

Republic of Namibia

MINISTRY OF EDUCATION, INNOVATION, YOUTH, SPORTS, ARTS AND CULTURE

NAMIBIA SENIOR SECONDARY CERTIFICATE (NSSC)

BUILDING STUDIES SYLLABUS

ORDINARY LEVEL

SYLLABUS CODE: 6186

GRADE 10 - 11

For implementation in 2027
For first examination in 2028

Ministry of Education, Innovation, Youth, Sports, Arts and Culture
National Institute for Educational Development (NIED)
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Namibia

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Building Studies Syllabus Ordinary Level Grades 10-11

ISBN: 978-99945-2-552-2

Printed by NIED
Website: http://www.nied.edu.na

Publication date: December 2026

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1. INTRODUCTION

The Namibian Senior Secondary Certificate Ordinary (NSSCO) level is designed as a two year course for examination after completion of the Junior Secondary phase. The syllabus is designed to meet the requirements of the *National Curriculum for Basic Education (NCBE, 2018)* and has been approved by the National Examination, Assessment and Certification Board (NEACB).

The NCBE, applicable at the stage of Senior Secondary Education (Grades 10-12) and at equivalent stages of non-formal education, as a part of life-long learning, recognise the uniqueness of the learner and adhere to the philosophy of learner-centred education.

The NCBE Guidelines:

- recognise that learning involves developing values and attitudes as well as knowledge and skills
- promotes self-awareness and an understanding of the attitudes, values and beliefs of others in a multilingual and a multicultural society
- encourage respect for human rights and freedom of speech
- provide insight and understanding of crucial "global" issues in a rapidly changing world which affect quality of life: the HIV and AIDS, global warming, environmental degradation, maldistribution of wealth, expanding and increasing conflicts, the technological explosion and increased connectivity
- recognise that as information in its various forms becomes more accessible, learners need to develop higher cognitive skills of analysis, interpretation and evaluation to use information effectively
- seek to challenge and to motivate learners to reach their full potential and to contribute positively to the environment, economy and society

Thus the Namibia National Curriculum Guidelines provide opportunities for developing essential, key skills across the various fields of study. Such skills cannot be developed in isolation and they may differ from context to context according to the field of study.

The skills developed in Building Studies are:

- communication skills
- information skills
- numeracy skills
- self-management and competitive skills
- problem solving skills
- social and co-operative skills
- physical skills
- work and study skills
- critical and creative thinking skills

2. RATIONALE

This syllabus is part of the technology learning area in the *National Curriculum for Basic Education (NCBE)* and is intended to provide a sequence in Building Studies which fosters the development of both manual and intellectual skills of the Building Industry. The approach to the subject which is advocated in this syllabus is problem centred and tries to involve learners in planning, designing and executing their practical work. The overall aim is to facilitate the acquisition of technical knowledge and skills, leading to self-reliance, which is essential for daily life, further study and the world of work. Ultimately, the goal of Building Studies is to increase the technological literacy of learners.

3. AIMS

The aims of the syllabus are the same for all learners. They are set out below and describe the educational purposes of a course in Building Studies for the NSSC examination. They are not listed in order of priority.

The aims are to:

- extend and deepen knowledge and understanding relating to building studies activities
- provide opportunities for experiential development and implementation building studies skills
- realise a building studies product from their developed knowledge
- develop an awareness of the significance of Building Studies upon society
- provide an opportunity for the learner to understand where specialised roles fit into the building industry

4. ADDITIONAL INFORMATION

Guided learning hours

The NSSCO level syllabuses are designed on the assumption that learners have about 130 guided learning hours per subject over the duration of two years, but this is for guidance only. The number of hours required to gain the qualification may vary according to local conditions and the learners' prior experience of the subject. *The National Curriculum for Basic Education (NCBE)* indicates that this subject will be taught for 8 periods of 40 minutes each per 7-day cycle, or 6 periods of 40 minutes each per 5-day cycle, over two years.

