

UNIFIED SCHEMES OF WORK SENIOR SECONDARY SCHOOLS

BUILDING CONSTRUCTION

SSI FIRST TERM

BUILDING CONSTRUCTION

General objectives

- ✓ Acquire knowledge and skills for the building construction trade and related professions.
- ✓ Appreciate the use of local materials for building construction.
- ✓ Develop respect for the abilities of the craftsmen in the building industry.
- Develop the capacity for providing solutions for constructional problems.
- ✓ Use safety precautions and safe practices in the building industry
- ✓ Appreciate the need for maintenance of buildings
- ✓ Develop the sense of morality and trustworthiness in the use of materials and other input resources supplied for projects

WKS	TOPICS	LEARNING	LEARNING	EMBEDDED CORE	TEACHING
		OBJECTIVES	ACTIVITIES	SKILLS	RESOURCES
1.	Introduction to	By the end of the	Students	Critical thinking&	AUDIO-VISUAL
	building	lesson students	brainstorm on the	Problem solving	RESOURCES
	construction	should be able to:	meaning of	- Communication&	Real building
			"building"	Collaboration	pictures, charts,
		Define Building as	- '	-Leadership &	video clip films,
		a discipline	Students in small	personal	poster etc.
			groups discuss the	development	https://en.m.wikiped
		State the purpose	purpose of a	41 H. V. W. L.	<u>ia</u>
	-	of a building	building		.org/wiki/building-
					construction
		Describe types of	With the Use of		
		buildings	models/charts		
		1	students compare		
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Distinguish	types of building.		
		between types of	types of Building,	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
		buildings		A SALAS	
2.	Safety	By the end of the	With the use of	Critical thinking&	AUDIO-VISUAL
۷.	precautions	lesson students	charts students	Problem solving	RESOURCES
	- Purpose	should be able to:	discuss safety	- Communication&	RESOURCES
	- Safety	Should be able to.	conditions to be	Collaboration	Dool opfoty
	- Salety Regulations	1 state the sefet.	observed at		Real safety
	regulations - Hazard in	1. state the safety	1 27776 777	-Leadership &	equipment, video
		conditions to be	worksite	personal	clips films, safety
	Construction	observed at the		development	charts, etc.
	site/	worksite	i. Students as a		www.safetymanage
	Workshop		class discuss the		<u>ment</u>
	- First Aid	2. explain the	need for observing		<u>.eku.edu</u>
	- Personal	need for observing	health and welfare		
-	Protective	health and welfare	regulations at		
ĺ	Equipment	regulations at	worksite		
İ	(PPE)	worksite		90 - 10	
	- Personal		ii. Students in small		
	Safety Habit	demonstrate	groups demonstrate		
		care and	care and		
		maintenance of	maintenance of		
		tools and	tools and		
1	j	equipment	equipment, iii.		
			Students in pairs		
]		4. use equipment	demonstrate the		
		at construction	use of safety		
l		sites	equipment at		
ļ			construction site		
.	1		practice		
3.	Hand Tools	By the end of the	i. Students as a	-Critical thinking&	AUDIO-VISUAL
			וו טונועטוונט מס מ	omour amminga	A TODIO-A TOOUTE

WKS	TOPICS	LEARNING	LEARNING	EMBEDDED CORE	TEACHING
77110		OBJECTIVES	ACTIVITIES	SKILLS	RESOURCES
	Identification			- Communication&	
	of tools and	i. Identify the basic	1 December 1	Collaboration	Read basic hand
	uses - Block	hand tools, equipment and	ii. Students in small	-Leadership &	tools, and
	laying tools	machine	groups sketch and label basic hand	personal development	equipment, posters,
	- Carpentry	ii. State the	tools, equipment	development	video clips, drawings.
	and Joinery	functions of basic	and machines.		diawings.
	hand tools	hand tools,			https://en.m.wikiped
	- Numbering	equipment and			ia
	hand tools	machine.			.org/wiki/hand-tools
	Maintenance of tools				
4-5	Construction	By the end of the	Students are	- Critical thinking&	AUDIO-VISUAL
	team	lesson students	grouped in 3 each	Problem solving	RESOURCES
	Olivert	should be able to:	group representing	- Communication&	
	Client team Contractor's	1 Outline and	the construction	Collaboration	Relationship charts,
	team	Outline and identify the parties	teams.	-Leadership &	films, photographs
	Statutory	in each	Students in pairs	personal development	charts and drawing, contract document.
	personnel	construction team	produce pictorial	Government	www.designingbuild
			diagrams on the		ings
		2. Describe the	hierarchy in the		.co.uk
	197	duties and	construction team		
		relationship of the			
		various teams that make the			
		construction team.			,
		oonstruction team.			
		3. Distinguish			
		between the roles			
- 1		and relationships			
		between the			:
		members of each team	il pro	`·-	
6.	Working	By the end of the	i. Students as a	- Critical thinking&	AUDIO-VISUAL
	Drawings:	lesson students	class brainstorm on	Problem solving	RESOURCES
		should be able to:	the significant	- Communication&	
	Types of	A Difference of	difference between	Collaboration	Video clips,
	working drawing	Differentiate	working and	-Leadership &	Production
	w.u.v.n.y	between working drawing and	construction drawings	personal development	drawings, building
	- Elevation	construction	Gravings.	goveropriiont	plans, Building drawings
	- plans	drawing			instrument.
	- sections		ii. Students in pairs	en t	www.designingbuild
	1 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 /	2. Explain the	discuss the		ings
	Functions of	purposes of items	functions of		.co.uk
	Grid lines	involved in	gridlines on a site		
	Types of plan	working drawings	plan.		1
.	Site plan	3. Explain the	iii. Students as an		
	Block plan	functions of grid	individual sketch a		
	Foundation	line on a site plan	block plan of a		
	plan	.	proposed building.		
	Ground floor	4. Sketch a block			
		nion of a proposed	iv. Students in small		
	plan	plan of a proposed			1
	plan	building	groups examine		
	plan	building			

WKS	TOPICS	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE SKILLS	TEACHING RESOURCES
		information and	drawing		·
		clearly communicate that			
		information in			
	·	layman's term			
7.		1	MID-TERM BRE	ĀK	
8.	Freehand	By the end of the	i. Students as a	- Critical thinking&	AUDIO-VISUAL
	sketching and	lesson students	class make	Problem solving	RESOURCES
	Pictorial view - Details of a	should be able to:	freehand Sketch of	- Communication&	Video elime levilalian
	building	1. do freehand	a bungalow building elevation.	Collaboration -Leadership &	Video clips, building plans posters and
	- Building	sketching of a	ii. Students in small	personal	building drawing
	Terms	bungalow	groups identify	development	instruments.
			building parts.		https://classhall.co
		2. Identify building		3	<u>m/</u>
		parts and their terms.		*	freehand-sketching
9.	Site layout	By the end of the	i. Students as a	- Critical thinking&	AUDIO-VISUAL
٧.	and	lesson students	class discuss site	Problem solving	RESOURCES
	organization	should be able to:	layout using;	- Communication&	
	Basic		sample site layout	Collaboration	Drawing/charts;
	processes Locations	Identify and describe the basic	plans and site visits respectively	-Leadership & personal	Site layout drawing,
	and sizes	site planning	respectively	development	video clips, picture posters, physical
	Problems	process and	ii. Students in small	dovolopinoni	observation at the
	caused by	principles	groups identify and		excursion site.
	poor site		describe the basic		https://en.m.wikiped
	layout	2. Explain the	site planning		ia
	Purpose of site layout	purpose of the site layout	process and principles.		.org/site-layout
	Items in site	layout	pilitoipies,		
	layout	3. Sketch a simple	iii. Students in pairs		
		layout of a site	Use charts to		
			discuss items in site		
			layout		
			iv. Students as		
	* *		class visit sites to		
			see site layouts		
10.	Preliminary	By the end of the	Students as a class	Critical thinking&	AUDIO-VISUAL
	Operations Learning	lesson students should be able to:	research more on areas where	Problem solving - Communication&	RESOURCES
	activities	Silouid be able to.	preliminary	Collaboration	Charts/ Drawing,
	preceding	Explain the term	operations are used	-Leadership &	Video clips, Site
	actual	"PRELIMINARY	and discuss their	personal	layout etc.
	building	OPERATIONS" as	similarities and	development	www.designingbuild
	construction: Site	used in Building construction	differences as used		ings .co.uk
	acquisition	CONSTRUCTION	in building construction		.co.uk
	Provision of	Identify the key	20		
	access road	features to be	Students as a class		
	Site	addressed in a	go on a trip to new		
ł	clearance Site offices	quality building	sites to observe		
	and storage	process	preliminary works.		
	facilities	Recognize the risk	PROJECT:	*	
	Provision of	and opportunities	Students to		
	site services	surrounding	produce a		
ŀ	Site	preliminaries	preliminary report		
	investigation		after visitation to		

WKS	TOPICS	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE SKILLS	TEACHING
	Levelling	Prepare and	sites	SKILLS	RESOURCES
	Site and soil	interpret	Sitos		
	survey	preliminary reports			
	Planning	in tender			
	Detailed	documents			
	designing				
	Cost				
	estimation				
11.	Setting out	By the end of the	Students in small	- Critical thinking&	AUDIO-VISUAL
	- Tools and	lesson students	groups identify tools	Problem solving	RESOURCES
	Equipment	should be able to:	and equipment	- Communication&	
	for		used for setting out.	Collaboration	Tapes, pegs, lines,
	Setting out	Describe tools and		-Leadership &	and pins, builder
	10.00	equipment used	Students as a class	personal	square and profile
1	- Methods of	for setting-out	visit new sites to	development	board.
	setting out:	Barrell III	see the use and		www.a4architect.co
	using 3, 4, 5 method	Describe the	types of setting out		<u>m</u>
	Using the	precaution to be taken before	tools or equipment		
	builder's	setting-out	Students in small		
1	square	operations	groups discuss the		
	method	Operations	difference between		•
		Differentiate	a building line and a		
	- steps in	between a	boundary line		
	setting out	building line and a	, digen gar		·
	using both	boundary line	Students in pairs		
	methods		demonstrate the		
		Demonstrate the	setting out of simple		
	- Building	procedure for	building using tapes		
	line and	erecting profiles	and pegs to mark		
	boundary =	using both setting	corners of a		
	line	out methods	building in setting		
			out 3:4:5 method		
			and builder's		
12.	Revision/	By the end of the	square		
	Project	lesson students		The state of the s	
	. rojoot	should be able to:	The state of the s		
		Do a project on			
		production of			
		model of two		·	
		bedroom flat with			
		cardboard and			
1		other durable			
l		materials			
		Scales- 1:20		·	
13.	Examination				



