery care
	3.5 Apply knowledge of parasitology and entomology in preventing and controlling infections and infestations
	3.6 Utilize knowledge of nursing science and art in providing nursing care
4. Apply basic knowledge and principles of first aid in providing emergency care.	4.1 Utilize knowledge and skills of first aid in caring patient with cardiopulmonary emergency
	4.2 Apply principles and skills of first aid in caring patients with injuries
	4.3 Utilize principles of first aid in caring patient with poisoning
	4.4 Apply principles and skills of first aid in caring patients with shock
	4.5 Apply knowledge and skills of disaster management and emergency preparedness
5. Apply basic knowledge of information management to maintain health records and documentations	5.1 Apply knowledge and skills of computer technology in performing basic computer operations
	5.2 Utilize knowledge and skills of information management in documenting and keeping health records
	5.3 Utilize legal, ethical guidelines and security mechanism in handling health information

11.0 ENABLING AND SUB ENABLING OUTCOMES

Enabling Outcome		Sub enabling Outcome	
1.1	Utilize IPC principles and technique in providing nursing and midwifery care	1.1.1	Explain concepts of infection prevention and control in relation to care of patients in hospital
		1.1.2	Use hand hygiene techniques in preventing and controlling infections
		1.1.3	Use personal protective equipment in preventing spread of microorganisms in health care setting
		1.1.4	Use IPC technique in processing equipment and materials in health care setting
		1.1.5	Maintain clean health facility environment according to standards and guidelines
1.2	Utilize IPC knowledge and skills in managing waste in health care setting	1.2.1	Explain concepts of waste management in health care setting
		1.2.2	Dispose health care wastes using standard guideline
		1.2.3	Handle sharps using Infection Prevention and Control principles
1.3	Utilize knowledge of microbiology in preventing and controlling infections	1.3.1	Explain concepts of microbiology in relation to nursing practice
		1.3.2	Categorize microorganisms causing diseases in human body using knowledge of microbiology
		1.3.3	Prevent and control of nosocomial infection when providing nursing care
2.1	Utilize knowledge and skills of communication in providing nursing and midwifery care	2.1.1	Explain concepts of communication in relation to nursing and midwifery care
		2.1.2	Demonstrate effective communication skills in nursing and midwifery practice
		2.1.3	Demonstrate skills of sign language and tactile signing when communicating with clients/patients with disability of visual, speech and hearing
		2.1.4	Demonstrate skills of giving and receiving feedback in nursing and midwifery practice
		2.1.5	Apply therapeutic communication skills in providing care to patients/ clients in health care settings
		2.1.6	Utilize Information Education and Communication (IEC) materials when communicating health information to patients/clients

Enabling Outcome		Sub enabling Outcome	
2.2	Utilize principles of customer care in attending patient/client	2.2.1	Explain concepts of customer care in relation to nursing and midwifery practice
		2.2.2	Describe methods of customer care as applied in nursing and midwifery practice
		2.2.3	Apply knowledge of customer care to resolve patients'/ clients' concerns
2.3	Apply principles and skills of advocacy in providing nursing and midwifery care	2.3.1	Explain concepts of advocacy in relation to nursing and midwifery practice
		2.3.2	Describe patient's and service provider's rights in the provision of care
		2.3.3	Utilize knowledge and skills of advocacy to protect patient's/client's rights
2.4	Apply basic skills of entrepreneurship in providing health care services	2.4.1	Explain concepts of entrepreneurship as used in health care services
		2.4.2	Describe business regulatory framework of Tanzania in relation to health care service
		2.4.3	Utilize the principles of entrepreneurship to formulate business idea
		2.4.4	Develop business plan for health services using skills of entrepreneurship
		2.4.5	Design plan for cost sharing in relation to health services
3.1	Apply professional, legal and ethical principles and guidelines in providing nursing and midwifery care	3.1.1	Explain professional, legal and ethical principles related to nursing and midwifery practice
		3.1.2	Utilize legislation guidelines in providing nursing and midwifery care
		3.1.3	Apply ethical principles in nursing and midwifery practice
3.2	Utilize knowledge and principles of pharmacology in administration of medicines	3.2.1	Explain concepts of pharmacology related to medicine administration
		3.2.2	Describe common analgesics, anaesthetics, anti-inflammatory and steroids used in managing pain and inflammation
		3.2.3	Describe common antibacterial, antifungal, anti-viral and anti-malarial used in the treatment of patients with bacterial, fungal, viral and malaria infections
		3.2.4	Describe common anti-hypertensive, anti-diabetics and anticoagulants used in the treatment of patients with hypertension, diabetes and blood coagulation disorders

Enabling Outcome	Sub enabling Outcome
	3.2.5 Describe emetics, anti-emetics, anti-acids anticholinergic, anti-helminthic, anti-asthmatic, anti-tuberculosis and cough remedies used in the treatment of patients with disorder of GIT and respiratory systems
	3.2.6 Describe antipsychotics, antidepressant, anticonvulsants, hypnotics and anxiolytic used in the treatment of patients with mental disorders
	3.2.7 Describe medicines used in the treatment of cancer
	3.2.8 Apply principles of medicine administration during medication
3.3 Describe the anatomy and physiology of human body	3.3.1 Explain basic concepts of anatomy and physiology in relation to human body
	3.3.2 Describe respiratory, digestive and cardiovascular systems using knowledge of anatomy and physiology
	3.3.3 Describe musculoskeletal, urinary and reproductive systems using knowledge of anatomy and physiology
	3.3.4 Describe nervous, endocrine, lymphatic-immune systems and special senses using knowledge of anatomy and physiology
3.4 Apply knowledge of biochemistry in provision of nursing and midwifery care	3.4.1 Explain concepts of biochemistry in relation to human body biochemical functions
	3.4.2 Explain functions of macromolecules in relation to human body
	3.4.3 Describe human body enzymes, co-enzymes, fluids, and electrolytes in relation to human body function
	3.4.4 Provide care to patient with fluid and electrolyte imbalance using knowledge of biochemistry
3.5 Apply knowledge of parasitology and entomology in preventing and controlling infections and infestations	3.5.1 Describe concepts of parasitology and entomology in relation to human infections and infestations
	3.5.2 Describe common protozoa which cause human diseases
	3.5.3 Describe common nematodes which cause diseases in human body
	3.5.4 Describe common trematodes which cause diseases in human body

Enabling Outcome	Sub enabling Outcome
	3.5.5 Describe common cestodes which cause diseases in human body
	3.5.6 Describe vectors which transmit diseases to human body
	3.5.7 Describe ecto-parasites causing diseases to human body
3.6 Utilize knowledge of nursing science and art in providing nursing care	3.6.1 Describe nursing theories, models and nursing process in providing care
	3.6.2 Provide care to patient with hygienic needs using nursing process
	3.6.3 Provide care to patient with elimination needs using nursing process
	3.6.4 Provide care to patients with nutritional needs using knowledge and skills of nutrition
	3.6.5 Provide care to patients with pain, wound and limited mobility using nursing process
	3.6.6 Admit, transfer and discharge patients in the health facility using standards and protocols.
	3.6.7 Provide care to older people according to their needs and problems
	3.6.8 Provide end of life care to patients by adhering to ethical principles and protocols
4.1 Utilize knowledge and skills of first aid in caring patient with cardiopulmonary emergency	4.1.1 Explain concepts of first aid in relation to emergency care
	4.1.2 Describe cardiopulmonary resuscitation according to protocols and guidelines
	4.1.3 Provide first aid to patient with cardiopulmonary emergency using ABC approach
4.2 Apply principles and skills of first aid in caring patient with injuries	4.2.1 Provide care to patients/client with lacerations, strains, sprains, fractures and dislocations using principles of first aid
	4.2.2 Provide care to patient with head injury using principles of first aid
	4.2.3 Provide care to patient with eye injury using principles of first aid
	4.2.4 Provide care to patient with foreign body using principles of first aid
	4.2.5 Provide care to patient with burn using principles of first aid

Enabling Outcome		Sub enabling Outcome	
4.3	Utilize principles of first aid in caring patient with poisoning	4.3.1	Provide care to patient with food poisoning using principles of first aid
		4.3.2	Provide care to patient with bites and stings using principles of first aid
		4.3.3	Provide care to patient with chemical poisoning using principles of first aid
4.4	Apply principles and skills of first aid in caring patients with shock	4.4.1	Provide care to patient with anaphylactic shock using principles of first aid
		4.4.2	Provide care to patients with cardiogenic shock using principles of first aid
		4.4.3	Provide care to patient with hypovolemic shock using principles of first aid
		4.4.4	Provide care to patient with neurogenic shock using principles of first aid
4.5	Apply knowledge and skills of disaster management and emergency preparedness	4.5.1	Explain concepts of disaster management and emergency preparedness
		4.5.2	Provide care to patients during emergency using principles of disaster management
		4.5.3	Prevent disasters using knowledge and skills of emergency preparedness
5.1	Apply knowledge and skills of computer technology in performing basic computer operations	5.1.1	Describe components and accessory of a computer and their functions in relation to basic computer operations
		5.1.2	Perform basic computer operations using knowledge and skills of computer technology
		5.1.3	Utilize word processing application in preparing reports
		5.1.4	Utilize spread sheet application in processing health data
		5.1.5	Utilize power point application in preparing health information presentations
		5.1.6	Utilize Microsoft publisher application in preparing health publications
		5.1.7	Utilize Microsoft access application in keeping health data
		5.1.8	Communicate and search health information using basic computer operation
5.2	Utilize knowledge and skills of information management in documenting and keeping health records	5.2.1	Describe methods of keeping records related to health
		5.2.2	Differentiate tools used in keeping medical records

Enabling Outcome	Sub enabling Outcome
	5.2.3 Utilize documentation skills in recording and keeping client health information
	5.2.4 Use HMIS (MTUHA) to collect and report information related to health
5.3 Utilize legal, ethical guidelines and security mechanism in handling health information	5.3.1 Describe legal, ethical and security concepts in relation to health information management
	5.3.2 Employ security mechanism in protecting health information
	5.3.3 Protect health information from physical access and damage using guidelines and standards

12.0 ASSESSMENT CRITERIA AND BENCHMARKING

12.1 SUB ENABLING OUTCOMES RELATED TASKS, ASSESSMENT CRITERIA, ASSESSMENT METHODS AND INSTRUMENTS

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
1.1.1. Explain concepts of infection prevention and control in relation to care of patients in hospital	a) Define common terms used in infection prevention and control (standard precaution, infection, prevention, control)	1.1.1.1. Concepts of infection prevention and control related to care of patient in hospital are correctly explained	Written test	Question paper Marking scheme
	b) Outline objectives of infection prevention and control (IPC) in health care facility		Assignment	Assignment guide
	c) Explain components of standard precautions in IPC (consider every person, hand hygiene, personal protective equipment, handle sharps, safe dispose of wastes and process instruments)		Oral questions	Checklist
1.1.2. Use hand hygiene techniques in preventing and controlling infections	a) Define terms hand hygiene and hand washing	1.1.2.1. Concepts of hand hygiene techniques are correctly described.	Written test	Question paper Marking scheme
	b) Outline indications for hand hygiene		Assignment	Assignment guide
	c) Describe types of hand hygiene techniques (hand washing, hand antisepsis, antiseptic hand rub and surgical hand rub		Oral questions	Checklist
	d) Demonstrate hand washing technique	1.1.2.2. Hand hygiene techniques are correctly demonstrated	Observation of performance	Check list
	e) Demonstrate surgical hand rub technique			
	f) Demonstrate hand antisepsis technique			
	g) Demonstrate antiseptic hand rub technique			

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
1.1.3. Use personal protective equipment in preventing spread of microorganisms in health care setting	a) Define the term personal protective equipment (PPE)	1.1.3.1. Concepts of personal protective equipment are correctly explained	Written test	Question paper Marking scheme
	b) Explain importance of personal protective equipment		Assignment	Assignment guide
	c) Describe types of PPE		Oral questions	Checklist
	d) Use personal protective equipment in providing care to patient/ clients	1.1.3.2. Personal protective equipment are used according to IPC guideline	Observation of performance	Check list
1.1.4. Use IPC technique in processing equipment and materials in health care setting	a) Define common terms used in processing equipment (decontamination, cleaning, antiseptic, disinfectant, sterilization, linen, soap or detergent, solid or contaminated linen and sort)	1.1.4.1. Concepts of processing equipment and materials are correctly explained	Written test	Question paper Marking scheme
	b) Explain key steps in processing equipment and materials		Assignment	Assignment guide
	c) Perform decontamination and cleaning	1.1.4.2. Equipment and materials are properly processed	Oral questions	Checklist
	d) Sterilize equipment and materials			
	e) Perform high level disinfection			
1.1.5 Maintain clean health facility environment according to standards and guidelines	a) Define clean health facility environment	1.1.5.1. Concept of clean health facility environment are correctly explained	Written test	Question paper Marking scheme
	b) Explain importance of clean health facility environment.		Assignment	Assignment guide
	c) Explain principles of maintaining clean health facility environment		Oral questions	Checklist

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
	d) Keep health facility environment clean and tidy	1.1.5.2. Clean health facility environment is maintained according standards	Observation of performance	Check list
1.2.1 Explain concepts of waste management in health care setting	a) Define common terms used in waste management (health care waste, non-contaminated wastes, contaminated wastes)	1.2.1.1. Concepts of waste management in health care setting are correctly explained	Written test	Question paper Marking scheme
	b) Describe steps of waste management		Assignment	Assignment guide
	c) Explain tips of disposing contaminated wastes		Oral questions	Checklist
	d) Explain risks associated with health care wastes			
1.2.2 Dispose health care wastes using standard guideline	a) Describe Measures of minimizing wastes in healthcare setting.	1.2.2.1. Concepts of minimizing wastes in health care setting are correctly described	Written test	Question paper Marking scheme
			Assignment	Assignment guide
			Oral questions	Checklist
	b) Segregate and transport waste materials according to their level of infectiousness in health care setting	1.2.2.2. Health care wastes are disposed using standard guideline	Observation of performance	Check list
	c) Collect and store health care wastes as per facility standard guideline			
	d) Treat and dispose health care wastes as per standard guideline			