Prior learning

The Building Studies syllabus is designed to build on knowledge and skills acquired in the Junior Secondary phase.

It is recommended that learners who are beginning this course should have previously studied Technical Studies A or Technical Studies C in Grades 8 and 9.

Progression

NSSCO levels are general qualifications that enable learners to progress either directly to employment, or to proceed to further qualifications.

Support materials and approved textbooks

NSSCO syllabuses, **specimen** question papers, examiner reports and assessment manuals in subjects, where applicable, are sent to all schools. Approved learning support materials are available on the*Senior Secondary Textbook Catalogue for Schools*.

5. LEARNING CONTENT

The content is divided into 7 topics which are

1. Health and safety
2. Tools, machines and equipment
3. Communication
4. Setting out
5. Building materials
6. Building construction
7. Building industry

TOPIC	GENERAL OBJECTIVES *Learners will:*	SPECIFIC OBJECTIVES *Learners should be able to:*
1. Health and safety	• understand health and safety at the work place	• explain unsafe acts in the work place: - loose clothing and jewellery - personal safety (Personal Protective Equipment (PPE)) • explain unsafe conditions in the workplace: - inadequate guards over machinery - poorly maintained hand tools and machinery - workshop and environmental safety • describe hazards in the work place: - portable electrical equipment - loose lying nails, screws and bolts - stacking of materials and hoisting - firefighting and prevention
	• know procedures taken when injuries at the workplace occur	• describe and apply basic first aid procedures for: - bleeding wounds (taking infectious diseases into consideration) - electric shock - ABC of first aid application (Airway, Breathing, Circulation)

TOPIC	GENERAL OBJECTIVES *Learners will:*	SPECIFIC OBJECTIVES *Learners should be able to:*
2. Tools, machines and equipment	• understand building tools, machines and equipment and their uses	• explain the various tools and equipment: - builders square - building line - straight edge - spirit level - trowel - steel peg - measuring tape - spade - cold chisel - fish tape - dumpy level - bolster chisel - brick scotch - wheelbarrow - concrete mixer - compactor - compressor - jack hammer

TOPIC	GENERAL OBJECTIVES *Learners will:*	SPECIFIC OBJECTIVES *Learners should be able to:*
2. Tools, machines and equipment (continued)	• acquire the knowledge and skills to use and maintain building tools, machines and equipment	• use hand tools to set out: - builders square - building line - straight edge - spirit level - steel pegs - measuring tape - dumpy level • use building tools to build walls, mix and lay concrete: - trowel - spade/shovel - cold chisel - bolster chisel - brick scotch - wheelbarrow - pointing trowel - mortar pot • demonstrate the care and maintenance for hand tools: - correct cleaning and storage

TOPIC	GENERAL OBJECTIVES *Learners will:*	SPECIFIC OBJECTIVES *Learners should be able to:*
3. Communication	• acquire the skills to draw to scale	• explain why scales are used in the building industry • draw a simple building plan and elevations including steps (indicate tread, rise, going for steps) • illustrate the components of building plan using scales • interpret building drawings • draw scale drawings of doors and windows • draw scale drawings of component parts of concrete and timber: - ground floor - suspended/upper floor - reinforced concrete floor • draw scale drawings of: - fink roof trust - kingpost roof trust - mono roof trust
	• acquire the knowledge and skills to interpret specifications	• read specifications in relation to: - brick bonds - concrete and mortar mix ratios - finishing
4. Setting out	• acquire the knowledge and skills to set out	• explain the following setting out methods: - 3-4-5 method - square method - diagonal checking • apply the following setting out methods: - 3-4-5 method - square method - diagonal checking

