

THE NATIONAL EXAMINATIONS COUNCIL OF TANZANIA



**FORM TWO NATIONAL ASSESSMENT
FORMATS**

ISSUED BY:

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Table of Contents

FOREWORD.....	iv
011 CIVICS.....	1
012 HISTORY.....	3
013 GEOGRAPHY.....	6
014 BIBLE KNOWLEDGE.....	9
015 ELIMU YA DINI YA KIISLAMU.....	11
016 FINE ARTS.....	15
017 MUSIC.....	17
018 PHYSICAL EDUCATION.....	19
019 THEATRE ARTS.....	21
021 KISWAHILI.....	23
022 ENGLISH LANGUAGE.....	25
023 FRENCH LANGUAGE.....	27
025 ARABIC LANGUAGE.....	29
031 PHYSICS.....	32
032 CHEMISTRY.....	35
033 BIOLOGY.....	37
034 AGRICULTURAL SCIENCE.....	40
035 ENGINEERING SCIENCE.....	43
036 INFORMATION AND COMPUTER STUDIES.....	45
041 BASIC MATHEMATICS.....	47
042 ADDITIONAL MATHEMATICS.....	50
051 FOOD AND NUTRITION.....	52
052 TEXTILES AND DRESSMAKING.....	56
061 COMMERCE.....	59
062 BOOK KEEPING.....	61
070 TECHNICAL DRAWING.....	63
071 CIVIL ENGINEERING.....	65
080 ELECTRICAL ENGINEERING.....	73
090 MECHANICAL ENGINEERING.....	76

FOREWORD

The National Examinations Council of Tanzania administered the Form Two National Assessment (FTNA) since 2014. This Form Two Assessment Format booklet has been prepared to provide guidance to teachers and students in their preparation of their Form Two National Assessment. The subjects covered in this document include the seven core subjects, which are Civics, History, Geography, Kiswahili, English Language, Biology and Basic Mathematics. It also contains ten bias subjects which are Physics, Chemistry, Agricultural Science, Engineering Science, Commerce, Book Keeping, Technical Drawing, Civil Engineering, Electrical Engineering and Mechanical Engineering. Furthermore the booklet contain twelve optional subjects namely Bible Knowledge, Elimu ya Dini ya Kiislamu, Fine Arts, Music, Physical Education, French Language, Arabic Language, Additional Mathematics, Food and Nutrition, Textile and Dressmaking, Theatre Arts and Information and Computer Studies.

The Form Two National Assessment Formats have been prepared taking into account the topics stipulated in the syllabuses currently in use. This Assessment Format Booklet includes the formats of all the subjects that will be assessed in the Form Two National Assessment with effect from 2017.

It is hoped that this booklet will give an extra guidance to teachers and other educational stakeholders on assessment procedures in Form Two level. The formats are also expected to help teachers and learners to cope with the syllabus requirement for successful syllabus coverage and acquisition of knowledge and skills. The assessment format booklets will also help examiners in producing assessment papers, which fulfill the requirement of the syllabus.

The assessment formats are designed such that they will be used hand in hand with the syllabi. Teachers are therefore strongly encouraged to take advantages of these formats models in assessing their learners to harmonize their assessment procedures and those used by The National Examinations Council of Tanzania. However, they should not substitute the assessment formats for each subject with the subject syllabi.

Lastly, I would like to extend my sincere gratitude to Examination Officers and all individuals who were involved in preparation of this assessment format for their invaluable inputs during the preparation of this document.



Dr. Charles E. Msonde
EXECUTIVE SECRETARY

011 CIVICS

1.0 INTRODUCTION

The Civics assessment format for Form Two National Assessment (FTNA) covers the Form One and Form Two topics derived from the Civics syllabus for Secondary Schools which was issued in 2005 and revised in 2010. This assessment is a formative evaluation which aims at measuring the students' educational attainment of the specified competences learned in two years of Secondary Education.

2.0 GENERAL OBJECTIVES

The general objectives of the assessment are to test;

- 2.1 The extent to which the students have acquired the competences shown in the syllabus for form one and two.
- 2.2 Students level of understanding of concepts, skills and ability to apply them.

3.0 GENERAL COMPETENCES

At the end of form two secondary school syllabus topics, students are expected to demonstrate the following competences;

- 3.1 Knowledge of and respect for rights and responsibilities as a citizen in a democratic state.
- 3.2 Willingness to work hard for national development.
- 3.3 Understanding and appreciation of democratic values.
- 3.4 Knowledge of government structure and its functions.
- 3.5 Ability to analyse matters related to family issues and make the right decision.
- 3.6 Ability to use roads correctly and safely.
- 3.7 Knowledge and ability to apply life skills.
- 3.8 Responsible sexual behavior and gender relations.

4.0 ASSESSMENT RUBRIC

There will be **one (01)** paper of **2:30 hours** duration consisting of **seven (07)** questions in three sections A, B and C. Students will be required to

answer **all** questions in section A and B and **one (01)** question from section C.

- 4.1 **Section A** will comprise of **three (03)** questions. Question **one (01)** will consist of **twenty (20)** multiple choice questions items. Each item will weigh **one (01) mark**. Question **two (02)** will consist of **five (5)** matching items. Each item will weigh **one (01) mark** and question **three (03)** will consist of **ten (10)** True/False items. Each item will weigh **one (01) mark**. Section A will weigh **thirty five (35) marks**.
- 4.2 **Section B** will comprise **two (02)** questions (Question 4 and 5). Students will be required to answer **all** questions. Questions **four (04)** will be on comprehension. In this question, students will give short answers to **five (05)** items that will be set from the passage. The passage will consist of about **180 to 200** words. Question 4 will weigh **ten (10) marks**.

Question **five (05)** will consists of **ten (10)** items that will require students to give definitions of concepts and provide **two (02)** points on the importance/effects of each concept. The question will weigh **forty (40)** marks.

- 4.3 **Section C** will comprise of **two (02)** essay questions (question 6 and 7). Each question will weigh **fifteen (15)** marks. Students will be required to choose **one (01)** question from this section.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1 Our nation
- 5.2 Promotion of life skills
- 5.3 Human rights
- 5.4 Responsible citizenship
- 5.5 Work
- 5.6 Family life
- 5.7 Proper behavior and responsible decision making
- 5.8 Road safety education
- 5.9 Government of Tanzania
- 5.10 Democracy
- 5.11 Gender

012 HISTORY

1.0 INTRODUCTION

The History assessment format for Form Two National Assessment (FTNA) covers the Form One and Form Two topics derived from the History Syllabus for Secondary Schools which was issued in 2005 and revised in 2010. This assessment is a formative evaluation which aims at measuring the students' educational attainment of the specified competences learnt in two years of Secondary Education.

2.0 GENERAL OBJECTIVES

The general objectives of Form Two History assessment are to:

- 2.1 assess the students' achievements of the competences in explaining the concepts, importance, sources of History and the theories of origin and Evolution of Man.
- 2.2 determine the students' ability to relate both man's development to the environment and technology and peoples' economic activities to the development of social and political organization in Pre-colonial Africa.
- 2.3 determine the students' ability in explaining the motives for the interactions among the people of Africa.
- 2.4 assess the students' ability in explaining the levels of social and economic development in Pre-colonial Africa.
- 2.5 assess the students' ability in explaining the motives for the coming of foreigners to Africa from earliest times up to 1850s and analyse how and why the development of capitalism influenced social and economic changes in Africa.

3.0 GENERAL COMPETENCES

The Form Two History assessment will test the students' ability to:

- 3.1 demonstrate knowledge of the concepts, importance, sources of History and examine the theories of origin and Evolution of Man.
- 3.2 demonstrate ability to relate both man's development to the environment and technology and peoples' economic activities to the development of their social and political organization.

- 3.3 demonstrate knowledge of both the motives for interactions among the people of Africa and the levels of social economic development in pre-colonial Africa.
- 3.4 examine the motives for the coming of foreigners to Africa from the earliest times up to 1850s.
- 3.5 demonstrate knowledge on the development of capitalism and analyse how and why it influenced social and economic changes in Africa.

4.0 THE ASSESSMENT RUBRIC

There will be **one (1)** paper of **2:30 hours** duration. The paper will consist of three (3) sections A, B and C with a total of **ten (10)** questions. Students will be required to answer **all** questions from sections A and B and **two (2)** questions from section C.

Section A will comprise **four (4)** questions set from various topics. Question 1 will comprise **ten (10)** multiple-choice items, question 2 will comprise **ten (10)** matching items, question 3 will comprise **ten (10)** True and False items and in question 4 the students will be required to give a brief descriptions on **five (5)** historical terms. Each question will carry **ten (10)** marks making a total of **forty (40)** marks in this section.

Section B will consist of **three (3)** questions set from various topics. Question 5 will comprise **five (5)** historical statements of which the students will be required to arrange them in a chronological order. Question 6 will have **five (5)** items in which the students will be required to fill in the blanks. In question 7 the students will be required to identify/determine/interpret **five (5)** historical places or events on a given sketch map/chart/drawing/picture/photograph. Each question will carry **ten (10)** marks making a total of **thirty (30)** marks in this section.

Section C will comprise **three (3)** essay questions derived from various topics. The students will be required to answer only **two (2)** questions from this section. Each question will carry **fifteen (15)** marks making a total of **thirty (30)** marks in this section.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1.1 Sources and Importance of Studying History.
- 5.1.2 Evolution of Man, Technology and Environment.
- 5.1.3 Development of Economic Activities and their Impact.

- 5.1.4 Development of Social and Political Systems.
- 5.1.5 Interactions among the People of Africa.
- 5.1.6 Social-Economic Development and Production in Pre-colonial Africa.
- 5.1.7 Africa and the External World.
- 5.1.8 Industrial Capitalism.

013 GEOGRAPHY

1.0 INTRODUCTION

The Geography assessment format for the Form Two National Assessment (FTNA) covers the Form One and Form Two topics of the Geography Syllabus for Secondary Schools which was issued in 2005 and revised in 2010. The Geography form two assessment is a formative evaluation, which aims at measuring the students' educational attainment of the specified competences learnt in their two years of Secondary Education.

2.0 GENERAL OBJECTIVES

The assessment will measure the extent to which the students can:

- 2.1 interpret the concept of Geography, the solar system and its related aspects.
- 2.2 illustrate and differentiate physical components of the earth.
- 2.3 attain skills of observation, measuring, recording and interpreting geographical phenomena.
- 2.4 identify major types of human activities.

3.0 GENERAL COMPETENCES

The assessment will test students' ability to:

- 3.1 explain the concept of Geography, its area of study and the aspects related to solar system.
- 3.2 identify the parts and physical components of the earth.
- 3.3 observe, read, record, measure, calculate, analyse and interpret the elements of weather, climate and information on simple topographical maps.
- 3.4 relate climate to the environment and use conservation skills to protect the environment from environmental hazards caused by social and economic activities.
- 3.5 explain the sustainable ways of utilizing natural resources.

- 3.6 identify the types, characteristics, importance and problems of social and economic activities and their relationship with climate.

4.0 ASSESSMENT RUBRIC

There will be **one (1)** paper of **2:30 hours** duration. The paper will comprise a total of **ten (10)** questions in sections A, B and C. Students will be required to answer **all** questions in sections A and B and **two (2)** questions from section C.

- 4.1 **Section A:** This section will consist of **three (3)** questions set from various topics. Question **one (1)** will consist of **ten (10)** multiple choice items, question **two (2)** will consist of **five (5)** matching items and question **three (3)** will consist of **ten (10)** True/False items. Each item in question 1, 2 and 3 will weigh **one (1)** mark. The whole section will carry **twenty five (25)** marks.
- 4.2 **Section B:** This section will consist of **three (3)** short answers questions (Question 4, 5 and 6). Question 4 and 5 will be set from Human Geography and Physical Geography topics, which will weigh **fifteen (15)** marks each. Question 6 will be set from Map Work topic which will weigh **fifteen (15)** marks. The whole section will weigh a total of **forty five (45)** marks.
- 4.3 **Section C:** This section will consist of **four (4)** essay questions (Question 7, 8, 9 and 10) which will be set from Human Geography. Students will be required to answer **two (2)** questions from this section. Each question will weigh **fifteen (15)** marks. The whole section will weigh a total of **thirty (30)** marks.

5.0 ASSESSMENT CONTENTS

The following topics will be assessed:

- 5.1 Concept of Geography
- 5.2 The Solar System
- 5.3 Major Features of the Earth's Surface
- 5.4 Weather
- 5.5 Climate
- 5.6 Map Work
- 5.7 Agriculture

- 5.8 Water Management for Economic Development
- 5.9 Sustainable Use of Forest Resources
- 5.10 Sustainable Mining
- 5.11 Tourism
- 5.12 Manufacturing Industry
- 5.13 Sustainable Use of Power and Energy Resources
- 5.14 Transport.

014 BIBLE KNOWLEDGE

1.0 INTRODUCTION

The Bible Knowledge assessment format for Form Two National Assessment (FTNA) covers the Form I and Form II topics derived from the Bible Knowledge Syllabus for Secondary Schools which was issued in 2012. The Bible Knowledge form two assessment is a formative evaluation, which aims at measuring the students' educational attainment of the specified competences learnt in two years of Secondary Education.