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
1.2.3 Handle sharps using Infection Prevention and Control principles	a) Define the term sharp instruments	1.2.3.1 Concepts of handling sharps are correctly explained	Written test	Question paper Marking scheme
	b) Explain principles of sharp disposal		Assignment	Assignment guide
	c) Demonstrate skill of safe disposal of sharps and needles	1.2.3.2 Sharps are handled according to IPC principles	Oral questions	Checklist
1.3.1 Explain concepts of microbiology in relation to nursing practice	a) Define the terms microbiology, virulence and pathogens	1.3.1.1. Concepts of microbiology are correctly explained	Written test	Question paper Marking scheme
	b) Explain historical background of microbiology		Assignment	Assignment guide
	c) Explain importance of microbiology		Oral questions	Checklist
	d) Describe modes of disease transmission			
1.3.2 Categorize microorganisms causing diseases in human body using knowledge of microbiology	a) List different types of microorganism	1.3.2.1 Concepts of microorganisms causing diseases are correctly described	Written test	Question paper Marking scheme
	b) Explain characteristics of different microorganism		Assignment	Assignment guide
	c) Explain disease transmission cycle		Oral questions	Checklist
	d) Differentiate shapes of microorganisms			
	e) Explain functions of microorganism			
1.3.3 Prevent and control of nosocomial infection when providing nursing care	a) Explain nosocomial infection	1.3.3.1 Concepts of Nosocomial infection are correctly explained	Written test	Question paper Marking scheme
	b) Differentiate risk factors in nosocomial infection		Assignment	Assignment guide
	c) Describe risks of infection in different health care settings		Oral questions	Checklist

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
	d) Prevent self, patient/client against nosocomial infection	1.3.3.2 Nosocomial infection is prevented and controlled	Observation of performance	Check list
	e) Control infection in health care settings			
2.1.1 Explain concepts of communication in relation to nursing and midwifery care	a) Define communication	2.1.1.1 Concepts of communication are correctly Explained	Written test Assignment Oral questions	Question paper Marking scheme Assignment guide Checklist
	b) Explain the components of communication process			
	c) Differentiate between verbal and non-verbal communication			
	d) Outline modes of communication			
	e) Explain factors influencing communication process			
2.1.2 Demonstrate effective communication skills in nursing and midwifery practice	a) Define effective communication	2.1.2.1 Concepts of effective communication are properly explained	Written test Assignment Oral questions	Question paper Marking scheme Assignment guide Checklist
	b) Explain the importance of effective communication in health care settings			
	c) Explain factors influencing effective communication			
	d) Explain skills for effective communication			
	e) Explain barriers for effective communication			
	f) Explain advantage of effective communication at work place			
	g) Demonstrate effective communication skills in providing nursing and midwifery care	2.1.2.2 Effective communication skills are demonstrated	Observation of performance	Check list

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
2.1.3 Demonstrate skills of sign language and tactile signing when communicating with clients/patients with disability of visual, speech and hearing	a) Define terms sign language and tactile signing	2.1.3.1. Concepts of sign language and tactile signing are correctly described	Written test	Question paper Marking scheme
	b) Describe the principles of sign language and tactile signing (etiquette, sign variation and standard signs).		Assignment	Assignment guide
	c) Explain significance of sign language and tactile signing in nursing		Oral questions	Checklist
	d) Differentiate between sign language and tactile signing			
	e) Explain challenges of communicating to people with speech, hearing, and visual disabilities.			
	f) Interact with clients/patients with speech and hearing disabilities.	2.1.3.2. Effective Communication skills are correctly demonstrated in interacting with people with speech, hearing, and visual disabilities.	Competence test	Check list
	g) Interact with clients/patients with visual disabilities.		Field visit	Field visit report guide
	h) Interpret speech in various contexts using sign language and tactile signing.		Assignment	Assignment guide
2.1.4 Demonstrate skills of giving and receiving feedback in nursing and midwifery practice	a) Define feedback in communication	2.1.4.1 Principles of giving and receiving feedback are correctly explained	Written test	Question paper Marking scheme
	b) Outline the importance of feedback in communication		Assignment	Assignment guide
	c) Explain appropriate methods of providing feedback			
	d) Explain factors influencing effective feedback in communication		Oral questions	Checklist

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
	e) Explain principles of giving and receiving feedback			
	f) List advantages of giving and receiving feedback			
	g) Explain barriers for feedback in communication			
	h) Utilize principles of giving and receiving feedback	2.1.4.2 Principles of giving and receiving feedback are correctly utilized	Observation of performance	Check list
2.1.5 Apply therapeutic communication skills in providing care to patients/ clients in health care settings	a) Define therapeutic communication	2.1.5.1 Therapeutic communication in attending client are correctly described	Written test	Question paper Marking scheme
	b) Explain therapeutic communication techniques		Assignment	Assignment guide
	c) Explain the importance of good relationship with clients/ patients and co workers		Oral questions	Checklist
	d) outline factors for creating and maintaining good relationship with patient/client, and co workers			
	e) Explain phases of therapeutic relationship			
	f) Outline the advantages of therapeutic communication			
	g) Demonstrate therapeutic communication skills	2.1.5.2 Therapeutic communication skills are demonstrated	Observation of performance	Check list
2.1.6 Utilize Information Education and Communication (IEC) materials when	a) Define Information education and communication,	2.1.6.1 Concepts of Information, education and communication material are explained	Written test	Question paper Marking scheme
	b) Explain the importance of IEC		Assignment	Assignment guide
	c) Describe types of IEC materials			

Sub enabling Outcome	Related Tasks	Assessment Criteria		Assessment Method	Assessment Instrument
communicating health information to patients/clients	d) Identify different sources of IEC			Oral questions	Checklist
	e) Use IEC materials in influencing health behaviour	2.1.6.2	Health education sessions are conducted correctly	Observation of performance	Check list
	f) Prepare lesson plan for health education sessions according to patient/clients’ needs				
	g) Conduct health education sessions according to patient/clients’ needs				
2.2.1 Explain concepts of customer care in relation to nursing and midwifery practice	a) Define customer care	2.2.2.1	Concepts of customer care are correctly explained	Written test	Question paper
	b) Explain principles of customer care			Assignment	Marking scheme
	c) Differentiate between internal and external customer				
	d) Differentiate health customer care from other type of customer care				
	e) Identify value of quality of customer care in health				
	f) Explain the importance providing good customer care to internal and external customer				
2.2.2 Describe methods of customer care as applied in nursing and midwifery practice	a) Explain the role of nurse and midwife in customer care	2.2.2.1	Methods of Customer care are correctly described	Written test	Question paper
	b) Analyse customer needs and problems			Assignment	Marking scheme
	c) Explain factors influencing customers satisfaction				
	d) Explain methods of dealing with unsatisfied customers			Oral questions	Checklist

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
2.2.3 Apply knowledge of customer care to resolve patients'/clients' concerns	a) Explain customer relation management	2.2.3.1 Customer relation management is correctly explained	Written test	Question paper
	b) Demonstrate positive attitude in giving care to client/patient	2.2.3.2 Customer care principles are demonstrated in giving care to client/patient	Assignment	Assignment guide
	c) Attend client enquiries and complaints		Oral questions	Check list
	d) Plan good customer service to client/patient		Observation of performance	Check list
2.3.1 Explain concepts of advocacy in relation to nursing and midwifery practice	a) Define the term advocacy	2.3.1.1 Concepts of advocacy are correctly explained	Written test	Question paper
	b) Identify common areas requiring advocacy		Assignment	Marking scheme
	c) Explain steps for advocacy in nursing care		Oral questions	Assignment guide
	d) Identify the unique advocacy need of key population			
	e) Describe advocacy skills in nursing care			
2.3.2 Describe patient's and service provider's rights in the provision of care	a) Define terms; patients' rights, service providers rights	2.3.2.1 Patient's and services provider's rights are correctly described	Written test	Question paper
	b) Explain patient's rights in receiving nursing care		Assignment	Marking schemes
	c) Explain nurse's rights in providing nursing care		Oral questions	Assignment guide
2.3.3 Utilize knowledge and skills of advocacy to protect patient's/client's rights	a) Identify issue to be addressed in relation to advocacy of patient/client rights	2.3.3.1 Patient's/client rights are appropriately protected using knowledge and skills of advocacy	Observation of performance	Check list
	b) Develop goals and strategies to advocate patient/client rights			
	c) Develop plan for action to advocate patient/client right			

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
	d) Collaborate with other co- workers in addressing issues of client right			
2.4.1 Explain concepts of entrepreneurship as used in health care services	a) Define terms entrepreneurship, entrepreneur	2.4.1.1 Concepts related to entrepreneurship are correctly explained	Written test	Question paper Marking scheme
	b) Explain characteristics of entrepreneurship		Assignment	Assignment guide
	c) Explain roles of nursing in entrepreneurship		Oral questions	Check list
	d) Explain importance of entrepreneurship in health care services			
2.4.2 Describe business regulatory framework of Tanzania in relation to health care services	a) Define the term business regulatory authority	2.4.2.1 Business regulatory framework in Tanzania is correctly described	Written test	Question paper Marking scheme
	b) Outline the laws governing business in Tanzania		Assignment	Assignment guide
	c) Explain functions of business regulatory agencies in Tanzania (BRELLA, TRA,TIC, MIT and TBS)		Oral questions	Check list
	d) Identify areas of private practice in nursing and midwifery			
	e) Describe health care financing mechanism in Tanzania			
2.4.3 Utilize the principles of entrepreneurship to formulate business idea	a) Define business idea	2.4.3.1 Concepts of business idea are correctly explained	Written test	Question paper Marking scheme
	b) Explain steps of formulating business idea		Assignment	Assignment guide
			Oral questions	Check list

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
	c) Formulate a business idea	2.4.3.2 Business idea formulated	– Assignment	– Assignment guide
2.4.4 Develop business plan for health services using skills of entrepreneurship	a) Define the term business plan	2.4.4.1 Element and process of developing business are correctly described	Written test	Question paper Marking scheme
	b) Explain elements of a business plan		Assignment	Assignment guide
	c) Explain steps in developing business plan		Oral questions	Check list
	d) Formulate a business plan	2.4.4.2 Business plan is properly formulated	– Assignment	– Assignment guide
2.4.5 Design plan for cost sharing in relation to health services	a) Explain concept of cost sharing	2.4.5.1 Plan for soliciting funds in health care facility is correctly explained	Written test	Question paper Marking scheme
	b) Explain reasons for cost sharing		Assignment	Assignment guide
	c) Explain benefit and challenges of cost sharing		Oral questions	Check list
	d) Identify different financing mechanism for health care			
	e) Formulate a plan for collecting funds in health care setting	2.4.5.2 Plan for cost sharing is designed	Assignment	Assignment guide
3.1.1. Explain professional, legal and ethical principles related to nursing and midwifery practice	a) Define the terms nursing, patient and care.	3.1.1.1. Professional and ethical principles relevant to nursing practice are correctly explained.	Written test	Question paper Marking scheme
	b) Explain functions and roles of a nurse		Assignment	Assignment guide
	c) Explain qualities of professional nurse		Oral questions	Check list
	d) Explain historical background of nursing in Tanzania			
	e) Explain four elements of code of ethics for nurses			

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
	f) Explain moral principles applied in nursing practice			
3.1.2. Utilize legislation guidelines in providing nursing and midwifery care	a) Define the common terms related to legislation in nursing practice	3.1.2.1 Legislation and registration guidelines are correctly explained	Written test	Question paper Marking scheme
	b) Explain the importance of legislation in nursing practice		Assignment	Assignment guide
	c) Describe nursing legislation guideline in Tanzania		Oral questions	Check list
	d) Utilize legislation guideline in nursing practice	3.1.2.2 Legislation guidelines are utilized in providing nursing care	Observation of performance Assignments	Checklist Assignment guide
3.1.3. Apply ethical principles in nursing and midwifery practice	a) Demonstrate beneficence and non-maleficence during nursing care	3.1.3.1 Ethical principles are utilized in providing nursing care	Observation of performance	Check list
	b) Demonstrate truthfulness to patients and co-workers during nursing practice			
	c) Practice confidentiality during nursing practice			
	d) Demonstrate respect for autonomy during nursing care			
	e) Demonstrate respect for autonomy during nursing care			
	f) Demonstrate justice during nursing care			
3.2.1. Explain concepts of pharmacology related to medicine	a) Define terms; (pharmacology, pharmacokinetics, pharmacodynamics, medicine, dose, dosage,	6.2.2.1 Basic concepts of pharmacology are explained	Written tests	Question papers Marking scheme

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
administration	tolerance, agonist, antagonist, therapeutics, hypersensitivity, prescription, side effects, habituation, therapeutic index, bio-availability, first pass effect, half-life, generic name, trade name)		Assignments	Assignment guides
	b) Identify sources of medicine (plant, animal, mineral, synthetic sources)		Oral questioning	Checklist
	c) Explain forms of medicine preparations (powder, suspensions, mixture, capsules, infusions, ointments, pills, suppositories, tablets, tinctures, syrup, lozenges)			
	d) Explain factors affecting bio-availability of medicine			
6.2.3 Describe common analgesics, anaesthetics, anti-inflammatory and steroids used in managing pain and inflammation	a) Define analgesics, anaesthetics, anti-inflammatory and steroids	6.2.3.1 Common analgesics, anaesthetics anti-inflammatory and steroids are correctly described	Oral questioning	Checklist
	b) Identify common analgesics, anaesthetics anti-inflammatory and steroids		Written tests	Question papers and marking scheme
	c) Explain pharmacodynamics of common analgesics, anaesthetics anti-inflammatory and steroids		Assignments	Assignment guides
	d) Explain mechanism of action of analgesics, anaesthetics anti-inflammatory and steroids			

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
	e) Explain side effects of common analgesics, anaesthetics, anti-inflammatory and steroids f) Explain management of side effects of common analgesics, anaesthetics anti-inflammatory and steroids			
6.2.4 Describe common antibacterial, antifungal, anti-helminthic, anti-viral and anti-malarial used in the treatment of patients with bacterial, fungal, viral and malaria infections	a) Define antibacterial, antifungal, anti-helminthic, anti-viral and antimalarial b) Identify common antibacterial, anti-fungal, anti-helminthic, anti-viral and antimalarial c) Explain pharmacodynamics of common antibacterial, antifungal, anti-helminthic, anti-viral and antimalarial d) Explain mechanism of action of common antibacterial, antifungal, anti-helminthic , anti-viral and anti-malarial e) Explain side effects of common antibacterial, antifungal, anti-helminthic, anti-viral and anti-malarial f) Explain management of side effects of common antibacterial, antifungal, anti-helminthic, anti-viral and antimalarial	6.2.4.1 Common Antibacterial, Antifungal, anti-helminthic, anti-viral and anti-malarial are correctly described	Oral questioning Written tests Assignments	Checklists Question papers and marking scheme Assignment guides