TOPIC	GENERAL OBJECTIVES *Learners will:*	SPECIFIC OBJECTIVES *Learners should be able to:*
5. Building materials	• understand different types of building materials	• explain different building materials used in building construction: - sand - wood - masonry - concrete - reinforcement steel/rod - metal - stone: aggregate/hard core - cement - lime - roof coverings - floor coverings - bricks - damp-proof membrane (DPM) - damp-proof course (DPC) - doors (standard sizes and types) - windows (standard sizes and types) - lintels - forms for pillars
	• understand the need to preserve the environment	• explain procedures to: - source building materials without causing environmental damage - dispose building waste as per environmental laws
	• acquire the knowledge and skills to calculate quantities and costs for simple walls and structures	• calculate quantities of materials needed for specific projects • calculate the cost of materials needed for specific projects • select ratios for different concrete types • discuss the procedures of mixing, transporting, placement, compacting and curing concrete

TOPIC	GENERAL OBJECTIVES *Learners will:*	SPECIFIC OBJECTIVES *Learners should be able to:*
6. Building construction	• know types of concrete foundations	• explain different types of concrete foundation (properties and uses): - strip - pile - raft - pad
	• acquire the knowledge and skills to apply different types of bonds	• make bricks • lay bricks to make walls with openings and returns/quoins (corners) in: - Stretcher bond - English bond - Header bond - Flemish bond - Common bond • point bricks (flush, weather-struck, recessed, raking)
	• understand floor types	• describe different types of floors: - ground floor, (component parts of concrete and timber) - suspended/upper floors (component parts of concrete and timber) - reinforced concrete
	• know and understand roofing structures	• explain the type of roofs: - mono pitch - gable - hipped - flat • explain roof trusses (types and parts): - Fink - Kingpost - Mono

TOPIC	GENERAL OBJECTIVES *Learners will:*	SPECIFIC OBJECTIVES *Learners should be able to:*
6. Building construction (continued)	• Know and understand basic plumbing and its application	• describe different types of pipes used for domestic use: - drainage, waste, hot and cold water supply - plastic (PVC), copper, steel, clay, concrete • explain plumbing jointing techniques and fittings: - solder - compression - push-fit • explain the layout of the plumbing systems for a domestic house (hot and cold water supply, sewerage, rainwater/surface drainage)
	• know basic electric wiring and its application	• describe a domestic electrical layout (distribution board, circuits, switches, sockets) • identify colour codes for domestic single-phase electrical wires • explain safety features of electrical systems Residual Current Breaker (RCB), Residual Current Device (RCD) and fuses
	• acquire the knowledge and skills to apply plaster	• describe suitable mortar materials for plastering • explain the methods of application for plastering • prepare and apply lime plaster • apply plaster to a wall: - straight walls - returns - reveals - T-junctions
	• know types of paints	• describe the type of paints for: - wall - ceiling - windows and doors

TOPIC	GENERAL OBJECTIVES *Learners will:*	SPECIFIC OBJECTIVES *Learners should be able to:*
7. Building industry	• understand the building team and their roles	• explain the different members of the building team: - architect - surveyor - estimator - clerk of works - contractor - technicians - supervisor - manager - safety officer - sub-contractor - client - bricklayer - plasterer - plumber - electrician - carpenter/joiner - tiler - welder - glazer - painter/decorator

6. ASSESSMENT OBJECTIVES

6.1 Assessment objectives

The four assessment objectives in Building Studies are

A Knowledge with understanding
B Problem solving
C Interpretation of data
D Practical skills

A description of each assessment objective follows. Under each assessment objective a list is given of the skills a learner should be able to demonstrate.

A Knowledge and understanding

Learners should be able to

- demonstrate the ability to state facts, recall and name items, recall and describe processes
- demonstrate the ability to apply and relate knowledge to building construction
- make reasoned arguments and anticipate consequences of the outcomes of the realisation process
- demonstrate critical awareness of the interrelationship between building studies and the needs of society.

