

UGANDA BUSINESS AND TECHNICAL EXAMINATIONS BOARD

EXAMINATION PAPER FORMATS FOR NATIONAL CERTIFICATE PROGRAMMES (TECHNICAL AND VOCATIONAL)

1. NATIONAL CERTIFICATE IN ELECTRICAL INSTALLATION SYSTEMS AND MAINTENANCE Year 1

Paper Name and Code	Examination Format
TCTM 101: Applied Technician Mathematics I TCCS 101: Life Skills TCES 101: Electrical Installation Science	Each paper shall consist of eight questions and the candidate will be required to answer any five . All questions shall carry equal marks. The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions. Duration shall be three hours.
TCES 102: Engineering Drawing	The paper shall consist of six questions in sections A and B. Section A shall consist of two questions on either Orthographic, isometric or oblique projection carrying 40marks each. The candidate will be required to answer one question. Section B shall consist of five questions on geometrical constructions and the candidate will answer any three . Each question in this section will carry 20marks . The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions. Duration shall be three hours.
TCES 103: Electrical Installation Practice	The paper shall consist of two compulsory practical questions on Electrical Supply and Installation, and Solar PV Technology. Each question shall carry 50 marks . UBTEB shall send in advance cutting lists of materials required for the examinations to enable institutions prepare early. UBTEB shall also send an onsite assessor to award the marks as candidates perform the tasks. The questioning techniques to be applied should seek for the candidate's ability to comprehend, apply, analyse, synthesise and evaluate conditions. The duration shall be six hours.
TCCA 101: Computer Applications	The paper shall consist of three questions carrying 50 marks each. A candidate will be required to answer any two questions. A print out of the practical outputs together with the soft copies of all files used will be sent to UBTEB. The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions. The duration of this practical examination shall be two hours.
TCES 104: Electrical Supply Systems	The paper shall consist of eight questions in two sections A and B . Section A shall comprise Electrical Supply and Installation , and Section B Solar PV Technology . Each section shall contain four questions carrying 20marks each. The candidate will answer any five questions, choosing at-least two from each section. The questioning techniques to be applied should seek for the candidate's ability to comprehend, apply, analyse, synthesise and evaluate conditions. The duration shall be three hours.

TCES 105: Real Life Project I	<p>The paper shall consist of continuous assessment marks. UBTEB shall verify the authenticity of the awarded marks from the completed projects on the ground and learner's participation through presentations.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>The duration of the examination shall be the period during the 28 weeks of teaching in an academic year of study.</p>
Year 2	
Paper Name and Code	Examination Format
<p>TCTM 201: Applied Technician Mathematics II</p> <p>TCBE 201: Entrepreneurship Skills</p> <p>TCES 201: Electrical Installation Systems and Design</p> <p>TCES 204: Electrical Machines and Basic Electronics</p>	<p>Each paper shall consist of eight questions and the candidate shall be required to answer any five. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidates' ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>Duration shall be three hours.</p>
TCES 202: Industrial Installation and Equipment Maintenance Practice	<p>The paper shall consist of two compulsory practical questions on; Industrial Installation and Automation, and Equipment Repair and Maintenance.</p> <p>Each question shall carry 50 marks.</p> <p>UBTEB shall send in advance cutting lists of materials required for the examinations to enable institutions prepare early.</p> <p>UBTEB shall also send an onsite assessor to award the marks as candidates perform the tasks.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>The duration shall be six hours.</p>
TCES 203: Industrial Installation and Equipment Maintenance Technology	<p>The paper shall consist of eight questions, in two sections A and B.</p> <p>Section A shall comprise four questions on Industrial Installation and Automation and Section B comprise four questions on Equipment Repair and Maintenance. The candidate will answer any five questions choosing at-least two from each section. All questions shall carry 20 marks each.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>The duration shall be three hours.</p>
TCCS 201: Basic Kiswahili	<p>The paper shall consist of two sections; A (General Kiswahili) and B (Professional Kiswahili). Section A shall consist of five questions and a candidate will be required to answer any three. Section B shall consist of three questions and a candidate shall be required to answer any two. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>The total duration of the examination shall be three hours.</p>

TCES 205: Real Life Project II	<p>The paper shall consist of continuous assessment marks. UBTEB shall verify the authenticity of the awarded marks from the completed projects and learner's participation through presentations.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>The duration of the examination shall be the period during the 28 weeks of teaching.</p>
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2. NATIONAL CERTIFICATE IN ELECTRONICS TECHNOLOGY