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
3.2.4 Describe common anti-hypertensive, anti-diabetics and anticoagulants used in the treatment of patients with hypertension, diabetes and blood coagulation disorders	a) Define anti-hypertensive, anti-diabetics and anticoagulants	3.2.4.1 Common antihypertensive, anti-diabetics and anticoagulants are correctly described	Oral questioning	Checklists
	b) Identify common beta blockers, diuretics, vasodilators, medicine acting on heart muscles anti-diabetics and anticoagulants		Written tests	Question papers and marking scheme
	c) Explain pharmacodynamics of common beta blockers, diuretics, vasodilators, medicine acting on heart muscles, anti-diabetics and anticoagulants		Assignments	Assignment guides
	d) Explain mechanism of action of common beta blockers, diuretics, vasodilators, medicine acting on heart muscles, anti-diabetics and anticoagulant			
	e) Explain side effects of common beta blockers, diuretics, vasodilators, drug acting on heart muscles, antidiabetics and anticoagulant			
	f) Explain management of side effects of common beta blockers, diuretics, vasodilators, drug acting on heart muscles, antidiabetics and anticoagulant			
3.2.5 Describe emetics, anti-emetics, anti-acids anticholinergic, anti-helminthic, anti-asthmatic, anti-tuberculosis	a) Define emetics, anti-emetics, anti-ulcers, anticholinergic, ant asthmatic and cough remedies	3.2.5.1 Emetics, anti-emetics, anti-ulcers, anticholinergic ant asthmatic, anti-tuberculosis and cough	Oral questioning	Checklists
	b) Identify common emetics, anti-emetics , anti-ulcers,		Written tests	Question papers and marking scheme

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
and cough remedies used in the treatment of patients with disorder of GIT and respiratory systems	anticholinergic anti-asthmatics, anti-tuberculosis and cough remedies	remedies, are correctly described	Assignments	Assignment guides
	c) Explain pharmacodynamics of common emetics, antiemetic, anti-ulcers, anticholinergic anti asthmatic and cough remedies			
	d) Explain mechanism of action of common emetics, antiemetic, anti-ulcers, anticholinergic anti asthmatic and cough remedies			
	e) Explain side effects of common emetics, antiemetic, anti-ulcers, anticholinergic			
	f) Explain management of side effects of common emetics, antiemetic, anti-ulcers, cholinergic anti asthmatic and cough remedies			
3.2.6 Describe antipsychotics, antidepressant, anticonvulsants, hypnotics and anxiolytic used in the treatment of patients with mental disorders	a) Define antipsychotics, antidepressant, hypnotics anticonvulsants and anxiolytics	3.2.6.1 Antipsychotics, antidepressant, anticonvulsants hypnotics and anxiolytic are correctly described	Oral questioning	Checklists
	b) Identify common antipsychotics, antidepressant, hypnotics anticonvulsants and anxiolytics		Written tests	Question papers and marking scheme
			Assignments	Assignment guides

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
	c) Explain pharmacodynamics of common antipsychotics, antidepressant, hypnotics anticonvulsants and anxiolytics			
	d) Explain mechanism of action of common antipsychotics, antidepressant, hypnotics anticonvulsants and anxiolytics			
	e) Explain side effects of common antipsychotics, antidepressant, hypnotics anticonvulsants and anxiolytics			
	f) Explain management of side effects of common antipsychotics, antidepressant, hypnotics anticonvulsants and anxiolytics			
3.2.7 Describe medicines used in the treatment of cancer	a) Define anticancer b) Identify common anti-cancer c) Explain pharmacodynamics of common anticancer d) Explain mechanism of action of common anticancer e) Explain side effects of common anti-cancer	3.2.7.1 Medicines used in the treatment of cancer are correctly described	Oral questioning Written tests Assignments	Checklists Question papers and marking scheme Assignment guides

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
	f) Explain management of side effects of common anti-cancer			
3.2.8 Apply principles of medicine administration during medication	a) Describe role of nurse in administration of medicine	3.2.8.1 Concepts of drug administration correctly explained	Oral questioning	Checklists
	b) Describe routes of medicine administration		Written tests	Question papers and marking scheme
	c) Explain factors to consider in medicine administration		Assignments	Assignment guides
	d) Outline principles of medicine administration			
	e) Calculate medicine doses according to pharmacological knowledge	3.2.8.2 Administered medicines according to principles of medicine administration	Observation of performance	Check list
	f) Identify components of prescription			
	g) Prescribe medicine according to guidelines and protocols			
	h) Administer medicines			
3.3.1. Explain basic concepts of anatomy and physiology in relation to human body	a) Define the terms anatomy and physiology	3.3.1.1. Concepts of anatomy and physiology of human body are correctly explained	Oral questioning	Checklists
	b) Identify organization of the body as a whole		Written tests	Question papers and marking scheme
	c) Describe human cell			
	d) Identify human body tissues		Assignments	Assignment guides
	e) Identify functions of the body parts			
	f) Explain the interactions between human body structure and functions			
	g) Identify different human body systems			

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
3.3.2 Describe respiratory, digestive and cardiovascular systems using knowledge of anatomy and physiology	a) List organs forming respiratory, digestive and cardiovascular systems, and special senses	3.3.2.1 Respiratory, digestive and cardiovascular system are correctly described	Oral questioning	Checklists
	b) Describe anatomy of, respiratory, digestive and cardiovascular systems		Written tests	Question papers and marking scheme
	c) Describe physiology of respiratory, digestive and cardiovascular systems		Assignments	Assignment guides
3.3.3 Describe musculoskeletal, urinary and reproductive systems using knowledge of anatomy and physiology	a) List organs forming musculoskeletal, urinary and reproductive systems	3.3.3.1 Musculoskeletal, urinary and reproductive systems are properly described	Oral questioning	Checklists
	b) Describe anatomy musculoskeletal, urinary and reproductive systems		Written tests	Question papers and marking scheme
	c) Describe physiology of musculoskeletal, urinary and reproductive systems		Assignments	Assignment guides
3.3.4 Describe nervous, endocrine, lymphatic-immune systems and special senses using knowledge of anatomy and physiology	a) List organs forming nervous, endocrine, lymphatic-immune systems and special senses,	3.3.4.1 Nervous, endocrine, lymphatic-immune systems and special senses are correctly described	Oral questioning	Checklists
	b) Describe anatomy of nervous, endocrine, lymphatic-immune systems and special senses		Written tests	Question papers and marking scheme
	c) Describe physiology of nervous, endocrine, lymphatic-immune systems and special senses		Assignments	Assignment guides
3.4.1. Explain concepts of biochemistry in	a) Define biochemistry, atom, molecules, elements, compounds, acids alkali, mixture,	3.4.1.1. Concepts of biochemistry are correctly explained	Oral questioning	Checklists

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
relation to human body biochemical functions	solution, solute, solvents, vitamins, and pH		Written tests	Question papers and marking scheme
	b) Describe vitamins		Assignments	Assignment guides
	c) Explain common disorders related to deficiency of vitamins			
3.4.2. Explain functions of macromolecules in relation to human body	d) Explain functions of carbohydrates	3.4.2.1 Functions of macromolecules are correctly described	Oral questioning	Checklists
	e) Explain functions of proteins		Written tests	Question papers and marking scheme
	f) Explain functions of lipids		Assignments	Assignment guides
	g) Explains functions of Nucleic acids (DNA and RNA)			
3.4.3. Describe human body enzymes, co-enzymes, fluids, and electrolytes in relation to human body function	a) Describe functions of enzymes and co enzymes	3.4.3.1 Human body enzymes, fluids, electrolytes are correctly described	Oral questioning	Checklists
	b) Explain negative and positive feedback mechanism		Written tests	Question papers and marking scheme
	c) Differentiate between the intracellular and extracellular fluid		Assignments	Assignment guides
	d) Describe the homeostatic mechanism responsible for fluid regulation			
	e) Describe major functions of electrolytes in the body			
	f) Differentiate between freely permeable and selective permeable membranes			
	g) Explain acid – base balance as relate to homeostasis			
3.4.4. Provide care to patient with fluid and electrolyte imbalance using	a) Identify factors affecting fluid and electrolyte balance	3.4.4.1 Care of the patients with fluid and electrolyte imbalance is provided	Observation of performance	Check list
	b) Collect assessment data related to fluids and electrolyte imbalances			

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
knowledge of biochemistry	c) Teach client measures to maintain fluid and electrolyte balance			
3.5.1. Describe concepts of Parasitology and entomology in relation to human infections and infestations	a) Define parasite, parasitology, host, vector, definitive host, intermediate host, reservoir, entomology, ecto-parasites, endo parasites	3.5.1.1 Concepts of parasitology and entomology are correctly explained	Oral questioning	Checklists
	b) Describe relationship between parasite and host (commensalism, symbiosis, mutualism)		Written tests	Question papers and marking scheme
	c) Classify parasites of medical important		Assignments	Assignment guides
	d) Explain the effect of parasites in the host			
3.5.2. Describe common protozoa which cause human diseases	a) Define protozoa	3.5.2.1 Common protozoa which cause diseases are correctly described	Oral questioning	Checklists
	b) Classify protozoa of medical importance		Written tests	Question papers and marking scheme
	c) Identify common protozoa of medical importance (plasmodium, trypanosomes Entamoeba histolytica, Giardia lamblia, and balantidium coli, trichomonas vaginalis, cryptosporidium, microsporidium, isospora)		Assignments	Assignment guides
	d) Describe life cycle of common protozoa of medical importance			
	e) Describe characteristics of common protozoa			
3.5.3. Describe common nematodes which cause diseases in	a) Define nematodes	3.5.3.1 Common nematodes which cause diseases in human body	Oral questioning	Checklists
	b) Classify nematodes of medical importance		Written tests	Question papers and
	c) Identify common nematodes of medical importance (enterobius,			

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
human body	trichuris, ascaris, strongyloides, onchocerca, ancylostoma and necator americanus, trichinella)	are correctly described	Assignments	marking scheme Assignment guides
	d) Describe life cycle of common nematodes of medical important			
	e) Describe characteristics of common nematodes			
3.5.4. Describe common trematodes which cause diseases in human body	a) Define trematodes	3.5.4.1 Common trematodes which cause diseases in human body are correctly described	Oral questioning	Checklists
	b) Identify common trematodes of medical importance)		Written tests	Question papers and marking scheme
	c) Describe life cycle of common trematodes of medical importance		Assignments	Assignment guides
	d) Describe characteristics of common trematodes			
3.5.5. Describe common cestodes which cause diseases in human body	a) Define cestodes	3.5.5.1 Common cestodes which cause diseases in human body are correctly described	Oral questioning	Checklists
	b) Identify common cestodes of medical importance (Taenia solium and Taenia saginata)		Written tests	Question papers and marking scheme
	c) Describe life cycle of common cestodes of medical importance		Assignments	Assignment guides
	d) Describe characteristics of common cestodes			
3.5.6. Describe vectors which transmit diseases to human body	a) Identify vectors of medical importance (mosquitoes, tsetse fly, fleas,	3.5.6.1 Vectors which transmit diseases to human body are correctly described	Oral questioning	Checklists
	b) Explain life cycle of common vectors		Written tests	Question papers and marking scheme
	c) Identify measure to control common vectors		Assignments	Assignment guides
3.5.7. Describe ecto-parasites causing diseases to human body	a) Identify common ecto-parasites (lice, ticks, bed bugs, fleas, and flies)	3.5.7.1 Ecto-parasite which cause diseases to	Oral questioning Written tests	Checklists Question

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
	b) Explain the effect of ecto-parasites c) Explain preventions of ecto-parasites	human body are correctly described	Assignments	papers and marking scheme Assignment guides
3.6.1. Describe nursing theories, models and nursing process in providing care	a) Define models, nursing theory and nursing process	3.6.1.1 Nursing theories/ models and nursing process are correctly described	Oral questioning	Checklists
	b) Describe health service delivery system in Tanzania		Written tests	Question papers and marking scheme
	c) Differentiate frame work for care (team nursing, functional nursing, case management, patient focused care and primary nursing)		Assignments	Assignment guides
	d) Explain roles of nursing theory (education, research and clinical practice)			
	e) Explain Metaparadigm for nursing (person/ client, health, environment and Nursing			
	f) Explain selected theories/Model in nursing practice (Florence Nightingale theory, Orem's theory of self-care, Roy's adaptation theory, Imogene King's goal attainment theory, Virginia Henderson-Need theory, Faye Glenn Abdellah's)			
	g) Use nursing theories/model in providing basic nursing care.	3.6.1.2 Theories and models of nursing are correctly	Observation of performance	Check list

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
		utilized in provision basic nursing care		
	h) Outline importance of nursing process	3.6.1.3 Concepts of nursing process are correctly explained	Oral questioning	Checklists
	i) Explain components of nursing process		Written tests	Question papers and marking scheme
			Assignments	Assignment guides
	j) Assess client's objective and subjective data(history taking, physical examination, vital signs)	3.6.1.4 Nursing process is correctly utilized in provision of nursing care	Observation of performance	Check list
	k) Formulate nursing diagnosis			
	l) Develop plan of care			
	m) Implement patient/client care			
	n) Evaluate patient/client care			
3.6.2. Provide care to patient with hygienic needs using nursing process	a) Define basic nursing procedures for personal hygienic needs (bathing and skin care, care of the mouth, care of the hair, nails and feet, care of the eye, ear and prostheses and bed making)	3.6.2.1 Concepts of hygienic procedure are correctly explained	Oral questioning	Checklists
	b) Explain purposes for each personal hygienic procedure (bathing and skin care, care of the mouth, hair nails and feet eye, ear and prostheses and bed making)		Written tests	Question papers and marking scheme
			Assignments	Assignment guides

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
	c) Outline principles guiding each personal hygienic procedure (bathing and skin care, care of the mouth, hair nails and feet, eye, ear and prostheses and bed making)			
	d) Identify equipment /supplies for each personal hygienic procedure (bathing and skin care, care of the mouth, care of the hair nails and feet, care of the eye, ear and prostheses and bed making)			
	e) Describe steps guiding each personal hygienic procedure (bathing and skin care, care of the mouth, care of the hair nails and feet, eye, ear, prostheses and bed making)			
	f) Provide personal hygienic care	3.6.2.2	Observation of performance	Check list
3.6.3. Provide care to patient with elimination needs using nursing process	a) Identify basic nursing procedures for a client with elimination needs	3.6.3.1	Oral questioning	Checklists
	b) Explain purposes of each basic nursing procedures for a client with elimination needs (measuring and recording intake and output, giving and removing bedpans and urinal bottles, offering catheterization and removing sputum mug routine indwelling catheter care)		Written tests Assignments	Question papers and marking scheme Assignment guides

