

NATIONAL VOCATIONAL TRAINING INSTITUTE

TESTING DIVISION

TRADE TESTING REGULATIONS AND SYLLABUS

TRADE :GRAPHIC DESIGN

LEVEL :CERTIFICATE ONE

A. INTRODUCTION

- i. The review of this syllabus has been generally influenced by the demands of industries due to its continuous change as a result of technological advancement and the changing needs of society.

It was also influenced by the TVET reforms under the directions of the new educational reforms with the view to opening up further education and training opportunities to TVET graduates. The certificate ONE syllabus is designed to respond to the following level descriptors:

QUALIFICATION	KNOWLEDGE LEVEL	SKILLS AND ATTITUDE:
Certificate 1	<ol style="list-style-type: none">1. To demonstrate a broad knowledge base incorporating some technical concepts.2. To demonstrate knowledge of the theoretical basis of practical skills.3. To demonstrate knowledge in numeracy, literacy, IT and Entrepreneurial skills	<ol style="list-style-type: none">1. Require a wide range of technical skills2. Are applied in a variety of familiar and complex contexts with minimum supervision.3. Require collaboration with others in a team

- ii. This syllabus is aimed at providing trainees knowledge for a craft certificate intended to meet the needs of industry and for further course of study at Technical/Vocational Institutes, and Polytechnics and for other trainees who wish to become qualified craftsmen as Graphic Designers and Artists.

B. GENERAL OBJECTIVES

On completion of this course, the trainee should be able to apply and understand:

- i) acquire general knowledge in graphic design
- ii) assist trainees to manipulate tools and materials with the hands and mind to produce artworks.
- iii) assist trainee to use the environment to produce improvised tools and materials for designing artifacts.
- iv) encourage trainees to develop more interest in Graphic Design
- v) assist trainees to practice studio precautions to the best of their knowledge
- vi) assist students to know the main principles of drawing and shading in two and three-dimensional works
- vii) assist trainees to use ICT in designing information for the public
- viii) assist trainees to acquire creative skills and abilities that will lead to self-employment.

C. THE COURSE COMPONENTS

Trade Theory

Trade Science and Calculation

Trade Drawing

General Paper

Trade Practical

EXAMINATION: The candidates would be examined in the FIVE components listed in 'C' above.

Practical work must be carefully planned to illustrate application of the theory and to provide maximum opportunity for workshop practice, laboratory work and demonstration.

D. KNOWLEDGE AND SKILLS REQUIREMENT

The prime objective of the programme is to provide knowledge and skills of the trade in a manner that will best meet the needs of the trade as well as industries using graphic design tools/equipment and materials.

E. ENTRY TO THE COURSE

Minimum education : Must have passed JHS or SHS examination. However, the selection of trainees for the course is within the discretion of the Head of the Institution.

F. ELIGIBILITY FOR ENTRY TO EXAMINATION

Candidates may enter for examination only as internal candidate, that is those who at the time of entry to the examination are undertaking or have already completed the course at an approved establishment.

G. EXTERNAL EXAMINERS

The practical work of candidates will be assessed by an external examiner appointed by the Testing Commissioner.

H. EXAMINATION

The components for the examination for Graphic Design are as listed below:

1. Trade Theory
2. Trade Science and Calculation
3. Trade Drawing
4. General Paper
5. Trade Practical

I. EXAMINATION RESULTS AND CERTIFICATES

Each candidate will receive record of performance for the components taken. These are:

- i) Distinction
- ii) Credit
- iii) Pass
- iv) Referred/Failure

Certificates would be issued to candidates who would pass all the components.

NOTE

All Technical and Vocational trainees who aspire to take advantage of the opportunities opened to them in the educational reforms should NOTE that, for a trainee to progress to certificate Two (2) a pass in Certificate One (1) is compulsory.

J. APPROVAL OF COURSE

Institutions or other establishments intending to prepare trainees for the Examination must apply to:

THE COMMISSIONER
TESTING DIVISION
NVTI HEAD OFFICE
P. O. BOX MB 21, ACCRA

K. ACKNOWLEDGEMENT

NVTI wishes to acknowledge the team of experts, for preparing the materials which have been incorporated into this syllabus.

Mr. Osman Gibrin Seidu (Dip ED)
Ms. Boaduwah Elizabeth (BED H/E)
Mr. Benjamin A. Bortey (Dip. Rural Art & Ind)

Government's desire to improve the lot of Technical/Vocational Training, which led to the preparation of this syllabus, is hereby acknowledged.

RECOMMENDED TEXT BOOKS

1. The Designers' Companion (For S.H.S. with sample question)
by Kwaku Ameyaw-Benneh
2. A secret Guide to Graphic Design (For West Africa S.H.S.) by Lewis Omudie
3. A New Approach to Visual Arts (for S.H.S./Tertiary Institutions by Joe Adjei
4. Concise notes on Graphic Design (for schools & Colleges) By E.O. Hanson & H.K.K. Terry
5. Introduction to Graphic Design (Books 1-3) By Biney Kwaku Robert

REQUIRED TOOLS/EQUIPMENT

1. Writing tools:- Pen, pencil, felt pen, marker, calligraphy/broad pen, poster pen, ruling pen etc.
2. Drawing tools: - Charcoal, crayon, pastel, chalk, compasses, T-square, camera etc.
3. Ruling/Measuring: Ruler, set-square, pair of dividers, protractor. Etc.
4. Printing tools: - Brush, spray diffuser, palette, palette knife, squeegee, printing brayer or roller, developing tools etc.
5. Cutting tools: Knife, scissors, blade, guillotine, shredder, scalpel, tenon saw etc.
6. Punching tools: Needle, bodkin, awl, punch etc.
7. Tracing tools:- Light box, tracing paper, carbon paper, stencil, template etc.