Year 1

Paper Name and Code	Examination Format
TCTM 101: Applied Technician Mathematics I TCCS 101: Life Skills	<p>Each paper shall consist of eight questions and the candidate will be required to answer any five. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>Duration shall be three hours.</p>
TCET 103: Analogue and Digital Electronics Technology I	<p>The paper shall consist of eight questions in two sections A and B. Section A shall consist of Analogue Electronics and Section B Digital Electronics.</p> <p>Each section shall consist of four questions and the candidate will answer any five questions, choosing at least two from each section. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>Duration shall be three hours.</p>
TCET 104: Analogue and Digital Electronics Practice I	<p>The paper shall consist of two compulsory practical questions on Digital and Analogue Electronics respectively. Each question shall carry 50marks.</p> <p>Duration shall be Six hours.</p>
TCET 101: Engineering Science	<p>The paper shall consist of eight questions in two sections A and B. Section A shall comprise five questions on Electrical Engineering Science and Section B three questions on Mechanical Engineering Science.</p> <p>The candidate will be required to answer any five, choosing three from section A and two from section B. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>Duration shall be three hours.</p>
TCET 102: Engineering Drawing	<p>The paper shall consist of six questions in sections A and B. Section A shall consist of two questions on either Orthographic, isometric or oblique projection carrying 40marks each. The candidate will be required to answer one question.</p>

	<p>Section B shall consist of five questions on geometrical constructions and the candidate will answer any three. Each question in this section will carry 20marks. The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions. Duration shall be three hours.</p>
TCCA 101: Computer Applications	<p>The paper shall consist of three practical questions carrying 50 marks each. A candidate will be required to answer any two. A print out of the practical outputs together with the softcopies of all files used will be sent to UBTEB. The questioning techniques to be applied should seek for the candidate's ability to comprehend, apply, analyse, synthesise and evaluate conditions. The duration of this examination shall be two hours.</p>
TCET 105: Real Life Project I	<p>The real life project shall consist of continuous assessment marks. UBTEB shall verify the authenticity of the awarded marks from the completed projects on the ground and learners' participation through presentations. The tasks to be performed should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions. The total duration of the project assessment shall be the period during the 28 weeks of teaching in an academic year of study.</p>
Year 2	
Paper Name and Code	Examination Format
TCTM 201: Applied Technician Mathematics II TCBE 201: Entrepreneurship Skills TCET 203: Industrial Electronics	<p>Each paper shall consist of eight questions and the candidate shall be required to answer any five. All questions shall carry equal marks. The questioning techniques to be applied should seek for the candidates' ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions. Duration shall be three hours.</p>
TCET 204: Testing Methods and Fault Diagnosis	<p>The paper shall consist of two compulsory practical questions each carrying 50marks each. Duration shall be Six hours.</p>
TCET 201: Analogue and Digital Electronics Technology II	<p>The paper shall consist of eight questions in two sections A and B. Section A shall consist of Analogue Electronics and Section B Digital Electronics. Each section shall consist of four questions and the candidate will answer any five, choosing at least two from each section. All questions shall carry equal marks. The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions. Duration shall be three hours.</p>

TCET 202: Analogue and Digital Electronics Practice II	The paper shall consist of two compulsory practical questions on Digital and Analogue Electronics respectively. Each question shall carry 50marks . Duration shall be Six hours .
TCCS 201 Basic Kiswahili	The paper shall consist of two sections A (General Kiswahili) and B (Professional Kiswahili) . Section A shall consist of five questions and a candidate shall be required to answer any three . Section B shall consist of three questions and a candidate shall be required to answer any two . All questions shall carry equal marks. The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions. The total duration of the examination shall be three hours.
TCET 205: Real Life Project II	The real life project shall consist of continuous assessment marks. The examinations board shall verify the authenticity of the awarded marks from the completed projects and learners' participation through presentations. The tasks to be performed should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions. The total duration of the project assessment shall be the period during the 28 weeks of teaching and learning in an academic year of study.

3. NATIONAL CERTIFICATE IN MACHINING AND FITTING YEAR 1

Paper Name and Code	Examination Format
TCTM 101: Applied Technician Mathematics I TCCS 101: Life Skills TCMF 103: Engineering Science	Each paper shall consist of eight questions and the candidate shall be required to answer any five . All questions shall carry equal marks. The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions. Duration shall be three hours.
TCCA 101: Computer Applications	The paper shall consist of three practical questions carrying 50 marks each. A candidate will be required to answer any two . A print out of the practical outputs together with the softcopies of all files used will be sent to UBTEB. The questioning techniques to be applied should seek for the candidate's ability to comprehend, apply, analyse, synthesise and evaluate conditions. The duration of this examination shall be two hours.