B Problem solving

Learners should be able to

- demonstrate calculation in building materials and work out cost estimation.
- analyse a problem by considering any relevant functional, aesthetic, human economic and disposal of waste in the environmental friendly way.
- generate a range of **three** outline solutions to give consideration to the constraints of time, cost, skills and materials.

C Interpretation of Data

Learners should be able to

- interpret data in a variety of forms such as diagrams, drawings and specifications
- develop ideas
- represent details of form, shape construction, movement, size and structure through graphical representation

D Practical Skills

Learners should be able to

- plan and organise the procedure involved in the realisation of a solution in building construction
- demonstrate appropriate manipulative skills by showing an understanding of materials and their characteristics in relation to their use
- evaluate the product in terms of aesthetic, functional and technical quality

6.2 Scheme of assessment

Learners must be entered for Paper 1, Paper 2 (Practical examination) and Paper 3 (artefact and portfolio).

Differentiation

All learners are expected to pursue the same curriculum content and differentiation will be by outcomes.

Description of papers

Paper 1

Written	**2 hours**	**100 Marks**	**Weighting 50%**

This paper will consist of approximately **ten** short answer questions and **6** structured questions for a total of **30 Marks** and **70 Marks** respectively.

Paper 2

Practical Examination	**3 hours**	**50 Marks**	**Weighting 25%**

Each learner will undertake a practical examination which is a compulsory component to assess practical skills. The practical examination will be internally marked and externally moderated by DNEA.

Paper 3

Artefact and portfolio	**4 terms**	**50 Marks**	**Weighting 25%**

Each learner will undertake a personally identified project. The project will be internally marked and externally moderated by DNEA.

Learners will be expected to demonstrate core design and practical skills. The work presented for assessment will typically be in the form of an A3 size folder. A sketch (according to scale) of the made product should be included in the folder.

The folder should include photographic evidence of the made product. (See external moderation section for the assessment criteria for the course work).

The learners must commence with their project in the second trimester of Grade 10 and complete it by the end of the second trimester of Grade 11, to be ready for submission to DNEA at the beginning of the third trimester of grade 11.

6.3 Specification grid

Assessment objectives	Paper 1 Marks	Paper 2 Marks	Paper 3 Marks	Overall weighting of papers
A Knowledge with understanding	60	0	0	30%
B Problem solving	20	0	15	17,5%
C Interpretation of data	10	10	15	17,5%
D Practical skills	10	40	20	35%
Total marks	**100**	**50**	**50**	**200**
Weighting	50%	25%	25%	100%

The assessment objectives are weighted to give an indication of their relative importance. They are not intended to provide a precise statement of the number of marks allocated to a particular assessment objective.

6.4 Grade descriptions

Learners who have followed this curriculum are eligible for the award of grades A to G.

The candidate is likely to have shown:

	A	C	E	G
Knowledge with understanding	**Excellent ability to**	**Good ability to**	**Some ability to**	**Limited ability to**
	• identify detailed facts and techniques in relation to the content of the syllabus	• identify facts and techniques accurately in relation to the content of the syllabus	• identify basic facts and techniques accurately in relation to the content of the syllabus	• identify basic facts accurately in relation to the content of the syllabus
	• describe / explain / define the theories and principles of the syllabus in detail	• describe / explain / define clearly the theories and principles of the syllabus	• familiarity with the basic theories and principles of the syllabus	• be familiar with the basic principles of the syllabus