CERTIFICATE ONE – TRADE THEORY

TASK		CRITICAL POINTS	SUB-POINTS	INSTRUCTIONAL TECHNIQUES
1.0	INTRODUCTION TO GRAPHIC DESIGN	1.1.1 Definition 1.1.2 Identification of Graphic Design products	Career opportunities in Graphic design and their importance	Guide trainee to mention and identify the various careers in Graphic Design.
2.0	TOOLS/EQUIPMENT AND MATERIALS	2.1.1. Types of tools and their uses . E.g brush, pencil etc. 2.1.2. Types of equipments and their uses. Eg. Press, developing device etc. 2.1.3. Types of materials and their uses. Eg. Paper, wood etc.	Care and maintenance of tools, materials and equipment	Demonstrate the handling of tools and materials and equipment
3.0.	SAFETY AND HEALTH	3.1.1. Prevention of Accidents	First aid to all injuries Personal safety habits	i. Identification of tools ii. Correct use of tools and materials iii. Brainstorm with trainees the safety working techniques
4.0	SANITATION	4.1.1. Personal hygiene 4.1.2. Hygiene at the Studio	Bathing, washing of clothes, shaving, pasting of teeth etc. Internal and external hygiene	Discuss personal hygiene and sanitation
5.0	DRAWING	5.1.1. Realistic drawing 5.1.2. Cartoon drawing	i. Still life, nature drawing and imaginative drawing Abstract drawing	Guide trainee to identify objects and shapes and draw Assist trainee to change the real forms of objects
6.0	LETTERING	6.1.1. Block lettering	i. Gothic Lettering	i. Assist trainees to construct

		6.1.2. Calligraphy 6.1.3. Freestyle	ii. Roman Lettering iii. Italic/Cursive i. Use of 45° method ii. Fine writing iii. Design broad pens Use of shapes in the environment eg. Vegetables/fruits; orange, pepper etc.	square units and letters. Demonstrate the use of block pen in fine writing. Discuss the use of shapes in the environment using real objects
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CERTIFICATE ONE – TRADE THEORY

TASK		CRITICAL POINTS	SUB-POINTS	INSTRUCTIONAL TECHNIQUES
7.0	COLOUR	7.1.1. Theory of Colour	i. Type of colour ii. Physical properties of colour (tone, shade) etc. iii. Pigment, intensity etc.	i. Identify primary, secondary and tertiary colours ii. Discuss the terms in colour work.
8.0	COLOUR WHEEL	Identification of various types of colour wheel	a) List all the colours in the various colour wheels b) Draw: i. Primary colours 3 colour wheel ii. Secondary colours 6 colour wheel iii Tertiary colours 12 colour wheels	Demonstrate and assist trainee to draw the various colour wheels
9.0	PSYCHOLOGICAL AND EMOTIONAL VALUE OF COLOUR	Effects of colours in human endeavours in the society	i. Aesthetic value of colours ii. Social value of colours iii. Religious value of colours iv. Communication value of colour etc. v. Design artifacts: Poster, flags, packages etc.	Demonstrate the use of colours. (Trainees should use colours to design artifacts)
10.0	DESIGN	10.1.1. Definition of design 10.1.2. Elements of design E.g. Dot, line, shape, space 10.1.3. Principles of design Examples; variety harmony, balance	i. The individual element. ii. Natural elements and man-made element i. Principles of design:- variety, harmony, balance proportion, dominance, rhythm, unity opposition, contrast and	Identify natural and man-made element and design different patterns Using man-made element of design create attractive patterns according to the principles of design

		proportion etc.	repetitions	
11.0	ILLUSTRATION	11.1.1 Definition of Illustration ii) Types of illustration	i. The benefits of illustration in communication ii. The various methods in illustration work. E.g line, drawing, flat colour, painting pen and ink	Using various methods; design illustrations for labels, posters, calendars etc.

CERTIFICATE ONE – TRADE THEORY

TASK		CRITICAL POINTS	SUB-POINTS	INSTRUCTIONAL TECHNIQUES
12.0	LAYOUT DESIGN	12.1.1 Definition of layout 12.1.2 Principles of layout	1) Types of layout: i. Preliminary ii. Thumbnail iii. Rough layout iv. Finished layout v. Production layout 2. Procedure in layout: <u>Format</u> a) Portrait b) Radial/oval c) Landscape 3. Importance of layout	Illustrate and create attractive designs
13.0	COMMUNICATION DESIGN	13.1.1. Definition of communication design 13.1.2. Benefits of communication design in the society 13.1.3. Define poster 13.1.4. Describe logo	i. Types of communication designs Poster; Text/worded poster ii. Pictorial or illustrated poster iii. Text and illustrated poster iv. qualities of poster b) Logo	Discussion and Demonstration

			<ul style="list-style-type: none"> i. Name only ii. Name/Symbol iii. Initial letters iv. Pictorial name v. Associative logo vi. Allusive logo vii. Abstract logo 	
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CERTIFICATE ONE – TRADE THEORY

TASK		CRITICAL POINTS	SUB-POINTS	INSTRUCTIONAL TECHNIQUES
13.0	COMMUNICATION DESIGN CONT.	13.1.5. Signboard and Signpost 13.1.6. The importance of signboard and signpost 13.1.7. Banner 13.1.8. Calendar 13.1.9. Describe greeting or message card <u>Note:</u> The importance of banner, calendar and greeting or message card in the society	<ul style="list-style-type: none"> i. The relationship between a signboard and a signpost ii. Characteristics <ul style="list-style-type: none"> a) Signboard b) Signpost iii. Designing processes <ul style="list-style-type: none"> i) Characteristics <ul style="list-style-type: none"> a) Banner b) Calendar c) Greeting card ii) Designing processes 	Discussion and Demonstration
14.0	PACKAGING	14.1.1. Definition of packaging in art. 14.1.2. Function of packages in the society	<ul style="list-style-type: none"> i. Qualities of a good package ii. Designing processes 	Design and produce packages
15.0	PRINTMAKING	15.1.1. Definition 15.1.2. History of printmaking	<ul style="list-style-type: none"> i) Types of print making <ul style="list-style-type: none"> a) Direct print b) Mono print c) Frottage print d) Relief/block print e) Screen printing:- Lacquering 	Demonstrate to trainees to produce various prints

			and stenciling) ii) Processes of printmaking	
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CERTIFICATE ONE - TRADE THEORY

TASK		CRITICAL POINTS	SUB-POINTS	INSTRUCTIONAL TECHNIQUES
16.0	BOOKCRAFT	16.1.1. Define bookcraft/ Bookbinding 16.1.2. History of bookcraft	i) Types of bookcraft/bookbinding methods or techniques a) Wire-stitching (saddle stitching, perfect binding and side-stitching). ii) Identify the various types of books	Guide trainees to produce samples of books
17.0	I.C.T IN GRAPHIC DESIGN	17.1.1. Define computer as a Tool 17.1.2. Identify various icons of the software	1. Corel draw 2. Any other software <ul style="list-style-type: none"> • Paint box • Photo shop • Illustrator • Quak-xpres etc 	Guide trainees to use the Computer to design. Guide trainees to seek information on the internet