TCMF 101: Workshop Technology I	<p>The paper shall consist of two sections A and B. Section A shall comprise three questions on Engineering Materials and Section B five questions on workshop Technology. The candidate will answer any five questions, selecting at least two from each section. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>Duration shall be three hours.</p>
TCMF 104: Workshop Practice I	<p>The paper shall consist of two Compulsory Practical questions carrying 50 marks each.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>Duration shall be twelve hours.</p>
TCMF 102: Engineering Drawing	<p>The paper shall consist of six questions in sections A and B. Section A shall consist of one compulsory question on either Orthographic, isometric or oblique projection carrying 40marks.</p> <p>Section B shall consist of five questions on geometrical constructions and the candidate will answer any three.</p> <p>Each question in this section will carry 20marks</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions. Duration shall be three hours.</p>
TCMF 105: Real Life Project I	<p>The real life project shall consist of continuous assessment marks. UBTEB shall verify the authenticity of the awarded marks from the completed projects on the ground and learners' participation through presentations.</p> <p>The tasks to be performed should seek for the candidates' ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>The total duration of the project assessment shall be the period during the 28 weeks of teaching in an academic year of study.</p>
Year 2	
Paper Name and Code	Examination Format
TCTM 201: Applied Technician Mathematics II TCBE 201: Entrepreneurship Skills TCMF 201: Workshop Technology II TCMF 204: Electrical Engineering Science	<p>Each paper shall consist of eight questions and the candidate shall be required to answer any five. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidates' ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>Duration shall be three hours.</p>

TCMF 203: Workshop Practice II	<p>The paper shall consist of two Compulsory Practical questions carrying 50 marks each.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>Duration shall be thirty hours.</p>
TCMF 202: Mechanical Engineering Drawing	<p>The paper shall consist of six questions and the candidate will be required to answer Question One (Simple Machine assembly) and any other two questions. Question One shall carry 60marks and other questions 20 marks each. Where geometrical solutions are employed, construction lines shall be clearly shown and solutions should conform to BS308: 1984.</p> <p>The questioning technique to be applied should seek for the candidate's ability to remember, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>Duration shall be three hours.</p>
TCCS 201: Basic Kiswahili	<p>The paper shall consist of two sections A (General Kiswahili) and B (Professional Kiswahili). Section A shall consist of five questions and a candidate will answer any three. Section B shall consist of three questions and a candidate will answer any two. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidates' ability to apply, analyze, synthesize and evaluate conditions.</p> <p>The duration of the practical examination shall be three hours.</p>
TCMF 205: Real Life Project II	<p>The real life project shall consist of continuous assessment marks. UBTEB shall verify the authenticity of the awarded marks from the completed projects and learners' participation through presentations.</p> <p>The tasks to be performed should seek for the candidates' ability to remember, comprehend, apply, analyze, synthesize and evaluate conditions. The total duration of the project assessment shall be the period during the 28 weeks of teaching in an academic year of study.</p>

4. NATIONAL CERTIFICATE IN WELDING AND FABRICATION Year 1

Paper Name and Code	Examination Format
TCTM 101: Applied Technician Mathematics I TCCS 101: Life Skills TCWF 103: Engineering Materials	<p>Each paper shall consist of eight questions and the candidate will be required to answer any five. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>Duration shall be three hours.</p>
TCWF 104: Technical Drawing	<p>The paper shall consist of five questions in sections A and B. Section A shall consist of one compulsory question on either Orthographic, isometric, oblique projection or development carrying 60marks. Section B shall consist of four questions on geometrical</p>

	<p>constructions and the candidate will answer any two. Each question in this section will carry 20marks</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesize and evaluate conditions.</p> <p>Duration shall be three hours.</p>
TCCA 101: Computer Applications	<p>The paper shall consist of three practical questions carrying 50 marks each. A candidate will be required to answer any two. A print out of the practical outputs together with the softcopies of all files used will be sent to UBTEB.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>The duration of this examination shall be two hours.</p>
TCWF 101: Welding and Fabrication Technology I	<p>The paper shall consist of two sections A and B. Section A shall comprise three questions on fabrication Technology and Section B five questions on Welding Technology. The candidate will be required to answer any five questions from the paper, choosing two questions from section A and three questions from section B. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidates' ability to remember, comprehend, apply, analyse, synthesize and evaluate conditions.</p> <p>Duration shall be three hours.</p>
TCWF 102: Welding and Fabrication Practice I	<p>The paper shall consist of two practical questions. Question one shall be on Fabrication Practice and will take a duration of two hours and be marked out of 40 marks.</p> <p>Question two shall take a duration of four hours, to be marked out of 60 marks and will comprise the following;</p> <p>(i) Oxy-fuel gas welding, brazing, braze welding and soldering (ii) Shielded metal arc welding</p> <p>UBTEB shall send an assessing examiner to the institution to mark the candidates as they progress with tasks in stages until completion.</p> <p>The questioning techniques to be applied should seek for the candidates' ability to apply, analyse, synthesize and evaluate conditions.</p> <p>Duration shall be six hours.</p>
TCWF 105: Real Life Project I	<p>The real life project shall consist of Continuous assessment marks.</p> <p>UBTEB shall verify the authenticity of the awarded marks from the completed projects on the ground and learners' participation through presentations.</p> <p>The tasks to be performed should seek for the candidates' ability to apply, analyse, synthesize and evaluate conditions.</p> <p>The duration of the examination shall be the period during the 28 weeks of teaching in an academic year of study.</p>