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
	c) Identify equipment /supplies for each elimination procedure (measuring and recording intake and output, giving and removing; bedpans, urinal bottles, sputum mug and catheter)			
	d) Perform basic nursing procedures for a client with elimination needs (measuring and recording intake and output, giving and removing bedpans and urinal bottles, catheterization and routine indwelling catheter care)	3.6.3.2 Nursing care for a client with elimination needs is provided	Observation of performance	Check list
3.6.4. Provide care to patients with nutritional needs using knowledge and skills of nutrition	a) Explain concepts of nutritional needs	3.6.4.1 Concepts of nutritional needs of a patient correctly explained	Oral questioning	Checklists
	b) Identify equipment /supplies for assisting oral feeding and nasogastric feeding		Written tests	Question papers and marking scheme
			Assignments	Assignment guides
	a) Assist helpless client in oral feeding	3.6.4.2 Nursing care to patient with nutritional needs are correctly provided using knowledge and skills of nutrition	Observation of performance	Check list
	b) Insert nasogastric tube for feeding			
	c) Feed the client using nasal gastric tube			

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
3.6.5. Provide care to patients with pain, wound and limited mobility using nursing process	a) Define pain, wound, body alignment, body mechanics and immobility	3.6.5.1 Concepts related to pain, wound and limited mobility are correctly explained	Oral questioning	Checklists
	b) Identify causes of pain			
	c) Outline types of pain		Written tests	Question papers and marking scheme
	d) Explain the impact of chronic pain			
	e) Outline types of wound		Assignments	Assignment guides
	f) Explain purposes of wound dressing			
	g) Explain process of wound healing			
	h) Identify factors influencing wound healing			
	i) Describe normal body alignments for standing, sitting and lying.			
	j) Explain purposes of maintaining body mechanics			
	k) Explain principles used in body mechanics			
	l) Describe common positions used in caring patients			
	m) Identify risk factors for a pressure ulcer and foot drop			
	n) Describe measures to prevent pressure sores			
	o) Assess patients for pain, wound and limited mobility	3.6.5.2 Nursing care to patient with pain, wound and limited mobility are correctly provided	Observation of performance	Check list
	p) Position patient in bed			
	q) Provide pharmacological and non-pharmacological interventions for pain management.			
	r) Assist patient with limited mobility			
	s) Lift a patient /to/from bed, stretcher/wheel chair			

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
3.6.6. Admit, transfer and discharge patients in the health facility using standards and protocols.	a) Define the terms admission, transfer, and discharge	3.6.6.1 Terms admission, transfer and discharge are correctly explained	Oral questioning	Checklists
	b) Identify types of admission, transfer and discharge		Written tests	Question papers and marking scheme
	c) outline the purpose of admitting patient to health facility		Assignments	Assignment guides
	d) Explain procedure for admission, transfer and discharge of patient			
	e) Admit patient	3.6.6.2 Patients are admitted, transferred and discharged as per health facility standards and protocols	Observation of performance	Check list
	f) Transfer patient			
	g) Discharge patient			
3.6.7. Provide care to older people according to their needs and problems	a) Define geriatric nursing care	3.6.7.1 Concepts of care to older people are correctly explained	Oral questioning	Checklists
	b) Describe principles of geriatric nursing care		Written tests	Question papers and marking scheme
	c) Identify common conditions affecting older people			
	d) Explain roles of the nurse in provision of geriatric care		Assignments	Assignment guides
	e) Protect rights of privacy, dignity and wellbeing of the older people	3.6.7.2 Nursing care to older people are provided correctly	Observation of performance	Check list
	f) Provide nursing care to older people			
3.6.8. Provide end of life care to patients by	a) Define death and response of dying	3.6.8.1 Concept of end of life care are	Oral questioning	Checklists
	b) Explain response of dying and death			

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
adhering to ethical principles and protocols	c) Outline the signs of the dying patient	correctly explained	Written tests	Question papers and marking scheme
	d) Identify needs of the dying patient		Assignments	Assignment guides
	e) Explain physiology of dying and changes of the body after death			
	f) Provide palliative care to a dying patient	3.6.8.2 End of life care to patients are correctly provided by adhering to ethical principles	Observation of performance	Check list
	g) Provide care to the dead body (last office)			
4.1.1 Explain concepts of first aid in relation to emergency care	a) Define common terms used in first aid (first aid, casualty, first aider, first aid kit)	4.1.1.1 Concepts of first aid are correctly explained	Oral questioning	Checklists
	b) Outline purposes of first aid		Written tests	Question papers and marking scheme
	c) Explain first aid priorities			
	d) Identify tools/equipment in first aid kit		Assignments	Assignment guides
	e) Explain principles of first aid			
4.1.2 Describe cardiopulmonary resuscitation according to protocols and guidelines	a) Define cardiopulmonary emergency, cardiac arrest, respiratory arrest	4.1.2.1 Concepts of cardiopulmonary emergency are correctly described	Oral questioning	Checklists
	b) Describe cardiopulmonary resuscitation(CPR)		Written tests	Question papers and marking scheme
	c) Identify types of CPR			
	d) Identify causes of cardiopulmonary arrest		Assignments	Assignment guides
4.1.3 Provide first aid to patient with cardiopulmonary emergency using ABC approach	a) Describe different resuscitation techniques	4.1.3.1 First aid to patient with cardiopulmonary emergency is provided correctly	Observation of performance	Check list
	b) Perform resuscitation to adult			
	c) Perform resuscitation to children			

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
4.2.1 Provide care to patients/client with lacerations, strains, sprains, fractures and dislocations using principles of first aid	a) Define terms laceration, strain, sprains, fractures and dislocations	4.2.1.1 First aid concepts of managing laceration, sprains, fractures and dislocations are properly explained	Oral questioning	Checklists
	b) Identify types of fractures		Written tests	Question papers and marking scheme
	c) Explain common causes of laceration, strains sprains, fractures and dislocations		Assignments	Assignment guides
	d) Describe sign and symptoms of lacerations, strains sprains, fracture and dislocations			
	e) Describe techniques in providing first aid to patients with lacerations, strains sprains, fractures and dislocations			
	f) Employ first aid techniques in managing causality with lacerations, strains sprains, fractures and dislocations	4.2.1.2 First aid to patients with lacerations, strains sprains, fractures and dislocations emergency is provided	Observation of performance	Check list
4.2.2 Provide care to patient with head injury using principles of first aid	a) Define head injury	4.2.2.1 Principles of first aid are head injury are properly explained	Oral questioning	Checklists
	b) Identify types of head injury		Written tests	Question papers and marking scheme
	c) Explain signs and symptoms of head injury		Assignments	Assignment guides

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
	d) Assess level of consciousness using Glasgow coma scale. e) Describe different techniques in providing first aid to patients with head injury f) Use first aid techniques in managing patients with head injury	4.2.2.2 First aid to patients with head injury is properly provided	Observation of performance	Check list
4.2.3 Provide care to patient with eye injury using principles of first aid	a) Define eye injury b) Describe types of eye injuries (corneal abrasion, corneal perforation, chemical burns to the eye) c) Explain causes of eye injuries d) Identify signs and symptoms of eye injury e) Describe techniques in providing first aid to patients with eye injuries f) Use first aid techniques in managing patient with eye injury	4.2.3.1 First aid concepts of managing patients with eye injuries are properly described 4.2.3.2 First aid to patients with eye injuries is provided	Oral questioning Written tests Assignments	Checklists Question papers and marking scheme Assignment guides Check list
4.2.4 Provide care to patient with foreign body using principles of first aid	a) Define foreign body b) Explain sign and symptom of foreign body in the eye, ear, nose and skin c) outline causes of foreign body in the eye, ear, nose and skin d) Describe techniques in providing first aid to patient with foreign body e) Use first aid techniques in managing patient with foreign body	4.2.4.1 First aid concepts of managing patients with foreign body are correctly described 4.2.4.2 First aid to patients with foreign body is properly provided	Oral questioning Written tests Assignments	Checklists Question papers and marking scheme Assignment guides Check list

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
4.2.5 Provide care to patient with burn using principles of first aid	a) Define burn and scalds	4.2.5.1 Concepts of first aid to patients with burns are correctly described	Oral questioning Written tests	Checklists Question papers and marking scheme
	b) Identify types of burns			
	c) Assess the degrees of burns	4.2.5.2 First aid to patients with burns is provided	Observation of performance	Assignment guides Check list
	d) Describe different techniques in providing first aid to casualty with burn			
	e) Give first aid techniques in managing patients/client with burn			
4.3.1 Provide care to patient with food poisoning using principles of first aid	a) Define food poisoning	4.3.1.1 Concepts food poisoning are correctly described	Oral questioning Written tests	Checklists Question papers and marking scheme
	b) Identify types of food poisoning			
	c) Identify signs and symptoms of a patient with food poisoning			
	d) Utilize first aid techniques in managing patients with food poisoning	4.3.1.2 First aid techniques in managing patients with food poisoning are performed	Observation of performance	Assignment guides Check list
4.3.2 Provide care to patient with bites and stings using principles of first aid	a) Differentiate types of bites and stings	4.3.2.1 First aid to patients with bites and stings are correctly	Oral questioning Written tests	Checklists Question papers and
	b) Explain the signs and symptoms of patients with animal bite, snake bite and insect stings			

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
	c) Describe different techniques in providing first aid to patients with bites and stings	described	Assignments	marking scheme Assignment guides
	d) Give first aid to patients with bites and stings	4.3.2.2 First aid to patients with bites and stings is provided	Observation of performance	Check list
4.3.3 Provide care to patient with chemical poisoning using principles of first aid	a) Define chemical poisoning	4.3.3.1 Concepts of chemical poisoning are correctly described	Oral questioning	Checklists
	b) Explain types of chemical poisoning		Written tests	Question papers and marking scheme
	c) Describe chemical poisoning by ingestion, inhalation and injection		Assignments	Assignment guides
	d) Identify signs and symptoms of patient with chemical poisoning			
	e) Describe common household poisons.			
	f) Utilize first aid techniques in managing patients with chemical poisoning	4.3.3.2 First aid techniques in managing patients with chemical poisoning are utilized	Observation of performance	Check list
4.4.1 Provide care to patient with anaphylactic shock using principles of first aid	a) Define anaphylactic shock	4.4.1.1. Concepts of anaphylactic shock are correctly described	Oral questioning	Checklists
	b) Explain sign and symptoms of anaphylactic shock		Written tests	Question papers and marking scheme
	c) Describe techniques in providing first aid to patients with anaphylactic shock		Assignments	Assignment guides

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
	d) Demonstrate skills in caring patients with anaphylactic shock	4.4.1.2. Skills for caring patients with anaphylactic shock are demonstrated	Observation of performance	Check list
4.4.2 Provide care to patients with cardiogenic shock using principles of first aid	a) Define cardiogenic shock	4.4.2.1 Concepts of cardiogenic shock are correctly described	Oral questioning	Checklists
	b) outline signs and symptoms of cardiogenic shock		Written tests	Question papers and marking scheme
	c) Describe techniques in providing first aid to patients/client with cardiogenic shock		Assignments	Assignment guides
	d) demonstrate skills in caring patients with cardiogenic shock	4.4.2.2 Skills of caring patients with cardiogenic shock are demonstrated	Observation of performance	Check list
4.4.3 Provide care to patient with hypovolemic shock using principles of first aid	a) Define hypovolemic shock	4.4.3.1 First aid to patients/client with hypovolemic shock are correctly described	Oral questioning	Checklists
	b) outline sign and symptoms of hypovolemic shock		Written tests	Question papers and marking scheme
	c) Describe techniques in providing first aid to patient with hypovolemic shock		Assignments	Assignment guides
	d) Demonstrate skills in caring patients with hypovolemic shock	4.4.3.2 Skills of caring patients with hypovolemic shock are demonstrated	Observation of performance	Check list
4.4.4 Provide care to patient with neurogenic shock using principles of first aid	a) Define neurogenic shock	4.4.4.1 First aid to patients/client with neurogenic shock are correctly described	Oral questioning	Checklists
	b) outline sign and symptoms of neurogenic shock		Written tests	Question papers and marking scheme
	c) Describe techniques in providing first aid to			

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
	patients/client with neurogenic shock		Assignments	Assignment guides
	d) Demonstrate skills in caring patients/client with neurogenic shock	4.4.4.2 Skills of caring patients with neurogenic shock are demonstrated	Observation of performance	Check list
4.5.1 Explain concepts of disaster management and emergency preparedness practice	a) Define emergency, disaster and emergency preparedness b) Explain types of disaster (natural, manmade) c) Explain nurse's role in emergency and disaster (assesses, diagnose, plan, implement disaster plan and evaluate)	4.5.1.1 Concept of disaster and emergency preparedness are correctly explained	Oral questioning Written tests Assignments	Checklists Question papers and marking scheme Assignment guides
4.5.2 Provide care to patients during emergency using principles of disaster management	a) Explain triage system in emergency and disaster b) Explain the principle of assessment in emergency care and disaster c) Describe phases of disaster d) Demonstrate skills in caring patient in disaster and emergency	4.5.2.1 Concepts of disasters and emergency preparedness are correctly described 4.5.2.2 Skills for caring patient with disaster and emergency are demonstrated	Oral questioning Written tests Assignments Observation of performance	Checklists Question papers and marking scheme Assignment guides Check list
4.5.3 Prevent disasters using knowledge and skills of emergency preparedness	a) Define terms prevention, protection, mitigation, response and recovery b) Explain the role of nurse in emergency preparedness and disaster management	4.5.3.1 Concepts of emergency preparedness are correctly explained	Oral questioning Written tests	Checklists Question papers and marking scheme

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
			Assignments	Assignment guides
	c) Plan for emergency preparedness	4.5.3.2 Disasters are prevented correctly using knowledge and skills of emergency preparedness.	Observation of performance	Check list
	d) Identify effects of disaster			
	e) Respond to the effects of disaster			
5.1.1 Describe components and accessory of a computer and their functions in relation to basic computer operations	a) Define the term computer b) Explain characteristics of a computer c) Explain classification of computer by size and power d) Describe the main parts of the computer(process, input, output storage) e) Distinguish between hardware and software f) Differentiate between computer application programs and operating systems g) Describe accessories of the computer h) Explain functions of computer parts and accessories	5.1.1.1 Components and accessories of a computer and their functions are correctly described	Oral questioning Written tests Assignments	Checklists Question papers and marking scheme Assignment guides
5.1.2 Perform basic computer operations using knowledge and skills of computer technology	a) Perform computer connections and start up b) Identify graphical user interface(GUI) c) Explain computer file d) Perform file management e) Transfer file from computer to removable disks	5.1.2.1 Basic computer operations are performed according to procedures	Oral questioning Written tests Assignments	Checklists Question papers and marking scheme Assignment guides