UNIFIED SCHEMES OF WORK SENIOR SECONDARY SCHOOLS

BUILDING CONSTRUCTION

SSI SECOND TERM

WKS	TOPIC	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE	TEACHING RESOURCES
1	WELCOME			OTTLLO	NEGUURUES
	TEXT/				
	REVISION O	F			
	1ST TERM				
	WORK				
2-4	Excavation	By the end of the	Students in small	- Critical thinking&	AUDIO-VISUAL
	and earth	lesson students	groups discuss the	Problem solving	1
	work	should be able to:		- Communication&	RESOURCES
	Purpose of		excavation	Collaboration	Viales alles
	excavation	State the purpose	OXOG VALION	-Leadership &	Video clips,
	Types of	of excavation	Students in pairs	personal	production
1 -	excavation	Or Oxoca valion	identify the		drawings, building
	equipment	Identify the types	excavation	development	Excavation tools
	Use of	of equipment for	equipment and the		and equipment e.g
	excavation	excavation	uses of the different	.	banning rod, chart
	equipment	CAGGVALION			video clip, soil
	Types of	State uses of the	types of excavation		sample plans
	excavation	1	equipment		https://en.m.wikipe
	Support two	types of excavation	04		<u>ia</u>
	sides of		Students in small		.org./wiki/excavatio
	trenches	equipment	groups demonstrate		<u>n</u>
		Daniel III.	and practice the		1
	Safety methods in	Describe the types	procedure for		
	trench works	of excavation	supporting trench		la sur a
	Causes of		sides		
1		Demonstrate the			
1	collapse of	procedure for	students as a		
ł	trench sides	supporting the	class go to site to		
		sides of trenches	observe and		
			report how a	t en en	
		Sketch a typical	trench is		
		timber supports to	supported		1,000
- 1		trenches in		. P	P. A. Service
		various types of	Students in pairs		
		soil	use sketch as a		
			guide to show		
		Demonstrate the	typical supports to		
- 1		methods of	the sides of a		
		ensuring safety	trench excavation	The second of th	
		when digging a	for various types of		
		trench	soil		
			* *		
			Students as a class		
.			demonstrate the		
			methods of		
	1		ensuring safety		
1			when digging a		
	Ī		trench and discuss		
			the causes of		
- 1		,			
	-		collapse of trench		
5 F	FOUNDATIO	Dy the and of the	Sides	0.15 1.15	
	N	By the end of the	Students as a class	- Critical thinking&	AUDIO-VISUAL
1 -	N ✓ Definition	lesson students	use models to	Problem solving	RESOURCES
1		should be able to:	illustrate types of	- Communication&	
*	Functions	Identif, to	foundations	Collaboration	Model, sketches
ł	of	Identify types of		-Leadership &	and diagram if

ſ	WKS	TOPICS	LEARNING	LEARNING	EMBEDDED CORE	TEACHING
Da.			OBJECTIVES	ACTIVITIES	SKILLS	RESOURCES
		foundation	foundation	FIELD TRIP:	personal	foundation, video
	7	✓ Types		students as a	development	clips, charts it
		✓ Factors	State the functions			www.designingbuild
		influencing	of the foundation	observe different		ing
). 		choice of		types of		.co.uk/building_
		foundation	Describe the sizes	foundation		<u>foundation</u>
		√ Factors	of types of			
		determinin	foundation	Students in pairs		
		g the	Explain the factors	discuss the		
		bearing	which affect the	functions of		
		capacity of	bearing capacity	foundation		
		sub soil	of a subsoil			
			·	Students in small		
				groups use		
				diagrams/pictures	*	
				to discuss the sizes		
				of foundations and		
				factors which affect		
	4		4	the bearing		- '
				capacity of subsoil		10.00
	6	SUB	By the end of the	Students as a class	- Critical thinking&	AUDIO-VISUAL
		STRUCTURE	lesson students	use models to	Problem solving	RESOURCES
- [WALLS	should be able to:	discuss types of	- Communication&	
		Types of wall	Page 1	substructure wall	Collaboration	Chart, video clips,
1	•	at	Describe types of		-Leadership &	pictures, bricks,
		substructure	substructure wall	Students in pairs	personal	block
		level	Describe materials	discuss the types of	development	https://en.m.wikiped
		Materials for	for types of wall	bonding and the		ia
		types of	Explain the	principles involved	100	.org/wiki/walls
		walls	functions of	using sketches		
		Functions of	substructure walls			
İ		substructure	Explain types of	Students in small	1 77,	
-		walls	bonding for walls	groups erect walls		
		Bonding for	Language State of the	in different bonds		
		walls	Demonstrate ways			
		Erection of	of erecting walls in	Students in pairs		<u> </u>
		walls	different bonds	discuss types of		419-
		Description	1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	mortar for walls		
		of types of	Describe types of			
		mortar for	mortar for walls		, 98 ⁶	A Maria
		walls				
	7	MID TERM	BREAK			
1			' '		• •	
Г	8	Damage to	By the end of the	Students as a class	- Critical thinking&	AUDIO-VISUAL
		substructure	lesson students	demonstrate	Problem solving	RESOURCES
		work	should be able to:	methods of	- Communication&	
1		Defects in		protection against	Collaboration	Chart, video clips
1		substructure	Describe some of	damages to	-Leadership &	posters
		work	the defects in	substructure work	personal	Real object.
		Protection	substructure work		development	riodi objoot.
		against	Demonstrate the	Students in small	a o i o i o pinio i i	https://en.m.wikiped
		damage to	methods of	groups describe		ia
		substructure	protection against	some of the defects		.org/wiki/substructur
		work	damages to	in substructure		e
			substructure work	work.		-work
	9	DAMP Proof	Explain the term	Students as a class	- Critical thinking&	AUDIO-VISUAL
		Materials	"damp-proofing"	brainstorm on the	Problem solving	RESOURCES
		(DPM)	Describe materials	meaning of damp	- Communication&	. LEGOONOLO
		✓ Definition	used for damp	proofing	Collaboration	Chart, video clips
		✓ Types –	proofing	F	-Leadership &	posters
		- //	F. 559	1	Loudordillp G	posicio

WKS		LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE	TEACHING RESOURCES
	Asphalt, Bitamen, Polyethgl ne floor, water repellent cement ✓ Function D.P.C	Explain the purpose for using damp proofing in buildings		personal development	Real object. https://en.m.wikipedia .org/wiki/damp- proof- materials
10	GROUND FLOOR ✓ Functions ✓ Types solid, timber and ✓ Suspende d ground floor ✓ Materials ✓ Compositi on ✓ and constructi on	I. State the function of ground floor II. List types of ground floor III. Give functional requiremen t of ground floor IV. Sketch structure of	Students in small groups produce detailed drawings of a ground floor in first and third angle orthographic projections.	- Critical thinking& Problem solving - Communication& Collaboration -Leadership & personal development	AUDIO-VISUAL RESOURCES Charts, video clips, sketches, construction sites etc. https://en.m.wikipedia.org/wiki/ground-floor
11	FLOOR FINISHING Floor finishes Spreading Tiling Granolithic Mosaic work tiles Wood block tiles Terrazzo tile PVC tiles	a ground floor By the end of the lesson students should be able to: I. List materials for floor finishes II. Select suitable material for finishing a given floor III. Prepare floor to receive a finishing IV. Mix floor finishing materials to required ratio V. Lay floor finishing	I. Students as a class explain the procedure of finishing a floor-mixing, laying and curing of floor finishing II. Students in pairs identify materials for floor finishing III. Students in small groups prepare mixes for cement, sand, screed and terrazzo, Adhesive on PVC tile IV. Students as a class visit building site and observe the procedure of finishing a floor		AUDIO-VISUAL RESOURCES Real sample of flooring materials – (cement, sand, granite chipping, ebonite stripe), tool and equipment-(shovel, head pan, spiral level) https://en.m.wikipedaaorg/wiki/floor-inishing
12		REVISION	floor		
10	EXAMINATIO I	EXAMINATION			



UNIFIED SCHEMES OF WORK **SENIOR SECONDARY SCHOOLS**

BUILDING CONSTRUCTION

SSI THIRD TERM

WKS	TOPIC	LESSON	ACTIVITIES	Embedded Core	TEACHING
I WA	10110	OBJECTIVE	ACTIVITIES	Skills	TEACHING RESOURSES
1	WELCOME TE	ST/ REVISION OF L	AST TER. WOKRK	Okino	KLOOOKSES
2-5	BUILDING/W	By the end of the	Students as a class	- Critical thinking&	AUDIO-VISUAL
	ORKING	lesson students	observe displayed	Problem solving	RESOURCES
	MATERIALS	should be able to:	building materials	- Communication&	
	Identification		and discuss the	Collaboration	Video clips,
	of building	Identify building	materials for	-Leadership &	projectors. and
	materials	materials	making different	personal	films, charts
	Block/brick		types of	development	
	materials	Select the	blocks/bricks		https://en.m.wikiped
	Mix ratio	materials for			<u>ia</u>
	Sizes of blocks/bricks	making blocks/bricks	Students in small		.org/wiki/building-
	Manufacture	DIOCKS/DIICKS	groups discuss the		<u>materials</u>
	of	State the mix	mix ratios for types of blocks/bricks		
	blocks/bricks	ratios for types of	OI DIOCKS/DIICKS		
]	Difference	blocks/bricks	Students in pairs		
	between	DIOCKS/DITCKS	discuss the		
	bricks and	State the	recommended		•
	blocks	recommended	sizes of		
	Advantages	sizes of	blocks/bricks and	177.4	
	and	blocks/bricks	the processes for		•
	disadvantage		manufacturing		
	s of making	Describe	blocks/bricks		
	blocks/bricks	manufacture of			
	Fundamental	blocks/bricks	Students in pairs		
1	properties of		discuss the physical		
	blocks/bricks	Distinguish	differences	11 Th 15 Aug 11 Aug 11 Aug 11 Aug 11 Aug 11 Aug 11 Aug 11 Aug 11 Aug 11 Aug 11 Aug 11 Aug 11 Aug 11 Aug 11 Aug	
·	Types of	between blocks	between blocks and	Table 1	
	binding	and bricks	bricks as displayed		
	material	FL .			
	Properties of cement	Compare the	Students in small	12 Jan 1800	
	Fundamental	manufacture of	groups discuss the		
	properties of	concrete blocks by	advantages and		
	blocks/bricks	hand and by machine methods	disadvantages of		in the second
	Binding	Explain the	making blocks/bricks using		
	materials	fundamental	manual and		
	Properties of	properties of	machine methods		
	cement	blocks/bricks	maonine memous		
		Identify binding	Students as a class		
		materials	discuss the		
		Explain types of	manufacture of		
		binding material	cement	•	,
	٠,	Explain the		,	
		manufacture and			
		properties of		• •	1.4.11
		cement			
6	MOULDING	By the end of the	Students in small	- Critical thinking&	AUDIO-VISUAL
	MACHINES	lesson students	groups explain	Problem solving	RESOURCES
•	-manual	should be able to:	different types of	- Communication&	
.	- mechanical	I. Identify different	moulding machines.	Collaboration	Video clips, charts,
	-steps in the	types of moulding	II. Students as a	-Leadership &	illustration,
	production of	machines	class visita block	personal	mechanical
	concrete	II. differentiate	manufacturing	development	moulder manual
	bricks and	between manual	industry		moulder,