Year 2	
Paper Name and Code	Examination Format
TCTM 201: Applied Technician Mathematics II TCBE 201: Entrepreneurship skills	<p>Each paper shall consist of eight questions and the candidate shall be required to answer any five. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidates' ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>Duration shall be three hours.</p>
TCWF 201: Welding and Fabrication Technology II	<p>The paper shall consist of two sections A and B. Section A shall comprise three questions on fabrication Technology and Section B five questions on Welding Technology. The candidate will be required to answer any five questions from the paper, choosing two questions from section A and three questions from section B. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidates' ability to remember, comprehend, apply, analyse, synthesize and evaluate conditions.</p> <p>Duration shall be three hours.</p>
TCWF 202: Welding and Fabrication Practice II	<p>The paper shall consist of two practical questions.</p> <p>Question one shall comprise Fabrication Practice and will take a duration of 3 hours and marked out of 50 marks.</p> <p>Question two shall also take a duration of 3 hours, to be marked out of 50 marks and will comprise the following;</p> <p>(i) Tungsten Inert Gas (TIG) welding (ii) Metal Inert/Arc Gas (MIG/MAG) welding (iii) Shielded metal arc welding</p> <p>UBTEB shall send an assessing examiner to the institution to mark the candidates as they progress with tasks in stages until completion.</p> <p>The questioning techniques to be applied should seek for the candidates' ability to apply, analyse, synthesize and evaluate conditions.</p>
TCWF 204: CAD Drawing	<p>The paper shall consist of three practical questions carrying 50 marks each. A candidate shall be required to answer any two questions. A print out of the practical outputs together with the softcopies of all files used will be sent to UBTEB.</p> <p>The questioning techniques to be applied should seek for the candidates' ability to remember, comprehend, apply, analyse, synthesize and evaluate conditions.</p> <p>The duration of this practical examination shall be three hours.</p>

TCCS 201: Basic Kiswahili	<p>The paper shall consist of two sections A (General Kiswahili) and B (Professional Kiswahili). Section A shall consist of five questions and a candidate shall be required to answer any three questions. Section B consists of three questions and a candidate shall be required to answer any two. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidates' ability to apply, analyse, synthesise and evaluate conditions.</p> <p>The duration of the practical examination shall be three hours.</p>
TCWF 205: Real life project II	<p>The real life project shall consist of Continuous assessment marks.</p> <p>UBTEB shall verify the authenticity of the awarded marks from the completed projects on the ground and learners' participation through presentations.</p> <p>The tasks to be performed should seek for the candidates' ability to apply, analyse, synthesise and evaluate conditions.</p> <p>The duration of the examination shall be the period during the 28 weeks of teaching in an academic year</p>

5. NATIONAL CERTIFICATE IN WOODWORK TECHNOLOGY YEAR 1

Paper Name and Code	Examination Format
TCWT 101 Woodwork Technology TCWT 102 Materials Science TCTM 101: Applied Technician Mathematics I TCCS 101: Life Skills	<p>Each paper shall consist of eight questions and the candidate shall be required to answer any five. All questions shall carry equal marks. The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>The total duration of the examination shall be three hours.</p>
TCWT 103: Workshop Practice I	<p>The paper shall consist of one compulsory question to be marked out of 100.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>Duration of the examinations shall be six hours.</p>
TCWT 104: Construction Drawing	<p>The paper shall consist of two sections, A and B. Section A shall consist of three questions carrying 30 marks each and the candidate shall be required to answer any two. Section B shall consist of two questions carrying 40 marks each and the candidate shall be required to answer any one.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>The total duration of the examination shall be three hours.</p>
TCCA 101: Computer Application	<p>The paper shall consist of three practical questions carrying 50 marks each. A candidate will be required to answer any two. A print out of the practical outputs together with the softcopies of all files used will be sent to UBTEB.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>The duration of this examination shall be two hours.</p>