CERTIFICATE ONE – TRADE SCIENCE AND CALCULATIONS

TASK		CRITICAL POINTS	SUB-POINTS	INSTRUCTIONAL TECHNIQUE
1.0	MEASUREMENT	1.1. Measuring tools: Tape, ruler, stick, etc. 1.2. Materials: paper, canvas, fabric (cloth) wooden board, paints, adhesive and gloves	i. Method of measuring: millimeters, centimeters, meters ii. The metric and imperial systems. iii. Measuring with spoons, containers, pallets etc.	Demonstration
2.0.	COLOUR	Types of colours: i. primary, secondary, tertiary, etc. ii. Physical properties: Tone, shade, colour intensity	Methods of mixing colours: i. Poster colour with water, etc. ii. Oil colour with turpentine, etc. iii. Lacquer with thinner ,etc. iv. Printing pate with water or kerosene	Demonstration and calculation
3.0	LETTERING	Types of lettering: Block gothic, calligraphy, etc.	Method of construction: i. Gothic – measure horizontal and vertical lines to create the square units then construct the letters ii. Roman – draw two horizontal lines and demarcate spaces between the horizontal lines	Guide trainees to calculate spaces using the metric system
4.0	DESIGN AND ILLUSTRATION	Types of illustrations : Line drawing, flat colour printing, pen and ink, pen and wash monochrome painting, silhouette and water colour	i. Methods: mixing various colours according to the sizes of illustrations or surfaces of support.	Demonstrate with containers Demonstrate with the GRID

			ii. Scaling – enlargement and reduction of illustration	method of scaling
5.0	LAYOUT	Types of layout: Preliminary finished and production layout.	Methods: measure and draw out- a) the portrait format b) radial or oval format c) landscape format	Guide trainees to sketch out all the formats

CERTIFICATE ONE – TRADE SCIENCE AND CALCULATIONS

TASK		CRITICAL POINTS	SUB-POINTS	INSTRUCTIONAL TECHNIQUES
6.0.	PACKAGING	Types: a) Label b) Container c) Book jacket d) wrapper	Methods: a) Label – mix colour, measure the surface and paste b) Container – measure and cut and fold c) Book jacket – measure, cut and fold d) Wrapper – measure and cut	Guide trainees to mix, measure and cut
7.0	PRINTMAKING AND BOOKCRAFT	i. Types: monoprint, relief or block print, screen printing, etc. ii. Wire stitching, perfect binding, mechanical binding, etc.	Methods: • mix chemicals or ink • apply on paper or cloth. • measure and cut. • mix colours to decorate covers	Demonstrate and discuss

CERTIFICATE ONE - TRADE DRAWING

TASK		CRITICAL POINTS	SUB-POINTS	INSTRUCTIONAL TECHNIQUES
1.0.	TOOLS AND MATERIALS	i. Tools: e.g. pencil, pen, crayon, charcoal, marker, brush ii. Materials: paper, poster colour ink, spray, solvents, lacquer, egg albumen, etc.	<ul style="list-style-type: none"> • Sketch, draw and label parts 	Guide trainees to sketch and label
2.0.	DRAWING	Types: a. Realistic drawing e.g. still life b. Cartooning c. Outdoor sketching d. Shading: e.g. mass shading, cross hatching and pointillism, etc.	i. Composition: e.g. vegetables, fruits, utensils, etc. ii. Draw and make pictures of abstract shapes iii. Observe and sketch in the natural environment	Guide and assist trainees to draw
3.0.	LETTERING	Types of lettering: Gothic, Roman, Italics, Calligraphy and Freestyle	a. Gothic roman and italics: to construct letters b. Calligraphy – use broad pens to draw letters at angle of 45° c. Freestyle – use shapes in the environment to draw letters	Guide and assist trainees to write
4.0.	ILLUSTRATION	Types: Line drawing, silhouettes, pens and ink, pen and wash, water colour.	Method: i. Draw the outline of objects ii. Silhouettes – draw and paint the inner parts of objects against different backgrounds iii. Water colour – draw objects and use water colour to create tones	Guide trainees to draw and paint
5.0.	COMMUNICATION DESIGN	Types: a. Illustrated poster b. Text and illustrated poster	i. Methods (for (a) and (b) under Critical Point. <ul style="list-style-type: none"> • Draw pictures and paint 	Guide trainees to prepare and paint

		<p>c. Banner</p> <p>d. Signboard</p>	<p>ii. Method for Banner:</p> <ul style="list-style-type: none"> • Sketch, illustrate on fabric and paint <p>iii. Method for Signboard:</p> <ul style="list-style-type: none"> • Sketch pictures on wooden or metal support and paint. <p>NB: All the above (a-c) should go with the required texts. However with the signboard, the surface should be printed.</p>	
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CERTIFICATE ONE – TRADE PRACTICALS

TASK		CRITICAL SKILLS	SUB-SKILLS	INSTRUCTIONAL TECHNIQUES
1.0	INTRODUCTION TO GRAPHIC DESIGN	<p>1.1. Graphic design products and their uses</p> <p>12. Various careers in Graphic Design</p>	<p>i. The various graphic design products such as banners, handkerchiefs, calendars, badges, emblems, greeting cards and so on</p> <p>ii. Studio artist, teacher etc.</p> <p>iii. The importance of graphic design in the society</p>	Display and discuss with charts/photographs etc.
2.0.	TOOLS AND MATERIALS	<p>2.1. Identify various tools and materials</p> <p>2.2 List tools and materials</p>	<p>i. Observe and have a feel of the tools and materials</p> <p>ii. Draw the various tools</p> <p>iii. Care and maintenance of tools and materials</p>	Demonstration and discussion
3.0.	HEALTH AND SAFETY AT THE WORKSHOP	<p>3.1. Accidents</p> <p>3.2. Precautions</p>	<p>i. Accidents in the workshop.</p> <p>ii. Remedies to curb accidents</p> <p>iii. First-aid usage. (Fire extinguisher, drugs, water, etc.)</p>	Demonstration by fire and health personnel
4.0.	SANITATION	<p>4.1. Personal hygiene</p> <p>4.2. Cleaning the environment: Workshop/art studio</p>	<p>i. Washing cloths, ironing clothes.</p> <p>ii. Weeding, sweeping and dusting of the workshop</p>	Guide trainees
5.0.	DRAWING	<p>5.1. Realistic drawing</p> <p>5.2. Cartoon drawing</p>	<p>i. Still-life-nature drawing and Imaginative drawing</p> <p>iii. Abstract drawing</p>	<p>Composition of objects and Drawing</p> <p>Re-shape of real or natural forms</p>