WKS	TOPICS	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE SKILLS	TEACHING RESOURCES
	block	and mechanical	III. Students in		Material- cement
	34	types of moulding	small groups use		and aggregates
		machines	the various steps in		
		III. Use the	the production of		https://en.m.wikiped
		various steps in	bricks and block		ia
		the production of			.org/wiki/moulding-
		concrete bricks			machines
		and blocks.			
7	MID-TERM				
	BREAK				
8	FLOOR	By the end of the	Students as a class	- Critical thinking&	AUDIO-VISUAL
	-definition	lesson students	brainstorm on the	Problem solving	RESOURCES
	-types	should be able to:	meaning of floor	- Communication&	
	a) solid	I. define concrete		Collaboration	Charts, video clips,
	reinforcemen	upper flour	Students in small	-Leadership &	Picture
	t concrete	II. Identify various	groups use charts	personal	10.00
	floor	types of floor.	and models to	development	https://en.m.wikiped
	b)	III. Compare solid	discuss types of		ia
	suspended	reinforced	floors		.org/wiki/types-of-
	or timber	concrete floor and			floor
	floor	suspended timber			11001
	- supporting	floor		4.4	
	beam and	IV. state the			
	columns	function of			
	functions	supporting beam			
	- material	and columns			
	and	V. Describes	No. 1		
	construction	materials used in	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	·
		constructing		and the second	
		timber floor.	W I	100 种(A)	
			Professional Control		
9	WALLS	By the end of the	Students as a class	- Critical thinking&	AUDIO-VISUAL
	- Definition	lesson students	discuss the term	Problem solving	RESOURCES
	of wall	should be able to:	walls in building	- Communication&	Brick, block,
- [Types of 		construction	Collaboration	cement mortar,
	wall	Explain the terms		-Leadership &	sand, water video
	external	"walls" in super	Students use charts	personal	clips, charts etc.
	and	structure	to discuss types of	development	https://en.m.wikiped
,	internal		walls	по годоринони	ia
ł	wall (Recognize load			.org/wiki/walls
.	load	and non-load	et w		1019/ WIIII/ WUIIO
	bearing	bearing walls			
	and non-				
	load	Explain the			
1	bearing)	functions of types			
	- Function	of walls			
	s of walls				
10	CEILING	By the end of the	Students in small	- Critical thinking&	AUDIO-VISUAL
	- Purpose of	lesson students	groups discuss the	Problem solving	RESOURCES
	ceiling	should be able to:	term "ceiling"	- Communication&	Video clip, pictures
	- Sound and	i. explain the		Collaboration	charts etc.
	thermal	purpose of	Students in pairs	-Leadership &	Gridito Oto,
	- Insulation	ceiling	discuss methods of	personal	https://en.m.wikiped
1.	- part of a	ii. prepare ceiling	constructing ceiling	development	ia
	ceiling	parts	and give detailed	as rolopilloni	.org/wiki/ceiling
	sheet,	iii. Select	illustration of ceiling	*	iorg/wiki/ceiiirig
- 1	noggins,	appropriate	construction		4
		material used			
	strut and	material useu		1	l l

WKS	TOPICS	LEARNING	LEARNING	EMBEDDED CORE	TEACHING
	- material	iv. State safety	ACTIVITIES class go to site to	SKILLS	RESOURCES
	for ceilings	requirement	observe ceiling		
	- procedure	for	construction		
-	for	construction of			
	constructio	ceiling			
	n of ceiling				
	- safety				
	requiremen		:		
	t.				
11	PRACTICAL	By the end of the	i. Students in small	- Critical thinking&	AUDIO-VISUAL
	PROJECT	lesson students	groups mix the	Problem solving	RESOURCES
	na fashiri	should be able to:	material through	- Communication&	Video clips, picture
3.0		i. Batch the proportional	and stack Cure the brick/	Collaboration	, tools real object
		of material	block until they are	-Leadership & personal	and chalk board practice
		required.	ready for use.	development	practice
i i		ii. Mix the	ii. Students in pairs	development	
		appropriate	mould the sizes of		
		ratio of the	block and bricks		. *
		constituent	according to		
		iii. Mould the	specification		
		sizes of			
		block and			:
		bricks			
		according to			
ŀ		specification iv. Cure the		·	
l	und diel Mehren	iv. Cure the brick and			
		block			
į		v. Stack the			
		material after			
		14 or 21			
		days as			
		required			
12	REVISION	REVISION		- :	
13	EXAMINATIO	EXAMINATION			
	N				

ACHIEVEMENT STANDARDS FOR SSS1, SESSION

At the end of the session, the students:

- Are able to identify the various types of buildings and their purposes
- Know the safety conditions to be observed at the worksite
- Know the functions of basic hand tools, equipment and machines
- Understand the difference between working drawing and construction drawing
- Are able to identify and describe the basic site planning process and principle
- Know the various types of excavation
- Know the factors which affect the bearing capacity of subsoil
- Are able to describe materials used for damp proofing
- Understand the differences between manual and mechanical types of moulding machine



UNIFIED SCHEMES OF WORK SENIOR SECONDARY SCHOOLS

BUILDING CONSTRUCTION

SS2 FIRST TERM

WEE	TOPICS	LEARNING	LEARNING	EMBEDDED CORE	TEACHING
K		OBJECTIVES	ACTIVITIES	SKILLS	RESOURCES
1	WELCOME	TEST/REVISION	Revision of ss1		AUDIO-VISUAL
- F		OF SS1 WORK	work		RESOURCES
					Welcome test
2	Drawing and	By the end of the	Students as a class	- Critical thinking&	AUDIO-VISUAL
	materials	lesson students	brainstorm on the	Problem solving	RESOURCES
	-DEFINITION	should be able to:	definition of	- Communication&	Charts, video clips,
	A. principle		drainage	Collaboration	drainage materials,
	of drainage	Define, identify		-Leadership &	drainage fitting
	principle	and mention basic	Students in pairs	personal	
2	relating to :	principles of	list materials for	development	https://en.m.wikiped
	uses of	drainage	drainage		<u>ia</u>
	materials	13	0.6.4.5.4.5.5.5.11		.org/wiki/drains
lingi a	formation of	Identify and	Students in small		
	drain means of	explain types of	groups explain principles of		
	means or inspection	drainage materials	drainage		Andrew State of the Control of the C
	and clearing	materiais.	uraniayo		
	laying of	Explain the			
i	pipes in	process of laying			
	straight lines	drainage in a) A	and the second second	
	air and water	domestic building			
	tightness	domocao banamy		v market	
	use of traps				
	and water				: -
	seals				
	branches of				
4.	drains	94.1	1.0 ·		
	ventilation of		· · · · · · · · · · · · · · · · · · ·		Å.
North Control	drains				
	installation				
	of rain water	to a	that the con-		
.	pipes ,sink,				
	lavatory				
	basins and				
	bath waste		ATAM TAMES AND TAMES AND T		
3.4	Connection	l in the state of			
	of water closet				
2	Drains		The second second		
	passing			.i'	
	under a		the property and seeming		
	building			ļs i	
.	B. materials		Note that I was a street		
	-types,		and the second second second second		
j	properties				. '
	and			200	
	manufacture				
l	of drainage				
	materials	:			
	1. cast iron			Ì	
	pipes and		·		
1	fittings				
	2. Asbestos,				·
	cement,				
	pipes and				

WKS	TOPICS	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE	TEACHING RESOURCES
	fitting Plastic pipes and fittings earthenware pipes and pipes				
3	DRAINAGE SYSTEMS AND ITS GENERAL TERMS System of drainage separate system and Combine	By the end of the lesson students should be able to: Define terms commonly used in drainage works	Students as a class identify various materials used in drainage systems Students in pairs define terms commonly used in drainage works	- Critical thinking& Problem solving - Communication& Collaboration -Leadership & personal development	AUDIO-VISUAL RESOURCES Video clips, chart, real object https://en.m.wikiped ia .org/wiki/drainage- system
1	system terms used drainage work Sub soils				
	drain, surface water, drain saver,				
	sewage, sewerage, Easy bends, gulley traps, wastewater,				
	waste appliances, waste pipe, soil pipe				
	rain, water pipe, ventilation pipe, inspection				
	chamber, drain chute, roding eye, flinching, bending				
4 1	PLUMBING - Definition - Fitting a) Types of fittings in	By the end of the lesson students should be able to: i. Define plumbing	i. Identify the various types of fitting in plumbing. ii. State the quality of a good drainage	- Critical thinking& Problem solving - Communication& Collaboration -Leadership &	AUDIO-VISUAL RESOURCES Pipes with accessories, gum,
4 6 9	olumbing and sanitary works e.g. Soil fitting, wastewater	ii. Identify various types of fittings in plumbing and sanitary work ii. Explain various	iii. State the purpose of tools and equipment used in plumbing	personal development	charts, pictures, diagrams Plumbing fittings e.g. elbow, tee, socket, union, adaptor
t. ju v	ittings. b) Common oints in pipe vork, Galvanised oint, Copper	tools and equipment used in plumbing.			https://en.m.wikiped ia .org/wiki/plumbing

WKS	TOPICS	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE	TEACHING RESOURCES
	Mild Steel,			***************************************	
	Stainless,				
	Plastic joint				
	c) Tools and				
	equipment:-				
	Wrench,				
	Hacksaw,				
	Stick and				
	dye, diesel	-			
	etc				
	d) Materials				
	for joining				
	pipe works:				
	Heat, Gum				
	fitting,				•
	Compression				
	, etc	1			
	e) Use of		1		
	marching for			·	
	Benching:	i			
	Threading -				
	Joining	-			
5.	Electrical	By the end of the	i. Students as a	- Critical thinking&	AUDIO-VISUAL
	installation	lesson students	class identify	Problem solving	RESOURCES
	work	should be able to:	electrical symbols	 Communication& 	Charts, video clips,
	Various		ii. Students in pairs	Collaboration	sample of electrical
	kinds of	i. Identify various	define common	-Leadership &	fittings and
	symbols	symbols used in	terms in electrical	personal	materials.
	- One way	electrical	installation	development	https://en.m.wikiped
	switch	installation	iii. Studentsin small		ia
	- Two or	ii. Explain	groups identify		.org/wiki/electrical-
	three way	common terms	types of materials in		installation
	switch	used in electrical	electrical work		
	- Pendant	installation works.		· ·	
	switch	iii. Describe			
	- Switch	methods of			
	socket outlet	oneway switch,			
i	- Immersion	two or three way			
	heater	switches			A Company of the Comp
	- Meter and				
	cooker				
	control				
6.	Electrical	By the end of the	i. Students as a	Critical thinkings	ALIDIO MOLIAL
٠.	installation	lesson students	class identify	- Critical thinking&	AUDIO-VISUAL
	terms and	should be able to:	materials used in	Problem solving - Communication&	RESOURCES
1	materials:	i. Identify various	electrical		Charts, video clips,
1	- Ampere,	types of materials		Collaboration	sample of electrical
	ohms,	in electrical	installation	-Leadership &	materials. E.g.
			ii. Students in small	personal	metals, plastics,
	voltage	installation	groups explain	development	etc.
1	- Resistance	ii. Explains	Common terms in		https://en.m.wikiped
- 1	fuse	common terms	electrical		<u>ia</u>
İ	- Parallel and	used in electrical	installation e.g.		.org/wiki/electrical-
-	series	installation	ampere, ohms,		<u>installation</u>
- 1	connection		voltage		
			i		1
	- Resistivity		1	l	
	- Resistivity Materials:				
	- Resistivity				
	- Resistivity Materials:				
1.	- Resistivity Materials: - Metals				