2.0 GENERAL OBJECTIVES

The Bible Knowledge assessment is intended to find out to what extent students can:

- 2.1 Understand the biblical stories, quotations, places, persons and occasion of the statements.
- 2.2 Narrate biblical stories and events taken from their selected texts.
- 2.3 Use the knowledge gained from the Bible to protect and preserve human dignity and environment.
- 2.4 Apply biblical information and teachings in order to improve social, cultural, political, economic and technological life in Tanzania.

3.0 GENERAL COMPETENCES

The Bible Knowledge assessment questions will test students' ability to:

- 3.1 Demonstrate knowledge of Biblical quotations regarding the speaker/addressee, context/occasion, and ability to bring some interpretation and comments.
- 3.2 Narrate biblical stories and events taken from their selected texts as a means to make other people know the Bible.
- 3.3 Demonstrate ability to apply biblical instructions and teaching in protection and preservation of human dignity and environment and ability to admit the mistakes they make and accept the responsibility.
- 3.4 Apply biblical information and teachings in order to improve social, cultural, political, economic and technological life in Tanzania.

4.0 ASSESSMENT RUBRIC

There will be **one (1)** paper which will comprise **eight (8)** questions in sections A, B, C and D. Students will be required to answer all questions from sections A, B and C and **only one (1)** question from section D. The duration for the paper will be **2:30 hours**.

- 4.1 **Section A** will consist of **two (2)** questions (question 1 and 2) set from various topics. Question 1 will consist of **ten (10)** multiple-choice items carrying a total of **ten (10) marks**. Question 2 will consist of **ten (10)** matching items from any of the topics carrying **ten (10) marks**. This section will carry **twenty (20) marks**.
- 4.2 **Section B** will consist of **two (2)** questions (question 3 and 4) each question set from a different topic. Question 3 will consist of **ten (10)** True/False items set from one topic. Question 4 will consist of **ten (10)** items in which the students will be required to fill in the blanks. The students will be given a list of fifteen (15) words/phrases to choose as responses to fill in the given blanks. Each question will carry **ten (10) marks**. This section will carry **twenty (20) marks**.
- 4.3 **Section C** will consist of **two (2)** questions (question 5 and 6) each question set from a different topic. Question 5 will consist of **ten (10)** short answer items set from one topic. Each item will carry **two (2)** marks making a total of **twenty (20) marks**. In question 6 the students will be required to write short description of five biblical places/persons/concepts/themes from one topic. The question will carry **twenty (20) marks**. This section will carry **forty (40) marks**.
- 4.4 **Section D** will consist of **two (2)** essay questions set from different topics. Students will be required to answer **one (1)** question. This section will carry **twenty (20) marks**.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1 Creation
- 5.2 The fall and its outcome
- 5.3 Life of Abraham
- 5.4 The Sons of Isaac
- 5.5 The Hebrews in Egypt
- 5.6 Israelites' journey through the desert
- 5.7 Israel under the leadership of Joshua
- 5.8 Israel under the leadership of Judges.

015 ELIMU YA DINI YA KIISLAMU

1.0 UTANGULIZI

Fomati ya upimaji wa Elimu ya Dini ya Kiislamu imezingatia Muhtasari wa Elimu ya Dini ya Kiislamu kwa Elimu ya Sekondari wa mwaka 2012, mada zinazofundishwa katika Kidato cha Kwanza na cha Pili. Fomati hii inalenga kupima stadi na maarifa waliyoyapata wanafunzi kwa kipindi cha miaka miwili ya Elimu ya Sekondari.

2.0 MALENGO YA JUMLA

Upimaji wa Elimu ya Dini ya Kiislamu utazingatia uwezo wa wanafunzi katika:

- 2.1 Kuelewa mtazamo wa Uislamu juu ya dhana ya Elimu na Dini.
- 2.2 Kufahamu Nguzo za Imani.
- 2.3 Kufahamu chimbuko la Fiqh, mtazamo wa Uislamu juu ya ibada na utekelezaji wa nguzo tano za Uislamu na vipengele vya tabia njema.
- 2.4 Kuelewa Historia ya kushuka kwa Qur'an na kuhifadhiwa kwake.
- 2.5 Kuelewa namna ya kusoma Qur'an kwa kuzingatia Ahkami, tafsiri na mafunzo ya sura zilizoteuliwa.
- 2.6 Kuelewa maana ya Sunnah na Hadithi, Sayansi ya Hadithi na Mafunzo ya Hadithi zilizoteuliwa.
- 2.7 Kuelewa mwenendo na matendo yanayoonesha maadili katika Uislamu.
- 2.8 Kuelewa mitazamo mbalimbali juu ya historia, lengo la maumbile ya dunia na binadamu na namna ya kulifikia.
- 2.9 Kuelewa historia ya baadhi ya mitume, bara la Arab enzi za ujahili katika karne ya 6 na namna Mtume (s.a.w) alivyohuisha Uislamu.

3.0 UJUZI WA JUMLA

Kupima uwezo na utendaji wa mwanafunzi katika:

- 3.1 Kutambua mtazamo wa Uislamu juu ya dhana ya Elimu, Dini na haja ya dini kwa mwanadamu.

- 3.2 Kubainisha nguzo za Imani.
- 3.3 Kubainisha nguzo za Uislamu.
- 3.4 Kueleza maana ya Fiqh, chimbuko la Fiqh na misingi ya Fiqh.
- 3.5 Kueleza historia ya kushuka kwa Qur'an na kuhifadhiwa kwake.
- 3.6 Kusoma Qur'an kwa kuzingatia Ahkami, tafsiri na mafuzo ya sura zilizoteuliwa.
- 3.7 Kubainisha maana ya Sunnah na Hadithi, sayansi ya Hadithi na mafunzo ya Hadithi zilizoteuliwa.
- 3.8 Kutambua mwenendo na matendo yanayoonesha maadili katika Uislamu.
- 3.9 Kubainisha mitazamo juu ya historia, lengo la maumbile ya dunia na binadamu na namna ya kulifikia.
- 3.10 Kueleza historia ya baadhi ya Mitume, bara la Arab enzi za ujahili katika karne ya 6 na namna Mtume (s.a.w) alivyohuisha Uislamu.

4.0 MUUNDO WA UPIMAJI

Upimaji wa Elimu ya Dini ya Kiislamu utakuwa na karatasi moja iliyogawanyika katika sehemu tatu za A, B na C. Sehemu A itakuwa na maswali **mawili (2)**, sehemu B itakuwa na maswali **matatu (3)** na sehemu C itakuwa na maswali **mawili (2)**. Mwanafunzi atatakiwa kufanya maswali **yote**. Upimaji huu utakuwa wa muda wa saa **2:30**.

4.1 Sehemu A

Sehemu hii itakuwa na maswali **mawili (2)** ambayo yatakuwa na jumla ya alama **ishirini (20)**.

4.1.1 Swali la kwanza (01) litakuwa la kuchagua jibu sahihi lenye vipengele **kumi (i-x)**. Swali hili litahusu mada za Sunnah na Hadithi. Kila kipengele kitakuwa na jumla ya alama **moja (1)**. Hivyo swali hili litakuwa na jumla ya alama **kumi (10)**.

4.1.2 Swali la pili (02) litakuwa la kuoanisha vifungu vya maneno kutoka Orodha A na vifungu vya maneno kutoka Orodha B. Swali hili litatoka katika mada ya Tawhiid. Mwanafunzi atatakiwa aoanisha vipengele **kumi (i-x)** katika Orodha A na vipotoshi vilivyoko katika Orodha B. Kila kipengele

kitakuwa na alama **moja (1)** hivyo kuwa na jumla ya alama **kumi (10)**.

4.2 Sehemu B

Sehemu hii itakuwa na maswali **matatu (3)** ambayo yatakuwa na jumla ya alama **arobaini (40)**.

4.2.1 Swali la tatu (3) litakuwa na sentensi **kumi (10)** kutoka katika mada za Tawhiid ambapo mwanafunzi atatakiwa kuonesha kama sentensi hizo ni za **Kweli** au **Si Kweli**. Kila sentensi moja itakuwa na alama **moja (1)** hivyo kuwa na jumla ya alama **kumi (10)** katika swali hili.

4.2.2 Swali la nne (4) kutoka mada za Tarekh litakuwa na vipengele **kumi (a-j)** vyenye sentensi zilizoachwa nafasi wazi. Mwanafunzi atatakiwa kujaza nafasi zilizo wazi. Mwanafunzi atapewa orodha ya maneno au vifungu vya maneno **15** na kutakiwa kuchagua jibu sahihi na kujaza katika nafasi zilizo wazi. Kila kipengele kitakuwa na alama **mbili (2)** hivyo kuwa na jumla ya alama **ishirini (20)**.

4.2.3 Swali la tano (5) litakuwa na vipengele **viwili (2)**. Katika kila kipengele kutakuwa na sentensi **tano (5)** zilizopangwa katika mtiririko usio sahihi. Mwanafunzi atatakiwa kuzipanga katika mtiririko wenye kuleta mantiki. Swali hili litahusu mada za Qur'an. Kila sentensi itabeba uzito wa alama **moja (1)**. Hivyo swali la tano litakuwa na jumla ya alama **kumi (10)**.

4.3 Sehemu C

Sehemu hii itakuwa na maswali **mawili (2)** (6 na 7) yatakayokuwa na jumla ya alama **arobaini (40)**.

4.3.1 Swali la sita (6) litakuwa na vipengele **vitano (5)** vyenye kuhitaji kutoa maelezo kwa ufupi juu ya maneno au vifungu vya maneno. Swali hili litahusu mada za Fiqh. Kila kipengele kitakuwa na alama **nne (4)** na hivyo kuwa na jumla ya alama **ishirini (20)**.

4.3.2 Swali la saba (7) litakuwa la insha. Mwanafunzi atatakiwa kuandika insha ya maneno yasiyozidi **200**. Swali hili litahusu mada za Fiqh na litabeba uzito wa alama **ishirini (20)**.

5.0 MADA ZITAKAZOPIMWA

Mada zifuatazo zitapimwa:

- 5.1 Mtazamo wa Uislamu juu ya Elimu
- 5.2 Imani ya Kiislamu
- 5.3 Mtazamo wa Uislamu juu ya Dini
- 5.4 Maana, chimbuko na misingi ya Fiqh
- 5.5 Mtazamo wa Uislamu juu ya Ibada
- 5.6 Nguzo za Uislamu
- 5.7 Kushuka na kuhifadhiwa kwa Qur'an
- 5.8 Qur'an na tafsiri (sura zilizoteuliwa)
- 5.9 Sunnah na Hadithi
- 5.10 Dhana juu ya Historia.

016 FINE ARTS

1.0 INTRODUCTION

The Fine Arts syllabus was issued in 2005 by the Ministry of Education and Vocational Training. The syllabus focused more on acquisition of competences rather than content. This assessment format has been designed based on the syllabus requirements.

2.0 GENERAL OBJECTIVES

The assessment will test students' ability to:

- 2.1 acquire skills in drawing, painting and designing.
- 2.2 apply perspective in drawing.
- 2.3 apply the elements of pictorial composition in painting.
- 2.4 design posters using roman and other script letters.

3.0 GENERAL COMPETENCES

The assessment will test students' ability to:

- 3.1 make drawings, paintings and design.
- 3.2 create various works of Fine Arts.
- 3.3 produce works of Fine Arts by using traditional and modern technologies.

4.0 ASSESSMENT RUBRIC

There will be one paper of **three (3) hours** duration. The paper will consist of sections A, B, C and D with **eight (8)** questions. Students will be required to answer **two (2)** questions from any **two (2)** sections. Each question will carry **fifty (50)** marks. The **24 Hours Advance Instructions** will be sent to schools to enable them to prepare materials required for the assessment.

- 4.1 **Section A** will consist of **two (2)** questions set from the topic of Still Life. Students will be required to answer **one (1)** question. Each question will weigh **fifty (50)** marks.
- 4.2 **Section B** will consist of **two (2)** questions set from the topic of Drawing from Nature. Students will be required to answer **one (1)** question. Each question will weigh **50** marks.

- 4.3 **Section C** will consist of **two (2)** questions set from the topic of Pictorial Composition. Students will be required to answer **one (1)** question. Each question will weigh **fifty (50)** marks.
- 4.4 **Section D** will consist of **two (2)** questions set from the topic of Craft and Design. Students will be required to answer **one (1)** question. Each question will weigh **fifty (50)** marks.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1 Still life drawing
- 5.2 Drawing from nature
- 5.3 Pictorial composition
- 5.4 Craft and design

017 MUSIC

1.0 INTRODUCTION

The Music syllabus was issued in 2005 by the Ministry of Education and Vocational Training. The syllabus focused more on acquisition of competences rather than content. This assessment format has been designed based on the syllabus requirements.

2.0 GENERAL OBJECTIVES

The assessment will test students' ability to:

- 2.1 acquire skills in reading, writing and listening to simple music.
- 2.2 sing simple melodies of four bars at sight.
- 2.3 compose simple rhythm and melodies.
- 2.4 recognize music intervals.
- 2.5 give critic to musical works basing on principles of good melody, rhythmic and harmonic devices.
- 2.6 play traditional and modern musical instruments of Tanzania.

3.0 GENERAL COMPETENCES

The assessment will test students' ability to:

- 3.1 demonstrate skills of reading, writing and listening to simple music.
- 3.2 compose music and play musical instruments.
- 3.3 recognise music intervals.
- 3.4 explain musical terms and signs in music.
- 3.5 give critic to simple music work.