	A	C	E	G
Problem solving	**Excellent ability to**	**Good ability to**	**Some ability to**	**Limited ability to**
	• analyse and evaluate problems and situations	• analyse and evaluate problems and situations	• identify and define / describe problems and situations	• identify problems and situations
	• use judgement to structure / create effective plans of action	• use judgement to structure / create appropriate plans of action	• structure / create reasonable plans of action	• suggest solutions
Interpretation of data	**Excellent ability to**	**Good ability to**	**Some ability to**	**Limited ability to**
	• communicate information, ideas and processes (and solutions) in detail	• communicate information, ideas and processes (and solutions)	• communicate information, ideas and processes (and solutions)	• communicate information, ideas and processes (and solutions)
	• choose the most appropriate method to communicate in different situations	• choose appropriate methods to communicate in different situations	• choose communication methods for different situations	• choose different communication methods
	• interpret and handle information appropriately	• interpret and handle information adequately	• interpret and handle information	• handle information
Practical skills / Realisation	**Excellent ability to**	**Good ability to**	**Some ability to**	**Limited ability to**
	• apply a plan / specifications effectively and systematically	• apply a plan / specifications accurately and adequately	• apply a plan / specifications	• apply a plan / specifications
	• manage resources effectively	• manage resources	• manage resources	• manage resources
	• use equipment and tools effectively	• use equipment and tools appropriately	• use equipment and tools	• use equipment and tools
	• demonstrate correct techniques	• demonstrate appropriate techniques	• apply techniques	• be familiar with techniques
	• apply numerical skills effectively	• apply numerical skills appropriately	• apply numeric skills	• apply numeric skills
	• adhere to safety measures	• adhere to safety measures	• adhere to safety measures	• be familiar with safety measures
	• evaluate work and progress	• monitor and comment on work and progress	• comment on their work	• make basic comments about their work

7. GLOSSARY OF COMMAND WORDS FOR ASSESSMENT

Analyse	examine in detail to show meaning, identify elements and the relationship between them
Calculate	work out from given facts, figures or information
Classify	to assign things or people to classes or groups
Compare	identify/comment on similarities and/or differences
Conceptualise	to arrive at a concept or generalization as a result of things seen experienced or believed
Contrast	identify/comment on differences
Define	give precise meaning
Demonstrate	to show or prove something clearly and convincingly
Describe	state the points of a topic / give characteristics and main features
Determine	use the information given to work out the answer
Develop	take forward to a more advanced stage or build upon given information
Discuss	write about issue(s) or topic(s) in depth in a structured way
Display	to make something visible or available for others to see
Distinguish	show the difference between one or more variables
Evaluate	judge or calculate the quality, importance, amount, or value of something
Explain	set out purposes or reasons / make the relationships between things evident / provide why and/or how and support with relevant evidence
Give	produce an answer from a given source or recall/memory
Identify	name/select/recognise
Interpret	reasoning or some reference to theory, depending on the context
Investigate	examine a problem in a systematic way
Justify	support a case with evidence/argument
List	give a number of points, generally each of one word/a phrase
Outline	set out main points
Relate	find the relationship between one or more variables

Report	to give information about something that has happened
Research	methodical investigation into a subject in order to discover facts, to establish or revise a theory or to develop a plan of action based on the facts discovered
Select	choose from a number of alternatives
Sketch	make a simple freehand drawing showing the key features, taking care over proportions
State	express in clear terms
Suggest	apply knowledge and understanding to situations where there are a range of valid responses in order to make proposals

8. GLOSSARY OF SUBJECT TERMS

Abutment	the point where an arch meets a wall
Acquaint	to make somebody aware off or familiar with something
Adhesive	strong, firm contact between surfaces
Aesthetics	how something looks, especially when considering how pleasing it is
Aggregates	the stones and gravel used to make concrete
Air brick	a ventilator that fits into the brickwork to ventilate suspended timber ground floor
Amperage	the unit of electrical current
Arris	the corner where two surfaces meet
Axonometric	used to describe a method of drawing a 3-dimensional object so that the vertical and horizontal axes are drawn to scale but the curves and diagonals appear distorted
Back	the vertical brick surface that makes the opening for the fireplace
Beam	a large straight piece of timber or metal that forms one of the main structural members of a surface
Bonding	the overlapping connection of one stone or brick with another
Cavity wall	two layers of wall with a space in between
Cement	a combination of limestone and silica used in making concrete
Communication (graphical)	the exchange of information between individuals, by means of speaking or using a system of signs or behaviour (drawing)
Computer Aided Drafting (CAD)	drawing with the help of a computer
Computer Aided Manufacturing (CAM)	producing with the help of a computer
Concrete	a mixture of materials, such as cement, sand, gravel and water, that bond into a strong mass
Course	a complete layer of bricks including mortar
Damp proof course (dpc)	a layer of moisture-proof material laid on brickwork to prevent rising damp in walls
Damp-proof membrane (dpm)	a layer of moisture-proof material laid under a concrete slab and screed to prevent rising damp in floors
Datum level	the baseline for survey levels
Ergonomics	the study of how a workplace and the equipment used there can best be designed for comfort, safety, efficiency and productivity
Excavation	the process of digging out the ground on a site
Face	the exposed surface of a brick or block