WKS	TOPICS	BUILDING CONSTRUCTION LEARNING LEARNING EMBEDDED CORE TEACHING				
		OBJECTIVES	ACTIVITIES	EMBEDDED CORE	TEACHING RESOURCES	
7.	Mid-Term Break					
8.	Foundations - Concrete foundation - Site test of materials aggregate - Cement and water	ii. Explain different concrete operation.	i. Students in small groups differentiate between reinforced and non-reinforced concrete foundation ii. Students as a class Visit construction sites	- Critical thinking& Problem solving - Communication& Collaboration -Leadership & personal development	AUDIO-VISUAL RESOURCES Posters, charts, video clips, drawing, construction sites. https://en.m.wikipedia.org/wiki/foundations	
9.	Elementary test on - Concrete mixes - Concrete operation	By the end of the lesson students should be able to: i. Identify various	i. Students as a class observe different types of test of concrete mixes	- Critical thinking& Problem solving - Communication& Collaboration -Leadership &	AUDIO-VISUAL RESOURCES Charts, video clips, real object.	
		test on concrete mixes ii. Explain different concrete operation.	ii. Students in small groups use different concrete operation	personal development	https://en.m.wikipedia org/wiki/concrete-operations	
10	Types of concrete - Reinforceme nt of concrete - Mass concrete	By the end of the lesson students should be able to: i. Identify different types of concrete ii. Explain different between reinforced concrete and mass concrete	i. Students as a class explain different types of concrete ii. Students in small groups state the differences between reinforced concrete and mass concrete	- Critical thinking& Problem solving - Communication& Collaboration -Leadership & personal development	AUDIO-VISUAL RESOURCES Video clips, charts, pictures https://en.m.wikiped ia .org/wiki/reinforced- concrete	
11.	Practical projects A. Mix Ratio - Concrete cubes - Floor slabs B. Formwork for beams and columns - Laying of blocks with concrete pillars at equal intervals	By the end of the lesson students should be able to: i. Define mix ratio ii. Describe the process of concrete cubes production and floor slabs iii. use formwork for beams and columns	i. Students in pairs prepare a mix ratio ii Students in small groups State the process of concrete cubes production iii. Students as a class prepare formwork for beams and columns	- Critical thinking& Problem solving - Communication& Collaboration -Leadership & personal development	AUDIO-VISUAL RESOURCES Video clips, charts, picture, shovel, concrete cubes, etc.	
12.	Revision	Revision			Pavision	
13.					Revision	



UNIFIED SCHEMES OF WORK SENIOR SECONDARY SCHOOLS

BUILDING CONSTRUCTION

SS2 SECOND TERM

WKS	TOPIC	LESSON OBJECTIVES	ACTIVITIES	EMBEDDED CORE SKILLS	TEACHING RESOURCES
1	WELCOM TEST	REVISION OF LAST TERM WORK			
2	WALL Methods of	By the end of the lesson students	Students in small groups discuss the	- Critical thinking& Problem solving	AUDIO-VISUAL RESOURCES
	walls construction	should be able to:	methods of protecting wall	- Communication& Collaboration	Video clips, Charts, Picture, Visit to site.
	Protection of wall surface	Describe methods of wall	surface against weather	-Leadership & personal	https://en.m.wikiped
	against weather	construction of each type of wall	degradation and physical damage	development	ia .org/wiki/walls
	degradation				.org/wiki/waiis
	Comparison of load and	Demonstrate the methods of	Students as a class Use charts to		n en egit
	non-load bearing walls	protecting wall surface against	compare load bearing and non-		
	Materials for loads and	weather erosion and physical	load bearing walls		
	non-load bearing wall	damage	Students in pair use real materials to		
	Free standing wall	Compare the differences	discuss materials for wall construction		
	Preventive	between load			
	methods	bearing and non- load bearing walls	Students in small groups discuss the		
	€ 3.000	Describe the	methods of preventing moisture		
		materials for load and non-load	penetration in free standing wall		
		bearing walls			
		Explain the methods used to			
	•	prevent free standing wall from	er troud		
		moisture			
3	DOOR AND	penetration By the end of the	Students discuss	- Critical thinking&	AUDIO-VISUAL
	DOOR FRAMES	lesson students should be able to:	types of door frames and doors	Problem solving - Communication&	RESOURCES Charts, Pictures,
	Types of door frame	Describe types of	with the aid of sketches	Collaboration -Leadership &	Posters, Video Clips, Physical,
	Door types	door frame	Students as a	personal development	Observation.
	Functions of door	Describe types of door	classdiscuss the functions of doors	development	https://en.m.wikiped
	Selection of door types	Explain the functions of doors	Students in pairs		<u>ia</u> .org/wiki/doors
	Construction of doors	Demonstrate the methods of	select doors and state their particular		·
	Methods of fixing door	constructing doors Describe the	uses		
	frames	methods of fixing	Students in small		
	Use of breeze block,	door frames into wall openings	groups demonstrate the construction of		
	150mm nail,	Demonstrate the	types of doors and	1	

WKS	TOPICS	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE SKILLS	TEACHING RESOURCES
	wood plug Use of ironmongery	methods of fixing doors to door frames	sketch details in constructing doors Students in pairs illustrate methods of fixing door frames into wall openings		
		·	Students as a class visit a site to see how doors are fixed		
			Students in small groups illustrate and demonstrate the methods of fixing door frames		
4	WINDOWS AND WINDOWS FRAME Window types Window and window frames parts	By the end of the lesson students should be able to: Identify and describe types of windows and their frames	With the aid of charts, students in small groups discuss types of window and their frames Students in pairs illustrate with	- Critical thinking& Problem solving - Communication& Collaboration -Leadership & personal development	AUDIO-VISUAL RESOURCES Video Clips, Pictures, Posters, Visit to site. https://en.m.wikiped ia .org/wiki/windows- and-windows-
	Functions of windows Windows and frames construction Moisture prevention.	Explain the functions of windows Describe the methods of constructing windows	sketches types and parts of a window Students in small groups illustrate the construction of windows and window frames		frames
		Demonstrate the methods of preventing entry of moisture at joints in windows and window frames	Students in pairs demonstrate how to prevent moisture from entering the joints		
5	Bridging of openings in walls Arch Description of types of arch Types of	By the end of the lesson students should be able to: Identify and describe types of arches	Students in pairs draw different types of arches using geometrical method of drawing Students in small groups discuss the	- Critical thinking& Problem solving - Communication& Collaboration -Leadership & personal development	AUDIO-VISUAL RESOURCES Video clips, charts, pictures, granite, sand aggregates. https://en.m.wikiped ia
	lintel Methods of bridging wall	Describe types of lintels Discuss methods of bridging wall	types of arches using sketches and charts Using sketches and models, students as a class discuss the types of lintels		.org/wiki/lintel

WKS	TOPICS	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE SKILLS	TEACHING RESOURCES
			Students in small groups demonstrate the following:		THE STORES
			-methods of bridging an opening		
			in walls -Positioning or		
			reinforcement in		
			concrete lintel		
6	Columns and beams in	By the end of the lesson students	Students as a class	- Critical thinking	AUDIO-VISUAL
	walls	should be able to:	use models to discuss columns	Problem solving - Communication	RESOURCES Video, clips, charts,
	Define		and beams	Collaboration	pictures, wood
	column and	State the materials		-Leadership and	models of various
	beams Materials for	for columns and	Students in small	personal	types of roof
	columns and	beams	groups observe real materials for	development	construction site
	beams	Explain the	columns and		https://en.m.wikiped
	Functions of	functions of	beams		ia
	columns and	columns and			.org/wiki/columns-
	beams	beams	Students in pairs		and-beams
	Reinforceme nt to	Apply	demonstrate production of the		
	columns and	reinforcement	reinforcement steel		
	beams	steels to columns	for columns and		,
		and beams	beams		
7	MID TERM	MID TERM	MID TERM BREAK		MID TERM BREAK
8-10	BREAK Roofs:	BREAK By the end of the	Chudanta a a a la a	0.11.11.11.0	
0-10	Types of	lesson students	Students as a class use models,	- Critical thinking& Problem solving	AUDIO-VISUAL
	roofs	should be able to:	sketches and charts	- Communication&	RESOURCES Video clips, charts,
	Parts of		to discuss parts of	Collaboration	pictures etc.
	types of	Recognize types	roofs and their	-Leadership &	,
	roofs: wall	of roofs in building	functions	personal	https://en.m.wikiped
	plates, rafter, ridge piece,	construction Acquire skills in	Students in small	development	<u>ia</u>
	tie, roofs	roof	groups discuss the		.org/wiki/roofs
	covering	construction	terms in roofs		
	Terms in roof	Determine	construction		
	construction	materials used for			
	ROOF COVERING	roof construction	Students as a class		
	MATERIALS		visit a site to observe		
	Safety	Affilia	construction		
	precautions				
.	Roof		Students in small		
.	construction s		groups discuss		
	Measures for		models of roof covering materials		
	preventing		and demonstrate		
	uplifts of		safety measures		
	roofs	The state of the s	during fixing and		
	- International		handling of roof		
	Alestenda (D.)	**	materials		
e produce de la constante de l			Students in pairs		
			demonstrate methods of		
1	1		constructing pitch		į

WKS	TOPICS	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE SKILLS	TEACHING RESOURCES
			and flat roofs		
			Students discuss measures for checking roof uplift during storm		
11	PRACTICAL / PROJECT 1 Lay tiles and DPC II Fix pipes of various kinds				
12	REVISION	REVISION			REVISION
13	EXAMINATIO N	EXAMINATION			EXAMINATION



UNIFIED SCHEMES OF WORK SENIOR SECONDARY SCHOOLS

BUILDING CONSTRUCTION

SS2 THIRD TERM

WKS	TOPIC	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE SKILLS	TEACHING RESOURCES	
1	WELCOME TEST/ REVISION OF LAST TERM WORK					
2	FIXING OF ROOF COVER – fixing of roof covering materials and safety during construction. Protection of roof from wind, rain, lightening Use of fascia boards, concrete flashing and aluminum wind breakers safety requirement	By the end of the lesson students should be able to: i) Fix roof covering materials ii) Observe safety rules during roof construction iii) Construct fascia board, concrete flashings and aluminium as wind breakers. iv) List safety requirements during roof construction.	i) Students as a class identify fixing roof covering materials ii. Students in pairs Observe safety rules during roof construction	- Critical thinking& Problem solving - Communication& Collaboration -Leadership & personal development	AUDIO-VISUAL RESOURCES Corrugate aluminium sheet woods, nails, charts, video clips, Pictures. https://en.m.wikiped ia .org/wiki/roofs	
3	CEILINGS A purpose of ceiling Thermal insulation Sound insulation Properties of ceiling Strength Rigidity, aesthetic s (beauty)	By the end of the lesson students should be able to: I) Explain the purposes of ceiling II) Identify and explain parts of ceiling.	i. Students as a class discuss purposes of ceilings ii Students in small groups State the properties of ceiling	- Critical thinking& Problem solving - Communication& Collaboration -Leadership & personal development	AUDIO-VISUAL RESOURCES Video clips, pictures, chairs, Real objects https://en.m.wikiped ia .org/wiki/ceilings	
4	PARTS OF A CEILING A Purpose of ceiling Ceiling tiles (sheets) Nogglio Struit Batten B. MATERIAL S FOR CEILING	By the end of the lesson students should be able to: I identify and explain parts of a ceiling II Select appropriate materials used for ceiling	I. Students in small groups identify parts of a ceiling II. Students as a class State and explain materials used for ceiling	- Critical thinking& Problem solving - Communication& Collaboration -Leadership & personal development	AUDIO-VISUAL RESOURCEs Ceiled and unceiled houses, video clips, pictures, charts etc. https://en.m.wikiped ia .org/wiki/ceilings	