4.0 ASSESSMENT RUBRIC

There will be one paper of **2:30 hours** duration. The paper will consist of sections A, B and C with a total of **six (6)** questions. Students will be required to answer **all** questions in section A, B and C.

- 4.1 **Section A** will consist of **one (1)** question with **twenty (20)** multiple choice items set from all major topics of the syllabus. Each item will carry **two (2)** marks. This section will weigh **forty (40)** marks.

- 4.2 **Section B** will consist of **two (2)** questions. Question 2 will consist of **ten (10)** matching items. Question 3 will consist of **ten (10)** true or false items. Each item will carry **one (1)** mark. The section will weigh **twenty (20)** marks.
- 4.3 **Section C** will consist of **three (3)** short answer questions of which question 4 and 5 will consist of **five (5)** items and each question will weigh **ten (10)** marks. Question 6 will consist of **two (2)** short answer items and will weigh **ten (10)** marks in each item. Student will be required to answer **all** questions. The section will weigh **forty (40)** marks.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1 Rudiments of music
- 5.2 Harmony
- 5.3 Applied music

018 PHYSICAL EDUCATION

1.0 INTRODUCTION

This assessment format has been formulated on the basis of the revised Physical Education Syllabus of 2005. The main objective of this format is to give guidance to Physical Education assessors in setting items for assessment. In this format a number of objectives and competences will be assessed.

2.0 GENERAL OBJECTIVES

The general objectives of this assessment are to test the extent to which students can:

- 2.1 interpret the concept of Physical Education and its importance to the development of human being.
- 2.2 develop knowledge and improve personal health and physical fitness.
- 2.3 develop individual skills to participate and value physical exercises, sports and games and recreational activities.
- 2.4 interpret and apply health rules, first aid and safety measures in sports at individual and community levels.

3.0 GENERAL COMPETENCES

The assessment will specifically test the students' ability to:

- 3.1 demonstrate an understanding of the concept, value of Physical Education and physical activities.
- 3.2 identify the roles of exercise on health and fitness.
- 3.3 demonstrate mastery on basic movement skills to perform various games and related physical activities.
- 3.4 demonstrate an understanding on specific skills in sport and recreational activities.
- 3.5 apply knowledge and skills in rendering first aid and safety services in sports at individual and community levels.

4.0 ASSESSMENT RUBRIC

There will be **one (1)** paper of **2:30 hours** duration. The paper will consist of **ten (10)** questions spread in three sections A, B and C. Students will be required to answer **all** questions in all sections.

- 4.1 **Section A** will comprise **four (4)** questions. Question 1 will consist of **ten (10)** multiple-choice items set from all major topics of the syllabus. Question 2 will have **five (05)** matching items set from any one topic/ sub topic in the syllabus. Question 3 will consist of **ten (10)** items of true or false statements, Question 4 will consist of **five (05)** filling in the blanks items. Each item in all questions will carry **one (01)** mark. Section A will weigh **thirty (30)** marks in total.
- 4.2 **Section B** will comprise **five (5)** short answer questions set from various topics in the syllabus. Students will be required to answer **all** questions in this section. Each question will carry **ten (10)** marks. This section will weigh **fifty (50)** marks.
- 4.3 **Section C** will comprise **one (1)** question from any games topic. This section will weigh **twenty (20)** marks.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1 Principles of Physical Education.
- 5.2 Safety.
- 5.3 First Aid.
- 5.4 Health Related Physical Fitness.
- 5.5 Performance Related Physical Fitness.
- 5.6 Gymnastics.
- 5.7 Swimming.
- 5.8 Recreation and Outdoor Activities.
- 5.9 Ball games (Soccer and Netball).
- 5.10 Track and Field Events (Short and Middle distance running, Relays and Hurdles).

1.0 INTRODUCTION

The Theatre Arts syllabus was issued in 2008 by the Ministry of Education and Vocational Training. The syllabus has been improved to focus more on acquisition of competences rather than content. This assessment format has been designed according to the syllabus requirements.

2.0 GENERAL OBJECTIVES

The assessment will test students' ability to:

- 2.1 understand their own culture, the elements of culture and national culture.
- 2.2 develop an understanding of art, forms of art, functions of art, differentiate the basic characteristics of form of art.
- 2.3 develop an understanding and appreciation of Theatre, elements of Theatre arts and forms of Theatre arts.
- 2.4 understand theatre practices in Tanzania in different eras (pre-colonial and post colonial era).
- 2.5 understand techniques of theatre performances from world theatre practices.
- 2.6 understand performing techniques in African theatre arts.
- 2.7 understand techniques in selected non-African theatre arts.

3.0 GENERAL COMPETENCES

The assessment will test students' ability to:

- 3.1 respect norms, values and national symbols as ways of promoting national culture.
- 3.2 use techniques of theatre performances from world theatre practices.

- 3.3 create, demonstrate and perform African theatre and non-African theatre.
- 3.4 demonstrate and promote Theatre Arts works.
- 3.5 perform Theatre Arts works.

4.0 ASSESSMENT RUBRIC

There will be one paper of **2:30** hours duration. The paper will consist of sections A, B and C with a total of **11** questions.

- 4.1 **Section A** will consist of **four (4)** questions. Question 1 will comprise **ten (10)** multiple choice items set from all major topics of the syllabus. Question 2 will comprise **ten (10)** matching items. Question 3 will comprise **five (5)** filling in the blanks items and question 4 will comprise **five (5)** questions on true or false items. Each item will weigh 1 mark. Students will be required to answer **all** questions. The section will weigh **thirty (30)** marks.
- 4.2 **Section B** will consist of **five (5)** short answer questions. Students will be required to answer **all** questions. Each question will carry **ten (10)** marks. The section will weigh **fifty (50)** marks.
- 4.3 **Section C** will consist of **two (2)** essay questions. Students will be required to answer **one (1)** question. The question will carry **twenty (20)** marks. The section will weigh **twenty (20)** marks.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1 Culture
- 5.2 Art
- 5.3 Theatre arts
- 5.4 Theatre arts practices in Tanzania
- 5.5 World theatre practices
- 5.6 Performing techniques in African theatre
- 5.7 Performing techniques in selected non-African theatre.

021 KISWAHILI

1.0 UTANGULIZI

Fomati hii imeandaliwa ili kukidhi utunzi wa maswali ya Upimaji wa Kidato cha Pili. Fomati imezingatia muhtasari wa mwaka 2005 uliorekebisha mwaka 2010 kwa Kidato cha Kwanza na cha Pili. Mada zote zilizomo ndani ya muhtasari wa somo la Kiswahili kwa Shule za Sekondari kwa Kidato cha Kwanza na cha Pili zimezingatiwa kikamilifu.

2.0 MALENGO YA JUMLA

Malengo ya upimaji yatahusu uwezo wa mwanafunzi katika:

- 2.1 Kuelewa, kutathmini na kutumia kazi za fasihi katika maisha.
- 2.2 Kusoma na kuelewa maandiko na vitabu mbalimbali vya Kiswahili vyenye taarifa fupi na rahisi ili kupata ujumbe mahsusi.
- 2.3 Kubainisha matumizi ya Kiswahili katika miktadha mbalimbali.
- 2.4 Kujieleza kwa Kiswahili kwa kusimulia au kuandika habari fupi kwa kuzingatia taratibu za uandishi.
- 2.5 Kukusanya, kubainisha, kuhakiki, kutunga na kuhifadhi kazi za fasihi simulizi kwa Kiswahili.
- 2.6 Kubaini matumizi sahihi ya maneno katika tungo mbalimbali za Kiswahili.

3.0 UJUZI WA JUMLA

Upimaji kwa kutumia muhtasari utazingatia ujuzi na utendaji wa mwanafunzi katika:

- 3.1 Kusikiliza na kuwasiliana kwa Kiswahili sanifu katika miktadha mbalimbali.
- 3.2 Kusoma maandiko mbalimbali ya Kiswahili kwa ufanisi.
- 3.3 Kuandika habari fupi kwa Kiswahili sanifu.
- 3.4 Kubainisha, kuhakiki na kutunga kazi za fasihi simulizi kwa Kiswahili.
- 3.5 Kuwasiliana kwa kutumia lugha ya ishara na alama (kwa viziwi).

3.6 Kusoma na kuandika lugha ya Kiswahili kwa kutumia herufi za breili kwa wasioona.

4.0 MUUNDO WA UPIMAJI

Kutakuwa na karatasi **moja** yenye sehemu A, B, C, D na E. Muda wa upimaji utakuwa saa **2:30**. Jumla ya maswali yatakuwa **kumi (10)** na mwanafunzi atatakiwa kujibu maswali yote kwa kuzingatia maelekezo ya kila sehemu.

4.1 **Sehemu A** itahusu Ufahamu na itakuwa na maswali **mawili (02)** kuhusu kifungu cha habari. Swali la kwanza litakuwa na vipengele **vinne (04)**. Swali la pili litahusu ufupisho. Sehemu hii itakuwa na alama **kumi na tano (15)**.

4.2 **Sehemu B** itahusu Sarufi na itakuwa na maswali **mawili (02)** yenye vipengele vyenye kuhitaji majibu mafupi. Mwanafunzi atatakiwa kujibu maswali yote. Sehemu hii itakuwa na jumla ya alama **ishirini (20)**.

4.3 **Sehemu C** itahusu Mawasiliano na Utumizi wa Lugha. Sehemu hii itakuwa na maswali **mawili (02)** yenye kuhitaji majibu mafupi. Mwanafunzi atatakiwa kujibu maswali yote. Sehemu hii itakuwa na jumla ya alama **ishirini (20)**.

4.4 **Sehemu D** itahusu Fasihi na itajikita katika Fasihi kwa Ujumla, Uhakiki, Uhifadhi na Utunzi wa Kazi za Fasihi Simulizi. Sehemu hii itakuwa na maswali **matatu (03)** yenye kuhitaji majibu mafupi. Mwanafunzi atatakiwa kujibu maswali yote. Sehemu hii itakuwa na alama **thelathini (30)**.

4.5 **Sehemu E** itahusu Uandishi/Utungaji na itakuwa na swali **moja (01)**. Sehemu hii itakuwa na alama **kumi na tano (15)**.

5.0 MADA ZITAKAZOPIMWA

Mada zifuatazo zitapimwa:

- 5.1 Ufahamu
- 5.2 Sarufi
- 5.3 Mawasiliano na Utumizi wa Lugha
- 5.4 Fasihi
- 5.5 Uandishi/Utungaji

022 ENGLISH LANGUAGE

1.0 INTRODUCTION

This format has accommodated the changes made in the new English Language syllabus issued in 2005 and revised in 2010, which focuses more on enabling the students to communicate in varied situations, rather than on grammar perfection. This format, therefore, puts emphasis on testing students' ability to use appropriate English Language to communicate in a variety of settings.

2.0 GENERAL OBJECTIVES

The assessment will generally measure the extent to which students can:

- 2.1 Express themselves in both spoken and written English.
- 2.2 Read intensively a variety of simple English texts.
- 2.3 Write a variety of simple texts and descriptions in English Language.
- 2.4 Explain content of simple English readers in different genres.

3.0 GENERAL COMPETENCES

The assessment will measure the students' ability to:

- 3.1 Use English Language appropriately to communicate in a variety of settings.
- 3.2 Use appropriate English Language to express needs, feelings and ideas.
- 3.3 Read and understand simple texts in English Language.
- 3.4 Read, analyse simple English readers and poems and relate them to real life situations.
- 3.5 Write a variety of simple texts in English Language.

4.0 ASSESSMENT RUBRIC

The assessment will consist of **one (1)** paper of **2:30 hours** duration. There will be 10 questions distributed in sections A, B, C and D. Students will be required to answer **all** questions in each section.

4.1 Section A: Comprehension and Summary

There will be **two (2)** questions in this section. Question **one (1)** will

have two parts; part (a) will involve reading a passage and respond to 5 short answer items and part (b) will involve reading the same passage and responding to 5 True/False items. Each short answer in part (a) will weigh **two (2)** marks; while each True/False item in part (b) will weigh **one (1)** mark. Question **two (2)** will involve reading a short passage and transferring information to a table or filling-in-blank spaces. Each item in question two will weigh **one (1)** mark. The whole section will carry **twenty (20)** marks.

4.2 **Section B: Language Use**

The section will consist of **three (3)** questions. One question will be on matching items, another on jumbled items and the other on composition/letter writing. The matching and jumbled items will carry **five (5)** marks each, while the questions on composition/letter writing will weigh **ten (10)** marks. The whole section will comprise **twenty (20)** marks.

4.3 **Section C: Patterns and Vocabulary**

The section will have a total of **three (3)** questions designed to test the students' ability to use different vocabulary items and language patterns in different communicative situations. Question 6 and 7(a) will require students to fill in the blanks and will carry **five (5)** marks each. Questions 7(b), 8(a) & (b) will require students to re-write or transform sentences and will weigh **ten (10)** marks each. The section will comprise **forty (40)** marks.

4.4 **Section D: Reading Programme**

There will be **two (2)** questions designed to test the students' ability to analyse/explain content of simple English readers and poems that are recommended in the reading programme. The whole section will carry **twenty (20)** marks.