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
5.1.3 Utilize word processing application in preparing reports	a) Define word processing application(Microsoft word)	5.1.3.1 Microsoft Word application is correctly explained	Oral questioning	Checklists
	b) Explain features of Microsoft word		Written tests	Question papers and marking scheme
			Assignments	Assignment guides
	c) Open word processing application	5.1.3.2 Word processing application is utilized correctly	Observation of performance	Check list
	d) Create and format a word document			
	e) Open and save document			
	f) Print document			
5.1.4 Utilize spread sheet application in processing health data	a) Define common terms used in spread sheet application (Microsoft excel, workbook, worksheet, active cell, formula bar, Name box)	5.1.4.1 Spread sheet application is correctly identified	Oral questioning	Checklists
	b) Explain features of Microsoft excel		Written tests	Question papers and marking scheme
			Assignments	Assignment guides
	c) Open spread sheet application(Microsoft excel)	5.1.4.2 Spread sheet application is utilized	Observation of performance	Check list
	d) Enter data in excel worksheet			
	e) Perform simple calculation			
	f) Manipulate data			
5.1.5 Utilize power point application in preparing health information presentations	a) Define term Microsoft PowerPoint	5.1.5.1 Microsoft PowerPoint application is correctly explained	Oral questioning	Checklists
	b) Explain features of Microsoft PowerPoint		Written tests	Question papers and marking

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
			Assignments	scheme Assignment guides
	c) Create slide for presentation	5.1.5.2 Power point application is utilized correctly	Observation of performance	Check list
	d) Perform PowerPoint presentation			
5.1.6 Utilize Microsoft publisher application in preparing health publications	a) Define the term Microsoft publisher	5.1.6.1 Microsoft publisher is correctly explained	Oral questioning	Checklists
	b) Explain features of Microsoft Publisher		Written tests	Question papers and marking scheme
			Assignments	Assignment guides
	c) Design brochures, flyers and posters	5.1.6.2 Microsoft publisher application is utilized	Observation of performance	Check list
	d) Print brochures flyers and posters			
5.1.7 Utilize Microsoft access application in keeping health data	a) Define the terms used in Microsoft access (database, report, data, table, field)	5.1.7.1 Microsoft access application is correctly explained	Oral questioning	Checklists
	b) Explain features of Microsoft access		Written tests	Question papers and marking scheme
			Assignments	Assignment guides
	c) Open and Create simple data base	5.1.7.2 Microsoft Access application is utilized	Observation of performance	Check list
	d) Enter data into a simple created database			
	e) Create simple report from a database			
5.1.8 Communicate and search health information using basic	a) Define common terms used in computer communication (computer network, internet and email)	5.1.8.1 Computer communication and search engine are	Oral questioning Written tests	Checklists Question

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
computer operation	b) Outline importance of using e-mail in communication	correctly explained	Assignments	papers and marking scheme
	c) Explain different search engine and online database used to search health information			Assignment guides
	d) Search health information using search engines and online databases(Google, WHO and MOHCDGEC database)	5.1.8.2 Basic computer operation in communicating and searching health information are performed	Observation of performance	Check list
	e) Create an e-mail account			
	f) Receive e-mails			
	g) Create and send e-mails			
	h) Attach files to an e-mail message			
5.2.1 Describe methods of keeping records related to health	a) Define health record	5.2.1.1 Methods of health record keeping are correctly described	Oral questioning	Checklists
	b) Differentiate between manual and electronic methods of record keeping			
	c) Explain factors influencing choice of method of record keeping		Written tests	Question papers and marking scheme
	d) List advantages and disadvantages of manual and electronic record keeping			
5.2.2 Differentiate tools used in keeping medical records	a) List tools used in keeping medical records	5.2.2.1 Tools used in keeping health records correctly differentiated	Oral questioning	Checklists
	b) Explain components of medical records			
	c) Explain uses of tools used in keeping medical record		Written tests	Question papers and marking scheme
			Assignments	Assignment guides

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
5.2.3 Utilize documentation skills in recording and keeping client health information	a) Define documentation	5.2.3.1 Client documentation is correctly explained	Oral questioning	Checklists
	b) Explain principles of documenting client records		Written tests	Question papers and marking scheme
	c) Explain responsibility of nurse in documenting client information		Assignments	Assignment guides
	d) Fill patient/client records in health record tools	5.2.3.2 Client records are documented	Oral questioning	Checklists
	e) Prepare report of patient/client care		Written tests	Question papers and marking scheme
	f) Store patient /client records		Assignments	Assignment guides
	g) Retrieve information using appropriate medical record tools			
5.2.4 Use HMIS (MTUHA) to collect and report information related to health	a) Define Health Management Information System (HMIS)	5.2.4.1 Health Management Information System (MTUHA) is correctly explained	Oral questioning	Checklists
	b) Explain purpose of MTUHA in Tanzania		Written tests	Question papers and marking scheme
	c) List sources of HMIS (MTUHA) data		Assignments	Assignment guides
	d) Explain key issues in HMIS(MTUHA) system			
	e) Explain basic features and functionality of DHIS(computerized MTUHA version)			
	f) Collect data	5.2.4.2 HMIS (MTHUA) are used correctly to collect and report information	Observation of performance	Check list
	g) Fill data in MTUHA books (paper based)			
	h) Enter data in DHIS (Computerized MTUHA version)			
	i) Report health information			

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
5.3.1. Describe legal, ethical and security concepts in relation to health information management	a) Define common terms related to legal, ethical and security(privacy, confidentiality, legal, ethical, information security)	5.3.1.1 Legal, ethical and security concepts related to health information management are correctly described	Oral questioning	Checklists
	b) Explain the medico-legal principles of patient/client information		Written tests	Question papers and marking scheme
	c) Explain legal implication in handling patient/client information		Assignments	Assignment guides
	d) Describe instances in which medical records are used as legal evidence			
5.3.2. Employ security mechanism in protecting health information	a) Differentiate between confidential and non-confidential information	5.3.2.1 Information disclosure mechanism is correctly explained	Oral questioning	Checklists
	b) Explain information disclosure mechanism		Written tests	Question papers and marking scheme
	c) Establish information disclosure mechanism	5.3.2.2 Information disclosure mechanism is correctly established	Assignments	Assignment guides
5.3.3. Protect health information from physical access and damage using guidelines and standards	a) Explain physical access control of health information	5.3.3.1 Physical access control of health information is correctly explained	Observation of performance	Check list
			Oral questioning	Checklists
			Written tests	Question papers and marking scheme
			Assignments	Assignment guides

Sub enabling Outcome	Related Tasks	Assessment Criteria	Assessment Method	Assessment Instrument
	b) Limit physical access to confidential health information	5.3.3.2 Health information is protected from physical access and damage	Observation of performance	Check list
	c) Establish physical safety mechanism (fire, water, theft)			

12.2 Benchmarking for Assessment Criteria

ASSESSMENT CRITERIA	BENCHMARKING			
	The learner: has knowledge / skills of, ability to, can			
	Satisfactory	Good	Excellent	
1.1.2.1 Concepts of hand hygiene techniques are correctly explained.	Define terms hand hygiene and hand washing, outline indications for hand hygiene and describe any one (1) techniques of hand hygiene	Define terms hand hygiene and hand washing, outline indications for hand hygiene and describe any two (2) techniques of hand hygiene	Define terms hand hygiene and hand washing, outline indications for hand hygiene and describe at least three (3) techniques of hand hygiene	
1.1.2.2 Hand hygiene techniques are correctly demonstrated.	Demonstrate any one (1) hand hygiene technique	Demonstrate two (2) hand hygiene technique	Demonstrate at least (3) hand hygiene technique	
2.1.1.1 Concepts of communication are correctly explained	Define communication and effective communication and list component of communication	Define communication and effective communication, explain components of communication, and differentiate between verbal and non-verbal communication	Define communication and effective communication, explain the five components of communication, differentiate between verbal and non-verbal communication, outline modes of communication and explain factors influencing communication process	
2.1.1.2 Effective communication in providing basic nursing care are properly explained	Explain the importance of effective communication and two factors influencing effective communication	Explain the importance of effective communication four factors influencing effective communication, two skills for effective communication and two barriers for effective communication	Explain the importance of effective communication, ten factors influencing effective communication, four skills for effective communication, ten barriers for effective communication and advantage of effective communication at work place	
2.1.1.3 Effective communication skills are correctly utilized	Utilize questioning skills for effective communication	Utilize questioning, and listening skills for effective communication	Utilize questioning, observing, explaining, and listening skills for effective communication	

ASSESSMENT CRITERIA		BENCHMARKING		
		The learner: has knowledge / skills of, ability to, can		
		Satisfactory	Good	Excellent
3.1.1.1	Professional and ethical principles relevant to nursing practice explained.	Define nursing , care, ethics, moral, and patient and explain functions and roles of a nurse	Define nursing , care, ethics, moral, and patient and explain functions and roles of a nurse Explain the origin and historical background of nursing in Tanzania, and explain elements of code of ethics for nurses	Define nursing , care, ethics, moral, and patient and explain functions and roles of a nurse, explain the origin and historical background of nursing in Tanzania, and explain elements of code of ethics for nurses and explain moral principles applied in nursing practice
3.1.2.1	Legislation and guidelines in providing basic nursing care correctly explained	Define legislations, guidelines, health policy, procedures and explain importance of legislation in nursing	Define legislations and guidelines, policy, procedures explain importance of legislation in nursing describe legislations guideline in nursing practice in Tanzania and	Define legislations and guidelines, policy, procedures explain importance of legislation in nursing describe legislations guidelines in nursing practice in Tanzania and utilize legislation guideline in nursing practice
3.1.3.1	Ethical principles in providing nursing care utilized	Demonstrate beneficence, non-maleficence and truthfulness to patients and co-workers and apply ethical principles in providing nursing care	Demonstrate beneficence, non-maleficence, truthfulness, confidentiality to patients and co-workers and apply ethical principles in providing nursing care	Demonstrate beneficence, non-maleficence, truthfulness, confidentiality to patients and co-workers, respect for autonomy and justice ethical principles in providing nursing care
3.2.1.1	Basic concepts of pharmacology explained	Define common terms used in pharmacology(pharmacology, pharmacokinetics, pharmacodynamics, medicine, dose, dosage, tolerance, agonist, antagonist, therapeutics, hypersensitivity, side	Define common terms used in pharmacology, and identify sources of medicine (plant, animal, mineral, synthetic sources	Define common terms used in pharmacology, identify sources of medicine, and explain forms of medicine preparations and factors affecting their bio-availability.

ASSESSMENT CRITERIA		BENCHMARKING		
		The learner: has knowledge / skills of, ability to, can		
		Satisfactory	Good	Excellent
		effects, habituation, therapeutic index, bio-availability, first pass effect, half-life, generic name, trade name)		
3.2.2.1	Common analgesics, anaesthetics anti-inflammatory and steroids described	Define analgesics ,ant pain, anaesthetics, steroids and identify common analgesics, anaesthetics anti-inflammatory and steroids	Define analgesics and anti-pain, anaesthetics, steroids and identify common analgesics, anaesthetics, inflammatory and steroids inflammatory and steroids	Define analgesics and anti-pain, anaesthetics, steroids and identify common analgesics, anaesthetics, inflammatory and steroids inflammatory and steroids and explain mechanism of action, side effects and management of side effects of analgesics, anaesthetics inflammatory and steroids
3.2.3.1	Common antibacterial , antifungal, anti-viral and anti-malarial described	Define antibacterial ant fungal, anti-viral and anti-malarial and Identify common - analgesics, anaesthetics anti-inflammatory and steroids.	Define antibacterial anti-fungal, anti-viral and ant protozoa and identify common - analgesics,-anaesthetics anti-inflammatory and steroids and explain pharmacodynamics of common ant fungal, anti-viral and malarial and mechanism of their action.	Define antibacterial anti-fungal, anti-viral and anti-protozoa and identify common analgesics, anaesthetics anti-inflammatory and steroids and explain pharmacodynamics of common ant fungal, anti-viral and malarial and mechanism of their action, explain side effects of common analgesics, anaesthetics, anti-inflammatory and steroids and explain management of side effects of common antibacterial, antifungal, anti-helminthic, anti-viral and antimalarial

ASSESSMENT CRITERIA		BENCHMARKING		
		The learner: has knowledge / skills of, ability to, can		
		Satisfactory	Good	Excellent
3.2.4.1	Common antihypertensive, antidiabetics and anticoagulants described	Define anti-hypertensive, antidiabetics and anticoagulants and identify common beta blockers, diuretics, vasodilators, medicine acting on heart muscles anti-diabetics and anticoagulant	Define anti-hypertensive, antidiabetics and anticoagulant Identify common beta blockers, diuretics, vasodilators, medicine acting on heart muscles anti-diabetics and anticoagulant and Explain pharmacodynamics of common beta blockers, diuretics, vasodilators, medicine acting on heart muscles, anti-diabetics and anticoagulants and explain their mechanism of actions	Define anti-hypertensive, antidiabetics and anticoagulant and Identify common beta blockers, diuretics, vasodilators, medicine acting on heart muscles anti-diabetics and anticoagulant ,Explain pharmacodynamics of common beta blockers, diuretics, vasodilators, medicine acting on heart muscles, anti-diabetics and anticoagulants and explain their mechanism of actions and side effects of common beta blockers, diuretics, vasodilators, drug acting on heart muscles, antidiabetics and anticoagulant
3.2.5.1	Emetics, antiemetics, antiulcers anticholinergic and antihelminthic are correctly described.	Define emetics, antiemetic, anti-acids and cholinergic, antihelminthic and identify common emetics, antiemetics, anti-acids anticholinergic antiasthmatics and cough remedies	Define emetics, antiemetic, anti-acids and cholinergic, antihelminthic and identify them, and explain pharmacodynamics and mechanism of action.	Define emetics, antiemetic, anti-acids and cholinergic, antihelminthic and identify them, and explain pharmacodynamics and mechanism of action, side effects and management of side effects.
3.2.6.1	Antipsychotics, antidepressants, anticonvulsants hypnotics and anxiolytic medicine described	Define Antipsychotics, antidepressants, anticonvulsants hypnotics and anxiolytic and Identify them	Define Antipsychotics, antidepressants, anticonvulsants hypnotics and anxiolytic Identify them, and explain pharmacodynamics and mechanism of action.	Define Antipsychotics, antidepressants, anticonvulsants hypnotics and anxiolytic, Identify them, and explain pharmacodynamics and mechanism of action and mechanism of action, side effects and explain management of side effects.