CERTIFICATE ONE – TRADE PRACTICAL

TASK		CRITICAL SKILLS	SUB-SKILLS	INSTRUCTIONAL TECHNIQUES
6.0	LETTERING	6.1. Block Lettering 6.2. Calligraphy 6.3. Freestyle 6.4. Terms in lettering e.g. MA juscule and minuscule	<ul style="list-style-type: none"> • Gothic, Roman, Italic/Cursive • Fine writing (45° method) • Use of shapes in the environment • Design broad pens with bamboo or elephant grass 	Demonstrate and guide trainees
7.0.	COLOUR	7.1. Definition colour 7.2. Types of colour 7.3. Physical properties – tones, shades, etc. 7.4. Pigment intensity of colour 7.5. Emotional value of colour	<ol style="list-style-type: none"> i. Identify primary, secondary and tertiary colours. ii. Identify all the terms in colour works. 	Guide trainees
8.0	COLOUR WHEEL	8.1. The various types of colour wheels 8.1. The colours in the various colour wheels	Draw the following colour wheels – <ol style="list-style-type: none"> i. Primary colours (3 colour wheel) ii. Secondary colours (6 colour wheel) iii. Tertiary colours (12 colour wheel) iv. Paint all the colour wheels 	Guide students to paint the colour wheel
9.0	DESIGN	9.1. The Elements of Design: E.g. dot, line, shape, space 9.2. The Principles of Design e.g. variety, harmony balance, proportion etc.	<ol style="list-style-type: none"> i. The natural and man-made elements ii. Organize the elements of design according to the principles 	Guide trainees
10.0	ILLUSTRATION	10.1. Types of illustration 10.2 The various methods in illustration work. E.g. Line drawing, flat colour	Using various methods, design illustrations for labels, posters, calendars, etc.	Guide trainees to paint the various illustrations

painting, pen and ink, etc.

CERTIFICATE ONE – TRADE PRACTICAL

TASK		CRITICAL SKILLS	SUB-SKILLS	INSTRUCTIONAL TECHNIQUES
11.0	LAYOUT	11.1 The Principles of Layout 11.2 Types: Preliminary/thumbnailed, rough, finishing and production layout 11.3 Procedures – Portrait, oval and landscape formats	Layout procedures to arrange text and pictures on a surface to ensure balance of work	Guide trainees
12.0	COMMUNICATION DESIGN	Design the following art works i. Poster ii. Logo iii. Signboard iv. Sign post, calendar v. Banner, greeting cards	i. Draw out the various layouts ii. Sketch out text and illustrations of the designs iii. Paint out all the characters	Demonstrate and Guide trainees
13.0	PACKAGING	13.1. Materials used for packages 13.2 The different kinds of packages	i. Design and produce simple packages ii. Processes: Measuring, cutting, folding, pasting and painting	Guidance trainees
14.0	PRINTMAKING	Types of Printmaking: a) Direct print b) Mono print c) Frottage print d) Relief block print e) Screen printing (lacquering and stenciling)	The processes in printmaking: i. Preliminary sketches ii. Finished cloth iii. Transfer of design on a surface iv. Cutting and painting v. Developing with white light vi. Printing of work	Guidance and Demonstration
		Type of Bookcraft/Bookbinding methods:	Processes involved: i. Measuring	Guidance and Demonstration

15.0	BOOKCRAFT	<ul style="list-style-type: none"> a) Wire stitching b) Perfect binding c) Mechanical binding 	<ul style="list-style-type: none"> ii. Cutting iii. Folding iv. Stitching v. Cover design 	
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CERTIFICATE ONE – TRADE PRACTICALS

TASK		CRITICAL SKILLS	SUB-SKILLS	INSTRUCTIONAL TECHNIQUES
16.0	INFORMATION COMMUNICATION TECHNOLOGY IN GRAPHIC DESIGN	Manipulate the icons of the software	<ul style="list-style-type: none"> i. Creating images with the computer ii. Designing visual communication items iii. Accessing and presenting information iv. Use of the internet for detail information 	Guidance and demonstration

**LEVEL – CERTIFICATE ONE – TEST SPECIFICATION TABLE
TRADE THEORY (OBJECTIVE)**

NO	TOPIC	COGNITIVE KNOWLEDGE	AFFECTIVE UNDERSTANDING	PSYCHOMOTOR APPLICATION	TOTAL
1.	Tools and Materials	2	1	2	5
2.	Lettering	2	1	2	5
3.	Design	2	2	1	5
4.	Drawing	2	1	2	5
5.	Layout	1	2	2	5
6.	Printmaking	2	1	2	5
7.	Bookbinding	2	1	2	5
8.	Packaging	1	2	2	5
9.	Communication Design	2	2	1	5
10.	Illustration	2	2	1	5
11.	I.C.T.	2	2	1	5
12.	Safety/Health and Sanitation	1	1	3	5

**LEVEL – CERTIFICATE ONE – TEST SPECIFICATION TABLE
TRADE THEORY (SUBJECTIVE)**

NO	TOPIC	COGNITIVE KNOWLEDGE	AFFECTIVE UNDERSTANDING	PSYCHOMOTOR APPLICATION	TOTAL
1.	Tools and Materials	1	1	3	5
2.	Lettering	1	1	3	5

3.	Design	2	1	2	5
4.	Drawing	2	1	2	5
5.	Layout	1	1	3	5
6.	Printmaking	1	1	3	5
7.	Bookbinding	2	1	2	5
8.	Packaging	1	1	3	5
9.	Communication Design	1	2	2	5
10.	Illustration	1	2	2	5
11.	I.C.T.	2	1	2	5
12.	Safety/Health and Sanitation	1	1	3	5

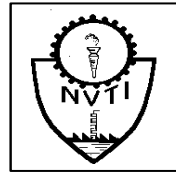
**LEVEL – CERTIFICATE ONE – TEST SPECIFICATION TABLE
(TRADE DRAWING)**

NO	TOPIC	COGNITIVE KNOWLEDGE	AFFECTIVE UNDERSTANDING	PSYCHOMOTOR APPLICATION	TOTAL
1.	Tools and Materials	2	2	1	5
2.	Drawing	1	1	3	5
3.	Lettering	1	1	3	5
4.	Illustration	2	1	2	5
5.	Communication Design	2	1	2	5