TCWT 105: Real life Project I	<p>The real life project shall consist of continuous assessment marks.</p> <p>UBTEB shall verify the authenticity of the awarded marks from the completed projects on the ground and learners' participation through presentations.</p> <p>The tasks to be performed should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>The total duration of the project assessment shall be the period during the 28 weeks of teaching in an academic year of study.</p>
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YEAR 2

Paper Name and Code	Examination Format
TCWT 201: Construction Technology TCWT 202: Construction Science TCTM 201: Applied Technician Mathematics II TCBE 201: Entrepreneurship Skills	<p>Each paper shall consist of eight questions and the candidate shall be required to answer any five. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>Duration shall be three hours.</p>
TCWT 203: Workshop Practice II	<p>The paper shall consist of one compulsory question to be marked out of 100.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>The total duration of the examination in six hours.</p>
TCWT 204: CAD Drawing	<p>The paper shall consist of three practical questions carrying 50 marks each and the candidate shall be required to answer any two.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>The total duration of the examination shall be three hours.</p>
TCCS 201: Basic Kiswahili	<p>The paper shall consist of two sections A (General Kiswahili) and B (Professional Kiswahili). Section A shall consist of five questions and a candidate shall be required to answer any three. Section B shall consist of three questions and a candidate shall be required to answer any two. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>The total duration of the examination shall be three hours.</p>
TCWT 205: Real life Project	<p>The paper shall consist of continuous assessment marks.</p> <p>UBTEB shall verify the authenticity of the awarded marks from the completed projects on the ground and learner' participation through presentations.</p> <p>The tasks to be performed should seek for the candidates' ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p> <p>The total duration of the project assessment shall be the period during the 28 weeks of teaching in an academic year of study.</p>

**6. NATIONAL CERTIFICATE IN BUILDING CONSTRUCTION
YEAR 1**

Paper Name and Code	Examination Format
TCTM 101: Applied Technician Mathematics I TCCS 101: Life Skills TCBC 101: Building Technology I TCBC 102: Building Science I	Each paper shall consist of eight questions and the candidate will be required to answer any five . All questions carry equal marks. The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions. The total duration of the examination shall be three hours.
TCBC 103: Building Drawing	The paper shall consist of six questions and the candidate will be required to answer any four . All questions carry equal marks. The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions. Duration shall be three hours.
TCCA 101: Computer Applications	The paper shall consist of one practical section with only three questions carrying 50 marks each. A candidate will be required to answer any two questions. A print out of the practical outputs together with the soft copies of all files used will be sent to UBTEB. The duration of this practical examination shall be two hours.
TCBC 104: Building Practice I	The paper shall consist of one practical section with only one question to be marked out of 100 marks. UBTEB shall send an assessing examiner to the real institutional workshop to mark the candidates as they progress with the tasks in stages until completion. The duration of this practical examination shall be six hours.
TCBC 105: Real Life Project I	The paper shall consist of continuous assessment marks. UBTEB shall verify the authenticity of the awarded marks from the completed projects on the ground and learner's participation through presentations. The duration of the examination is the period during the 28 weeks of teaching in an academic year of study. The tasks to be performed should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.

YEAR 2

Paper Name and Code	Examination Format
TCTM 201: Applied Technician Mathematics II TCBE 201: Entrepreneurship Skills TCBC 201: Building Technology II TCBC 202: Building Science II	Each paper shall consist of eight questions and the candidate will be required to answer any five . All questions carry equal marks. The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions. Duration shall be three hours.
TCBC 203: Computer Aided Building Drawing	The paper shall consist of three practical questions carrying 50 marks each and the candidate shall be required to answer any two . The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse,

	<p>synthesise and evaluate conditions. Duration shall be three hours</p>
TCCS 201: Basic Kiswahili	<p>The paper shall consist of two sections; Section A (General Kiswahili) and Section B (Professional). Section A shall consist of five questions and a candidate will be required to answer any three. Section B shall consist of three questions and a candidate shall be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions. The total duration of the examination shall be three hours.</p>
TCBC 204: Building Practice II	<p>The paper shall consist of one practical section with only one question carrying 100 marks.</p> <p>UBTEB shall send an assessing examiner to the real institutional workshop to mark the candidates as they progress with the tasks in stages until completion. The duration of this practical examination shall be six hours.</p>
TCBC 205: Real Life Project II	<p>The paper shall consist of continuous assessment marks. UBTEB shall verify the authenticity of the awarded marks from the completed projects on the ground and learner's participation through presentations. The duration of the examination shall be the period during the 28 weeks of teaching. The tasks to be performed should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesise and evaluate conditions.</p>