5.0 **ASSESSMENT CONTENT**

The following topics will be assessed:

- 5.1 Comprehension and Summary
- 5.2 Patterns and Vocabulary
- 5.3 Language Use
- 5.4 Reading programme

023 FRENCH LANGUAGE

1.0 INTRODUCTION

The French Language Assessment format for the Form Two National Assessment has been prepared basing on the 2005 French Language Syllabus which was revised in 2010. The topics stipulated in the syllabus for Form One and Form Two secondary school levels will be measured in the assessment of this subject.

2.0 GENERAL OBJECTIVES

The general objectives of the French Language assessment are to test the students' ability to:

- 2.1 Communicate in French language in a simple way in various situations.
- 2.2 Read and write correctly simple French texts.
- 2.3 Express feelings and attitudes in simple French.
- 2.4 Use correct vocabularies in appropriate situations.

3.0 GENERAL COMPETENCES

The assessment will test the students' ability to:

- 3.1 Read and understand simple texts written in French Language.
- 3.2 Use French Language for communication in various situations.
- 3.3 Express themselves correctly in written French Language.

4.0 ASSESSMENT RUBRIC

The French Assessment will consist of one paper and it will be of **2:30 hours** duration. This paper will consist of **four (4)** sections with a total of **ten (10)** questions and the students will be required to answer **all** the questions.

4.1 Section A: Comprehension

There will be **two (2)** questions in this section. Question 1 will consist of **two (2)** parts; question 1(a) will involve reading a passage and responding to 5 multiple choice items. Each item will carry **one (1)** mark. In question 1(b), the students will use the same passage to respond to 5 short-answer items. Each item will carry **two (2)** marks. Question 2 will involve reading a short text and responding to

True/False items. Each item will carry **one (1)** mark. This section will carry **twenty (20)** marks.

4.2 Section B: Language Patterns/Structure

This section will consist of **five (5)** questions aimed at testing the students' ability to use different language patterns in different situations. This section will carry a total of **forty five (45)** marks.

4.3 Section C: Language Use

This section will consist of **two (2)** questions of which one question will be on matching items and another on jumbled items. Matching items will carry **five (5)** marks while jumbled items will carry **ten (10)** marks. The whole section will carry **fifteen (15)** marks.

4.4 Section D: Written Expression/Composition

This section will consist of **one (1)** question on composition. The students will write a composition basing on the guided questions. This question will carry **twenty (20)** marks.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1 Comprehension
- 5.2 Language Patterns/Structure
- 5.3 Language Use
- 5.4 Written Expression/Composition

025 ARABIC LANGUAGE

1.0 INTRODUCTION

The 2015 Arabic Form Two National Assessment Format is based on the 1995 Arabic Language syllabus. This format has been prepared to enable both teachers and students to be aware on how Arabic Language will be assessed based on the syllabus requirements.

2.0 GENERAL OBJECTIVES

The assessment will generally measure the student's ability to:

- 2.1 Read and comprehend texts written in Arabic Language.
- 2.2 Communicate in Arabic Language in a simple way in various situations.
- 2.3 Apply the simple Arabic Language grammar and rhetoric.
- 2.4 Write composition in Arabic Language communicatively.

3.0 GENERAL COMPETENCES

The Arabic Language assessment will assess the students' ability to:

- 3.1 Read for comprehension in Arabic Language.
- 3.2 Construct the sentences using Arabic Language.
- 3.3 Understand the basic rules of inflection and uses of nominal and verbal sentences in simple Arabic grammar.
- 3.4 Describe rhetoric and uses of simile.
- 3.5 Express ideas and situations by using simple Arabic Language.

4.0 ASSESSMENT RUBRIC

The Arabic Language assessment will consist of **one (1) paper of 2:30 hours** duration. The paper will consist of 11 questions distributed in sections A, B, C and D. Sections A, B and C will be compulsory while in section D the students will be required to choose one of the two questions.

4.1 **Section A: Comprehension and Summary**

This section will consist of **one (1)** question with three parts. Part one will involve reading a passage and respond to short answer items, the second part will involve filling in blank spaces and third part will involve summary writing. Short answer items in part (a) will weigh **ten (10)** marks; while filling in blank spaces in part (b) will weigh **five (5)** marks and summary writing in part (c) will weigh **five (5)** marks, thus making a total of **twenty (20)** marks.

4.2 **Section B: Language Use**

This section will have a total of **four (4)** question (2, 3, 4 and 5) set from various topics. Question 2 will require the students to fill the blanks, question 3 will be on dialogue, question 4 will be on jumbled sentences, and question 5 will be on matching items. Questions 2, 4 and 5 will carry **five (05)** marks each and question 3 on dialogue will carry **ten (10)** marks, thus making a total of **twenty five (25)** marks.

4.3 **Section C: Grammar**

This section will consist of **four (4)** questions (6, 7, 8 and 9) set from various topics. Question 6 will require the students to fill the blanks, question 7 will be on short answers, question 8 will be on True and False and question 9 will require the students to analyze the underlined words. Each question will carry **ten (10)** marks except question 8 which will carry **five (5)** marks, thus making a total of **thirty five (35)** marks.

4.4 **Section D: Composition and Letter Writing**

This section will consist of **two (2)** questions; one question on letter writing and another one on composition. The required length of the composition will be between sixty words and one hundred words. Students will be required to answer **one (1)** question. The question will carry **twenty (20)** marks.

5.0 **ASSESSMENT CONTENT**

The following topics will be assessed:

5.1 Comprehension and summary

5.2 Language use

5.3 Grammar

5.4 Composition and letter writing

031 PHYSICS

1.0 INTRODUCTION

The Physics assessment format for the Form Two National Assessment (FTNA) is intended to assess the competences acquired by the students after two years of study at Ordinary Secondary Education Level. The format is based on the revised version of Physics Syllabus for Ordinary Secondary Education of 2007 which was designed and prepared by Tanzania Institute of Education to replace that of 1996.

2.0 GENERAL OBJECTIVES

The general objectives of the Physics assessment are to test students' ability to:

- 2.1 Demonstrate laboratory practice and safety.
- 2.2 Develop skills on basic principles of scientific investigation.
- 2.3 Develop skills for making physical measurements.
- 2.4 Recognise behaviour and properties of matter.
- 2.5 Understand concepts and principles of magnetism and electricity.
- 2.6 Comprehend the laws of motion.
- 2.7 Understand principles of simple machines.
- 2.8 Develop knowledge on sustainable energy for environmental conservation.

3.0 GENERAL COMPETENCES

The assessment will specifically test the students' ability to:

- 3.1 Practice safety rules in daily life.
- 3.2 Apply basic principles of scientific investigation.
- 3.3 Make appropriate measurements of physical quantities.
- 3.4 Use scientific skills to identify nature and properties of matter.
- 3.5 Apply electricity and magnetism knowledge in daily life.
- 3.6 Apply laws of motion in dealing with moving objects.

- 3.7 Use simple machines to simplify work.
- 3.8 Practice environmental conservation by adopting appropriate sustainable energy sources.

4.0 ASSESSMENT RUBRIC

There will be **one (1)** theory paper of **2:30 hours** duration. The paper will consist of **ten (10)** questions categorized into sections A, B and C. The students will be required to attempt **all** questions from **all** sections.

4.1 Section A

This section will comprise **three (3)** objective questions. The section will weigh a total of **thirty (30)** marks. The students will be required to answer **all** the questions.

- 4.1.1 Question **one (1)** will be on multiple choice composed of **20** items derived from various topics and will carry **twenty (20)** marks.
- 4.1.2 Question **two (2)** will involve **five (5)** matching items and will carry **five (5)** marks.
- 4.1.3 Question **three (3)** will be on filling in the blanks composed of **five (5)** items derived from various topics and will carry **five (5)** marks.

4.2 Section B

This section will consist of **five (5)** short answer questions, each carrying **ten (10)** marks. The section will weigh **fifty (50)** marks. The students will be required to answer **all** the questions.

4.3 Section C

This section will consist of **two (2)** questions aimed at assessing students' knowledge and skills in drawing and management of Physics apparatus and simple technological devices in everyday life. Each question will carry **ten (10)** marks making a total of **twenty (20)** marks. The students will be required to answer **all** the questions.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1 Introduction to Physics

- 5.2 Introduction to Laboratory Practice
- 5.3 Measurements
- 5.4 Forces
- 5.5 Archimedes Principle and Law of Flotation
- 5.6 Structure and Properties of Matter
- 5.7 Pressure
- 5.8 Work, Energy and Power
- 5.9 Light
- 5.10 Static Electricity
- 5.11 Current Electricity
- 5.12 Magnetism
- 5.13 Forces in Equilibrium
- 5.14 Simple Machines
- 5.15 Motion in Straight Lines
- 5.16 Newton's Laws of Motion
- 5.17 Temperature
- 5.18 Sustainable Energy Sources

032 CHEMISTRY

1.0 INTRODUCTION

The Chemistry assessment format for Form Two National Assessment (FTNA) covers the form one and form two topics derived from the Chemistry Syllabus for Secondary Schools which was issued in 2010. The format highlights the structure of the assessment paper, contents, general objectives and the general competences which will be assessed.

2.0 GENERAL OBJECTIVES

The Chemistry assessment's general objectives are to test the students' ability to:

- 2.1 Apply Chemistry knowledge and skills to solve daily life problems.
- 2.2 Understand nature and properties of matter.
- 2.3 Apply Chemistry knowledge and skills in proper use and management of the environment.
- 2.4 Apply Chemistry knowledge and skills in performing various activities in the laboratory.

3.0 GENERAL COMPETENCES

The assessment will specifically test the students' competences in:

- 3.1 Demonstrating Chemistry knowledge and skills in solving daily life problems.
- 3.2 Identifying various Chemistry apparatus and its uses.
- 3.3 Applying basic principles of scientific procedure.
- 3.4 Using fuels efficiently, treating and purifying water with environment consideration.
- 3.5 Explaining regulation and rules guiding proper use of laboratory.
- 3.6 Explaining various concepts related to nature and matter.

4.0 ASSESSMENT RUBRIC

The assessment will have **one (1)** theory paper of **2:30 hours** duration. The paper will consist of sections A and B comprising **ten (10)** questions. Students will be required to answer **all** the questions.

4.1 **Section A** will consist of **two (2)** questions which will be on multiple choice items, matching items and filling-in-the-blanks. This section will weigh **twenty (20)** marks.

4.1.1 The multiple choice question will consist 10 items from various topics. Each item will carry **one (1)** mark making a total of **ten (10)** marks.

4.1.2 The matching items and the filling-in-the-blanks question will consist a total of **ten (10)** items from various topics. Each item will carry **one (1)** mark, making a total of **ten (10)** marks.

4.2 **Section B** will consist of **eight (8)** short answer questions composed from various topics. Each question will carry **ten (10)** marks, making a total of **eighty (80)** marks.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1 Introduction to Chemistry
- 5.2 Laboratory techniques and safety
- 5.3 Heat sources and flames
- 5.4 The scientific procedure
- 5.5 Matter
- 5.6 Air, combustion, rusting and fire fighting
- 5.7 Oxygen
- 5.8 Hydrogen
- 5.9 Water
- 5.10 Fuels and energy
- 5.11 Atomic structure
- 5.12 Periodic classification
- 5.13 Formula, bonding and nomenclature.

033 BIOLOGY

1.0 INTRODUCTION

The Form Two Biology assessment format has been derived from the revised Biology syllabus issued in 2005. Basically, the format focuses on objectives and competences of the secondary education system. It intends to serve as a guideline for examiners to assess the competences acquired by students in their two years of Secondary Education.

2.0 GENERAL OBJECTIVES

The Biology assessment will test the extent to which the student can:

- 2.1 Evaluate the role, influence and importance of biological science in every day's life.
- 2.2 Demonstrate the capacity to improve and maintain their health, families and the community.
- 2.3 Apply scientific skills and procedures in interpreting various biological data.
- 2.4 Apply basic biological knowledge and appropriate skills in combating problems related to environment, health disorders and diseases such as HIV/AIDS, STI's etc.
- 2.5 Demonstrate necessary biological practical skills.

3.0 GENERAL COMPETENCES

The Biology assessment will test the students' ability to:

- 3.1 Apply scientific procedures and practical skills in studying Biology.
- 3.2 Demonstrate the appropriate use of biological knowledge, concepts, principles and skills in every day's life.
- 3.3 Demonstrate preventive measure and precautions against common accidents and other related health problems.
- 3.4 Apply biological knowledge in combating health related problems such as HIV/AIDS, STI's, malaria, cholera and other communicable diseases.

- 3.5 Apply biological knowledge, skills and scientific principles to improve and maintain their own health, the health of the families and the community.
- 3.6 Demonstrate biological skills in writing scientific procedures, observations and report writing.
- 3.7 Analyse groups of organism according to their similarities and differences.
- 3.8 Preserve nature and ensure sustained interaction of organisms in the natural environment.
- 3.9 Evaluate roles of various physiological processes, construct diagrams of biological structures and systems and indicate their functions in plants and animals.

4.0 ASSESSMENT RUBRIC

Biology Theory Assessment Paper will be of **2:30 hours** duration. The paper will consist of **three (3)** sections; A, B and C with a total of **eleven (11)** questions. The paper will weigh **100 marks**.