Frame	a solid timber or metal structure fixed to a wall
Gauge	a standard of measurement
Header	a brick laid in a wall so that the smallest surface is visible
In situ	constructing something, such as lintel, in position.
Joint	the point where two surfaces or pieces meet
Lintel	a beam that spans an opening to support the load of the wall above
Manhole	the access point to the drainage system
Masonry	building work in stone, bricks or blocks
Media	the various means of mass communication thought of as a whole, including radio, television, magazines and newspapers, together with the people involved in their production
Mortar	a mixture of cement, sand and water used in brick and block works
Oblique	sloping or joining something at an angle that is not a right angle
Pictorial	containing illustrations or photographs as opposed to written text (3-dimentional sketches)
Principle	the basic way something works
Rafter	an inclined beam that supports a roof
Recognise	be aware of a fact or problem
Reinforced concrete	concrete strengthened by embedded steel bars or mesh
Reveal	the side surface of a door or window opening
Scale	a ratio representing the size of an illustration or reproduction, especially a map or a model, in relation to the object it represents
Slab	a large area of thin concrete
Specification	a detailed description of a particular thing, especially one detailed enough to provide somebody with the information needed to make that thing
Technology	scientific knowledge used in practical ways in industry
Time management	to plan and execute a task within a given period
Triangulation	a navigation technique that uses the trigonometric properties of triangles to determine a location or course by means of compass bearings from two points a known distant apart.
Wall plate	the piece used as a base for fixing floor joists
Wasting	take away or remove access mortar

ANNEXE A: PRACTICAL ASSESSMENT CRITERIA

Assessment Objectives	Level of Response	Mark Range	Max. Mark
1. Planning	limited general knowledge and inaccurate description of items outlined in the syllabus	0-1	5
	describe with accuracy and understanding a wide range of items outlined in the syllabus	2-3	
	Excellently demonstrate a detailed knowledge of syllabus content presented in a variety of contexts	4-5	
2. interpretation of data	Convey information using elementary technical vocabulary	0-1	5
	Convey information using appropriate technical vocabulary	2-3	
	Convey information appropriately, precisely and concisely	4-5	
3. practical skills	Outline planning for project in a clear and understandable manner viewed against the product	0-11	35
	Plan for realisation in related stages pursued in a sequence leading to sensible completion when viewed against the product	12-23	
	Plan for realisation in related stages, pursued in a logical sequence leading to full completion when viewed against the product	24-35	
4. Evaluation	No or very cryptic evaluation that does not really say anything	0-1	5
	Learner reflected on the process but did not mention what was wrong or could be done different	2-3	
	Learner reflected on the process, highlighted challenges and mentioned what could be done different	4-5	
		Total 50	

ANNEXE B: BUILDING STUDIES PRACTICAL EXAMINATION ASSESSMENT SUMMARY FORM (NSSCO)

Please read the instructions printed overleaf <u>before</u> completing this form.