7. NATIONAL CERTIFICATE IN AUTOMOTIVE MECHANICS

Year 1

Paper Name and Code	Examination Format
TCAM 101: Automotive Technology, Electric and Electronics I	<p>The paper shall consist of eight questions in two sections A (Automotive Technology & Basic Workshop Technology) and B (Automotive Electric & Electronics Technology). Section A shall consist of five questions and the candidate will be required to answer any three while section B shall consist of three questions and the candidate will be required to answer any two questions. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidates' ability to remember, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>Duration shall be three hours</p>
TCAM 102: Automotive Technology, Electric and Electronics practice I	<p>The paper shall consist of two practical questions in two sections A (Automotive Technology) and B (Electric and Electronics Practice) carrying 50 marks each. The candidate will be required to answer both questions.</p> <p>UBTEB shall send an assessing examiner to the institution to mark the candidates as they progress with tasks in stages until completion.</p>

	<p>The questions should be commensurate with the available time and level of the candidates.</p> <p>The questioning techniques to be applied should seek for the candidates' ability to apply, analyze, synthesize and evaluate conditions.</p> <p>Duration shall be six hours.</p>
<p>TCAM 103: Technician Science I</p> <p>TCTM 101: Applied Technician Mathematics I</p> <p>TCCS 101: Life skills</p>	<p>Each paper shall consist of eight questions and the candidate will be required to answer any five. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>Duration shall be three hours.</p>
TCAM 104: Technical Drawing I	<p>The paper shall consist of six questions and the candidate will be required to answer any four. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>Duration shall be three hours.</p>
TCCA 101: Computer Applications	<p>The paper shall consist of three practical questions carrying 50 marks each. A candidate will be required to answer any two. A print out of the practical outputs together with the softcopies of all files used will be sent to UBTEB.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>The duration of this examination shall be two hours.</p>
TCAM105: Real Life Project 1	<p>The real life project shall consist of Continuous assessment marks.</p> <p>UBTEB shall verify the authenticity of the awarded marks from the completed projects on the ground and learners' participation through presentations.</p> <p>The tasks to be performed should seek for the candidate's ability to, comprehend, apply, analyze, synthesize and evaluate conditions</p> <p>The duration of the project assessment shall be the period during the 28 weeks of teaching in an academic year of study.</p>

YEAR 2

Paper Name and Code	Examination Format
TCAM 201: Automotive Technology, Electric and Electronics II	<p>The paper shall consist of eight questions in two sections A (Automotive Technology & Basic Workshop Technology) and B (Automotive Electric & Electronics Technology). Section A shall consist of five questions and the candidate will be required to answer any three while section B shall consist of three questions and the candidate will be required to answer any two questions. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidates' ability to remember, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>Duration shall be three hours</p>
TCAM 202: Automotive Technology, Electric and Electronics practice II	<p>The paper shall consist of two practical questions in two sections A (Automotive Technology) and B (Electric and Electronics Practice) carrying 50 marks each. The candidate will be required to answer both questions.</p> <p>UBTEB shall send an assessing examiner to the institution to mark the candidates as they progress with tasks in stages until completion.</p> <p>The questions should be commensurate with the available time and level of the candidates.</p> <p>The questioning techniques to be applied should seek for the candidates' ability to apply, analyze, synthesize and evaluate conditions.</p> <p>Duration shall be six hours.</p>
TCAM 203: Technician Science II TCTM 201: Applied Technician Mathematics II TCBE 201: Entrepreneurship Skills	<p>The paper shall consist of eight questions and the candidate is required to answer any five. All questions shall carry equal marks.</p> <p>The questioning techniques shall seek for the candidates' ability to remember, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>Duration shall be three hours.</p>
TCAM 204: Technical Drawing II	<p>The paper shall consist of six questions and the candidate will be required to answer any four. All questions carry equal marks.</p> <p>The questioning technique to be applied should seek for the candidate's ability to remember, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>The duration of the examination shall be three hours.</p>
TCCS 201: Basic Kiswahili	<p>The paper shall consist of two sections A (general Kiswahili) and B (professional). Section A shall consist of five questions and a candidate shall be required to answer any three questions. Section B shall consist of three</p>

	<p>questions and a candidate is required to answer any two. All questions carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>The total duration of the examination shall be three hours.</p>
TCAM 205: Real Life Project II	<p>The real life project shall consist of Continuous Assessment marks.</p> <p>UBTEB should verify the authenticity of the awarded marks from the completed projects on the ground and learners' participation through presentations.</p> <p>The tasks to be performed should seek for the candidate's ability to, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>The duration of the project assessment shall be the period during the 28 weeks of teaching in an academic year of study.</p>