1	BUILDING CONSTRUC					
WKS	TOPICS	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE SKILLS	TEACHING RESOURCES	
	 ❖ Asbestos sheet ❖ Cellotex sheet ❖ Hard Boards ❖ Bamboo ❖ Mats ❖ Grass 					
5	 ❖ Raffia PLUMBING METHODS OF INSTALLATIO N ❖ Types of load work used in plumbing ❖ Roofs ❖ Gutters ❖ Eaves ❖ Valleys 	By the end of the lesson students should be able to: I. State types of load work used in plumbing ii. Identify and explain methods of plumbing installation	I. Students as a class demonstrate methods of plumbing installation II. Students in pairs Sketch types of lead work used in plumbing	- Critical thinking& Problem solving - Communication& Collaboration -Leadership & personal development	AUDIO-VISUAL RESOURCES Video clips, Charts, pictures, visits construction sites. https://en.m.wikiped ia .org/wiki/plumbing- methods-of- installation	
6	METHODS OF INSTALLATIO N Water closet (WC) Wash land basin (W.H.B) Baths and showers	By the end of the lesson students should be able to: I. Fix water closet, wash hand basin, Baths and showers and sinks II. Install pipes in septic tank, manhole and soak away construction	I. Students in pairs fix water closet, wash hand basin, etc. II Students in small groups Sketch the systems of drainage pipe work III Students as a class state the purpose of septic tank and soak away	- Critical thinking& Problem solving - Communication& Collaboration -Leadership & personal development	AUDIO-VISUAL RESOURCES Pipes with accessories, charts, Pictures, Video clips https://en.m.wikiped ia .org/wiki/plumbing- methods-of- installation	
	Sinks Septic tanks Manhole Soak away constructi on Water reservatio ns -types and materials					
7	MID TERM BREAK MID TERM BREAK					
8	ELECTRICAL INSTALLATIO N AND ELECTRICAL SYMBOL Types of wiring	By the end of the lesson students should be able to: I identify and explain types of wiring	Students in small groups Identify the electrical wiring materials. Students in pairs List the types of	- Critical thinking& Problem solving - Communication& Collaboration -Leadership & personal development	AUDIO-VISUAL RESOURCES Video clips. Electrical wiring materials, Charis etc.	

WKS		LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE SKILLS	TEACHING RESOURCES
	Steel conduct P.V.C conduct (Polynol Chloride) M.I.C.S (Mineral		electrical wiring.		https://en.m.wikipedia ia .org/wiki/electrical- installation
	s insulate cooper sheathir				
: 	y T.R.S (Tough Rubber				
	Sheathir g Surface)		The second of th		
10	IEE (Institute of Electrical Engineers) Regulation s for electrical equipment of building Electricals symbols Installations terms Types of materials Reasons for the choice of materials PRACTICAL/PROJECTS	l lesson students should be able to: I. Discuss the Institute of Electrical Engineers (I.E.E) II Identify and	I. Students as a class State the I.E.E regulations. II. Students in pairs Sketch electrical symbols III. Students in small groups explain various types of electrical materials IV. Students in small groups State reasons for the choice of materials.	- Critical thinking& Problem solving - Communication& Collaboration -Leadership & personal development	AUDIO-VISUAL RESOURCES Video clips Charts, Electrical wiring materials I.E.E regulations Etc. https://en.m.wikiped ia .org/wiki/electrical- installations https://en.m.wikiped ia
	- Wall Plastering - Floor Screening				org/wiki/walls-and- floors
11	PRACTICAL / PROJECT ❖ Surface wiring on				
	the wall ❖ Fix door				
	frames ❖ Fix windows frames				
12	REVISIONS	REVISIONS			REVISIONS
	EXAMINATIO NS	EXAMINATIONS			EXAMINATIONS

ACHIEVEMENT STANDARDS FOR SSS 2, SESSION

At the end of the session, the students:

- ✓ understand the principle of drainage
- ✓ know the various types of fittings in plumbing and sanitary work
- ✓ are able to identify various types of materials in electrical installation
- \checkmark know the difference between reinforced concrete and mass concrete
- ✓ understand the process of concrete cubes production and floor slabs
- ✓ know how to use frame work for beams and coloumns
- ✓ are able to demonstrate methods of protecting wall surface against weather erosion physical damage.
- ✓ understand methods of constructing doors
- know the methods of constructing windows and window frames
- ✓ re able to describe types of arches and lintels
- ✓ know the method of bridging wall
- ✓ know the safety rules and requirement during roof construction
- ✓ are able to identify and explain methods of plumbing installation
- ✓ are able to recognize and sketch electrical symbols



UNIFIED SCHEMES OF WORK SENIOR SECONDARY SCHOOLS

BUILDING CONSTRUCTION

SS3 FIRST TERM

WKS	TOPIC	LEARNING OBJECTIVES	LEARNING	EMBEDDED CORE	TEACHING
		Welcome test	ACTIVITIES Welcome test	SKILLS	RESOURCES
1.	The Revision	AACIOOING TOSE	AACICOTTIG (GSI		
2-4	of SS i-ii work	By the end of the	Students as a class	- Critical thinking&	AUDIO MOLLA
-4	Stair cases: Definition of	lesson students	brainstorm on the	Problem solving	AUDIO-VISUAL RESOURCES
	stair	should be able to:	meaning of the term	- Communication&	Training materials
	Types of		"stairs"	Collaboration	like wood, nails,
	stairs	Acquire	0	-Leadership &	bricks, cement,
	Parts of	knowledge about stairs.	Students as a class	personal	sand and granite,
	stairs	Stairs.	go to a two-storey building to observe	development	bricklayers laving
	Functional	Understand the	stairs and their		tools, video clips,
	requirements	fundamentals of	details.		charts and
	of stair construction	stair construction.			drawings
			Students as an		https://en
	Setting out timber stairs		individual discuss		https://en.m.wikiped
	Layout of		parts of stairs and	1	org/wiki/types-of-
	timber stairs		sketch types of		stairs
	Timber stair		stairs with their	1	
	construction		details.		1
	Problems in		Students in pairs		
	timber stair		identify the	1	
	construction		functional		
	Concrete		requirements of	1	
	stair construction		stair construction.		
	Formwork for				
	concrete		Students in small	·	
	stairs		groups demonstrate	1	
	Placement of		the procedures for		
	reinforcemen	•	setting out timber stairs.		
	t bars		Stairs.		
	Fixing of	1	With the use of		
	balustrade		sketches and		
	Functional	1	models of joint		
	characteristi cs of		students show the		
	materials for	[]	methods of		
	balustrade.		constructing timber		
ĺ	Construction	8	stairs.		
1	of metal		Studente in - "		
	stairs		Students in small roups discuss		
l	1	4	efects of materials		1
		اً ا	sed for timber		
1			tairs.		
		•			
		l w	/ith the use of		
			odel students as		
ĺ			class discuss the		
l			eps involved in		
		, en	ecting formwork.		
		St	udents in pairs monstrate the		
-		l de	monstrate the ethods of making		re e
		1 1110	and of making		

WKS	TOPICS	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE	TEACHING RESOURCES
			reinforced concrete stairs.		
			Students as a class embark on a tour to observe stairs reinforcement placing.		
			Students in small groups demonstrate the methods of fixing balustrade in concrete stairs		
			Students in pairs use models to discuss types of metal for stair construction.		
			Students as a class discuss the functional characteristics of balustrade materials with		
			emphasis on the following: - rotting effect of moisture on timber - rusting iron/steel due to dampness		
			- concrete cracks, decomposition due to poor mixing, poor design, etc.		
	Wall finishes Plastering i. Tools and requirement ii. Materials for plastering iii. Reparation of the wall iv. Surface v. Plastering	By the end of the lesson students should be able to: i. Define plastering and properties of mortar ii. Know the reason for the application of plaster on internal surfaces	i. Students as a class define plastering and the mortar characteristics ii. Students in pairs explain the reason for applying mortar on walls iii. Students in small groups identify the	- Critical thinking& Problem solving - Communication& Collaboration -Leadership & personal development	AUDIO-VISUAL RESOURCES Real plastering materials, video clips, charts, diagrams, chalk board practice. https://en.m.wikiped ia .org/wiki/wall-
	process vi. Plastering sequence vii. Properties of plaster viii. Plaster board lathing	iii. Identify tools and requirements for standard plastering iv. Know how to prepare the background to receive plastering v. Know how to arrange the	uses of tools for plastering. iv. Students as an individual apply mortar on wall surfaces use tools to finish plastering on wall		plastering

WKS	TOPICS	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE SKILLS	TEACHING RESOURCES
		mortars and potter additive to materials		·	
6.	Drawing installation - Methods of construction - Inspection	By the end of the lesson students should be able to: i. Construct drains ii. Lay inspection	i. Students in small groups test for leakage by using water ii. Students in small	- Critical thinking& Problem solving - Communication& Collaboration -Leadership &	AUDIO-VISUAL RESOURCES Video, still pictures, pipes (6" and9".) Diagrams, video,
• 	chambers - Septic tanks and soak away	chamber iii. Construct septic tanks and soak-away pits	groups test for leakage and flow by using air/ smoke test	personal development	charts and other materials for laying pipes and preparing inspection chamber
	pits.				https://en.m.wikiped ia .org/wiki/inspection-
7					<u>chambers</u>
8-10	Preparing and maintenance	By the end of the lesson students	Students in pairs	- Critical thinking& Problem solving	6" and 9" pipes, yarns video, charts,
	of drainage Define	should be able to:	discuss drainage, stating its	- Communication& Collaboration	diagram PPK https://en.m.wikiped
	drainage Principles of drainage	Explain the principles of Drainage.	importance to health and sanitation, discuss	-Leadership & personal development	<u>ia</u> .org/wiki/types-of- drainage
	system Factors for	100	the principles of	uovoiopinoni.	<u>uraniage</u>
	selecting a	Explain the types of drainage	drainage.	,	%
	type of drainage	scheme.	Students as an individuals discuss		
	scheme Materials for	Explain the factors to consider in	the types of drainage using		
21 21	drainage Methods of	selecting a type of drainage scheme.	sketches.	:	
	joining pipes Functions of traps	Describe the materials for a	Students in small groups discuss the factors for selecting		
	Functions of an inspection	drainage system	a type of drainage scheme and the		
	chamber Protection against	Explain with the aid of sketches the methods of	materials for drainage.		
	flooding Methods of	joining pipes. Describe the	Students as a class discuss the		
	laying and bedding drains Methods of	functions of traps. Explain the functions of an inspection	methods of joining different types of pipes using sketches.		
	testing drains	chamber. Demonstrate the	Students in pairs		
	Functions of soakaway Construction	measures for protecting against flooding.	to discuss the functions of a trap.		
	of materials Construction	Demonstrate the methods of laying	Students as a class discuss the		
	tanks	and bedding drain pipes. Demonstrate	functions of an inspection chamber.		N. A. A. A. A. A. A. A. A. A. A. A. A. A.
		methods of testing drains.	Students as an		