**LEVEL – CERTIFICATE ONE – TEST SPECIFICATION TABLE
TRADE THEORY (SCIENCE AND CALCULATION)**

NO	TOPIC	COGNITIVE KNOWLEDGE	AFFECTIVE UNDERSTANDING	PSYCHOMOTOR APPLICATION	TOTAL
1.	Measurement	1	2	2	5

2.	Colour	1	1	3	5
3.	Lettering	2	1	2	5
4.	Design and Illustration	1	1	3	5
5.	Layout	2	1	2	5
6.	Packaging	2	1	2	5
7.	Printing and Bookcraft	2	1	2	5



NATIONAL VOCATIONAL TRAINING INSTITUTE

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TRADE TESTING REGULATIONS AND SYLLABUS

TRADE: GRAPHIC DESIGN

LEVEL: CERTIFICATE TWO

A. INTRODUCTION

- i. The review of this syllabus has been generally influenced by the demands of industries due to its continuous change as a result of technological advancement and the changing needs of society.

It was also influenced by the TVET reforms under the directions of the new educational reforms with the view to opening up further education and training opportunities to TVET graduates. The certificate ONE syllabus is designed to respond to the following level descriptors:

QUALIFICATION	KNOWLEDGE LEVEL	SKILLS AND ATTITUDE:
Certificate II	<ol style="list-style-type: none">1. To demonstrate broad knowledge base with substantial depth in area(s) of study.2. To demonstrate a command of analytical interpretation of range of data.3. To present results of study accurately and reliably.	<ol style="list-style-type: none">1. Needs varied skills and competencies in different tasks under various contexts.2. Require a wide range of technical and supervisory skills.3. Would be employed in different contexts.

- ii. This syllabus is aimed at providing trainees advance knowledge for a craft certificate intended to meet the needs of industry and for further course of study at Technical/Vocational Institutes, and Polytechnics and for other trainees who wish to become qualified craftsmen as Graphic Designers and Artists.

B. GENERAL OBJECTIVES

On completion of this course, the trainee should be able to apply and understand:

- i) and acquire general knowledge in Graphic Design.
- ii) and assist students to manipulate tools and materials with the hands and mind to produce artworks.
- iii) and assist trainees to use the environment to produce improvised tools and materials for designing artifacts.
- iv) and encourage students to develop more interest in Graphic Design.
- v) and assist trainees to practice studio precautions to the best of their knowledge.
- vi) and assist trainees to know the main principles of drawing and shading in two and three-dimensional works.
- vii) and assist trainees to use Information Communication Technology designing information to the public.
- viii) and assist trainees to acquire creative skills and abilities that will lead to self-employment.

C. THE COURSE COMPONENTS

Trade Theory
Trade Science and Calculation
Trade Drawing
General Paper
Trade Practical

EXAMINATION: The candidates would be examined in the FIVE components listed in 'C' above.

Practical work must be carefully planned to illustrate application of the theory and to provide maximum opportunity for shop practice, laboratory work and demonstration.

D. KNOWLEDGE AND SKILLS REQUIREMENT

The prime objective of the programme is to provide knowledge and skills of the trade in a manner that will best meet the needs of the trade as well as industries using graphic design tools/equipment and materials.

E. ENTRY TO THE COURSE

Minimum education : Must have passed the Certificate 1 examination.
Intermediate certificate holders would also be considered.

F. ELIGIBILITY FOR ENTRY TO EXAMINATION

Candidates may enter for examination only as internal candidate; that is those who at the time of entry to the examination are undertaking or have already completed the course at an approved establishment.

G. EXTERNAL EXAMINERS

The practical work of candidates will be assessed by an external examiner appointed by the Trade Testing Commissioner.

H. EXAMINATION

The components for the examination for Graphic Design are as listed below:

1. Trade Theory
2. Trade Science and Calculation
3. Trade Drawing
4. General Paper
5. Trade Practical

I. EXAMINATION RESULTS AND CERTIFICATES

Each candidate will receive record of performance given the grade for the components taken.

These are:

- v) Distinction
- vi) Credit
- vii) Pass
- viii) Referred/Failure

Certificates would be issued to candidates who would pass all the components.

J. NOTE

All Technical and Vocational trainees who aspire to take advantage of the opportunities opened to them in the educational reforms should NOTE that, for a trainee to progress to certificate Two (2) a pass in Certificate One (1) is needed compulsory.

K. ACKNOWLEDGEMENT

NVTI wishes to acknowledge the team of experts, for preparing the materials which have been incorporated into this syllabus.

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Ms. Boaduwah Elizabeth (BED H/E)

Mr. Benjamin A. Bortey (Dip. Rural Art & Ind).

Government's desire to improve the lot of Technical/Vocational Training, which led to the preparation of this syllabus, is hereby acknowledged.

RECOMMENDED TEXT BOOKS

1. The Designers' Companion (For S.H.S. with sample question)
by Kwaku Ameyaw-Benneh
2. A secret Guide to Graphic Design (For West Africa S.H.S.) by Lewis Omudie
3. A New Approach to Visual Arts (for S.H.S./Tertiary Institutions by Joe Adjei
4. Concise notes on Graphic Design (for schools & Colleges) By E.O. Hanson & H.K.K. Terry
5. Introduction to Graphic Design (Books 1-3) By Biney Kwaku Robert

REQUIRED TOOLS/EQUIPMENT

1. Writing tools:- Pen, pencil, felt pen, marker, calligraphy/broad pen, poster pen, ruling pen etc.
2. Drawing tools: - Charcoal, crayon, pastel, chalk, compasses, T-square, camera etc.
3. Ruling/Measuring: Ruler, set-square, pair of dividers, protractor. Etc.
8. Printing tools: - Brush, spray diffuser, palette, palette knife, squeegee, printing brayer or roller, developing tools etc.
9. Cutting tools: Knife, scissors, blade, guillotine, shredder, scalpel, tenon saw etc.
10. Punching tools: Needle, bodkin, awl, punch etc.
11. Tracing tools:- Light box, tracing paper, carbon paper, stencil, template etc.