8. NATIONAL CERTIFICATE IN PLUMBING

Paper Name and Code	Examination Format
TCTM 101: Applied Technician Mathematics I TCCS 101: Life skills TCPL 101: Plumbing Technology I TCPL 102: Plumbing Science I	<p>Each paper consists of eight questions and the candidate is required to answer any five. All questions carry equal marks.</p> <p>The questioning techniques to be applied should seek the candidate's ability to remember, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>Duration is three hours.</p>
TCPL 104: Drawing	<p>The paper shall consist of six questions and the candidate will be required to answer any four. All questions shall carry equal marks.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>Duration shall be three hours.</p>
TCCA 101: Computer Applications	<p>The paper consists of three questions carrying 50 marks each. A candidate will be required to answer any two questions. A print out of the practical outputs together with the softcopies of all files used will be sent to UBTEB.</p> <p>The questioning techniques to be applied should seek the candidate's ability to comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>The duration of this practical examination shall be two hours.</p>
TCPL 103: Workshop Practice I	<p>The paper shall consist of two compulsory practical questions. Question one shall comprise water supply pipe work connections and question two, Bench work and</p>

	<p>fabrication skills. All questions shall carry equal marks.</p> <p>The duration of this practical examination shall be six hours.</p> <p>UBTEB shall send an assessing examiner to the institution to mark the candidates as they progress with tasks in stages until completion.</p> <p>The questions should be commensurate with the available time and level of the candidates.</p> <p>The questioning techniques to be applied should seek for the candidates' ability to apply, analyze, synthesize and evaluate conditions.</p>
TCPL 105: Real Life Project I	<p>The real life project shall consist of Continuous assessment marks.</p> <p>UBTEB shall verify the authenticity of the awarded marks from the completed projects on the ground and learners' participation through presentations.</p> <p>The tasks to be performed should seek for the candidate's ability to, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>The duration of the examination is the period during the 28 weeks of teaching in an academic year of study.</p>
Year 2	
Paper Name and Code	Examination Format
TCTM 201: Applied Technician Mathematics II TCBE 201: Entrepreneurship Skills TCPL 201: Plumbing Technology II TCPL 202: Plumbing Science II	<p>Each paper shall consist of eight questions and the candidate is required to answer any five. All questions carry equal marks.</p> <p>The questioning techniques to be applied should seek the candidates' ability to remember, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>Duration is three hours.</p>
TCCS 201: Basic Kiswahili	<p>The paper shall consist of two sections A (general Kiswahili) and B (professional). Section A shall consist of five questions and a candidate shall be required to answer any three questions. Section B shall consist of three questions and a candidate is required to answer any two. All questions carry equal marks.</p> <p>The questioning techniques to be applied should seek the candidate's ability to remember, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>The total duration of the examination shall be three hours.</p>

<p>TCPL 203: Workshop Practice II</p>	<p>The paper shall consist of two compulsory practical questions. Question one shall comprise water supply pipe work connections and question two, Bench work and fabrication skills. All questions shall carry equal marks.</p> <p>The duration of this practical examination shall be six hours.</p> <p>UBTEB shall send an assessing examiner to the institution to mark the candidates as they progress with tasks in stages until completion.</p> <p>The questions should be commensurate with the available time and level of the candidates.</p> <p>The questioning techniques to be applied should seek for the candidates' ability to apply, analyze, synthesize and evaluate conditions.</p> <p>Duration shall be Six hours</p>
<p>TCPL 204: Computer Aided Plumbing Drawing</p>	<p>The paper shall consist of three practical questions carrying 50 marks each and the candidate shall be required to answer any two.</p> <p>The questioning techniques to be applied should seek for the candidate's ability to remember, comprehend, apply, analyse, synthesize and evaluate conditions.</p> <p>Duration shall be three hours</p>
<p>TCPL 205 Real Life Project II</p>	<p>The paper consists of continuous assessment marks.</p> <p>The examinations body shall verify the authenticity of the awarded marks from the completed projects on the ground and learner's participation through presentations.</p> <p>The duration of the examination is the period during the 28 weeks of teaching.</p>

9. NATIONAL CERTIFICATE IN HOTEL MANAGEMENT AND INSTITUTIONAL CATERING

Year 1

Paper Name and Code	Examination Format
<p>TCCS 101: Life Skills</p>	<p>This paper shall consist of eight questions and the candidate is required to answer any five. All questions carry equal marks.</p> <p>The questioning techniques to be applied should seek the candidates' ability to remember, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>Duration is three hours.</p>
<p>TCCA 101: Computer Applications</p>	<p>The paper consists of three questions carrying 50 marks each. A candidate will be required to answer any two questions. A print out of the practical outputs together with the softcopies of all files used will be sent to UBTEB.</p> <p>The questioning techniques to be applied should seek the candidate's ability to comprehend, apply, analyze, synthesize and evaluate conditions.</p>