- 4.1 **Section A** will comprise **four (4)** questions and will weigh a total of **thirty (30) marks**.
 - 4.1.1 Question **one (1)** will be on multiple choices composed of **ten (10)** items derived from various topics and will carry **ten (10)** marks.
 - 4.1.2 Question **two (2)** will be on True and False composed of **ten (10)** items derived from various topics and will carry **ten (10)** marks.
 - 4.1.3 Question **three (3)** will involve five matching items which are homogenous (derived from one of the topics) and will carry **five (5)** marks.
 - 4.1.4 Question **four (4)** will be on filling in the blanks composed of **five (5)** items derived from one of the topics and will carry **five (5)** marks.
- 4.2 **Section B** will consist of **five (5)** short answer questions, each of which will carry **ten (10)** marks. The section will weigh a total of **fifty (50)** marks.
- 4.3 **Section C** will comprise **two (2)** essay questions, each of which will carry **twenty (20)** marks. Students will be required to answer only

one (1) question. The section will weigh **twenty (20)** marks.

5.0 ASSESSMENT CONTENTS

The following topics will be assessed:

- 5.1 Introduction to Biology
- 5.2 Safety in Our Environment
- 5.3 Health and Immunity
- 5.4 Cell Structure and Organization
- 5.5 Classification of Living Things
- 5.6 Nutrition
- 5.7 Balance of Nature
- 5.8 Transport of Materials in Living Things
- 5.9 Gaseous Exchange and Respiration.

034 AGRICULTURAL SCIENCE

1.0 INTRODUCTION

This assessment format has been formulated based on the 1997 Agricultural Science syllabus. The main objective of this format is to give guidance to Agricultural Science assessors in setting assessments. In this format a number of competences will be assessed.

2.0 GENERAL OBJECTIVES

The assessment will test students:

- 2.1 Knowledge and understanding of basic concepts and principles used in farming activities.
- 2.2 Ability to apply modern scientific and technological skills required in crop and livestock farming.
- 2.3 Ability to demonstrate the inter-relationships among the various disciplines of Agriculture required in any agricultural production venture.
- 2.4 Ability to apply scientific skills in carrying out investigations/experiments.

3.0 GENERAL COMPETENCES

The assessment will test students' ability to:

- 3.1 Enumerate facts and ideas
- 3.2 State principles, laws and theories
- 3.3 Define and explain agricultural terms
- 3.4 Describe concepts, principles and theories
- 3.5 Outline agricultural processes
- 3.6 Demonstrate the application of knowledge, concepts and principles to explain intelligently the observations and offer solution to problems related to Agriculture.

4.0 ASSESSMENT RUBRIC

The Agricultural Science assessment will comprise one theory paper of **2:30 hours** duration. The paper will consist of three sections A, B and C with a total of **ten (10)** questions. Students will be required to answer **all** questions. The paper will weigh **100 marks**.

- 4.1 **Section A** will consist of **three (3)** objective questions. The section will weigh a total of **twenty (20)** marks. Question **one (1)** will be a multiple choice question consisting of **ten (10)** items from various topics. The question will carry **ten (10)** marks. Question **two (2)** will be a matching item consisting of **five (5)** items. The question will carry **five (5)** marks. Question **three (3)** will be a True/False question consisting of **five (5)** items. The question will carry **five (5)** marks.
- 4.2 **Section B** will have **six (6)** short answer questions. The section will weigh a total of **sixty (60)** marks. Each question will carry **ten (10)** marks.
- 4.3 **Section C** will have **one (1)** essay type question. The question will carry **twenty (20)** marks.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1 Fundamentals of Agriculture
- 5.2 Agricultural Mechanics
- 5.2.1 The Concept of Agricultural Mechanics
 - 5.2.2 The Farm Workshop
 - 5.2.3 Farm Power and Machinery.
- 5.3 Crop Production
- 5.3.1 Introduction to Crop Science and Production
 - 5.3.2 Classification of Crop Plants Grown in Tanzania
 - 5.3.3 Distribution of Major Crop Plants of Economic Importance in Tanzania

- 5.3.4 Factors Affecting Crop Production in Tanzania
 - 5.3.5 Farming Systems
 - 5.3.6 Cropping Systems and Planting Patterns
 - 5.3.7 Principles of Crop Production
 - 5.3.8 Crop Protection
 - 5.3.9 Horticultural Production
 - 5.3.10 Handling and Processing of Crop Products
 - 5.3.11 Crop Storage Structures.
- 5.4 Livestock Production
- 5.4.1 Introduction to Livestock Science and Production
 - 5.4.2 Factors Affecting Livestock Production in Tanzania
 - 5.4.3 Livestock Farming Systems in Tanzania
 - 5.4.4 Principles of Livestock Production
 - 5.4.5 Poultry Farming
 - 5.4.6 Livestock Feeds and Feeding.
- 5.5 Farming Business Economics
- 5.5.1 The Concept of Farming Business Economics
 - 5.5.2 Agricultural Economics
 - 5.5.3 Price and its Determinants
 - 5.5.4 Factors of Production.
- 5.6 Soil and its Agricultural Utilization
- 5.6.1 The Concept of Soil
 - 5.6.2 Soil Constituents
 - 5.6.3 Weathering and Soil Formation
 - 5.6.4 Physical Properties of Soil
 - 5.6.5 Types of Soils Found in Tanzania.

035 ENGINEERING SCIENCE

1.0 INTRODUCTION

This assessment format has been prepared to provide the guide for setting the Form Two National Assessment (FTNA). The format has been prepared to cover the requirements of the existing Engineering Science syllabus of 1994.

2.0 GENERAL OBJECTIVES

The assessment will test the students' ability to:

- 2.1 state theories applied to science.
- 2.2 do calculations related to the field.
- 2.3 evaluate simple machine.

3.0 GENERAL COMPETENCES

The assessment will test students' ability to:

- 3.1 Interpret and use units related to science.
- 3.2 State laws governing scientific principles.
- 3.3 Perform simple related calculations.
- 3.4 Demonstrate and explain the use and advantages of levers.
- 3.5 Describe and demonstrate the construction and use of simple machines.

4.0 ASSESSMENT RUBRIC

There will be one paper with **ten (10)** questions in sections A and B. The duration of this paper will be **2:30 hours**. All questions in sections A and B will be compulsory.

- 4.1 **Section A** will comprise **one (1)** question of **ten (10)** Multiple-Choice items, **one (1)** question of **ten (10)** True and False items and **one (1)** question of **ten (10)** Completion items each weighing **one (1)** mark. The section will weigh **thirty (30)** marks.
- 4.2 **Section B** will comprise of **seven (7)** structured questions each weighing **ten (10)** marks. The section will weigh **seventy (70)** marks in total.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1 Units and Measurement
- 5.2 Forces
- 5.3 Linear Motion
- 5.4 Work, Energy and Power
- 5.5 Sound
- 5.6 Optical (Light)
- 5.7 Friction
- 5.8 Turning Forces
- 5.9 Simple Machine
- 5.10 Fluid Mechanics
- 5.11 Heat
- 5.12 Electricity and Magnetism

036 INFORMATION AND COMPUTER STUDIES

1.0 INTRODUCTION

This assessment format has been derived from the revised Information and Computer Studies syllabus issued by the Ministry of Education and Vocational Training in 2005. The syllabus intends to assess students' competence rather than contents. The purpose of this format is to provide the objective of Information and Computer Studies (ICS) assessment, the structure of the assessment paper and indicate the topics to be covered during the assessment as stipulated in the syllabus for Form I and II level.

2.0 GENERAL OBJECTIVES

The general objectives of the Information and Computer Studies (ICS) assessment are to test whether students can:

- 2.1 Demonstrate skills in data processing and interpretation of information.
- 2.2 Identify skills of using operating system and computer handling.
- 2.3 Apply practical skills in the use of computers.
- 2.4 Demonstrate skills in using internet and its application.
- 2.5 Outline types of networks and security issues in a networked environment.

3.0 GENERAL COMPETENCIES

The assessment will test the students' ability to:

- 3.1 Use computer knowledge in data and information processing.
- 3.2 Identify the parts of computer and their uses.
- 3.3 Apply operating system principles to manage files and folders.
- 3.4 Demonstrate skills in creating a document using Microsoft word and using spreadsheet to process data.
- 3.5 Demonstrate knowledge in using internet to access data and information.

4.0 ASSESSMENT RUBRIC

The Information and Computer Studies paper will comprise 10 questions in sections A, B and C. Students will be required to answer **all** questions. The duration for this paper will be **2:30 hours**. The paper will weigh **100 marks**.

- 4.1 **Section A** will consist of **three (3)** questions. Question **one (1)** will be a multiple choice consisting of **ten (10)** items. The question will carry **ten (10)** marks. Question **two (2)** will be a matching item question consisting of **five (5)** items. The question will carry **five (5)** marks. Question **three (3)** will be a True/False question consisting of **five (5)** items. The question will carry **five (5)** marks. The whole section will weigh a total of **twenty (20)** marks.
- 4.2 **Section B** will consist of **six (6)** short answer questions, each of which will carry **ten (10)** marks. The section will weigh a total of **sixty (60)** marks.
- 4.3 **Section C** will consist of **one (1)** essay or long question which will carry **twenty (20)** marks. The section will weigh a total of **twenty (20)** marks.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1 Information
- 5.2 The computer
- 5.3 Computer software
- 5.4 Computer handling
- 5.5 Computer evolution
- 5.6 Word processing
- 5.7 Spreadsheet
- 5.8 Computer networks and communications
- 5.9 The internet

041 BASIC MATHEMATICS

1.0 INTRODUCTION

This assessment format has been prepared using the Basic Mathematics syllabus for Secondary Schools that was issued by the Ministry of Education and Vocational Training in 2005. The purpose of this format is to provide the structure of the assessment paper and indicate the topics to be assessed in this subject. The Basic Mathematics assessment will comprise questions from the topics covered in form I and II as stipulated in the syllabus. The aim of this assessment is to assess the knowledge and skills acquired in Form I and II.

2.0 GENERAL OBJECTIVES

The general objectives of the Basic Mathematics assessment are to assess students' ability to:

- 2.1 Perform computations on numbers, algebraic terms and radicals.
- 2.2 Use approximations in solving simple problems.
- 2.3 Convert and do computations on basic units, decimals, percentages and fractions.
- 2.4 Construct and draw geometrical figures as well as finding angles, perimeters and areas of simple geometrical figures.
- 2.5 Compute ratios, profit and loss.
- 2.6 Draw graphs of linear equations, solve, linear equations in one or two unknowns, linear inequalities in one unknown, quadratic equations and transpose formulae.
- 2.7 Derive and apply the laws of exponents and logarithms.
- 2.8 Do calculations using mathematical tables.
- 2.9 Prove and apply congruence and similarity of figures.
- 2.10 Represent reflections, rotations, translations and enlargement geometrically.
- 2.11 Determine sine, cosine and tangent of angles and hence apply them in solving problems.

2.12 Represent and interpret statistical data collected from real life situations.

2.13 Perform operations on sets and apply sets to solve problems.

3.0 GENERAL COMPETENCES

The general competences tested in the Basic Mathematics will include the students' ability to;

3.1 Distinguish different types of numbers.

3.2 Estimate and compute numbers accurately.

3.3 Convert units, decimals, percentages and fractions.

3.4 Handle mathematical instruments in constructing and drawing geometrical figures.

3.5 Solve problems on geometry, ratio, profit and loss.

3.6 Draw graph and interpret linear equations.

3.7 Find perimeters and areas of simple geometrical figures.

3.8 Find relationships among logarithms, exponents, radicals, right angled triangles and trigonometric ratios.

3.9 Use mathematical tables in computations.

3.10 Verify laws and prove theorems.

3.11 Do scale drawing and geometrical transformations.

3.12 Solve problems on quadratic equations.

3.13 Organize and interpret data.

3.14 Apply set operations in solving problems.

4.0 ASSESSMENT RUBRIC

There will be **one (1)** paper of **2:30 hours** duration. This paper will have **ten (10)** short-response questions, each carrying **ten (10)** marks. The students will be required to answer **all** the questions, showing all the work clearly.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1 Numbers
- 5.2 Fractions
- 5.3 Decimals and Percentages
- 5.4 Units
- 5.5 Approximations
- 5.6 Geometry
- 5.7 Algebra
- 5.8 Ratio, profit and loss
- 5.9 Coordinate geometry
- 5.10 Perimeters and areas
- 5.11 Exponents and radicals
- 5.12 Quadratic equations
- 5.13 Logarithms
- 5.14 Congruence
- 5.15 Similarity
- 5.16 Geometrical transformations
- 5.17 Pythagoras theorem
- 5.18 Trigonometry
- 5.19 Sets
- 5.20 Statistics

042 ADDITIONAL MATHEMATICS

1.0 INTRODUCTION

The Additional Mathematics format has been prepared basing on the 2010 Additional Mathematics Syllabus for Secondary Schools, Form I – IV. It has covered all nine (9) topics which are taught in Form One and Form Two.

2.0 GENERAL OBJECTIVES

The general objectives for Form Two Additional Mathematics assessment are to assess the students' ability to:

- 2.1 solve problems involving equations, inequalities, variations and sets.
- 2.2 simplify expressions.
- 2.3 identify and draw symmetrical figures, loci of points, truth tables, electrical circuits and irregular polygons.
- 2.4 divide lines into proportional parts.