WKS	TOPICS	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE SKILLS	TEACHING RESOURCES
		Explain the term cesspool Explain the functions of Soakaway. Demonstrate the methods of	individual make sketches and illustrations to demonstrate measures of preventing flooding in drainage.		
		constructing manholes. Demonstrate the method of constructing septic tank.	Students in small groups demonstrate the methods of laying and bedding drain pipes with charts and sketches. Students demonstrate the methods of testing drains		
			Students discuss cesspool and soakaway with emphasis on their functions using sketches.		
and the second			Students in pairs demonstrate the methods of constructing manhole using sketches.		
			Students as a class go to site to observe manhole construction and methods of constructing septic tank.		
			With the use of sketches students in pairs discuss the differences between cesspool and septic tanks		
11	Plumbing - System of pipe works - One pipe system - Two pipe system Single stale system	By the end of the lesson students should be able to: i. Define plumbing ii. Identify and use materials for domestic plumbing iii. Know the system ofpipe works iv. Be able to fix	i. Students as a class Identify materials that are of good quality and standard for fixing plumbing problems. ii. Students in small groups fix and explain one pipe system, two pipes system and single	- Critical thinking& Problem solving - Communication& Collaboration -Leadership & personal development	AUDIO-VISUAL RESOURCES Plumbing materials, video chart, diagram and plumbing tools https://en.m.wikiped ia .org/wiki/plumbing
		and explain one pipe system, two pipes system and single stale system	stale system		
12	Revision	Revision			Revision
10	Examination	Examination			Examination