CERTIFICATE TWO – TRADE THEORY

TASK		CRITICAL POINTS	SUB-POINTS	INSTRUCTIONAL TECHNIQUES
1.0	TOOLS AND MATERIALS	1. Tools/Materials: <ul style="list-style-type: none"> • Drawing • Painting • Printing • Cutting • Punching • Spraying etc. 	Tools: <ul style="list-style-type: none"> a) Handling of the tools b) Improvisation of tools e.g. brushes, writing pens, spraying gun, squeegee, etc. <u>Materials</u> – Improvisation of material(s) like adhesives, sap, resins, starch, milk brush, etc.	Guide trainees to search the environment to identify tools and materials using real objects.
2.0.	HEALTH AND SAFETY IN	<ul style="list-style-type: none"> a) Accidents in the Workshop b) Precautions to take in the workshop c) Avoidance of alcoholic beverages etc. 	<ul style="list-style-type: none"> i. Remedies to curb accidents in the workshop ii. First Aid usage (First Aid Box) Fire extinguisher, drugs water, etc. iii. Educate trainees against negative lifestyles etc. 	Demonstration by National Fire Service and Health Personnel
3.0	GRAPHIC DESIGN AND JOB AVENUES	Job avenues: <ul style="list-style-type: none"> a) Advertising houses b) Printing houses c) Ministries d) Self Employment Entrepreneurs etc. 	Products – (As in a – d) <ul style="list-style-type: none"> a) Billboards, newspaper adverts b) T-shirts, banners, posters c) Teachers, administrators etc. d) Commercial artist 	Discussion and visit to Graphic Design establishment
4.0.	LETTERING	Spacing – Types <ul style="list-style-type: none"> a) Visual or optical spacing b) Mechanical spacing c) Line spacing d) Word spacing e) Letter spacing 	<ul style="list-style-type: none"> a) Arrangement of letters or words in spaces b) Painting out of letters c) combination of upper and lower cases 	Demonstration and Guidance

CERTIFICATE TWO – TRADE THEORY

TASK		CRITICAL POINTS	SUB-POINTS	INSTRUCTIONAL TECHNIQUES
5.0.	COLOUR	a) Terms : Warm and cool colours, citron, russet, olive monochrome, etc. b) Legibility of colours on surfaces	a) i. Warm colours: Red, yellow ii. Cool colours: Blue b) Legibility i) Black on yellow ii) Blue on white iii) Black on white iv) White on red v) Green on red vi) White on orange etc.	Guide trainees to practice colour application
6.0.	DESIGN (PATTERN WORK)	Types: <ul style="list-style-type: none"> • Controlled marbling • Uncontrolled marbling • Spraying • Repeat pattern • Doodling 	Pattern works design as in critical points	Demonstration/methods
7.0.	COMMUNICATION DESIGN	Types: Crests, flags, wall hangings, billboards, pennants and burnings, etc.	Message designs creations	Guide trainees through processes
8.0	PAPER CRAFT	Terms: <ul style="list-style-type: none"> • Origami or paper • Construction 	Method: i) Decorate papers ii) Cutting and folding iii) Shapes of flowers, birds, dolls	Guide Trainees
9.0	SCREEN PRINTING (SERIGRAPHY)	Type: <ul style="list-style-type: none"> • Photographic Screen Printing 	Method: <ul style="list-style-type: none"> • Preliminary layout • Finished layout • Transfer of design on fresh sheets • Ink the design in black • Prepare the screen • coat screen 	Guidance and Demonstration

			<ul style="list-style-type: none"> • Send design and screen to darkroom, etc. 	
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CERTIFICATE TWO – TRADE THEORY

TASK		CRITICAL POINTS	SUB-POINTS	INSTRUCTIONAL TECHNIQUES
10.0	BOOK BINDING	Types: i) Edition or multi-section binding ii) Single – section binding iii) Repair of old books iv) Care and maintenance	Methods: Measuring – cutting – folding – sewing or stitching – gluing – pressing – trimming – covering – give title For (iv) use cupboard to store books, use files etc.	Guidance and Demonstration
11.0	CARTOONING	Types: a) Gag b) Conic strip c) Animation d) Editorial	Sketching, drawing, printmaking, paintings, etc.	Demonstration
12.0	PHOTOGRAPHY	i. History of Photography ii. Parts of the camera and its uses iii. Still and moving photography	i) In the 1500’s, the camera obscure was used by the renaissance artists to assist them in their paintings. ii) Lens, view finder, control ring, shutter, rewind lever, film chamber, pressure plate focus ring, etc.	Discussions and Demonstration
13.0	ENTREPRENEURIAL SKILLS	Types: a) Costing b) Pricing c) Marketing	a) Direct cost, Overhead cost b) Profit margin c) Strategies (survey, questionnaire, target group)	Discussion
14.0	EXHIBITION	Types: a) General exhibition b) Specific exhibition	Search for Art works – venue – time/date – mounting – target group (viewers) and buyers	Discussion
15.0	INFORMATION AND COMMUNICATION TECHNOLOGY IN GRAPHIC DESIGN	Computer Coral Draw	<ul style="list-style-type: none"> • Introduction • Paint box • Photoshop • Illustrator • Quak-xpress etc. 	Guidance and Demonstration

CERTIFICATE TWO – TRADE SCIENCE AND CALCULATIONS

TASK		CRITICAL POINTS	SUB-POINTS	INSTRUCTIONAL TECHNIQUES
1.0.	MEASUREMENT	i. Measuring tools: Pair of dividers, set square, protractor, etc. ii. Materials: Paper, twine, binding cloth, fixative, paint, solvents, etc.	Measurements: Measuring in millimeters, centimeters, meters, measuring in volumes, quantities and sizes	Demonstrate and guide trainees
2.0.	COLOUR	Types of colours: Tints, shades, complementary, etc. Characteristics: Warm and cool	Mixing: i. Poster colour with water ii. Tints – mixing with white iii. Shades – mixing with black iv. Printing paste – mix with water or kerosene	Demonstrate and guide trainees
3.0	LETTERING	Types: Roman, Gothic, Italic, Calligraphy, Freestyle, etc.	Method: E.g. Gothic – calculate the size of the boxes in centimeters or millimeters.	Guide trainees to do the calculations
4.0.	DESIGN AND ILLUSTRATION	Types of illustrations: i. Line drawing, flat colour painting, silhouette water colour, etc. ii. Realistic Painting	Methods: i. Mixing various colours according to the sizes of illustrations or surfaces of support ii. Scaling – enlargement and reduction of illustration	Guidance/Demonstration
5.0.	LAYOUT	i. Types: Preliminary, finished and production layouts. ii. Arrangement of elements	Methods: i. Measure and draw out the formats e.g portrait, etc. ii. Measure and construct the text and illustrations on the surfaces to ensure balance of work.	Guide trainees to sketch
6.0.	PACKAGING	Types: a) Label b) Container	Methods: a) Label – mix colours, measure the surface and paste b) Container – measure, cut and	Guide trainees through the processes

		c) Book jacket d) Wrapper	fold c) Book jacket – measure cut and fold d) Wrapper – measure and cut	
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CERTIFICATE TWO – TRADE SCIENCE AND CALCULATIONS