	The duration of this practical examination shall be two hours.
VCHC 101 Food and Beverage Service	<p>This paper will consist of one compulsory practical question.</p> <p>UBTEB shall send an assessing examiner to the institution to mark the candidates as they progress with tasks in stages until completion.</p> <p>Duration shall be two hours</p>
VCHC 102 Basic French	<p>This paper will consist of seven questions in two sections A and B.</p> <p>Section A will consist of two compulsory parts (speaking and Listening skills) carrying 20 marks each. One question will be recorded information to be played to the candidates after which they will write down the answers to the questions that follow in the official booklets provided while the other part will consist of a set of questions which the candidates will answer orally while being recorded.</p> <p>Section B shall consist of five questions and the candidates will be required to answer any three questions carrying 20 marks each.</p> <p>Copies of all the recorded work shall be sent to UBTEB for marking.</p> <p>Duration is three hours</p>
VCHC 103 Fundamentals of Food production, Service and hygiene	<p>This paper will consist of eight in three sections A, B and C comprising eight questions. The candidate will be required to answer five questions in total.</p> <p>Section A (Fundamentals of Food production) will consist of three questions requiring candidates to answer only two.</p> <p>Section B (Fundamentals of Service) will consist of three questions requiring candidates to answer only two.</p> <p>Section C (Fundamentals of hygiene) will consist of two questions requiring candidates to answer only one.</p> <p>Duration is 3 Hours</p>
VCHC 104 Food Production	<p>This paper will consist of one compulsory practical question.</p> <p>UBTEB shall send an assessing examiner to the institution to mark the candidates as they progress with tasks in stages until completion.</p> <p>Duration is four hours</p>
VCHC 105 Real Life Project I	<p>The real life project shall consist of Continuous assessment marks.</p> <p>The examinations board shall verify the authenticity of the awarded marks from the completed projects on the ground and learners' participation through presentations.</p> <p>The total duration of the project assessment shall be the period during the 28 weeks of teaching in an academic year of study.</p>

Year 2	
Paper Name and Code	Examination Format
TCCS 101: Life Skills	<p>This paper shall consist of eight questions and the candidate is required to answer any five. All questions carry equal marks.</p> <p>The questioning techniques to be applied should seek the candidates' ability to remember, comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>Duration is three hours.</p>
TCCA 101: Computer Applications	<p>The paper consists of three questions carrying 50 marks each. A candidate will be required to answer any two questions. A print out of the practical outputs together with the softcopies of all files used will be sent to UBTEB.</p> <p>The questioning techniques to be applied should seek the candidate's ability to comprehend, apply, analyze, synthesize and evaluate conditions.</p> <p>The duration of this practical examination shall be two hours.</p>
VCHC 101 Food and Beverage Service	<p>This paper will consist of one compulsory practical question.</p> <p>UBTEB shall send an assessing examiner to the institution to mark the candidates as they progress with tasks in stages until completion.</p> <p>Duration shall be two hours</p>
VCHC 102 Basic French	<p>This paper will consist of seven questions in two sections A and B.</p> <p>Section A will consist of two compulsory parts (speaking and Listening skills) carrying 20 marks each. One question will be recorded information to be played to the candidates after which they will write down the answers to the questions that follow in the official booklets provided while the other part will consist of a set of questions which the candidates will answer orally while being recorded.</p> <p>Section B shall consist of five questions and the candidates will be required to answer any three questions carrying 20 marks each.</p> <p>Copies of all the recorded work shall be sent to UBTEB for marking.</p> <p>Duration is three hours</p>
VCHC 103 Fundamentals of Food production, Service and hygiene	<p>This paper will consist of eight in three sections A, B and C comprising eight questions. The candidate will be required to answer five questions in total.</p> <p>Section A (Fundamentals of Food production) will consist of three questions requiring candidates to answer only two.</p> <p>Section B (Fundamentals of Service) will consist of three questions requiring candidates to answer only two.</p> <p>Section C (Fundamentals of hygiene) will consist of two questions requiring candidates to answer only one.</p>

	Duration is three hours
VCHC 104 Food Production	This paper will consist of one compulsory practical question. UBTEB shall send an assessing examiner to the institution to mark the candidates as they progress with tasks in stages until completion. Duration is four hours
VCHC 105 Real Life Project I	The real life project shall consist of Continuous assessment marks. The examinations board shall verify the authenticity of the awarded marks from the completed projects on the ground and learners' participation through presentations. The total duration of the project assessment shall be the period during the 28 weeks of teaching in an academic year of study.
VCHC 106: Industrial Training I	
VCHC 206: Industrial Training II	
Note: Year 2 papers of NCHMIC shall be assessed as per the curriculum	