UNIFIED SCHEMES OF WORK SENIOR SECONDARY SCHOOLS

BUILDING CONSTRUCTION

SS3SECOND TERM

DESIGN DESCRIVE DESIGN DELECTIVE 1 FENCE AND FENCER - Type of fencing Material or fencing Construction of fence 1 FENCE AND FENCER - Type of fencing Material or fencing Construction of fence 2 ACCESS - Types - Function and materials 3 GATES Definition Types of gate for road in the site 3 GATES Definition Types of gate Material and classification revolutions (iii) identify and ist measure in the site 3 GATES Definition Types of gate Material and classification revolution file Material and classification Production, Rixing and maintenance None of gate Material and classification Production, Rixing and maintenance None of gate and not construction of the site Students in small groups discuss the characteristics of the meterials used in the construction of fence and boundary wall using threat wailable materials By the end of the lesson students in the site Students in small groups and construction of fence and frepair existing and maintenance Students in small groups and construction of fence and frepair existing and maintenance Types of gate and not construction of the lesson students should be able to: Students in small groups participate in relation to building and maintenance Types of gates and boundary wall using the available materials Students in small groups and proportion of the construction of the lesson students should be able to: Students in small groups participate in relation to building and maintenance Types of gates and the proportion of the construction of the construction of the construction site. Students in small groups participate in fixing the gate to the entrance of a construction site. Students in small groups participate in fixing the gate to the entrance of a construction site. Students in small groups participate in fixing the gate to the entrance of a construction site. Students in small groups participate in fixing the gate to the entrance of a construction site. Students in small groups participate in fixing the gate to the entrance of a construction site. Students in s		140//	TODIO				3333ECOND TERM	
FENCING FORM FENCING Type of fencing Material and classification Forduction, fixing and material and classification Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and maintenance Material and classification Fixing and Material and classification Fixing and Material and classification Fixing and Material and classification Fixing and Material and classification Fixing and Material and classification Fixing and Material and classification Fixing and Material and Classifi					ACTIVITY	EMBEDDED CORE		
Problem solving Communication & Collaboration Collaboration Collaboration Communication & Collaboration Collaborat		1			, ,	- Critical thinking&		
Foliabrotation of fence fencing Construction of fence fences and boundary wall used in building construction (iii) identify and ist materials used for fencing and boundary wall used in building construction (iii) identify and ist materials used for fencing and boundary wall using phokes, block and other durable materials 2 ACCESS - Types - Function and material for construction on construction on and material for for construction on the site 3 GATES Definition Types of gate Material and classification production, fixing and maintenance Material and classification fixing and maintenance ACCESS (iii) be able to: (iii) dentify and ist materials used for fence and a boundary wall using the available materials. PROJECT ACTIVITIES 2 ACCESS (iii) the end of the lesson students should be able to: (iii) the material sused in the construction of the material sused for for construction on the site 3 GATES Definition Types of gate Material and classification fixing and maintenance Accessification fixing and maintenance Material and classification fixing and maintenance (iii) dentify and ist materials used for fence and the construction of the site ACCESS and for the construction of the site ACCESS and for construction of the site ACCESS and for construction of the site of the materials and classification fixing and maintenance with site of the construction of the site of the construction of the site of the construction of the site of the construction of the site of the construction of the site of the construction of the site of the construction of the site of the construction of the site of the construction of the co						Problem solving	1	
Material of fencing Construction of fence and boundary walls steing construction (iii) identify and list materials used to fencing and boundary walls (iv). Set out and oonstruct boundary walls using bricks, block and other durable materials with construction of construction on a construction on constr						- Communication&		
Identify tences and its serction process. (ii) list types of fence of fence on the construction of fence of fences and boundary wall used in building construction (iii) identify and list materials used for fencing and boundary wall using bricks, block and other durable materials (iv). Set out and construct boundary wall using bricks, block and other durable materials ACCESS Types Function and material for construction on technique for road in the site Punction of technique for road in the site Punction of technique for road in the site Punction of technique for road in the site Punction of technique for road in the site Punction of technique site construction of technique for road in the site Punction of technique site construction of technique site of temporary road within and around the site Punction of tence and repair exceed of tence and repair exceed of tence and repair exceted of tence of the punction of tence and repair exceted of tence of the punction of tence and repair exceted of tence of the entrance of a construction of tence and repair exceted of tence and repair exceted of tence of the punction of tence and repair exceted of tence of the punction of tence and repair exceted of tence		1						
and its erection process. (ii) list types of fences and boundary wall used in building construction of fencing and boundary wall used in building construct of fencing and boundary wall using bricks, block and other durable materials with the construction of fencing and boundary wall using bricks, block and other durable materials 2 ACCESS - Types - Function and material for construction of ithe construction of ithe construction of ithe construction of fencing and boundary wall using the available materials. By the end of the lesson students should be able to: and material for construction of ligil list and prepare a temporary road within and around the site 3 GATES Definition Types of gate and maintenance will be performed in the construction of fence and repair construction of fence and repair construction of fence and repair construction, fixing and maintenance will be performed and maintenance will be performed and classification production, fixing and maintenance will be performed and maintenance will be performed and classification production, fixing and maintenance will be performed and maintenance will be able to: site being erected construction of fence and repair classification production, fixing and maintenance will be performed to fence and repair the materials used (iii.) Students as an individual list toocal types of fencing materials where boundary wall using the available materials. By the end of the construction of fence and repair the materials used (iii.) Students as an individual list toocal types of fencing materials. PROJECT ACCESS (iii) It being or fencing materials where boundary wall using the available where boundary wall using the available processor sact for boundary wall using the available of fencing where boundary wall using the available of fencing where boundary wall using the available of fencing where boundary wall using the available of fencing where boundary wall using the available of fencing where boundary wall using the available of fencing where boundary wall using			J		wall is being	-Leadership &		
the materials used development wideo chart in the materials used in building construction (iii) identify and list materials used for fencing and boundary walls (iv). Set out and construct boundary walls (iv). Set out and other durable materials with and other durable materials 2 ACCESS 2 ACCESS 3 Function and material for construction on technique for road in the site 3 GATES Definition Types of gate 3 GATES Definition Types of gate Material and Classification Production, fixing and maintenance 3 GATES Definition Types of gate Material and Classification Production, fixing and maintenance (ii) identify and isit materials used (iii). Students in small groups discuss the characteristics of the materials used in the construction (iii) identify and isit materials used (iii). Students in small groups discuss the construction in development (iii). Students as an individual list local types of fencing materials (iii) Students as an individual list local types of fencing materials (iii) Students as an individual list local types of fencing materials (iii) Students as an individual list local types of fencing materials (iii) Students in small groups fencing and pairs Construction of fencing materials (iii) Students as a class visit a local site where boundary wall using the available materials ACCESS - Types less on students should be able to: should be able to: on the construction of the site 3 GATES Definition Types of gate Material and Material and (i), define "Gates" in relation to the entrance of a construction site in relation to the entrance of a construction site on the entrance of a construction site on the entrance of a construction site on the entrance of a construction site on the entrance of a construction site on the entrance of a construction site on the entrance of a construction site on the entrance of a construction site on the entrance of a construction site on the entrance of a construction site on the entrance of a construction site on the entrance of a construction site on the entran				and its erection	erected and identify			
(ii) list types of fercing and maintenance (iii) list ripes of gates 3 GATES Definition Types of gates Material and classification Production, fixing and maintenance (iii) list mid production (iii) identify and ist materials used for fencing and boundary wall using bricks, block and other durable materials (iii) Students as an individual list local types of fencing materials (iii) Students as an individual list local types of fencing materials (iii) Students as an individual list local types of fencing materials (iii) Students as an individual list local types of fencing materials (iii) Students as an individual list local types of fencing materials (iii) Students as a class visit a local site or materials. PROJECT ACTIVITIES Students as a class valid belie for materials (iv) Define access in the construction of the site Students as a class valid belie for fence being erected clips/slide of fence being erected construction techniques use for temporary road within and around the site 3 GATES Definition Types of gate Material and classification Production, fixing and maintenance (iii) Students as a class valid belie local site of the materials used in the construction dehance with the construction of secondary wall using the available materials. PROJECT COmmunication& Collaboration -Leadership & Problem solving construction site. Students in small groups discuss the characteristics of the materials used in the construction of secondary wall using the available materials. Problem solving -Communication& Collaboration -Leadership & problem solving -Communication& Collaboration -Leadership & Problem solving -Communication& Collaboration -Leadership & Problem solving -Communication& Collaboration -Leadership & Problem solving -Communication& Collaboration -Leadership & Problem solving -Communication& Collaboration -Leadership & Problem solving -Communication& Collaboration -Leadership & Problem solving -Communication& Collaboration -Leadership & Problem solving -Communication& Collaboration -Lead			Constructio		the materials used		video chart	
boundary wall used in building construction (iii) identify and ist materials used of fencing and boundary wall using bricks, block and other durable materials 2 ACCESS - Types - Function and material should be able to: sh			of fence			,	, and on any	
small groups discuss the characteristics of the materials used in the construction (iii) identify and list materials used for fencing and boundary walls (iv). Set out and construct boundary wall using bricks, block and other durable materials 2		l					https://en.m.wikiped	
construction (iii) identify and list materials used for fencing and boundary walls (iv). Set out and construct boundary wall using bricks, block and other durable materials 2								
Construction (iii) identify and list materials used for fencing and boundary walls (iv). Set out and construct boundary wall using bricks, block and other durable materials 2				used in building			.org/wiki/constructio	
the materials used for fencing and boundary walls (iii.) Students as an individual list local types of fencing materials using bricks, block and other durable materials 2								
fencing and boundary walls (iii). Students as an individual list local types of fencing materials 2				(iii) identify and lis				
Interciting and boundary walls (iv). Set out and construct boundary wall using bricks, block and other durable materials September S	İ				in the construction		https://en.m.wikiped	
(iv) Set out and construct boundary wall using bricks, block and other durable materials should be able to: and material for constructi on netchnique for road in the site site site construction arbitishment for production, fixing and malterian (i). define "Gates" in relation to morboduction, fixing and maintenance (ii) identify and isst types of gates and (iii) ide								
Individual list local construct boundary wall using bricks, block and other durable materials Individual list local types of fencing materials Individual	-1			boundary walls	(iii.) Students as an		org/wiki/types-of-	
boundary wall using bricks, block and other durable materials 2 ACCESS - Types - Function and material for construction on - Construction on technique for road in the site 3 GATES Definition Types of gate Material and classification Production, fixing and maintenance Material and classification Production, fixing and maintenance Definition Types of gate Definition maintenance Definition maintenance Definition maintenance Definition maintenance Definition materials Definition materials Definition materials Definition materials Definition materials Definition maintenance Definition maintenance Definition maintenance Definition maintenance Definition materials Definition material materials Definition materials			100					
using bricks, block and other durable materials Signature Construct Construct	1							
and other durable materials ACCESS Types Function and material for construction on technique for road in the site	1		1					
ACCESS Function and material for construction on techniques use for temporary road within and around the site	1			using bricks, block				
2 ACCESS - Types - Function and material for Constructi on - Constructi on technique for road in the site 3 GATES Definition Types of gate Material and classification Production, fixing and maintenance 3 GATES Definition Types of gate Material and classification Production, fixing and maintenance ACCESS - Types - Types - Function and material (i). Define access in the construction site (ii) lief and prepare a temporary road within and around the site Construction of technique for road in the site ACTIVITIES Students as a class visit a local site visit obling visit on visit a local site doullabration Leadership & personal development AUDIO-VISUAL AUDIO-VISUAL RESOURCES Steel, school gate, visit a nearby visit a nearby visit a nearby visit a nearby visit a nearby visit to a nearby visit to a nearby visit to a nearby visit to a nearby visit to a nearby visit to a nearby visit to a nearby visit to a nearby visit to a nearby	1							
the available materials. PROJECT ACTIVITIES ACCESS - Types lesson students should be able to: Function and material (i). Define access in the construction on constructi on technique suse for temporary road within and around the site 3 GATES Definition Types of gate Material and classification Production, fixing and maintenance Material and classification Production, fixing and maintenance Types of gate Sutdents as a class visit a local site where boundary wall is being erected slass watch video clips/slide of fence being erected - Students in small groups engage in construction of fence and repair existing school fence Students as a class visit a local site where boundary wall is being erected - Students in small groups engage in construction of fence and repair existing school fence Students as a class visit a local site where boundary wall is being erected - Students in small groups engage in construction of fence and repair existing school fence Students as a class visit and prepair existing school fence and repair existing school fence Students as a class visit and prepair existing school fence and repair existing school fence Students as a class visit and prepair existing school fence and repair existing school fence Students in small groups engage in construction site.	1		1	materials	pairs Construct	-		
ACCESS - Types - Function and material for constructi on technique for road in the site 3 GATES Definition Types of gate Material and classification Production, fixing and maintenance Material and classification Production, fixing and maintenance Material and classification Production, fixing and maintenance Material and classification Production, fixing and maintenance Material and classification Production (ii) identify and list types of gates and maintenance Material and classification Production (iii) identify and list types of gates and visite and maintenance Material and classification Production, fixing and maintena	1							
ACCESS - Types - Function and material for constructi on echnique for road in the site 3 GATES Definition Types of gates Material and classification Production, fixing and maintenance Material and classification Production, fixing and maintenance Types of gates By the end of the lesson students should be able to: should be able	1		1.00					
ACCESS - Types - Function and material for constructi on etchnique for road in the site 3 GATES Definition Types of gate Material and classification Production, fixing and maintenance Material and classification Production, fixing and maintenance Material and maintenance ACCINITIES Students as a class visit a local site where boundary wall is being erected should be able to: Students as a class visit a local site where boundary wall is being erected should be able to: Students as a class visit a local site where boundary wall is being erected should be able to: Students as a class visit a local site where boundary wall is being erected should be able to: Students as a class visit a local site where boundary wall is being erected should be able to: Students as a class visit a local site where boundary wall is being erected should be able to: Students as a class visit a local site where boundary wall is being erected should be able to: Students as a class visit a local site where boundary wall is being erected should be able to: Students as a class visit a local site where boundary wall is being erected should of erected students in small groups engage in construction of fence and repair existing school fence Students as a class visit an local site where boundary wall is being erected students in small groups engage in construction of fence and repair existing school fence Students as a class visit an erably construction site. Students as a class visit an erably gate construction of fence and repair existing school fence Students in small groups engage in construction of fence and repair existing school fence Students in small groups engage in construction of fence and repair existing school fence Students in small groups engage in construction site. Students in small groups engage in construction of fence and repair existing school fence Students in small groups engage in construction site. Students in small groups engage in construction site. Students in small groups engage in constructi	1		1,31,0			1		
ACCESS - Types - Function and material for constructi on technique for road in the site 3 GATES Definition Types of gate Material and classification Production, fixing and maintenance Material and classification Production, fixing and maintenance Material and maintenance ACCESS - Types - Function and beside to: should be able to: students in small groups participate in fixing the gate to the entrance of a construction site. Students in small groups fix a Students as a class video clips/slide of fence being erected - Students as a class video on therefore being erected - Students as a class visit an earby gate construction site Critical thinking& Problem solving - Communication& Collaboration stantievelopment AUDIO-VISUAL RESOURCES National development AUDIO-VISUAL RESOURCES Stelenschip - Critical thinking& Problem solving - Critical thinking& Collaboration stantievelopment AUDIO-VISUAL RESOURCES -								
Communication Collaboration	2	ACCESS	By the end of the		0 11 11 11 2			
should be able to: and material for constructi on - Constructi on technique for road in the site 3 GATES Definition Types of gate Material and classification Production, fixing and maintenance Should be able to: where boundary wall is being erected - Students as a class watch video clips/slide of fence being erected - Students in small groups engage in construction of fence and repair existing school fence Students as a class ochieved clips/slide of fence being erected - Students in small groups engage in construction of fence and repair existing school fence Students as a class visit a nearby gate construction site Students in small groups participate in fixing and material for construction (ii) Jeffine access in the construction site (iii) Jentify and state construction techniques use for temporary road within and around the site Students as a class visit a nearby gate construction site Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the en						- Critical thinking&		
## wall is being erected class watch video construction site on technique for road in the site 3 GATES Definition Types of gate Material and classification Production, fixing and maintenance Material and classification Production, fixing and maintenance (i). Define access in the construction site on in the construction site on the construction of in relation to building drawing (ii) identify and state construction techniques use for techniques use for temporary road within and around the site 3 GATES Definition Types of gate Material and classification Production, fixing and maintenance (i). Define access in the construction site on the entrance of a construction of ferce and repair existing school fence Students as a class or clips/slide of fence being erected oblips/slide of fence being erected - Students in small groups engage in construction of fence and repair existing school fence Students as a class or classification of fence and repair existing school fence Students as a class or classification of fence and repair existing school fence Students in small groups engage in construction of fence and repair existing school fence Students in small groups engage in construction of fence and repair existing school fence Students in small groups engage in construction of fence and repair existing school fence Students in small groups engage in construction of fence and repair existing school fence Students in small groups articipate in fixing the gate to the entrance of a construction site - Students as a class visit a nearby gate construction site Students in small groups articipate in fixing the gate to the entrance of a construction site - Students in small groups engage in construction of fence and repair existing school fence - Critical thinking and existing the gate on the existing school fence - Critical thinking and existing the gate on the problem solving and evelopment of a construction site Critical thinking and evelopment or construction and development or construction site						Communication 9		
for constructi on site in the construction site on (ii) list and prepare a temporary access road for building drawing for road in the site 3 GATES Definition Types of gate Material and classification Production, fixing and maintenance Minimate access in the construction site on the construction site in the construction site on (ii) list and prepare a temporary access road for being erected - Students in small groups engage in construction of fence and repair existing school fence Students as a class watch video clips/slide of fence being erected - Students in small groups engage in construction of fence and repair existing school fence Students as a class vatch video clips/slide of fence being erected - Students in small groups engage in erected - Students in small groups participate in fixing the gate to the entrance of a construction site. Students as a class vatch video clips/slide of fence being erected - Students in small groups engage in erected - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups of gates and site of the erected - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups fix a site of fence being erected - Students in small development - Crritical thinking& Problem solving - Communication& Collaboration - Leadership & personal development - Critical thinking& Problem solving - Communication& Collaboration - Leadership & personal development - Critical thinking& Problem solving - Communication& Collaboration - Leadership & personal development - Critical thinking& Problem solving - Communication& Collaboration - Leadership & personal development - Critical thinking& Problem solving - Communication& Collaboration - Leadership & personal development			15. 电流通信算信息 15.	and and and to.				
in the construction site Construction on			material	(i). Define access			a contract of the contract of	
constructi on - Constructi on technique for road in the site 3 GATES Definition Types of gate Material and classification Production, fixing and maintenance iite (ii) list and prepare a temporary access road for building drawing (iii) identify and state construction techniques use for temporary road within and around the site Material and classification Production, fixing and maintenance site (ii) list and prepare a temporary access road for building drawing (iii) identify and list types of gates and technique use for temporary road within and around the site Students as a class visit a nearby gate construction site Students in small groups engage in construction of fence and repair existing school fence Students as a class visit a nearby gate construction site Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups fix a AUDIO-VISUAL RESOURCES Steel, school gate, visit to a nearby construction site. Video clips, picture drawings. https://en.m.wikiped ia - Orritical thinking& Problem solving - Communication& Collaboration - Leadership & personal development https://en.m.wikiped ia - Org/wiki/site accessibility AUDIO-VISUAL RESOURCES Steel, school gate, visit to a nearby construction site. Video clips, picture drawings. https://en.m.wikiped ia - Orritical thinking& Problem solving - Communication& - Collaboration - Leadership & personal development		Ì	for		1			
Cilps/slide of fence being erected a temporary access road for building drawing for road in the site Students in small groups engage in construction of techniques use for temporary road within and around the site Students as a class visit a nearby gate construction site.			constructi				work.	
a temporary access road for building drawing (iii) identify and state construction techniques use for temporary road within and around the site 3 GATES Definition Types of gate Material and classification Production, fixing and maintenance Construction techniques use for temporary road within and around the site Students in small groups engage in construction of fence and repair existing school fence Students as a class visit a nearby gate construction site Students in small groups participate in fixing the gate to the entrance of a construction site types of gates and Ci) identify and list types of gates and Ci) identify and list types of gates and Ci) identify and list types of gates and Ci) identify and list types of gates and Ci) identify and list types of gates and Cii identify and list types of gate		.		(ii) list and prepare		development	https://on.ma.udlda.ad	
access road for building drawing (iii) identify and state construction techniques use for temporary road within and around the site 3 GATES Definition Types of gate Material and classification Production, fixing and maintenance (ii) identify and state construction techniques use for temporary road within and around the site Students in small groups engage in construction of fence and repair existing school fence Students as a class visit a nearby gate construction site Students in small groups engage in construction of fence and repair existing school fence Students as a class visit a nearby gate construction site Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups engage in construction of fence and repair existing school fence Students as a class visit a nearby gate construction site Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups engage in construction of fence and repair existing school fence AUDIO-VISUAL RESOURCES Steel, school gate, visit to a nearby construction site Leadership & personal development Video clips, picture drawings. https://en.m.wikiped ia			- Constructi	a temporary	being erected			
building drawing (iii) identify and state construction techniques use for temporary road within and around the site 3 GATES Definition Types of gate Material and classification Production, fixing and maintenance building drawing (iii) identify and state construction techniques use for temporary road within and around the site Students as a class visit a nearby gate construction site. - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students as a class visit a nearby gate construction site. - Critical thinking& Problem solving - Communication& Collaboration - Leadership & personal development - Leadership & personal development - Material and classification - Communication& Collaboration - Leadership & personal development				access road for	- Students in small	#* 		
for road in the site 3 GATES Definition Types of gate Material and classification Production, fixing and maintenance (iii) identify and state construction techniques use for temporary road within and around the site Students as a class visit a nearby gate construction site Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups fix a construction of fence and repair existing school fence Students as a class visit a nearby gate construction site Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups fix a construction of fence and repair existing school fence AUDIO-VISUAL RESOURCES Steel, school gate, visit to a nearby construction site. Video clips, picture development https://en.m.wikiped ia			technique	building drawing				
state construction techniques use for temporary road within and around the site 3 GATES Definition Types of gate Material and classification Production, fixing and maintenance Students as a class visit a nearby gate construction site Students in small groups participate in fixing the gate to the entrance of a construction site types of gates and groups fix a Students as a class visit a nearby gate construction site Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups fix a AUDIO-VISUAL RESOURCES Steel, school gate, visit to a nearby construction site. Video clips, picture development				(iii) identify and			accessibility	
techniques use for temporary road within and around the site By the end of the lesson students should be able to: Material and classification Production, fixing and maintenance Critical thinking& Problem solving construction site Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups fix a		1	the site	state construction	fence and repair			
within and around the site By the end of the lesson students should be able to: Material and classification Production, fixing and maintenance Within and around the site By the end of the lesson students visit a nearby gate construction site Students as a class visit a nearby gate construction site Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups fix a Critical thinking& Problem solving - Communication& Collaboration - Leadership & personal development AUDIO-VISUAL RESOURCES Steel, school gate, visit to a nearby construction site. Video clips, picture drawings. https://en.m.wikiped iga		- 1						
the site By the end of the lesson students should be able to: Material and classification Production, fixing and maintenance the site By the end of the lesson students visit a nearby gate construction site. Students as a class visit a nearby gate construction site. Students as a class visit a nearby gate construction site. Students in small groups participate in fixing the gate to the entrance of a construction site Steel, school gate, visit to a nearby construction site. Video clips, picture development development AUDIO-VISUAL RESOURCES Steel, school gate, visit to a nearby construction site. Video clips, picture drawings. In relation to the entrance of a construction site Steel, school gate, visit to a nearby construction site. Video clips, picture development Types of gate In relation to the entrance of a construction site Steel, school gate, visit to a nearby construction site. Video clips, picture development Types of gate In relation to the entrance of a construction site Steel, school gate, visit to a nearby construction site. Video clips, picture development Types of gate In relation to the entrance of a construction site Steel, school gate, visit to a nearby construction site. Video clips, picture development Types of gate and groups fix a					fence			
GATES Definition Types of gate Material and classification Production, fixing and maintenance By the end of the lesson students should be able to: Students as a class visit a nearby gate construction site Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students as a class visit a nearby gate construction site Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students in small groups participate in fixing the gate to the entrance of a construction site - Students as a class visit a nearby gate construction site Critical thinking& Problem solving - Communication& Collaboration - Leadership & personal development - Video clips, picture development in the problem solving - Communication& Collaboration - Leadership & personal development - Students in small groups participate in fixing the gate to the entrance of a construction site Students in small groups participate in fixing the gate to the entrance of a construction site Students in small groups participate in fixing the gate to the entrance of a construction site Students in small groups participate in fixing the gate to the entrance of a construction site Students in small groups participate in fixing the gate to the entrance of a construction site.					Carlo Company			
Definition Types of gate Material and classification Production, fixing and maintenance Definition Types of gate lesson students should be able to:			CATEO					
Types of gate Material and classification Production, fixing and maintenance Construction Site Steel				By the end of the		- Critical thinking&	AUDIO-VISUAI	
Material and classification Production, fixing and maintenance (ii) identify and list types of gate should be able to: Should be able to: Construction site. Students in small groups participate in fixing the gate to the entrance of a construction site Steel, school gate, visit to a nearby construction site. Collaboration Leadership & personal development development Construction site. Collaboration Leadership & personal development development Material and classification Froduction, fixing and construction site. Steel, school gate, visit to a nearby construction site. Video clips, picture drawings. https://en.m.wikiped in the production is to a nearby construction site. Steel, school gate, visit to a nearby construction site. In fixing the gate to the entrance of a construction site. Steel, school gate, visit to a nearby construction site. In fixing the gate to the entrance of a construction site. Steel, school gate, visit to a nearby construction site. In fixing the gate to the entrance of a construction site. Steel, school gate, visit to a nearby construction site. In fixing the gate to the entrance of a construction site. Steel, school gate, visit to a nearby construction site. In fixing the gate to the entrance of a construction site. Steel, school gate, visit to a nearby construction site. In fixing the gate to the entrance of a construction site. Steel, school gate, visit to a nearby construction site. In fixing the gate to the entrance of a construction site. Steel, school gate, visit to a nearby construction site. In fixing the gate to the entrance of a construction site.					visit a nearby gate	Problem solving		
Material and classification Production, fixing and maintenance (i). define "Gates" in relation to building construction (ii) identify and list types of gates and list classification (i). define "Gates" in relation to building construction site on struction site			ypes of gate	snould be able to:				
(i). define Gates (in relation to building in relation to building construction (ii) identify and list types of gates and in relation to building construction (ii) identify and list types of gates and in relation to building construction site (ii) identify and list types of gates and in relation to building construction site (ii) identify and list types of gates and in relation to building construction site (ii) identify and list types of gates and in relation to building construction site (iii) identify and list types of gates and in relation to building construction site (iii) identify and list types of gates and in relation to building construction site (iii) identify and list types of gates and list types of gates and list types of gates and list types of gates and list typ			Material and	(i) def "0 "			visit to a nearby	
Production, fixing and maintenance (ii) identify and list types of gates and line feation to building construction (ii) identify and list types of gates and line fixing the gate to the entrance of a construction site construction site line fixing the gate to the entrance of a construction site line fixing							construction site.	
fixing and maintenance (ii) identify and list types of gates and least form the entrance of a construction site on small groups fix a least form the entrance of a construction site on small groups fix a least form the entrance of a construction site on the entrance of a construction site of the entrance of a construction site of the entrance of a construction site of the entrance of a construction site of the entrance of a construction site of the entrance of a construction site of the entrance of a construction site of the entrance of a construction site of the entrance of a construction site of the entrance of a construction site of the entrance of a construction site of the entrance of a construction site of the entrance of a construction site of the entrance of a construction site of		l l				•		
maintenance construction construction site						development		
types of gates and groups fix a running groups fix a			maintonana			14	N. A.	
types of gates and groups fix a		'	mannenance				https://en.m.wikiped	
org/wiki/types-of-							<u>ia</u>	
				Ciassification	uamage gate		.org/wiki/types-of-	