TASK		CRITICAL POINTS	SUB-POINTS	INSTRUCTIONAL TECHNIQUES
7.0.	PRINTMAKING AND BOOKCRAFT	Types of Prints: i. Mono print relief or block print , screen printing, frottage, etc. ii. Wire stitching, perfect binding, mechanical binding etc.	Methods: i. Mix chemicals or ink and apply on paper or cloth ii. Frottage – rubbing technique iii. Measure and cut, mix colour to decorate covers	Discuss and demonstrate
8.0	PHOTOGRAPHY	Types: 1. Photography (Still) 2. Photography (Moving)	i. Measuring the sizes of pictures taken e.g passport medium, large, etc. ii. Developing of negatives in the dark room	Guide and display
9.0.	INFORMATION AND COMMUNICATION TECHNOLOGY	Types: i. Computer software ii. Use of colours in designing	a) Corel draw or print to arrange different colours in their respective shades, tones etc. b) Apply dispersion of colour skills to draw	Demonstration and guidance

CERTIFICATE TWO – TRADE DRAWING

TASK		CRITICAL POINTS	SUB-POINTS	INSTRUCTIONAL TECHNIQUES
1.0.	TOOLS AND MATERIALS	i. Tools: Felt pens, poster pens, palette compasses, pantograph. T-square, camera etc. ii. List of materials: Paper, poster colour, water colour, binding cloth, oil paint, acrylic, tracing materials etc.	Sketch, draw, and label tools Apply the materials to support the work to test efficiency of trainees	Guide trainees to sketch, paint and label
2.0	DRAWING	Types: <ul style="list-style-type: none"> • Realistic drawing (still Life) • Cartooning • Perspective drawing E.g. linear and colour perspective	Composition: <ul style="list-style-type: none"> a) Objects: E.g. flowers, fruits ,etc. b) Pictures of abstract shapes. c) Observe and sketch outdoors d) i. Linear perspective (optical appearance of objects) ii. Aerial or colour perspective (appearance of colours in distance) 	Guide and assist trainees
3.0.	LETTERING	Types: <ul style="list-style-type: none"> • Visual or optical spacing • Mechanical spacing • Line spacing • Word 	Procedure <ul style="list-style-type: none"> i. Horizontal lines ii. Upper and lower case letters iii Display out the letters iv. Display work for appreciation 	Guide and assist trainees
4.0.	ILLUSTRATION	Types: <ul style="list-style-type: none"> • Realistic painting • Silhouette • Flat colour work • Pen and wash • Outline drawing etc. 	<ul style="list-style-type: none"> i. Draw real objects – eg. Trees, human beings, animals, etc. ii. Outline of objects iii. Mix colour in flat form (paint drawn objects) iv. Ink and brush to create tones v. Stroke of line to draw objects 	Guide and assist trainees

CERTIFICATE TWO - TRADE DRAWING

TASK		CRITICAL POINTS	SUB-POINTS	INSTRUCTIONAL TECHNIQUES
5.0.	Communication Design	Types: a) Wall hangings b) Bill boards c) Crests d) Pennants e) Buntings	<ul style="list-style-type: none">• Sketch out the various preliminary works• Develop sketches to the finished cloth• Transfer of design on either wood, plastic or cloth• Paint work in colours (text and illustration).	Guide and assist trainees

CERTIFICATE TWO - PRACTICALS

TASK		CRITICAL SKILLS	SUB-SKILLS	INSTRUCTIONAL TECHNIQUES
1.0	TOOLS AND MATERIALS	Identify tools and materials in Graphic Design	<ul style="list-style-type: none"> a. Types of tools and materials b. Draw the various tools c. Care and maintenance of tools and materials 	Assist trainees, identify tools and materials. Using real objects.
2.0	HEALTH AND SAFETY	<ul style="list-style-type: none"> • Identify forms of accidents in the workshop • Remedies to curb accidents in the workshop 	<ul style="list-style-type: none"> • Discuss the various accidents in the workshop • Precautions to take in the workshop • First aid usage (fire extinguisher, drug, etc.) 	<p>Discussion</p> <p>Demonstration by National Fire Service Personnel</p>
3.0.	JOB AVENUES	<ul style="list-style-type: none"> i. Advertising houses ii. Printing Houses iii. Ministries. iv. Self Employment (Entrepreneurs in Screen printing & Commercial Art) 	<ul style="list-style-type: none"> i. Visits to Advertising and Printing Houses ii. Invite Resource Persons iii. Organize exhibitions 	Organize trainees for sub skills activities i-iii.
4.0.	LETTERING	<p>Spacing:</p> <ul style="list-style-type: none"> a) Optical/Visual spacing b) Mechanical spacing c) Line spacing d) Letter spacing e) Word spacing 	<ul style="list-style-type: none"> i. Ruling of horizontal lines (pair of parallel lines) ii. Adjusting the spaces (optical spacing) iii. Creating equal spaces (mechanical spacing) iv. Creating spaces in-between sentences v. Creating gaps in-between letters vi. Creating gaps in-between words 	Guide Trainees to Practice