ASSESSMENT CRITERIA	BENCHMARKING		
	The learner: has knowledge / skills of, ability to, can		
	Satisfactory	Good	Excellent
3.2.7.1 Anti-cancers are correctly described	Define common anti cancers and identify common anti- cancer	Define common anti cancers and identify and explain mechanism of actions	Define common anti cancers and identify them and explain mechanism of actions, explain the side effects of anti-cancers and explain management of side effects of common anti-cancer
3.2.8.1 Medicines are correctly administered	Describe role of a nurse in administration of medicine and routes of medicine administration	Describe roles of a nurse in administration of medicine, routes, explain factors to consider in medicine administration and outline principles to be considered in medicine administration	Describe roles of a nurse and routes in administration of medicine, explain factors, outline principles, calculate medicine, identify components of prescription and prescribe medicine and administer according to guidelines and protocols
3.3.1.1 Concept of anatomy and physiology of human body is correctly explained	Define the term anatomy, physiology and Identify organization of the body as a whole	Define the term anatomy, physiology and Identify organization of the body as a whole describe human cell, Identify human body tissues and functions of body parts	Define the term anatomy, physiology and Identify organization of the body as a whole, describe human cell, Identify human body tissues and functions of body parts, explain the interactions between human body structure and functions and different human body systems
3.3.2.1 Nervous, endocrine, lymphatic-immune system and special senses are correctly described	List organs forming nervous, endocrine, lymphatic-immune system and special senses	List organs forming nervous, endocrine, lymphatic-immune system and special senses, and describe their structure	List organs forming nervous, endocrine, lymphatic-immune system and special senses, and describe their structure and functions
3.3.3.1 Respiratory, digestive and urinary system are	List organs forming respiratory, digestive, and urinary systems	List organs forming respiratory, digestive, and urinary systems and describe their structures	List organs forming respiratory, digestive, and urinary systems and describe their structures and

ASSESSMENT CRITERIA	BENCHMARKING		
	The learner: has knowledge / skills of, ability to, can		
	Satisfactory	Good	Excellent
properly described			functions
3.3.4.1 Musculoskeletal, cardiovascular and reproductive systems are described	List organs forming musculoskeletal, cardiovascular and reproductive systems	List organs forming musculoskeletal, cardiovascular and reproductive systems and describes their structures	List organs forming musculoskeletal, cardiovascular and reproductive systems and describes their structures functions
3.4.1.1. Concepts of biochemistry are correctly explained	Define biochemistry, atom, molecules, elements, compounds acids alkali, mixture solution, solute enzymes pH , carbohydrates, protein and lipids	Define biochemistry, atom molecules, elements, compounds acids alkali, mixture solution, solute, solvents, vitamins enzymes pH , and describe vitamins,	Define biochemistry, atom molecules, elements, compounds acids alkali, mixture solution, solute, solvents, vitamins enzymes pH, carbohydrates, protein, lipids and describe vitamins and disorders related to vitamin deficiency
3.4.2.1 Structure and functions of macromolecules are correctly described	Explain structure and functions of carbohydrates	Explain structure and functions of carbohydrates, lipid and protein	Explain structure and functions of carbohydrates, lipids protein and DNA and RNA
3.4.3.1 Human body enzymes, fluids, electrolytes described	Describe structure and functions of enzymes and co enzymes	Describe structure and functions of enzymes and co enzymes, explain feedback mechanism and differentiate between the intracellular and extracellular fluid compartment	Describe structure and functions of enzymes and coenzymes, explain feedback mechanism differentiate between the intracellular and extracellular fluid compartment describe function of electrolytes, differentiate between permeable and selective permeable and explain how acid balance relates to homeostasis

ASSESSMENT CRITERIA	BENCHMARKING		
	The learner: has knowledge / skills of, ability to, can		
	Satisfactory	Good	Excellent
3.4.4.1 Care of patients with fluid and electrolyte imbalance is provided	Identify factors affecting fluid and electrolyte balance	Identify factors affecting fluid and electrolyte balance and collect data related to fluids and electrolyte imbalance	Identify factors affecting fluid and electrolyte imbalance, collect data related to fluids and electrolyte imbalance and teach client measures to maintain fluid and electrolyte balance
3.5.1.1 Concepts of Parasitology and entomology are correctly explained	Define parasite, Parasitology, host, vector, definitive host, intermediate host, reservoir, entomology, ecto parasites, endo parasites and describe relationship between parasite and host	Define parasite, Parasitology, host, vector, definitive host, intermediate host, reservoir, entomology, ecto parasites, endo parasites and describe relationship between parasite and host and classify parasites of medical importance	Define parasite, Parasitology, host, vector, definitive host, intermediate host, reservoir, entomology, ecto parasites, endo parasites and describe relationship between parasite and host , classify parasites of medical importance and explain the effect of parasites in the host
3.5.2.1 Common protozoa which cause diseases are correctly described	Define protozoa and classify protozoa of medical importance	Define protozoa , classify protozoa of medical importance and identify common protozoa of medical importance and describe life cycle of common protozoa of medical importance	Define protozoa and classify them of medical importance and identify common protozoa of medical importance and describe life cycle of common protozoa of medical importance and characteristics of common protozoa
3.5.3.1 Common nematodes which cause diseases in human body described	Define nematodes and Classify nematodes of medical importance.	Define nematodes , classify nematodes of medical importance and identify common nematodes of medical importance	Define nematodes classify nematodes of medical importance and identify common nematodes of medical importance and describe life cycle of common nematodes of medical importance and describe characteristics of common nematodes.

ASSESSMENT CRITERIA	BENCHMARKING		
	The learner: has knowledge / skills of, ability to, can		
	Satisfactory	Good	Excellent
3.5.4.1 Common trematodes which cause diseases in human body are correctly described	Define trematodes and identify common trematodes of medical importance	Define trematodes, identify common trematodes of medical importance (and describe life cycle of common trematodes of medical importance	Define trematodes and identify common nematodes of medical important (types of Schistosoma) and describe life cycle and their characteristics.
3.5.5.1 Common cestodes which cause diseases in human body are correctly described	Define cestodes and identify common cestodes of medical importance	Define cestodes, identify common cestodes of medical importance and describe life cycle of common cestodes	Define cestodes, identify common cestodes of medical important, describe life cycle of common cestodes and their characteristics.
3.5.6.1 Vectors which transmit diseases to human body are correctly described	Identify vectors of medical importance,	Identify vectors of medical importance and explain life cycle of common vectors	Identify vectors of medical importance, explain life cycle of common vectors and identify measure to control common vectors
3.5.7.1 Ectoparasites which cause diseases to human body are correctly described	Identify common ectoparasites	Identify common ectoparasites, explain the effect of ectoparasites.	Identify common ectoparasites, explain the effect of ectoparasites and explain preventions of ectoparasites
3.5.6.1 Nursing theories, models and nursing process correctly described	Define models, nursing theory and nursing process and describe health service delivery system in Tanzania	Define models, nursing theory nursing process and describe health service delivery system in Tanzania ,differentiate frame work for care, and explain roles of nursing theory	Define models, nursing theory, nursing process, describe health service delivery system in Tanzania and differentiate frame work for care, explain roles of nursing theory and Metaparadigm for nursing, explain selected theories and explain the nursing process

ASSESSMENT CRITERIA	BENCHMARKING		
	The learner: has knowledge / skills of, ability to, can		
	Satisfactory	Good	Excellent
4.1.1.1 Concepts of first aid are correctly explained	Define common terms used in first aid, explain purposes of first aid and priorities	Define common terms used in first aid, explain purposes of first aid, explain first aid priorities, and identify tools/equipment in first aid	Define common terms used in first aid, explain purposes of first aid, explain first aid priorities, identify tools/equipment in first aid, explain principles of first aid kit and, Describe resuscitation techniques
4.1.2.1 Concepts of cardiopulmonary emergency are correctly explained	Define cardiopulmonary emergency, cardiac arrest, respiratory arrest and describe cardiopulmonary resuscitation	Define cardiopulmonary emergency, cardiac arrest, respiratory arrest, describe cardiopulmonary resuscitation and identify types of CPR	Define cardiopulmonary emergency, cardiac arrest, respiratory arrest, describe cardiopulmonary resuscitation and identify types of CPR and causes of cardiopulmonary arrest
5.1.1.1 Components and accessories of a computer and their functions are correctly described	Define the term computer, explain characteristics of a computer and explain classification of computer by size and power	Define the term computer, explain characteristics of a computer and explain classification of computer by size and power and describe the main parts of the computer	Define the term computer, explain characteristics of a computer and explain classification of computer by size and power, describe the main parts of the computer, distinguish between hardware and software, differentiate between computer application programs and operating systems accessories of the computer and explain functions of computer parts and accessories
5.1.2.1 Basic computer operations are performed according to procedures	Perform computer connection, start-up and identify GUI	Perform computer connection, start-up, file management operation and identify GUI	Perform computer connection, start-up, identify GUI, file management and transfer file from computer to removable disks

13.0 DESCRIPTION OF THE PROGRAM MODULES

13.1 Module One: Infection Prevention and Control

13.1.1 Module Code: NMT 04101

13.1.2 Module Title: Infection Prevention and Control

13.1.3 Number of Credits: 15

13.1.4 Sub-Enabling Outcomes

- 1.1.1 Explain concepts of infection prevention and control in relation to care of patients in hospital
- 1.1.2 Use hand hygiene techniques in preventing and controlling infections
- 1.1.3 Use personal protective equipment in preventing spread of microorganisms in health care setting
- 1.1.4 Use IPC technique in processing equipment and materials in health care setting
- 1.1.5 Maintain clean health facility environment according to standards and guidelines
- 1.2.1 Explain concepts of waste management in health care setting
- 1.2.2 Dispose health care wastes using standard guideline
- 1.2.3 Handle sharps using Infection Prevention and Control principles
- 1.3.1 Explain concepts of microbiology in relation to nursing practice
- 1.3.2 Categorize microorganisms causing diseases in human body using knowledge of microbiology
- 1.3.3 Prevent and control of nosocomial infection when providing nursing care

13.1.5 Prerequisite Modules: None

13.1.6 Teaching and Learning Context:

This module will be facilitated through Lecture Discussion, Group Discussion Practice in Skills Laboratory, Assignments, Demonstration, Tutorial and Clinical Practice

13.1.7 Teaching and Learning Resources:

In this module the following teaching and learning materials will be used: Textbooks, Writing board and Markers Computer, Practicum Guides, Procedure Book Projector and Flip Charts

13.1.8 Mode of Assessment

Continuous Assessment	40%
Written Test	15%
Assignment guide	05%
Practical Examination	
OSPE/OSCE	15%
Practical Procedure book	05%

End of Semester Examination	60%
Written Examination	25%
Clinical Examination	35%

References

- Arora, D. R., & Arora, B. (2009). *Microbiology for nurses & Allied Sciences*. New Delhi: CBS Publishers.
- Brooks, G.F., Butel, J.S. & Morse, S.A. (2004). *Medical Microbiology* (23rd Ed). Boston: Mc GrawHill
- CDC. (2007). *Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Setting*. Retrieved on March 25, 2015 from www.cdc.gov/ncidod/dhqp/pdf/isolation2007.pdf
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- MoHSW. (2004). *National Infection Prevention and Control Guideline for Healthcare services in Tanzania*. Dar es Salaam: Ministry of Health and Social Welfare.
- MoHSW. (2006). *Health care waste management monitoring plan: making medical*. Dar es Salaam: Ministry of Health and Social Welfare
- MoHSW. (2006). *National Standards and Procedure for Health Care Waste*. Dar es Salaam: Ministry of Health and Social Welfare
- MoHSW. (2007). *National Infection Prevention and Control Guideline for Healthcare services in Tanzania: A pocket guide for Health care Providers*. Dar es Salaam: Ministry of Health and Social Welfare.
- Nester, E. W., Anderson, D. G., Roberts Jr., C. E., Pearsall, N. N., & Nester, M. T.(2004). *Microbiology: A Human perspective* (4th Ed). Boston: Mc GrawHill.
- Rosdahl, C.B. & Kawalski, M.T (2012). *Textbook of Basic Nursing* (10th Ed.). Philadelphia, USA: Lippincott Williams and Wilkins.
- Tietjen, L. D., Bossemeyer, & McIntosh, N. (2003). *Infection Prevention Guidelines for Healthcare Facilities with Limited resources*. Maryland: JHPIEGO Corporation: Baltimore.

13.2 Module Two: Professionalism in Nursing

13.2.1 Module Code: NMT 04102

13.2.2 Module Title: Professionalism in Nursing

13.2.3 Number of Credits: 7

13.2.4 Sub Enabling Outcomes:

- 2.2.1 Explain concepts of customer care in relation to nursing and midwifery practice
- 2.2.2 Describe methods of customer care as applied in nursing and midwifery practice
- 2.2.3 Apply knowledge of customer care to resolve patients'/ clients' concerns
- 2.3.1 Explain concepts of advocacy in relation to nursing and midwifery practice
- 2.3.2 Describe patient's and service provider's rights in the provision of care
- 2.3.3 Utilize knowledge and skills of advocacy to protect patient's/client's rights
- 3.1.1 Explain professional, legal and ethical principles related to nursing and midwifery practice
- 3.1.2 Utilize legislation guidelines in providing nursing and midwifery care
- 3.1.3 Apply ethical principles in nursing and midwifery care

13.2.5 Prerequisite module: - None

13.2.6 Teaching and Learning Context:

This module will be facilitated through Lecture Discussion, Group Discussion Practice in Skills Laboratory, Assignments, Demonstration, Tutorial and Clinical Practice

13.2.7 Teaching and Learning Resources:

In this module the following teaching and learning materials will be used:
Textbooks, Writing board and Markers Computer, Practicum Guides, Procedure Book Projector and Flip Charts

13.2.8 Modes of Assessment:-

Continuous Assessment	40%
Written test	15
Practical examination	
OSCE/OSPE	20
Assignment guide	05
End of Semester Examination	60%
Written examination	25%
Clinical examination	35%

References

- Berman, A., Synder, S., Kozier & Erb's. (2014). *Fundamental of Nursing: Concepts, Process and Practices* (9th Ed.). Pearson New International
- Craven, F.R., & Hirnle, C. J. (2008). *Fundamentals of Nursing* (6th Ed). Philadelphia, USA: Lippincott Williams and Wilkins
- Dasha, S. K., & Pandab, A. K. (2011). *Managing Customer Relationships in Private Health Care*.
- Fry, S.T., & Johnstone, M.J. (2008). *Ethics in Nursing Practice: A guide to ethical decision making* (3rd Ed). United Kingdom: Blackwell
- Kozier & Erb's., Bernman, A., & Snyder, S. (2014). *Fundamentals of Nursing Concepts and practice* (9th Ed.). Edinburgh Gate: Pearson Education Limited
- Potter, P., & Perry, A. (2005). *Fundamental of Nursing* (6th Ed.). USA: Mosby Company
- TNMC. (2007). *Code of Professional Conduct for Nurses and Midwives in Tanzania*. Dar es Salaam: Tanzania
- TNMC. (2009). *Nursing Ethics: A manual for Nurses*. Dar es Salaam: Tanzania.