3.0 GENERAL COMPETENCES

The general competences for Form Two Additional Mathematics assessment are to assess the students' ability to:

- 3.1 create patterns of numbers.
- 3.2 draw, interpret and identify graphs, shapes and loci of points.
- 3.3 simplify and solve mathematical problems.
- 3.4 apply set properties in solving set problems.
- 3.5 test validity for logical arguments.

4.0 ASSESSMENT RUBRIC

This paper will comprise **ten (10)** questions. Each question will carry **ten (10)** marks. The students will be required to answer **all** questions. The duration of the examination paper will be **2:30 hours**.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1 Numbers

- 5.2 Algebra
- 5.3 Geometrical Constructions
- 5.4 Locus
- 5.5 Coordinate Geometry
- 5.6 Symmetry
- 5.7 Logic
- 5.8 Variations
- 5.9 Sets

051 FOOD AND NUTRITION

1.0 INTRODUCTION

The Food and Nutrition assessment format for Form Two National Assessment (FTNA) covers the form one and form two topics derived from the Home Economics syllabus for Secondary Schools which was issued in 1997. It has been prepared basing specifically on section A of this syllabus that covers the Home Management and Food and Nutrition topics. This assessment is a formative evaluation which aims at measuring the students' educational attainment of the specified competences learned in two years of Secondary Education.

2.0 GENERAL OBJECTIVES

The assessment will generally measure the extent to which the students;

- 2.1 have attained knowledge on good manners and good grooming and demonstrate them appropriately.
- 2.2 understanding the concept of selecting, furnishing and care of the home and manage family resources.
- 2.3 understand matters concerning family health, family relationships, child development and other aspects of personal and family living.
- 2.4 understand different methods of cooking and their suitability in cooking various foods.
- 2.5 understand the nutritionally adequate meals in the context of preparing, cooking and serving balanced meals for different groups of people.

3.0 GENERAL COMPETENCES

The assessment will measure the students' ability to;

- 3.1 apply the rules to demonstrate good manners and grooming which are accepted in the family and community.
- 3.2 demonstrate skills on selecting, furnishing and caring for the house and managing the family resources.
- 3.3 apply the hygiene principles and use of health services to combat problems related to family health.

- 3.4 apply health rules to improve the health of expectant and lactating mothers and young children.
- 3.5 apply correct procedures and use proper cleaning equipment and agents in carrying out house cleaning and family wash.
- 3.6 apply suitable methods of cooking to prepare balanced meals for different groups of people.

4.0 ASSESSMENT RUBRIC

There will be **one (1)** theory paper of **2:30 hours** duration. The paper will consist of **eleven (11)** questions in sections A, B and C. Students will be required to answer **all** the questions in sections A and B and **one (1)** question from section C. The paper will weigh **100** marks.

4.1 Section A: Objective Questions

This section will comprise **three (3)** questions set from various topics of the syllabus and will weigh **twenty four (24)** marks.

Question 1 will consist of **ten (10)** multiple-choice items (i) – (x) and the students will be required to choose the correct answer from the alternatives given. Each item will carry **one (1)** mark, making a total of **ten (10)** marks.

Question 2 will consist of **seven (7)** True/False items. The students will be required to write ‘True’ for the correct statement and ‘False’ for the incorrect one. Each item will carry **one (1)** mark, making a total of **seven (7)** marks.

Question 3 will be matching items. A series of **seven (7)** items (i) – (vii) will be listed in Column A and **eight (8)** responses in Column B. Students will be required to write the letter of response that fits premises in Column A besides the item number. Each item will carry **one (1)** mark, making a total of **seven (7)** marks.

4.2 Section B: Short Answer Questions

This section will consist of **six (6)** short answer questions extracted from any topic of the Form I or Form II syllabus. Each question will have three parts (a), (b) and (c), and will weigh **ten (10)** marks, making a total of **sixty (60)** marks.

4.3 Section C: Essay Questions

This section will consist of **two (2)** essay questions set from different topics of the syllabus. Students will be required to answer

only **one (1)** question from this section. The question will weigh **sixteen (16)** marks.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1 Good manners and good grooming
- 5.2 Age courtship and marriage practices
- 5.3 The family, family roles and relationships
- 5.4 Laundering in the home
- 5.5 Disinfectants and their use
- 5.6 Materials used in the home
- 5.7 Cleaning agents
- 5.8 Sanitation
- 5.9 Cleaning a house
- 5.10 Floors and floor covering
- 5.11 The house compound
- 5.12 Kitchen planning
- 5.13 Kitchen and food hygiene
- 5.14 Food
- 5.15 Money management
- 5.16 Water supply
- 5.17 Refuse
- 5.18 An ideal home
- 5.19 Public health services
- 5.20 The adolescent and early marriage
- 5.21 The expectant mother
- 5.22 The coming baby
- 5.23 Child health baby clinic
- 5.24 Feeding the baby
- 5.25 Family planning

- 5.26 The toddler
- 5.27 Children's ailments
- 5.28 Accidents in the home
- 5.29 Cooking food
- 5.30 Planning balanced meals

052 TEXTILES AND DRESSMAKING

1.0 INTRODUCTION

The Textiles and Dressmaking assessment format for Form Two National Assessment (FTNA) covers the form one and form two topics derived from the Home Economics syllabus for Secondary Schools which was issued in 1997. It has been prepared basing specifically on section C of this syllabus that covers the Textiles and Dressmaking topics. This assessment is a formative evaluation which aims at measuring the students' educational attainment of the specified competences learned in two years of Secondary Education.

2.0 GENERAL OBJECTIVES

The assessment will generally assess the extent to which the students can;

- 2.1 demonstrate the understanding, choice, use and care of sewing equipment.
- 2.2 show an understanding of different types of fabrics, their properties, care and use.
- 2.3 demonstrate an understanding in the use of stitches and apply them in making decorative articles.
- 2.4 Show an understanding of the general rules and principles used in garment making and repairing clothes.
- 2.5 demonstrate the application of design and pattern knowledge in dressmaking.

3.0 GENERAL COMPETENCES

The assessment will measure the students' ability to;

- 3.1 apply the acquired knowledge to make proper choice, use and care of sewing equipment.
- 3.2 demonstrate skills in the use of different types of stitches.
- 3.3 identify various types of fabrics, their properties, use and caring procedures.
- 3.4 demonstrate an understanding of the principle underlying the choice of fabrics and designs in garment making.

- 3.5 use various types of patterns in garment making.
- 3.6 demonstrate creativity in designing and embroidering different household articles.
- 3.7 apply skills and rules in choosing and using garment making process.
- 3.8 analyse the procedures of repairing garments.

4.0 ASSESSMENT RUBRIC

There will be **one (1)** theory paper of **2:30 hours** duration. The paper will consist of **eleven (11)** questions in sections A, B and C. Students will be required to answer **all** the questions in sections A and B and **one (1)** question from section C. The paper will weigh **hundred (100)** marks.

4.1 Section A: Objective Questions

This section will comprise of **three (3)** questions set from various topics of the syllabus and it will weigh **twenty four (24)** marks.

Question 1 will consist of **ten (10)** multiple-choice items (i) – (x) and the students will be required to choose the correct answer from the alternatives given. Each item will carry **one (1)** mark, making a total of **ten (10)** marks.

Question 2 will consist of **seven (7)** True/False items. The students will be required to write ‘True’ for the correct statement and ‘False’ for the incorrect one. Each item will carry **one (1)** mark, making a total of **seven (7)** marks.

Question 3 will be matching items. A series of **seven (7)** items (i) – (vii) will be listed in Column A and **eight (8)** responses in Column B. Students will be required to write the letter of response that fits premises in Column A besides the item number. Each item will carry **one (1)** mark, making a total of **seven (7)** marks.

4.2 Section B: Short Answer Questions

This section will consist of **six (6)** short answer questions extracted from any topic of the Form I or Form II syllabus. Each question will have three parts (a), (b) and (c), and will weigh **ten (10)** marks, making a total of **sixty (60)** marks.

4.3 Section C: Essay Questions

This section will consist of **two (2)** essay questions set from different topics of the syllabus. Students will be required to answer only **one (1)** question from this section. The question will weigh **sixteen (16)** marks.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1 The sewing room
- 5.2 The sewing machine
- 5.3 Fabrics
- 5.4 Basic sewing stitches
- 5.5 Making aprons
- 5.6 Embroidery
- 5.7 Undergarments
- 5.8 Mending
- 5.9 Making a blouse/shirt and skirts/short
 - 5.9.1 Pattern drafting
 - 5.9.2 Pattern marking
 - 5.9.3 Choice and estimation of material
 - 5.9.4 Laying and cutting out
 - 5.9.5 Dressmaking processes
 - 5.9.5.1 Seams
 - 5.9.5.2 Disposal of fullness
 - 5.9.5.3 Sleeves
 - 5.9.5.4 Collars
 - 5.9.5.5 Openings and fastenings
 - 5.9.5.6 Edge finishes
 - 5.9.5.7 Pockets

061 COMMERCE

1.0 INTRODUCTION

The Commerce assessment format for Form Two National Assessment (FTNA) covers the Form I and Form II topics derived from the Business Studies Syllabus for Secondary Schools issued by the Ministry of Education and Culture in 1997. The FTNA is a formative evaluation, which aims at measuring the students' educational attainment of the specified competences learnt in two years of Secondary Education.

2.0 GENERAL OBJECTIVES

The assessment will test students' ability to:

- 2.1 demonstrate knowledge and skills on various commercial terms and concepts.
- 2.2 identify different formulae and apply them in calculations and interpret the results.
- 2.3 read and interpret different charts and curves.

3.0 GENERAL COMPETENCES

The assessment will test students' ability to:

- 3.1 define, explain, list, match, distinguish and relate various commercial terms and concepts.
- 3.2 deduce and apply various formulae in simple calculations.
- 3.3 interpret result based on the simple calculations.
- 3.4 draw, label and interpret different charts and curves.

4.0 ASSESSMENT RUBRIC

There will be one paper of **2:30 hours** duration. The paper will consist of three sections A, B and C with a total of 7 questions. Students will be required to answer **all** questions.

- 4.1 **Section A** will consist of **three (3)** questions. The section will weigh a total of **thirty (30)** marks. Question **one (1)** will

consist of 10 multiple-choice items, each carrying **one (1)** mark making a total of 10 marks. Question **two (2)** will consist of **five (5)** matching items each carrying **one (1)** mark making a total of **five (05)** marks. Question **three (3)** will consist of **fifteen (15)** items of **one (1)** mark each, of which **ten (10)** will be True or False and **five (5)** items will be filling blanks.

- 4.2 **Section B** will comprise **two (2)** short answer questions of **fifteen (15)** marks each. The total marks in this section will be **thirty (30)**. Question **four (4)** will involve definitions on any five commercial terms (i – v) or differentiation of five pairs of commercial terms (i – v). Question **five (5)** will involve brief explanations on different commercial concepts.
- 4.3 **Section C** will comprise **two (2)** questions (6 and 7). One question will involve drawings or calculations and the other will be an essay type question. Each question will carry **twenty (20)** marks. The whole section will weigh **forty (40)** marks.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1 The Scope of Commerce
- 5.2 Production
- 5.3 Theory of Demand
- 5.4 Theory of Supply
- 5.5 Retail trade
- 5.6 Wholesale trade
- 5.7 Warehousing
- 5.8 Stock Administration.

062 BOOK KEEPING

1.0 INTRODUCTION

This Book Keeping assessment format for Form Two National Assessment (FTNA) covers the Form I and Form II topics derived from the Business Studies Syllabus for Secondary Schools issued by the Ministry of Education and Vocational Training in 1997. The Book Keeping assessment is a formative evaluation which aims at measuring the students' educational attainment of the specified competences learned in two years of Secondary Education.

2.0 GENERAL OBJECTIVES

The assessment will test the students' ability to:

- 2.1 Define and explain the subject matter of Book Keeping.
- 2.2 Distinguish the various Book Keeping systems concerning financial matters and records.
- 2.3 Understand the importance of keeping books of accounts for individuals.
- 2.4 Acquire and apply essential business knowledge, skills and principles.

3.0 GENERAL COMPETENCES

The assessment will test the students' ability to:

- 3.1 Define various Book Keeping systems concerning financial matters and records.
- 3.2 Communicate competently and confidentially by listening, reading and writing in Book Keeping.
- 3.3 Recognize and use numerical patterns and relationships confidently and competently in Book Keeping.
- 3.4 Make appropriate use of technology in solving problems at individual and community level.

4.0 ASSESSMENT RUBRIC

There will be one paper of **2:30 hours** duration. The paper will consist of **seven (7)** questions, divided into sections A, B and C. The students will be required to answer **all** questions. The paper will weigh **hundred (100)** marks.

- 4.1 **Section A** will consist of **ten (10)** Multiple Choice **items** and **ten (10)** Matching Items. Each question will carry **ten (10)** marks; making a total of **twenty (20)** marks in this section.
- 4.2 **Section B** will consist of **two (2)** questions. The questions may either be short answer, or simple calculation, filling the blanks or true and false questions. Each question will carry **ten (10)** marks; making a total of **twenty (20)** marks in this section.
- 4.3 **Section C** will consist of **three (3)** questions on problem-solving and recording of transactions. The students will be required to attempt **all three (3)** questions. Each question will carry **twenty (20)** marks; making a total of **sixty (60)** marks in this section.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

- 5.1 Subject matter of Book Keeping
- 5.2 Principles of double entry system
- 5.3 Classification of accounts
- 5.4 Trial balance
- 5.5 Stock
- 5.6 Elementary trading, profit or loss accounts
- 5.7 Elementary balance sheet
- 5.8 Books of prime entry
- 5.9 Petty cash and imprest system (Columnar petty cash book)
- 5.10 Bank reconciliation statement
- 5.11 Government accounting terminologies
- 5.12 Source of government funds and expenditure estimates.