PRACTICALS - CERTIFICATE TWO

TASK		CRITICAL SKILLS	SUB-SKILLS	INSTRUCTIONAL TECHNIQUES
5.0.	COLOUR	i. Terms: a) Warm and cool colour b) Monochrome c) Citroen, etc. ii. Legibility	Solution: i. Warm colours: Red, orange ii. Cool colours: Blue, green and their mixtures ii. Mix colours with different shades and paint surfaces with accompanying texts.	Discuss and guide trainees
6.0.	PATTERN WORK	Types: i. Controlled marbling ii. Uncontrolled marbling ii. Doodling iii. Repeat patterns	Method: i. Example for critical skills i and ii Pour cooked starch - mix oil paint and sprinkle – drop the plain sheets on the sprinkled oil etc. ii. Scribbling iii. Cut shape and repeat patterns	Demonstrate and guide trainees
7.0.	COMMUNICATION DESIGN	Types: Crests, flags, billboards, pennants, buntings, wall hangings, etc.	Prepare layout - sketch, illustration and texts – develop characters – paint out characters, etc.	Guide trainees to develop ideas
8.0.	PAPER CRAFT	Type: Origami	Construction: <ul style="list-style-type: none"> • Design papers in different colours • Draw and cut paper shapes – fold and join parts cut • Create shapes of birds, animals, etc. 	Guide trainees to construct
9.0.	SCREEN PRINTING	Types: Photographic screen printing	Preliminary layout, finished layout, transfer into tracing paper – ink the design in black – prepare screen and coat it – to the darkroom, etc.	Demonstration
10.0	BOOK BINDING	Types: i. Editions or Multi-section binding	i. Measuring – cutting – folding, sewing gluing, etc. ii. Use files, cupboards to store,	Discuss and demonstrate

		ii. Single section binding iii. a) Care and maintenance b) Repair of old books	avoid heat, water and oil, etc. iii. Repair as in i. & ii.	
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PRACTICALS – CERTIFICATE TWO

TASK		CRITICAL SKILLS	SUB-SKILLS	INSTRUCTIONAL TECHNIQUES
11.0	CARTOONING	Types: a) Gas b) Comic strip c) Animation d) Editorial	General layout: a) Sketch out characters with their balloons – write out messages in the balloons b) Importance of cartoons - for communication	Guide trainees to sketch
12.0	PHOTOGRAPHY	Types: a) Photography (Still) b) Photography (Moving)	a) Take shorts with camera b) Visit to photo studios c) Display and appreciate pictures taken	Guide and display
13.0	EXHIBITION	Types: a) General exhibition b) Specific exhibition	Assemble art work – venue – time and date – target group – mounting etc. b) trips to museums etc.	Organize internal and external exhibitions
14.0	INFORMATION AND COMMUNICATION TECHNOLOGY	The computer (Software)	COREL Draw – Paint box photo-shop, illustrator, Quak-xpress etc.	Demonstrate and guide trainees

REQUIRED TOOLS/EQUIPMENT

1. Writing tools:- Pen, pencil, felt pen, marker, calligraphy/broad pen, poster pen, ruling pen etc.
2. Drawing tools: - Charcoal, crayon, pastel, chalk, compasses, T-square, camera etc.
3. Ruling/Measuring: Ruler, set-square, pair of dividers, protractor. Etc.
3. Printing tools: - Brush, spray diffuser, palette, palette knife, squeegee, printing brayer or roller, developing tools etc.
4. Cutting tools: Knife, scissors, blade, guillotine, shredder, scalpel, tenon saw etc.
5. Punching tools: Needle, bodkin, awl, punch etc.
6. Tracing tools:- Light box, tracing paper, carbon paper, stencil, template etc.

LEVEL – CERTIFICATE TWO – TEST SPECIFICATION TABLE
TRADE THEORY (OBJECTIVE)

NO	TOPIC	COGNITIVE KNOWLEDGE	AFFECTIVE UNDERSTANDING	PSYCHOMOTOR APPLICATION	TOTAL
1.	Tools and Materials	2	2	1	5
2.	Lettering	2	2	1	5
3.	Design	2	1	2	5
4.	Drawing	2	2	1	5
5.	Layout	2	1	2	5
6.	Printmaking	2	1	2	5
7.	Bookbinding	2	1	2	5
8.	Packaging	2	1	2	5
9.	Communication Design	2	1	2	5
10.	Illustration	1	2	2	5
11.	I.C.T.	2	2	1	5
12.	Safety/Health and Sanitation	1	1	3	5
13.	Photography	1	1	3	5
14.	Exhibition	2	2	1	5
15.	Costing, Pricing and Marketing	1	1	3	5

LEVEL - CERTIFICATE TWO - TEST SPECIFICATION TABLE
TRADE THEORY (SUBJECTIVE)

NO	TOPIC	COGNITIVE KNOWLEDGE	AFFECTIVE UNDERSTANDING	PSYCHOMOTOR APPLICATION	TOTAL
1.	Tools and Materials	1	1	3	5
2.	Lettering	1	2	2	5
3.	Design	1	1	3	5
4.	Drawing	1	2	2	5
5.	Layout	1	2	2	5
6.	Printmaking	2	1	2	5
7.	Bookbinding	1	1	3	5
8.	Packaging	1	1	3	5
9.	Communication Design	2	1	2	5
10.	Illustration	1	2	2	5
11.	I.C.T.	2	1	2	5
12.	Safety/Health and Sanitation	1	1	3	5
13.	Photography	1	1	3	5
14.	Exhibition	2	1	3	5
15.	Costing, Pricing and Marketing	1	1	3	5

**LEVEL – CERTIFICATE TWO – TEST SPECIFICATION TABLE
(TRADE DRAWING)**

NO	TOPIC	COGNITIVE KNOWLEDGE	AFFECTIVE UNDERSTANDING	PSYCHOMOTOR APPLICATION	TOTAL
1.	Tools and Materials				
2.	Lettering				
3.	Design				
4.	Drawing				
5.	Layout				
6.	Printmaking				
7.	Bookbinding				
8.	Packaging				
9.	Communication Design				
10.	Illustration				
11.	I.C.T.				
12.	Safety/Health and Sanitation				
13.	Photography				
14.	Exhibition				
15.	Costing, Pricing and Marketing				

**LEVEL - CERTIFICATE TWO - TEST SPECIFICATION TABLE
(TRADE SCIENCE AND CALCULATIONS)**

NO	TOPIC	COGNITIVE KNOWLEDGE	AFFECTIVE UNDERSTANDING	PSYCHOMOTOR APPLICATION	TOTAL
1.	Measurement	1	1	3	5
2.	Colour	2	1	2	5
3.	Lettering	1	1	3	5
4.	Design and Illustration	1	1	3	5
5.	Layout	2	1	2	5
6.	Packaging	1	1	3	5
7.	Printmaking and Bookcraft	1	1	3	5
8.	Photography	1	2	2	5
9.	I.C.T.	1	1	3	5