13.3 Module Three: Human Anatomy and Physiology

13.3.1 Module Code: NMT 04103

13.3.2 Module Title: Human Anatomy and Physiology

13.3.3 Number of Credits: 14

13.3.4 Sub-Enabling Outcomes

- 3.3.1 Explain basic concepts of anatomy and physiology in relation to human body
- 3.3.2 Describe respiratory, digestive and cardiovascular systems using knowledge of anatomy and physiology
- 3.3.3 Describe musculoskeletal, urinary and reproductive systems using knowledge of anatomy and physiology
- 3.3.4 Describe nervous, endocrine, lymphatic-immune systems and special senses using knowledge of anatomy and physiology
- 3.4.1 Explain concepts of biochemistry in relation to human body biochemical functions.
- 3.4.2 Explain functions of macromolecules in relation to human body function
- 3.4.3 Describe human body enzymes, co-enzymes, fluids, and electrolytes in relation to human body function

13.3.5 Prerequisite module: None

13.3.6 Teaching and Learning Context: -

This module will be facilitated through Lecture Discussion, Presentations, and Group Discussion Practice in Skills Laboratory, Assignments and Demonstration

13.3.7 Teaching and Learning Resources:-

In this module the following teaching and learning materials will be used:
Projectors, Computer, Flipchart, White board, Marker pen, Anatomical model and Charts.

13.3.8 Modes of Assessment:-

Continuous Assessment	40%
Written test	15%
Practical Examination	
OSCE/OSPE	20%
Assignment guide	05%
End of Semester Examination	60%
Written examination	25%
Practical examination	
OSCE/OSPE	35%

References

- Brook G.F, Butel J.S, Morse S.A, (2004) *Medical Microbiology* (23rd Ed). Bostomn Mexico City
- Craven, R. F & Hirnle, CJ (2008): *Fundamental of Nursing, Human Health and Functions*, (6th Ed), Philadelphia, Lippincott
- Rosdahl, C.B. & Kawalski, M.T (2012). *Textbook of Basic Nursing* (10th Ed). Philadelphia, USA: Lippincott Williams and Wilkins.
- Ross & Wilson (2004). *Anatomy and physiology colouring and Work book*. (1st Ed) USA: Elsevier Linked.
- Valeria, C. S. & Sanders, T. (2007). *Essential of anatomy and physiology*, (5th Ed) Davis Company, Philadelphia: UK.
- Waugh A. & Grant A. (2001). *Anatomy and Physiology in Health and Illness*, (9th Ed) Harcourt Publisher Ltd: London UK.

13.4 Module Four: Basic Computer Applications

13.4.1 Module Code: NMT 04104

13.4.2 Module Title: Basic Computer Applications

13.4.3 Number of Credits: 6

13.4.4 Sub-enabling Outcomes:

- 5.1.1 Describe components and accessory of a computer and their functions in relation to basic computer operations
- 5.1.2 Perform basic computer operations using knowledge and skills of computer technology
- 5.1.3 Utilize word processing application in preparing reports
- 5.1.4 Utilize spread sheet application in processing health data
- 5.1.5 Utilize power point application in preparing health information presentations
- 5.1.6 Utilize Microsoft publisher application in preparing health publications
- 5.1.7 Utilize Microsoft access application in keeping health data
- 5.1.8 Communicate and search health information using basic computer operation

13.4.5 Prerequisite modules: None

13.4.6 Teaching and Learning context:

This module will be facilitated through Lecture Discussion, Presentations, and Group Discussion Practice in Computer Laboratory, Assignments and Demonstration

13.4.7 Teaching and Learning Resource:

In this module the following teaching and learning materials will be used:
Textbooks, Writing board and Markers Computer, Practicum Guides, Procedure Book Projector and Flip Charts

13.4.8 Mode of Assessment

Continuous Assessment	40%
Written test	10%
Assignment guide	05%
Practical test	25%
End of Semester examination	60%
Written Examination	25%
Practical Examination	35%

References

- Coletti, P. (2015). *Basic Computer Course Book*. Retrieved on March 13, 2015, through www.paolocoletti.it/books/basiccomputer.pdf
- EZ-REF Courseware (2007). *Microsoft Office 2007 Training Manual*. Retrieved on March 13, 2015, through <http://s3.amazonaws.com/szmanuals/2f0785413c6ff4c31aa813c27f5d88a8>
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- Helium. (2002). *How to sort a range of data in Microsoft excel*. Retrieved from <http://www.computer-software.helum.com>
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- Tools for SEO. (2012). *Introduction to MS-Word*. Retrieved from www.nos.org/htm/ms-word1.htm
- University of California-Berkley Library. (2012). *Tutorial table of contents*. Retrieved from <http://www.lib.berkeley.edu>
- University of Texas at Austin. (2004). *Getting started with Microsoft access*. Retrieved from <http://www.utexas.edu>
- Waverka, P. (2003). *Office 2003 all in one desk reference for dummies*. New Jersey: Wiley

13.5 Module Five: Communication Skills

13.5.1 Module Code: NMT 04105

13.5.2 Module Title: Communication Skills

13.5.3 Number of Credits: 10

13.5.4 Sub-enabling Outcomes

- 2.1.1 Explain concepts of communication in relation to nursing and midwifery care
- 2.1.2 Demonstrate effective communication skills in nursing and midwifery practice
- 2.1.3 Demonstrate skills of sign language and tactile signing when communicating with clients/patients with disability of visual, speech and hearing
- 2.1.4 Demonstrate skills of giving and receiving feedback in nursing and midwifery practice
- 2.1.5 Apply therapeutic communication skills in providing care to patients/ clients in health care settings
- 2.1.6 Utilize Information Education and Communication (IEC) materials when communicating health information to patients/clients

13.5.5 Prerequisite module: None

13.5.6 Teaching and Learning Context:

This module will be facilitated through Lecture Discussion, Presentations, and Group Discussion Practice in Skills Laboratory, Assignments, Demonstration and Clinical Practice

13.5.7 Teaching and Learning Resources:

In this module the following teaching and learning materials will be used:
Textbooks, Writing board and Markers Computer, Practicum Guides, Procedure Book Projector and Flip Charts

13.5.8 Modes of Assessment:-

Continuous Assessment	40%
Written test	15%
Practical examination	
OSCE/OSPE	20%
Assignment report	05%
End of Semester Examination	60%
Written examination	25%
Clinical examination	35%

References

- Berman, A., Synder, S., Kozier & Erb's. (2014). *Fundamental of Nursing: Concepts, Process and Practices* (9th Ed.). Pearson New International
- Craven, R. F. & Hirnle, C. J. (2008). *Fundamental of Nursing: Human Health and Functions* (6th Ed.). Philadelphia: Lippincott
- Huber, D. L. (2006). *Leadership and Nursing Care Management* (3rd Ed.). USA, Philadelphia: Saunders Elsevier
- Kozier & Erb's., Bernman, A., & Snyder, S. (2014). *Fundamentals of Nursing Concepts and practice* (9th Ed.). Edinburgh Gate: Pearson Education Limited
- Marquis, B.L. (2009). *Leadership Roles and Management Function in Nursing* (6th Ed.). Lippincott: Philadelphia
- Mercy, C. (2011). *Essential of Psychiatric Mental Health Nursing: Concepts of care on evidence based practice* (5th Ed.).USA, Philadelphia: F.A. Davis Company
- Sullivan, E. J., & Decker, P. J. (2009). *Effective Leadership and Management in Nursing* (7th Ed.).New Jersey: USA, Pearson Prentice Hall
- MoHSW . (2000). *Quality Assurance Training Guidelines for Health workers*. Dar es Salaam Tanzania: Ministry of Health and Social welfare.
- WHO. (2006). *Medical Records Manual: A Guide for Developing Countries*. Philippines, WHO

13.6 Module Six: Parasitology and Entomology

13.6.1 Module Code: NMT 04106

13.6.2 Module Title: Parasitology and Entomology

13.6.3 Number of Credit: 5

13.6.4 Sub Enabling Outcomes:

- 3.5.1 Describe concepts of parasitology and entomology in relation to human infections and infestations
- 3.5.2 Describe common protozoa which cause human diseases
- 3.5.3 Describe common nematodes which cause diseases in human body
- 3.5.4 Describe common trematodes which cause diseases in human body
- 3.5.5 Describe common cestodes which cause diseases in human body
- 3.5.6 Describe vectors which transmit diseases to human body
- 3.5.7 Describe ecto-parasites causing diseases to human body

13.6.5 Prerequisite modules: None

13.6.6 Teaching and Learning context:

This module will be facilitated through Lecture Discussion, Group Discussion Practice in Skills Laboratory, Assignments, Demonstration, Tutorial and Clinical Practice

13.6.7 Teaching and Learning Resources:

In this module the following teaching and learning materials will be used:
Textbooks, Writing board and Markers Computer, Practicum Guides, Procedure Book Projector and Flip Charts

13.6.8 Modes of Assessment

Continuous assessment	40%
Written test	35%
Assignment guide	15%
End of semester examination	60%
Written examination	60%

References

- Brooks, G.F., Butel, J.S., & Morse, S.A. (2004). *Medical Microbiology* (23rd Ed). Boston: Mc GrawHill
- Cook, G. (2000). *Manson's Tropical Diseases* (22nd Ed). London: W.B. Saunders.
- Craven, R. F., & Hirnle, C. J. (2008). *Fundamental of Nursing: Human Health and Functions* (6th Ed.). Philadelphia: Lippincott
- Erickson, A. (2009). *Parasite*. Retrieved from <http://www.stanford.edu>
- Gupte, S. (2010). *The Short Textbook of Medical Microbiology including Parasitology* (10th Ed.). New Delhi, India: Jaypee Brothers Medical Publishers.
- Leventhal, R. & Russell, F. C. (2009). *Medical parasitology: A self-instructional text* (5th Ed.). New Dehli, India: Jaypee Brothers Medical.
- Parija, S. (2006). *Textbook of Medical Parasitology: Protozoology and Helminthology* (3rd Ed.). New Delhi, India: All India Publishers
- Rosdahl, C.B. & Kawalski, M.T (2012). *Textbook of Basic Nursing* (10th Ed.). Philadelphia, USA: Lippincott Williams and Wilkins.
- Science. (2013). Arthropods. Retrieved from <http://www.esccalbe.blogspot.com>
- Service, M. (2008). *Medical Entomology for students* (4th Ed.). Cambridge, UK: Cambridge University Press and Distributors.

13.7 Module Seven: Application of Nursing Process and Theories in Nursing Care

13.7.1 Module Code: NMT 04207

13.7.2 Module Title: Application of Nursing Process and Theories in Nursing Care

13.7.3 Number of Credit:13

13.7.4 Sub Enabling Outcomes:

- 3.6.1 Describe nursing theories, models and nursing process in providing care
- 3.6.6 Admit, transfer and discharge patients in the health facility using standards and protocols.
- 3.6.7 Provide care to older people according to their needs and problems
- 3.6.8 Provide end of life care to patients by adhering to ethical principles and protocols

13.7.5 Prerequisite modules:

NMT 04101: Infection Prevention and Control
NMT 04103: Human Anatomy and Physiology

13.7.6 Teaching and Learning context:

This module will be facilitated through Lecture Discussion, Presentations, and Group Discussion Practice in Skills Laboratory, Assignments, Demonstration, Skill laboratory, and Clinical practice

13.7.7 Teaching and Learning Resources:

In this module the following teaching and learning materials will be used:
Textbooks, Writing board and Markers Computer, Practicum Guides, Procedure Book Projector and Flip Charts

13.7.8 Modes of Assessment

Continuous assessment	40%
Written test	10%
Practical	
OSCE/OSPE	20%
Portfolio (case work)	05%
Practical procedure book	05%
End of semester examination	60%
Written examination	25%
Clinical examination	35%

References

- Brunner, L.S., & Suddath, S. D. (1999). *Medical Surgical Nursing*. (9th Ed). Lippincott: Philadelphia
- Craven, R. F & Hirnle, C.J (2008): *Fundamental of Nursing, Human Health and Functions*, (6thEd), Philadelphia, Lippincott
- De Laune, S. C., & Ladner, P. K. (2002). *Fundamentals of nursing: Standards & practice* (2nd Ed.). USA: Delmar Cengage Learning.
- Kozier & Erb's (2014) *Fundamentals of Nursing Concepts and practice*. (9th Ed) Audreney Bernman Shorlee Spyder
- Rosdahl, C.B. & Kawalski, M.T (2012). *Textbook of Basic Nursing* (10th Ed.). Philadelphia, USA: Lippincott Williams and Wilkins.
- Marquis, B. L., & Huston, C. J. (2009). *Leadership Roles and Management Functions in Nursing Theory and Application* (6th Ed.). USA: Lippincott Williams & Wilkins.
- Potter, P., & Perry, A. (2005). *Fundamentals of nursing* (6th Ed.). USA: Mosby.
- TNMC. (2007). *Code of Professional Conduct for Nurses and Midwives in Tanzania*. Dar es Salaam: Tanzania.
- TNMC. (2009). *Nursing ethics: A manual for nurses*. Dar es Salaam: Tanzania.
- Fray, T., & Johnstone, M. (2008). *Ethics in Nursing Practice A guide to Ethical Decision Making*. (3rd Ed). Blackwell: United Kingdom

13.8 Module Eight: Basic Clinical Nursing

13.8.1 Module Code: NMT 04208

13.8.2 Module Title: Basic Clinical Nursing

13.8.3 Number Credit: 20

13.8.4 Sub enabling Outcomes

- 3.4.4 Provide care to patient with fluid and electrolyte imbalance using knowledge of biochemistry
- 3.6.2 Provide care to patient with hygienic needs using nursing process
- 3.6.3 Provide care to patient with elimination needs using nursing process
- 3.6.4 Provide care to patients with nutritional needs using knowledge and skills of nutrition
- 3.6.5 Provide care to patients with pain, wound and limited mobility using nursing process

13.8.5 Prerequisite module:

NMT 04105: Communication skills
NMT 04102: Professionalism in Nursing
NMT 04103: Anatomy and Physiology
NMT 04101: Infection Prevention and Control

13.8.6 Teaching and Learning Context:

This module will be facilitated through Lecture Discussion, Presentations, and Group Discussion Practice in Skills Laboratory, Assignments, Demonstration, Skill laboratory, and Clinical practice

13.8.7 Teaching and Learning Resources:

In this module the following teaching and learning materials will be used:
Textbooks, Writing board and Markers Computer, Practicum Guides, Procedure Book Projector and Flip Charts

13.8.8 Modes of Assessment:

Continuous Assessment	40%
Written test	15%
Assignment guide	05%
Practical examination	
OSCE/OSPE	15 %
Procedure book	05%
End of Semester Examination	60%
Written examination	25%
Clinical examination	35%

References

- Berman, A. Synder, S., Kozier & Erb's. (2014). *Fundamental of Nursing: Concepts, Process and Practices* (9th ed.). Edinburgh Gate, Harlow, England: Pearson Education Limited
- Bewes, P. (2003). *Surgery. A manual for rural health workers*. (2nd ed.), Nairobi, AMREF.
- Black, J.M., & Hawks, J.H. (2009). *Medical surgical Nursing*. (8th ed.), Philadelphia: W.B. Saunders Company.
- Brunner, L.S., & Suddath, S. D. (2004). *Textbook of Medical Surgical Nursing* (10th ed.). Philadelphia USA, Lippincott Williams and Wilkins
- Brunner, L.S., & Suddath. S. (2010). *Medical Surgical Nursing* (12th ed.), New York, Lippincott
- Colmer, M.R. (2005). *Moroney's. Surgery for Nurses*. (16th ed.), Edinburgh and London Churchill Livingstone
- Craven, R. F., & Hirnle, C. J. (2008). *Fundamental of Nursing: Human Health and Functions* (6th ed.). USA, Philadelphia: Lippincott Williams and Wilkins
- Huber, D. L. (2006). *Leadership and nursing care management* (3rd ed.). USA, Philadelphia: Saunders Elsevier
- Mallett J, B., & Bailey, C., (1996) *Manual of Clinical Nursing Procedure* (4th ed.). Malden, USA: Blackwell Science Ltd
- Mercy, C. (2011). *Essential of psychiatric mental health nursing: Concepts of care on evidence based practice* (5th ed.).USA, Philadelphia: F.A. Davis Company
- Monahan, F.D., & Sands, J.K (2007). *Medical surgical nursing health and illness perspective* (8th ed.). Canada: Mosby Elsevier
- Perry A.G., & Potter P.A, (1994) *Clinical Nursing Skills in Techniques* (3rd ed.). Mosby, Chicago, Madrid, London, Toronto
- Rosdahl, C.B. & Kawalski, M.T (2012). *Textbook of Basic Nursing* (10th ed.). Philadelphia, USA: Lippincott Williams and Wilkins.