WKS	TOPICS	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE SKILLS	TEACHING RESOURCES
		(iii) participate in fixing of steel gates (iv) maintain and repair the existing	-Project Proposal -Project Writing		gate
4-5	FLOOR FINISHES - Definition Types of floor finish - material for floor finishes Laying procedures Advantages and disadvantage s of types of floor finish - Factor necessary for considering when selecting	repair the existing school gate By the end of the lesson students should be able to: Identify and describe types of floor finishes. Describe the materials for types of floor finishes. Describe the procedures for laying floor finishes. Explain the advantages and disadvantages and disadvantages of types of floor finishes. List factor affecting floor finishes. Fix the floor finished according to specification Do the necessary housekeeping after the application of the floor finishes.	Students as a class Use models and sketches to discuss types of floor finishes. Students as a class go to completed buildings to observe types of floor finishes. Students in small groups discuss the materials for types of floor finish and the procedure for laying floor finishes. Students as a class demonstrate methods of laying floor finishes. Students in pairs discuss advantages and disadvantages of types of floor finishes.	- Critical thinking& Problem solving - Communication& Collaboration -Leadership & personal development	AUDIO-VISUAL RESOURCES Tiles, (ceramics or plastic) ileum or woodblock tile cutter, measuring table, lath, spirit level; cement (OPC) while portland cement, wire brush soft brush, towels of different size. Video, chart, internet, chalk board. https://en.m.wikipedia.org/wiki/types-of-foors
6	LAND – SCAPPING WORK	By the end of the lesson students should be able to: - Identify and list material for landscapinginterpret plan and other perimeter drawingsselect the tools for earthmovingselect other earthmoving equipment - Cut, fill and ram the undulation terrain for landscaping	i. Students as a class identify and list materials for landscaping, Interpret floor plan and other perimeter drawing ii. Students in pairs identify tools and equipment for earthmoving iii. Students in small groups carryout the following activities -cutting, hacking and laying inter locking bricks, - lay kerbs to divide areas	- Critical thinking& Problem solving - Communication& Collaboration -Leadership & personal development	AUDIO-VISUAL RESOURCES - All the tools and equipment required for good housekeeping - earthmoving tools - The floor plan - The site plan - Video chart, posters - calculators https://en.m.wikiped ia .org/wiki/land- scapping-work

WKS	TOPICS	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE SKILLS	TEACHING RESOURCES
		processlevel the soil with relevant toolslay Krebs and interlocking paring concrete according to the drawing Transfer trees and shrubs according to the required floor and other beautiful plants Treat and maintain the landscape project till maturity - Do proper house keeping	required - debris clearing - tree planting, shrubs implanting and transfer - maintenance of landscaping equipment - visit to site where landscaping process is going on		
7	MOCK	REVISION	REVISION		REVISION
	EXAMINATIO	WAEC			
1	N	EXAMINATION			
	REVISION				

ACHIEVEMENT STANDARDS FOR SSS3, SESSION

At the end of the session, the students:

- ✓ understand the fundamentals of stairs construction
- know the reason for the application of plaster on internal surfaces
- ✓ know how to construct drains an inspection chambers
- ✓ know the methods of joining different types of pipes
- know the factors that must be considered when selecting a type drainage scheme
- ✓ are able to identify and use materials for domestic plumbing
- ✓ understand the erection process of fencing
- ✓ are able to identify materials used for fencing and boundary walls
- ✓ understand the procedures for laying out floor finishes
- ✓ identify materials for landscaping
- ✓ interpret plan and other perimeter drawings

Ĵ.