Centre number						Centre name			November	2	0		
Candidate number	Candidate name				Teaching group/ set	**Part A**	**Part B** Making (max 40)		**Part C**	**Total mark**		**Internally moderated mark**	
						Short questions (max 5)	Interpretation of data (max 5)	Practical skills (max 35)	Evaluation (max 5)	**(max 50)**		**(max 50)**	
Name of subject teacher completing this form							Signature			Date			
Name of internal moderator							Signature			Date			

ANNEXE C: ASSESSMENT SPECIFICATION GRID FOR ARTEFACT / PORTFOLIO

Criterion	Level of Response	Mark Range	Max. Mark
1. Generation and exploration of ideas	A limited range of ideas with a tendency to focus on a single concept; little or no evaluation of ideas	0-1	**5**
	A range of appropriate solutions proposed. Ideas examined with evaluations leading to the identification of possible ideas for development	2-3	
	A wide range of appropriate solutions with imaginative interpretation; detailed evaluation of ideas and consideration of the requirements of the specification	4-5	
2. Development of proposed solution	Some decisions made about form, materials and/or construction methods; a working drawing with little detail	0-1	**5**
	Appropriate decisions made about form, materials and construction details/ production methods; evidence of some testing and/or trialing; A simple plan showing awareness of the main processes involved;	2-3	
	Appropriate testing and trialing resulting in reasoned decisions about form, materials, construction/production methods and other items	4-5	
3. Planning for production	Limited evidence of any forethought;	0-3	**10**
	Satisfactory planning showing an order for the sequence of operations; satisfactory working drawing showing overall layout and major dimensions	4-6	
	Clear and detailed planning showing an effective order for the sequence of operations; time schedule of production, tools and materials. Clear and detailed working drawings and other information giving full details of final product	7-10	
4. Product realisation	Exhibit a reasonable standard of outcome, be mainly complete and satisfy some aspects of the specification	0-7	**25**
	Some minor inaccuracies and blemishes; complete and functioning as intended	8-16	
	Completed to a high standard of outcome with precision and accuracy; fully meet the requirements of product specification	17-25	
5 Testing and Evaluation	Little or no evidence of testing; general overall appraisal with little reference to the specification	0-1	**5**
	Appropriate reporting and/or comment on simple testing; reference to specifications with some conclusions leading to possible modifications or improvements	2-3	
	Objective testing with reference to specifications and user; detailed and meaningful conclusions leading to proposals for further development.	4-5	
		Total	**50**

MODERATION

(a) Internal moderation

When several teachers in a centre are involved in internal assessment, arrangements must be made within the centre for all learners to be assessed to a common standard.

It is essential that within each centre the marks for each skill assigned within different teaching groups (e.g. different classes) are moderated internally for the whole centre entry. The centre assessments will then be subjected to external moderation.

(b) External moderation

Coursework assessment summary forms must be received by Regional Office / REXO during the first week of September along with samples of the coursework undertaken by the learners and the schemes of assessment for each assignment. The samples should cover the full ability range. If there are ten or fewer learners, all the coursework that contribute to the final mark for all learners must be sent to DNEA. Where there are more than ten learners, all the coursework that contribute to the final mark for ten of them will be required. The centre should select learners covering the whole mark range, with the marks spaced as evenly as possible, from the top mark to the lowest mark. If appropriate, the samples should be selected from the classes of different teachers. A further sample of coursework may subsequently be required. All records and supporting work should be retained until after the publication of the results.

The Directorate of National Examination and Assessment (DNEA) will issue instructions to centres in Namibia concerning external moderation arrangements.

ANNEXE D: BUILDING STUDIES COURSEWORK ASSESSMENT SUMMARY FORM (NSSCO)

Please read the instructions printed overleaf <u>before</u> completing this form.