13.9 Module Nine: Basic Pharmacology

13.9.1 Module code: NMT 04209

13.9.2 Module title: Basic Pharmacology

13.9.3 Number of Credits: 10

13.9.4 Sub-enabling Outcomes:

- 3.2.1 Explain concepts of pharmacology related to medicine administration
- 3.2.2 Describe common analgesics, anaesthetics anti-inflammatory and steroids used in managing pain and inflammation
- 3.2.3 Describe common antibacterial, antifungal, anti-viral and anti-malarial used in the treatment of patients with bacterial, fungal, viral and malaria infections
- 3.2.4 Describe common anti-hypertensive, anti-diabetics and anticoagulants used in the treatment of patients with hypertension, diabetes and blood coagulation disorders
- 3.2.5 Describe emetics, anti-emetics, anti-acids anticholinergic, anti-helminthic, anti-asthmatic, anti-tuberculosis and cough remedies used in the treatment of patients with disorder of GIT and respiratory systems
- 3.2.6 Describe antipsychotics, antidepressant, anticonvulsants, hypnotics and anxiolytic used in the treatment of patients with mental disorders
- 3.2.7 Describe medicines used in the treatment of cancer
- 3.2.8 Apply principles of medicine administration during medication

13.9.5 Prerequisite modules:

NMT 04103 Human Anatomy and Physiology

13.9.6 Teaching and Learning context:

This module will be facilitated through Lecture Discussion, Presentations, and Group Discussion Practice in Skills Laboratory, Assignments, Demonstration, and Skill laboratory, and Clinical practice

13.9.7 Teaching and Learning Resource:

In this module the following teaching and learning materials will be used:
Textbooks, Writing board and Markers Computer, Practicum Guides, Procedure Book Projector and Flip Charts

13.9.8 Mode of Assessment

Continuous Assessment	40%
Written test	20%
Assignment guide	05%
Practical examination	
OSCE/OSPE	10%
Practical procedure book	05%

End of Semester examination	60%
Written Examination	30%
Practical Examination	30%

References

- Bennett, P. N. (2003). *Clinical pharmacology*. (9th ed.). London: Churchill Livingstone.
- Gould, D., Greenstein. B., & Trounce, J. (2004). *Trounce's clinical pharmacology for nurses* (17th ed.). London: Churchill Livingstone.
- Greenstein, B. Gold, D. Trounce, J. (2009): *Clinical pharmacology for nurses*, (18th Ed.) Livingstone China, Churchill
- Hopkins, S. J. Kelly, J.C. (2008): *Drugs and Pharmacology for nurses*, Livingstone China, Churchill
- Laurence, D. R., Bennett, P. N., & Brown, M. J. (1997). *Clinical pharmacology* (8th ed.). Edinburgh: Livingstone Churchill.
- Rang, H. P. (1995). *Pharmacology* (3rd ed.). London: Churchill Livingstone.

13.10 Module Ten: Basics of Health Information Management

13.10.1 Module code: NMT 04210

13.10.2 Module title: Basics of Health Information Management

13.10.3 Number of Credits: 4

13.10.4 Sub-enabling Outcomes:

- 5.2.1 Describe methods of keeping records related to health
- 5.2.2 Differentiate tools used in keeping medical records
- 5.2.3 Utilize documentation skills in recording and keeping client health information
- 5.2.4 Use HMIS (MTUHA) to collect and report information related to health
- 5.3.1 Describe legal, ethical and security concepts in relation to health information management
- 5.3.2 Employ security mechanism in protecting health information
- 5.3.3 Protect health information from physical access and damage using guidelines and standards

13.10.5 Prerequisite modules:

NMT 04104 Basic Computer Applications

13.10.6 Teaching and Learning context:

This module will be facilitated through Lecture Discussion, Presentations, and Group Discussion Practice in Skills Laboratory, Assignments, Demonstration, Skill laboratory, and Computer laboratory practice

13.10.7 Teaching and Learning Resource:

In this module the following teaching and learning materials will be used:
Textbooks, Writing board and Markers Computer, Practicum Guides, Procedure Book Projector and Flip Charts

13.10.8 Mode of Assessment

Continuous Assessment	40%
Written test	20%
Assignment guide	05%
Practical test	15%
End of Semester examination	60%
Written Examination	25%
Practical Examination	35%

References

- Brunner, L.S., & Suddath, S. D. (2004). *Textbook of Medical Surgical Nursing* (10th ed.). Philadelphia USA, Lippincott Williams and Wilkins
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- MOHSW. (2002). *Health Management Information System HMIS (MTUHA) Guidelines Book 1*. Ministry of Health & Social Welfare: Dar-es-Salaam Tanzania.
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- WHO (2006). *Medical Records Manual: A Guide for Developing Countries*. Philippines, WHO

13.11 Module Eleven: Disaster and Emergency Preparedness

13.11.1 Module code: NMT 04211

13.11.2 Module title: Disaster and Emergency Preparedness

13.11.3 Number of Credits: 13

13.11.4 Sub-enabling Outcomes:

- 4.1.1 Explain concepts of first aid in relation to emergency care
- 4.1.2 Describe cardiopulmonary resuscitation according to protocols and guidelines
- 4.1.3 Provide first aid to patient with cardiopulmonary emergency using ABC approach
- 4.2.1 Provide care to patients/client with lacerations, strains, sprains, fractures and dislocations using principles of first aid
- 4.2.2 Provide care to patient with head injury using principles of first aid
- 4.2.3 Provide care to patient with eye injury using principles of first aid
- 4.2.4 Provide care to patient with foreign body using principles of first aid
- 4.2.5 Provide care to patient with burn using principles of first aid
- 4.3.1 Provide care to patient with food poisoning using principles of first aid
- 4.3.2 Provide care to patient with bites and stings using principles of first aid
- 4.3.3 Provide care to patient with chemical poisoning using principles of first aid
- 4.4.1 Provide care to patient with anaphylactic shock using principles of first aid
- 4.4.2 Provide care to patients with cardiogenic shock using principles of first aid
- 4.4.3 Provide care to patient with hypovolemic shock using principles of first aid
- 4.4.4 Provide care to patient with neurogenic shock using principles of first aid
- 4.5.1 Describe concepts of disaster management and emergency preparedness in relation to nursing practice
- 4.5.2 Provide care to patients during emergency using principles of disaster management
- 4.5.3 Prevent disasters using knowledge and skills of emergency preparedness

13.11.5 Prerequisite modules:

NMT 04103 Human Anatomy and Physiology

13.11.6 Teaching and Learning context:

This module will be facilitated through Lecture Discussion, Presentations, and Group Discussion Practice in Skills Laboratory, Assignments, Demonstration, and Skill laboratory.

13.11.7 Teaching and Learning Resources:

In this module the following teaching and learning materials will be used:
Textbooks, Writing board and Markers Computer, Practicum Guides, Procedure Book Projector and Flip Charts

13.11.8 Mode of Assessment

Continuous Assessment	40%
Written test	15%
Assignment guide	05%
Practical examination	
OSCE/OSPE	20%
End of Semester examination	60%
Written Examination	25%
Clinical Examination	35%

References

- CDC (2005). *Check for safety: A home fall prevention checklist for older adults*. Atlanta: CDC.
- Handley, A. J., & Evans, T. R. (2004). *Abc of Resuscitation*. (T. R. E. M C) Colquhoun, A J Handley, (Ed.). London: BMJ Publishing Group
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- St Andrew's Ambulance association (2001): *First Aid Manual*, London, Dorling Kindersley limited
- University of Surrey and University of the West of England (2009) *Accidents prevention among children and young people a priority review crown*. Department of Children, Schools and Families, England: UK
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- White, J. &, McNulty, A. (2011). *Assessing the links between first Aid training and Community resilience*. UK: British Red Cross
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13.12 Module: Twelve: Entrepreneurship

13.12.1 Module Code: NMT 04212

13.12.2 Module Title: Entrepreneurship

13.12.3 Number Of Credit: 3

13.12.4 Sub Enabling Outcomes:

- 2.4.1 Explain concepts of entrepreneurship as used in health care services
- 2.4.2 Describe business regulatory framework of Tanzania in relation to health care service
- 2.4.3 Utilize the principles of entrepreneurship to formulate business idea
- 2.4.4 Develop business plan for health services using skills of entrepreneurship
- 2.4.5 Design plan for cost sharing in relation to health services

13.12.5 Prerequisite modules: None

13.12.6 Teaching and Learning context:

This module will be facilitated through Lecture Discussion, Presentations, and Group Discussion Practice in Skills Laboratory, Assignments, Demonstration, and Skill laboratory.

13.12.7 Teaching and Learning Resources:

In this module the following teaching and learning materials will be used: Assessment tool, Computer, LCD Projector, flip sheet, marker pen and white board

13.12.8 Modes of Assessment

Continuous assessment	40%
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Written test	25%
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Assignment guide	10%
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Practical procedure/log book	05%
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End of semester examination	60%
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Written examination	30%
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Project report	30%
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References

- Adair, J. (2007). *The Art of Creative Thinking: How to Be Innovative and Develop Great Ideas*. Philadelphia: Kogan Page Publishers.
- Boris, U. (2010). *Frontiers in Entrepreneurship*. (1st ed.). Born, Springer
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- Greenhalgh, T., & Bate, P. (2005). *Diffusion of Innovations in Health service Organisations*. New Jersey: John Wiley & Sons.
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- Runco, Mark, A., (2007). *Creativity: Theories and Themes*. Elsevier Academic Press: USA.
- Windrum, P. (2008). *Innovation in Public Sector Services: Entrepreneurship, Creativity and Management*. Chltenham (UK): Edward Elgar Publishing.

14.0 APPENDICES

14.1 DACUM Chart for NTA Level 4: Nurses and Midwife

Duties	Tasks/ Workplace skills								
A Asses a patient	A1 Perform quick assessment	A2 Establish therapeutic relationship	A3 Take history	A4 Prepare equipment	A5 Take vital signs	A6 Perform physical examination	A7 Identify patient needs and problems		
B Prevent and control infection	B1 Perform hand washing	B2 Use PPE	B3 Segregate hospital waste	B4 Decontaminate equipment, materials and surfaces	B5 Sterilize equipment	B6 Isolate infectious patients			
C Conduct therapeutic communication	C1 Identify client for therapeutic	C2 Prepare environment	C3 Establish rapport	C4 Conduct health talks	C5 Refer client				
D Perform basic nursing procedures	D1 Perform bed bath	D2 Perform bed making	D3 Change position of the patient	D4 Lift patient	D5 Provide bed pan and urinal	D6 Feed the patient	D7 Mouth wash		
E Provide 1 st AID	E1 Maintain Air way, Breathing and Circulation	E2 Administer oxygen	E3 Resuscitate the patient/client	E4 Assess blood sugar status	E5 Assess for anaemia	E6 Mobilize fracture	E7 Control bleeding	E8 Manage poisoning	E9 Refer client
F Manage cleaning equipment and supplies	F1 Identify needs	F2 Prepare a list of cleaning Equipment and supplies	F3 Order cleaning Equipment and supply	F4 Receive cleaning Equipment and supply	F5 Store cleaning Equipment and supply				
G Organise work environment	G1 Assess physical working environment	G2 Identify equipment and supplies needed	G3 Perform cleaning	G4 Arrange working environment					

Duties	Tasks/ Workplace skills								
H Provide care to a deceased	H1 Prepare materials and equipment	H2 Perform last office	H3 Inform mortuary attendants						
I Maintain records and documents	I1 Prepare different registers	I2 Record daily activity	I3 Prepare work report	I4 Store work report	I5 Maintain safety and security	I6 Maintain proper arrangement of report	I7 Maintain file movement register	I8 Communicate work report	I9 Maintain electronic record
J Ensure patient safety	J1 Observe Ethical and legal issues	J2 Keep patients's medicine safe	J3 Keep patients property's	J4 Keep environment safe	J5 Separate patients	J6 Avoid overcrowding			
K Advocate for patient right	K1 Observe patient's rights	K2 Educate patients on their rights	K3 Report malpractice	K4 Maintain confidentiality	K5 Provide privacy to patient				
L Admit patient	L1 Take nursing history	L2 Orient patient	L3 Take vital sign	L4 Take investigations	L5 Give medication	L6 Prepared	L7 Record patient particulars		
M Provide customer care	M1 Create rapport	M2 Provide therapeutic communication	M3 Orient the client	M4 Provide feedback	M5 Identify clients concerns	M6 Guide clients	M7 Handle clients as individuals	M8 Provide information	M9 Make follow up

14.2 List of Participants

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33	Mr. Octavian Leonard	TDC	I-TECH
34	Ms. Ukende Shalla	Midwifery Advisor	JHPIEGO
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39	Dr. Christom Lipingu	Senior Tech.	JHPIEGO

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134	Regina T. Mbonde	R/Nurse	Ilala Municipal
135	Charles Sepe Lwitaba	R/Nurse	Kivule Dispensary
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