070 TECHNICAL DRAWING

1.0 INTRODUCTION

This assessment format for Technical Drawing Subject has been prepared to provide the guide for setting the Form Two National Assessment (FTNA). The format has been prepared to cover the requirements of the existing Technical Drawing syllabus of 1994.

2.0 GENERAL OBJECTIVES

The assessment will test the students' ability to:

- 2.1 read and interpret technical drawing.
- 2.2 read and make technical drawing.
- 2.3 draw loci of mechanics.

3.0 GENERAL COMPETENCES

The assessment will test the students' ability to:

- 3.1 identify drawing equipment.
- 3.2 identify and demonstrate how to use different drawing lines.
- 3.3 draw orthographic projection.
- 3.4 demonstrate how to make pictorial drawing.
- 3.5 demonstrate how to draw loci of different mechanisms.

4.0 ASSESSMENT RUBRIC

There will be **one (1)** theoretical assessment paper with a total of **seven (7)** questions divided in sections A and B. Students will be required to answer **all** questions in section A in the spaces provided and **two (2)** questions from section B on a separate paper provided. The duration for this paper will be **three (3)** hours.

- 4.1 **Section A** will comprise **four (4)** questions. The section will carry a total of **forty (40)** marks. Question **one (1)** will consist of **ten (10)** multiple-choice items (i-x), each will weigh **one (1)** mark, making a total of **ten (10)** marks. Question **two (2)** will consist of **ten (10)** True and False items (i - x), each will weigh **one (1)** mark making a total of

ten (10) marks. Question **three (3)** and **four (4)** will be constructed from Basic Technical Drawing and will weigh **ten (10)** marks each.

4.2 **Section B** will consist of **three (3)** questions from either Pictorial, Orthographic, Auxiliary views or Loci topics. Student will be required to answer **two (2)** questions. Each question will weigh **thirty (30)** marks making a total of **sixty (60)** marks in this section.

5.0 ASSESSMENT CONTENT

The following topic will be assessed:

- 5.1 Draughting office/room
- 5.2 Draughting equipment
- 5.3 Standard ISO and drawing sheet
- 5.4 Lines
- 5.5 Lettering
- 5.6 Geometrical construction in plane geometry
- 5.7 Scale
- 5.8 Similar figures
- 5.9 Equal areas
- 5.10 Pictorial drawing
- 5.11 Orthographic projection
- 5.12 Auxiliary views
- 5.13 Blending of lines and curves
- 5.14 Loci
- 5.15 Dimensioning
- 5.16 Freehand Sketching.

071 CIVIL ENGINEERING

1.0 INTRODUCTION

This assessment format for Civil Engineering subjects has been prepared for assessing Form Two National Assessment. The test is intended to assess the extent to which students have acquired skills and knowledge in Civil Engineering for their two years of study. This format is the reflection of Civil Engineering syllabus for Secondary Education issued in 1994 by the Tanzania Institute of Education. The format is comprised of six subjects of which Building Construction subject will be compulsory and five subjects which are Surveying, Carpentry and Joinery, Brickwork and Masonry, Painting and Signwriting and Plumbing will be optional. Students will be required to register in only one Optional Trade Subject and in the assessment will attempt only questions under the opted trade.

2.0 COMPULSORY PART

The Building Construction subject will be compulsory to all students enrolled in the field of Civil Engineering.

2.1 BUILDING CONSTRUCTION

2.1.1 GENERAL OBJECTIVES

The assessment will test student's ability to:

- (a) Apply basic construction principles in the erection of domestic buildings up to the level of a wall structure.
- (b) Select suitable construction materials for construction of domestic buildings up to the level of a wall structure.
- (c) Maintain the required quality of constructed building up to the level of a wall structure.

2.1.2 GENERAL COMPETENCES

The assessment will assess the student's ability to:

- (a) Describe, present and demonstrate the building architecture.
- (b) Analyse the building team and demonstrate the roles of members

in the building cycle during construction works.

- (c) Apply scientific methods in safe lumbering and timbering processes.
- (d) Prepare and demonstrate proper uses of building materials of bricks/blocks, stones, concrete, timber, metals, pipes paints and adhesives.
- (e) Identify and describe the requirements of the construction site.
- (f) Identify and describe construction techniques of different types of domestic building foundations.
- (g) Demonstrate and describe techniques of construction and bridging over openings of different types of walls.
- (h) Identify and demonstrate different types of wall finishes.
- (i) Identify and describe the purposes of special treatment to the top of exposed walls.
- (j) Identify and demonstrate different supports to personnel and structures during construction works.

3.0 OPTIONS PART

There will be **five (5)** Optional Trade Subjects from which students will be required to attempt questions in **only one** Subject.

3.1 Option I: SURVEYING

3.1.1 GENERAL OBJECTIVES

The assessment will test students' ability to:

- (a) use the basic surveying tools and instruments for preparing plans and simple maps.
- (b) apply surveying principles and concepts for setting-out works using chain/tape and compasses.

3.1.2 GENERAL COMPETENCES

The assessment will test the students' ability to:

- (a) apply safety regulations and demonstrate proper uses of medicines in the First Aid Kit.
- (b) identify types of fire and demonstrate the uses of fire fighting materials and equipment.
- (c) interpret and apply the objects of different classes of surveying into social-economic development.
- (d) handle, use and service surveying tools and equipment in the field.
- (e) process surveying data and use the data to prepare plans and simple maps.

3.2 Option II: CARPENTRY AND JOINERY

3.2.1 GENERAL OBJECTIVES

The assessment will test students' ability to:

- (a) apply knowledge, principles and basic skills related to timbering and jointing.
- (b) demonstrate methods and techniques of using relevant tools, equipment and plants/machinery to produce different components of wood structures.

3.2.2 GENERAL COMPETENCES

The assessment will test the students' ability to:

- (a) apply safety regulations and demonstrate uses of the contents in the First Aid Kit.
- (b) identify types of fire and demonstrate fire fighting gears and techniques.
- (c) apply principles and methods of preparing and preserving timber materials.
- (d) select and use timber in making furniture and other construction members.

- (e) construct house components and fittings made of timber.
- (f) use and service hand tools and woodworking machines for different carpentry and joinery works.

3.3 Option III: BRICKWORK AND MASONRY

3.3.1 GENERAL OBJECTIVES

The examination will test students' ability to apply knowledge, principles and basic skills in manipulating with bricks, blocks, stones and concrete materials to assemble different components in the process of developing a domestic house.

3.3.2 GENERAL COMPETENCES

The assessment will test the students' ability to:

- (a) apply safety regulations and demonstrate uses of the contents in the First Aid Kit.
- (b) identify types of fire and demonstrate fire fighting gears and techniques.
- (c) select, maintain and service tools and equipment used in construction of single storey buildings.
- (d) interpret drawings describing basic structures of the building.
- (e) prepare materials and demonstrate the procedures for putting in place the single storey building.
- (f) apply scientific principles and methods for safe installation of building components.

3.4 Option IV: PAINTING AND SIGN-WRITING

3.4.1 GENERAL OBJECTIVES

The assessment will test students' ability to:

- (a) apply knowledge, principles and basic skills of painting and decorations.
- (b) demonstrate methods and techniques of using relevant tools and materials to produce a finished surface.

3.4.2 GENERAL COMPETENCES

The assessment will test the students' ability to:

- (a) select and demonstrate the uses of tools, equipment and plants in painting works.
- (b) identify causes of fire and demonstrate methods of preventing fire and use of fire fighting gears.
- (c) select, mix and use various types of paints.
- (d) paint different surfaces.
- (e) design various decorative effects on different surface.

3.5 Option V: PLUMBING

3.5.1 GENERAL OBJECTIVES

The assessment will test the students' ability to:

- (a) apply knowledge, principles and basic skills on preparation of different types of pipes for plumbing works.
- (b) demonstrate methods and techniques of using relevant tools and materials to produce finished pipes as per recommended standards.

3.5.2 GENERAL COMPETENCES

The assessment will test the students' ability to:

- (a) identify and demonstrate application and maintenance of common hand tools, equipment and plants.
- (b) describe types, characteristics and uses of materials applied in pipe works.

- (c) analyse the process of protecting sheet metals and pipes.
- (d) prepare pipe shapes, install and repair the pipe works.
- (e) join metals by welding and soldering.

4.0 ASSESSMENT RUBRIC

There will be **one (1)** theory paper for Civil Engineering subjects. The paper will consist of **13** questions and the student will be required to answer **09** questions. The duration for the paper will be **two and half (2:30) hours**.

4.1 **Section A** will be compulsory comprising Multiple Choices, Matching Items, True and False and Short Answers items from several **topics** in Building Construction subject. Students will be required to answer **all** questions in this section. This section will weigh a total of **forty (40)** marks.

4.1.1 Question 1 will consist of **five (5)** multiple-choice items. Each item will weigh **one (1)** mark.

4.1.2 Question 2 will consist of **five (5)** matching items in List A which will be matched with **responses** from List B. Each item will weigh **one (1)** mark.

4.1.3 Question 3 will consist of **five (5)** True and False items. Each item will weigh **one (1)** mark.

4.1.4 Questions 4 to 8 will be Short Answers items and each will weigh **five (5)** marks making a total of **twenty five (25)** marks.

4.2 **Section B** will comprise **five (5)** structured questions from five options. Questions in this section will be drawn from the topics of the optional trade subject of the students' specialization. Each question in this section will comprise **five (5)** parts weighing **twelve (12)** marks each. Students will be required to answer **all** parts of the question in their area of specialization. The total marks in this section will be **sixty (60)**.

5.0 ASSESSMENT CONTENT

5.1. COMPULSORY PART

5.1.1 BUILDING CONSTRUCTION

The following topics will be tested:

- 5.1.1.1 Introduction to architectural elements in building
- 5.1.1.2 Construction materials
- 5.1.1.3 Site preparation
- 5.1.1.4 Foundation
- 5.1.1.5 Scaffolding and shoring
- 5.1.1.6 Walls

5.2. OPTIONAL PART

The following topics will be assessed in each option

5.2.1 Option I: Surveying

- 5.2.1.1 Introduction to surveying laboratory
- 5.2.1.2 Safety
- 5.2.1.3 Surveying instruments
- 5.2.1.4 Chain surveying
- 5.2.1.5 Chain and compass traversing

5.2.2 Option II: Carpentry and Joinery

- 5.2.2.1 Introduction to workshop layout
- 5.2.2.2 Safety
- 5.2.2.3 Tools, equipment and machines
- 5.2.2.4 Timber
- 5.2.2.5 Truing up timber
- 5.2.2.6 Joints.

5.2.3 Option III: Brick Work and Masonry

- 5.2.3.1 Introduction to workshop layout
- 5.2.3.2 Safety
- 5.2.3.3 Tools, plant and equipment
- 5.2.3.4 Bricks and block making
- 5.2.3.5 Mortar
- 5.2.3.6 Bonding
- 5.2.3.7 Foundation
- 5.2.3.8 Concrete.

6

6.2.1 Option IV: Painting and Sign Writing

- 6.2.1.1 Introduction to painter and sign writers workshop
- 6.2.1.2 Safety
- 6.2.1.3 Tools, equipment, plants and brushes
- 6.2.1.4 Paints and painting materials
- 6.2.1.5 Painting techniques
- 6.2.1.6 Water paints and texture finishes.

6.2.2 Option V: Plumbing

- 6.2.2.1 Introduction and workshop arrangement
- 6.2.2.2 Safety and regulations
- 6.2.2.3 Tools, equipment and plants
- 6.2.2.4 Materials
- 6.2.2.5 Protective coatings
- 6.2.2.6 Bending
- 6.2.2.7 Threading and pipe fitting
- 6.2.2.8 Joints and jointing.

1.0 INTRODUCTION

The current Electrical Engineering Syllabus for Secondary Education was issued in 1994 by the Tanzania Institute of Education. It intends to prepare students for further technical education and equip them with skills and knowledge in Electrical Engineering for employment in Tanzania industries and for self-employment as well. This Electrical Engineering Assessment Format has been designed in accordance with the current syllabus requirements.

2.0 GENERAL OBJECTIVES

The Electrical Engineering assessment will test the students' ability in performing various tasks as stipulated under each particular part in Electrical Engineering field which include Electrical Engineering Science, Electrical Installation and Radio and TV servicing. The general objectives in each areas are as follows:

2.1 Electrical Engineering Science

- (a) Solve problems related to Electrical Engineering Science.
- (b) Explain types of instruments and machines related to Electrical Engineering Science.

2.2 Electrical Installation

- (a) Perform basic domestic installation.
- (b) Read and interpret basic electrical wiring diagrams.

2.3 Radio and TV Servicing

- (a) Identify functions of basic electronic components used in Radio and TV systems.
- (b) Perform calculations related to basic electronic circuits.