Centre number					Centre Name						November	2	0		
Candidate number	Candidate name	Teaching group/set	Generation and explorationof ideas (max. 5)	Developmentof proposed solution (max. 5)	Planning for production (max .10)	Product realisation (max. 25)	Testing and evaluation (max. 5)	**Total mark (max. 50)**	**Internally moderated marks (max. 50)**						
Name of subject teacher completing this form		Signature					Date								
Name of internal moderator		Signature					Date								

A. INSTRUCTIONS FOR COMPLETING COURSEWORK ASSESSMENT SUMMARY FORMS

1. Complete the information on top of the form.
2. List the candidates in an order which will allow ease of transfer of information to a computer-printed coursework mark sheet MS1 at a later stage (i.e., in candidate index number order, where the list is known; see item B.1 below). Show the teaching group or set for each candidate. The initials of the teacher may be used to indicate a group or set.
3. Transfer each candidate's marks to this form as follows**:**
   (a) Where there are columns for individual skills or assignments enter marks initially awarded (i.e. before internal moderation has taken place).
   (b) In the column headed 'Total Mark', enter the total mark awarded before internal moderation has taken place.
   (c) In the column headed 'Internal Moderated Mark', enter the total mark awarded ***after*** internal moderation has taken place.
4. Both the teacher completing the form and the internal moderator (or moderators) should check the form and complete and sign the bottom portion.

B. PROCEDURES FOR EXTERNAL MODERATION

1. The Directorate of National Examinations and Assessment (DNEA) sends a computer-printed coursework mark sheet MS1 to each centre showing the names and index numbers of each learner. Transfer the total internally moderated mark for each learner from the Coursework Assessment Summary Form to the computer-printed Coursework mark sheet MS1.
2. The top copy of the computer-printed coursework mark sheet MS1 and samples of the candidates' work covering the full ability range must be dispatched in the specially provided envelope to reach the DNEA, on date to be announced officially.
3. Indicate the candidates who are in the sample by means of an asterisk (*) against the candidates' names on the overleaf. The size of the coursework sample should be as follows:

Number of candidates entered	***Number of candidates whose work is required***
0 – 10	All candidates
11 - 50	10
51 - 100	15
above 100	20

4. Where more than one teacher is involved in marking the work, the sample must include candidates marked by all teachers. Candidates must be selected so that the whole range is covered, with marks spread as evenly as possible from the top mark to the lowest mark.
5. DNEA reserves the right to request further samples of coursework.
6. Send with the sample work records of the centre's criteria for the award of marks and information as to how internal moderation was carried out.

ANNEXE E: LIST OF TOOLS, MACHINES, EQUIPMENT AND MATERIALS

Setting out tools
- steel ruler
- steel square
- tape measure
- building line
- straight edge
- water level
- plumb bob
- steel pegs
- club hammer
- dumpy level
- laser measuring device

Bricklaying tools
- building trowel
- spirit level
- builders bucket
- corner blocks and line
- line and pins
- gauge rod
- metal tingle

Cutting tools
- club hammer
- brick bolster
- comb (Scotch) hammer
- cold chisel
- club hammer

Digging tools
- mattock
- pick
- shovel
- spade

Plastering tools
- plastering trowel
- wooden float
- hand hawk
- corner tools
- gauging trowel
- cove trowel
- block brush
- flooring trowel
- skirting tool
- v-jointers
- reading tool
- small tool
- drags and scrapers
- nosing trowel

Tiling tools
- serrated edge
- rubber float
- tile cutter
- tile nipper
- chalk line
- tile cutter
- tile gauge
- rod saw
- tile's hammer
- claw hammer

Jointing tools
- long jointer (round and square)
- short jointers (round and square)
- pointing trowel
- mastic trowel
- scraper
- Frenchman curve
- plumb rule

Special/common tools
- trammel
- hand saw
- claw hammer

Machinery
- concrete mixer
- compactor
- floating machine
- compressor
- jack hammer
- vibrator

Materials
- fine aggregates (crusher sand and natural sand)
- coarse aggregates (stones, gravel and pumice)
- cement
- building lime
- bricks/blocks
- pre-cast (lintels and poles)
- ready mix concrete



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