3.0 GENERAL COMPETENCES

Since the Electrical Engineering assessment is divided into **three** areas namely Electrical Engineering Science, Electrical Installation and Radio and TV servicing; the general competences for Electrical Engineering assessment will specifically assess students' ability to perform numerous tasks as indicated under each particular area as follows:

3.1 Electrical Engineering Science

- (a) Briefly explain the nature of electricity.
- (b) Identify and demonstrate how to use laws for different operations and behavior.
- (c) Define different terms used in electrical engineering fields.
- (d) Solve simple problems involving electrical circuits.

3.2 Electrical Installation

- (a) Identify all kinds of electricity and their sources.
- (b) Apply different laws governing electric behavior.
- (c) Calculate electrical parameters.

3.3 Electronics, Radio repair and TV servicing

- (a) Identify different electronic components symbols.
- (b) Draw simple electronic circuit diagrams.
- (c) Read and interpret circuit diagrams.
- (d) Define various terms used in radio and TV systems
- (e) Calculate different parameters used in electronic circuits.

4.0 ASSESSMENT RUBRIC

- 4.1 There will be **one (1)** paper of **2:30 hours** duration. The paper will consist of sections A and B with a total of **eleven (11)** questions.
- 4.2 **Section A** will comprise **nine (9)** questions. Question 1 will consist of **ten (10)** multiple-choice items from various topics in Electrical Engineering Science. Each item will weigh **one (1)** mark and the remaining **eight (8)** questions will be short-answers, each will weigh **five (5)** marks. This section will weigh a total of **fifty (50)** marks.
- 4.3 **Section B** will consist of two parts. Part **I** will be on Electrical Installation and part **II** will be on Electronics, Radio repair and TV Servicing. Each part will comprise **one (1)** structured question; weighing **fifty (50)** marks. Each question in each part will contain five items covering different topics, within the syllabus. Each item will weigh **ten (10)** marks.

Students will be required to answer the question from one of the two parts depending on their area of specialization. This section will carry a total of **fifty (50)** marks.

5.0 ASSESSMENT CONTENT

The following topics will be assessed in each area:

5.1 Electrical Engineering Science

- 5.1.1 Nature of Electricity
- 5.1.2 Units
- 5.1.3 D.C Circuits
- 5.1.4 Effects of Electrical Current
- 5.1.5 Electric Heating
- 5.1.6 Magnetism and Electromagnetism
- 5.1.7 Instruments and Measurements
- 5.1.8 Transformers
- 5.1.9 Batteries and Cells
- 5.1.10 Conductor and Cables

5.2 Electrical Installation

- 5.2.1 Safety and tools
- 5.2.2 Electrical accessories and symbols
- 5.2.3 Conductor, insulators and cables
- 5.2.4 Supply systems
- 5.2.5 Sheathed wiring system
- 5.2.6 Conduit, trunking and ducts
- 5.2.7 Special wiring
- 5.2.8 Consumer circuits
- 5.2.9 Protective devices
- 5.2.10 Earthing

5.3 Electronics, Radio repair and TV Servicing

- 5.3.1 Safety , tools and equipment
- 5.3.2 Electronic circuit components
- 5.3.3 Soldering
- 5.3.4 Semiconductors
- 5.3.5 Semiconductor diodes
- 5.3.6 Power supplies
- 5.5.7 Bipolar transistor

090 MECHANICAL ENGINEERING

1.0 INTRODUCTION

This assessment format has been designed according to the current Mechanical Engineering Syllabus for Secondary Education issued in 1994 by the Ministry of Education. The format intends to measure the students' educational attainment of the specified competences learned in two years of Secondary Education.

2.0 GENERAL OBJECTIVES

The assessment aims at testing students' ability in performing various tasks as stipulated under each part within Mechanical Engineering field. The general objectives on each part are as follows;

2.1 Workshop Technology

- (a) Apply developed basic knowledge and scientific concepts in the science of metal extraction.
- (b) Propose and select appropriate materials for various operations of workshop jobs.
- (c) Understand the methods and equipment required to process materials from their raw state to useful form of material supplies e.g. solid and hollow metal sections.

2.2 Refrigeration and Air Conditioning

- (a) Associate the thermodynamics laws to analyze the working principles of the refrigerators and air conditioners.
- (b) Make the right choice of installation and repair tools and techniques.
- (c) Do basic calculations of quantity of heat absorbed or dissipated at definite points of the refrigeration cycle.

2.3 Plant and Equipment Maintenance

- (a) Use knowledge acquired to determine the correct type of maintenance methods and tools to be used for a particular failure or sign of arising failure of a machine.
- (b) Work out cost estimates for repair of equipment.

2.4 Motor Vehicle Mechanics

- (a) Describe the construction and functions of automobile main parts and auxiliary components in both petrol and diesel engine.
- (b) Use knowledge acquired to suggest or choose the right tool, correct handling and manipulation in performing repair.

2.5 Welding and Metal Fabrication

- (a) Maintain personal and equipment safety in a welding workshop.
- (b) Apply the knowledge acquired to appropriately select suitable welding tools and demonstrate how to use them, regulate and set welding flames and currents.

2.6 Fitting and Turning

- (a) Maintain both personal and equipment safety in the workshop.
- (b) Select and use various hand tools and equipment in fitting and turning appropriately as well as repairing, servicing and maintaining them.
- (c) Explain various settings and operation of drill and lathe machines.

2.7 Auto electrics

- (a) Explain how to exhibit safe working practice in performing auto electrics jobs.
- (b) Apply acquired knowledge to use testing, setting, adjusting and measuring instrument correctly.
- (c) Perform basic electrics circuit calculations.

2.8 Foundry and Black Smith

- (a) Explain the ways to keep safety in a foundry workshop.
- (b) Use the knowledge of foundry to identify foundry tools and their functions.
- (c) Explain various moulding techniques.

3.0 GENERAL COMPETENCES

The assessment will specifically assess students' ability to perform tasks as indicated under each particular part within Mechanical Engineering field. The general objectives on each field are as follows;

3.1 Workshop Technology

- (a) Define the terms used in metallurgy and explain the difference between ferrous metals and nonferrous metals.
- (b) List various types of metals and nonmetals used in engineering.
- (c) Analyze the properties of different metals.
- (d) Distinguish various types of lubricants and their applications.
- (e) Name and produce sketches of the furnaces from which metals are extracted.

3.2 Refrigeration and Air Conditioning

- (a) Mention the areas where refrigeration and air condition is of vital importance in our daily life.
- (b) Demonstrate the uses of various refrigeration tools.
- (c) Produce sketches of various tools used in refrigeration.
- (d) Mention parameters used in refrigeration.
- (e) Perform elementary calculations on heat, temperature and pressure.
- (f) Identify the various types of refrigerants and their characteristics.

3.3 Plant and Equipment Maintenance

- (a) Define the terms related to maintenance and plant layout.
- (b) Explain the importance of maintenance in industries.
- (c) Classify maintenance works.
- (d) Formulate a maintenance plan and maintenance circle.
- (e) Analyze the cost of maintenance.
- (f) Distinguish between preventive maintenance and corrective maintenance.

3.4 Motor Vehicle Mechanics

- (a) Identify different protective equipment and explain both personal and machine safety.
- (b) Demonstrate how to use hand tools.
- (c) Identify main components of a motor vehicle and analyze their functions.
- (d) Produce correct sketches of various vehicle components.

- (e) Select suitable type of fasteners and locking devices.
- (f) Identify the components associated with motor vehicle systems such as power unit, power transmission system, fuel system, ignition system and lubrication system.
- (g) Suggest suitable repair tools and techniques for a particular motor vehicle fault.

3.5 Welding and Metal Fabrication

- (a) Define welding and compare it with other metal joining processes.
- (b) Mention both personal and machine safety in welding.
- (c) Identify hand tools and state their purposes.
- (d) Distinguish between gas welding and electric welding and give the advantages and disadvantages of each.
- (e) Identify various soldering materials and categorize the soldering processes.
- (f) Explain the methods of producing acetylene and oxygen gases, define oxy-fuel flame welding, select correct nozzles and filler rods and set correct working pressure.
- (g) Identify various electric arc welding accessories and equipment, explain their functions, select proper size and type of electrodes and explain how to join metal pieces by welding.
- (h) Define resistance welding and explain their types.
- (i) Identify various weld joints and welding position and illustrate by means of sketches.

3.6 Fitting and Turning

- (a) Name the causes of accidents and give the rules to prevent them.
- (b) Mention the hand tools and measuring instruments, explain their uses and produce sketches.
- (c) Name the common types of drilling machines, explain the functions of their parts and do some basic calculations of speeds and feeds.
- (d) Identify all lathe parts and accessories, give their functions and define the basic operations such as facing, parallel turning, taper turning and parting off.
- (e) Differentiate permanent joint from temporary joint, explain how to rivet pieces of metal.
- (f) Define the term screw thread and sketch the types of screw threads.

3.7 Auto Electrics

- (a) List and explain the safety rules observed in the auto electric workshop.
- (b) Draw simple electric circuits and solve basic problems in determining voltage and resistance.
- (c) Mention battery types and explain their functions and construction.
- (d) Name all components of the charging system and give the purposes of each.

3.8 Foundry and Blacksmith

- (a) Define the terms which are commonly used in forging and foundry.
- (b) Mention the safety rules which govern the foundry and blacksmith practice.
- (c) Name the forging tools, state the function of each and produce sketches.
- (d) Identify all foundry hand tools and equipment sketch and label their parts.
- (e) Define pattern, identify various types of pattern and explain their advantages.
- (f) Define core, explain the purpose of a core, how to make cores and methods of supporting cores.
- (g) Name and explain the types of binders and parting materials.
- (h) Identify all types of forging operations.
- (i) Define hand moulding and explain various hand moulding methods.

4.0 ASSESSMENT RUBRIC

There will be **one (1)** paper consisting of sections A and B with a total of **fourteen (14)** questions out of which students will be required to answer **eight (8)** questions. Time allocated will be **2:30 hours**.

- 4.1 **Section A** will comprise **one (1)** question of **five (5)** multiple-choice items from various topics each weighing **one (1)** mark, **one (1)** matching items question consisting of **five (5)** items each weighing **one (1)** mark and **five (5)** short answer questions weighing **six (6)** marks each. Students will be required to answer **all** questions. The total marks for this section ₈₀ will be **forty (40)**.

- 4.2 **Section B** will comprise **seven (7)** optional areas according to students' specializations. Each area will comprise **one (1)** structured question with parts **(a)**, **(b)** and **(c)** weighing **20 marks** each, thus making a total of **60 marks**. The students will be required to answer questions in **all** parts from **one area** of their specialization.

5.0 ASSESSMENT CONTENT

The following topics will be assessed:

5.1 Compulsory Part

5.1.1 Workshop Technology

- 5.1.1.1 Introduction to workshop Technology
- 5.1.1.2 Engineering materials
- 5.1.1.3 Production of engineering materials
- 5.1.1.4 Lubrication.

5.2 Specialization Areas

5.2.2 Refrigeration and Air Conditioning

- 5.2.2.1 Refrigeration
- 5.2.2.2 Air conditioning
- 5.2.2.3 Tools and equipment
- 5.2.2.4 Brazing
- 5.2.2.5 Heat temperature and pressure
- 5.2.2.6 Refrigerants.

5.2.3 Plant and Equipment Maintenance

- 5.2.3.1 Maintenance
- 5.2.3.2 Preventive maintenance
- 5.2.3.3 Corrective maintenance.

5.2.4 Motor Vehicle Mechanics

- 5.2.4.1 Introduction to motor vehicle mechanics
- 5.2.4.2 Safety
- 5.2.4.3 Tools and equipment
- 5.2.4.4 Vehicle layout
- 5.2.4.5 Fasteners and locking devices
- 5.2.4.6 Power unit

- 5.2.4.7 Fuel system
- 5.2.4.8 Ignition system
- 5.2.4.9 Lubrication system.

5.2.5 Welding and Metal Fabrication

- 5.2.5.1 Introduction to welding and metal fabrication
- 5.2.5.2 Safety
- 5.2.5.3 Welding
- 5.2.5.4 Soft soldering
- 5.2.5.5 Production of welding gases
- 5.2.5.6 Gas welding equipment and accessories
- 5.2.5.7 Gas welding
- 5.2.5.8 Electric arc welding accessories and equipment
- 5.2.5.9 Electric arc welding
- 5.2.5.10 Filler metals
- 5.2.5.11 Resistance welding
- 5.2.5.12 Weld joints
- 5.2.5.13 Welding position.

5.2.6 Fitting and Turning

- 5.2.6.1 Introduction to fitting and turning
- 5.2.6.2 Safety
- 5.2.6.3 Hand tools
- 5.2.6.4 Machines
- 5.2.6.5 Common tools
- 5.2.6.6 Drilling
- 5.2.6.7 Lathe machine
- 5.2.6.8 Metal joining.

5.2.7 Auto Electrics

- 5.2.7.1 Introduction to auto electrics
- 5.2.7.2 Safety
- 5.2.7.3 Battery
- 5.2.7.4 Charging system.

5.2.8 Foundry and Blacksmith

- 5.2.8.1 Introduction to foundry and blacksmith
- 5.2.8.2 Safety
- 5.2.8.3 Forging tools and equipment

- 5.2.8.4 Foundry tools and equipment
- 5.2.8.5 Foundry and black smith processes (Introduction)
- 5.2.8.6 Patterns and pattern making
- 5.2.8.7 Parting materials
- 5.2.8.8 Forging
- 5.2.8.9 Hand moulding.