## <u>The Lester Vaughan School</u> <u>Information Technology (Practical) Unit Plans – Year 1</u> <u>Term – 1</u>

WEEK	TOPIC	<b>OBJECTIVES</b>	CONTENT
1	Word Processing	• Review standard formatting features	- Doc size, margins, font attributes, B/U/I, line
		• Complete similar processes using	spacing, alignment, sub & superscript.
		Google Docs.	- students write an algorithm to a problem
			involving the above features.
2		• Produce a doc with the above features	Copy & move text, copy text from ext. source,
		while adding more WP features	insert pictures & shapes, insert screenshots,
			format shapes & pictures, insert text box / word
			art, insert page.
3		• Produce a dos which includes columns,	Insert borders, columns, Highlight text, insert and
		borders, tables and hyperlinks.	format tables, hyperlinks.
			- students write an algorithm to a problem
			involving the above features.
4		• Create a single doc to be sent to several	Create prim. doc / form letter; create a data source
		persons with info which relates to each	(in Word or Excel) {no use of wizard}.
		individual only.	Merge docs to produce individual letters.
5		• Create a fillable electronic form for	Use of content controls, such as check boxes,
		online use.	text boxes, date picker, drop-down lists, and
			command buttons.
6		• Complete Unit Test	All units, theory & practical
		• Review and tidy up units taught	
7	Spreadsheet	• Perform basic entry and calculations	Enter data in a table; resize columns & rows; use
	Management	• format a table	basic formulae: add, subtract, divide, multiply.
		• ID row, column, cell address, ranges	use sum, count, counta, average.
		• Clear & Fill functions	use features such as B, I, U, font attributes, etc.

		Format cell / range {Format Cell dialog}
8	• perform tasks including: date, counting	f, static & dynamic date entry, counts based on
	max, min,	criteria; basic if statements
	• Write logical statements (simple)	- students write an algorithm to a problem
	• Edit cells (without deleting) {F2}	involving some of the above features.
9	• Perform calculations using ACR {F4}	Calculations with simple ref cell or range (e.g. in
	• Rename cells & ranges	rank formula, a multiplier).
	Copy formulae and data	Diff. between moving cell values and copying
	• Explain what happens if data is move	d them - effect on related formulae.
	to a new location.	
10	• Write logical statements wit	h If statements with calc.; Truth Tables
	calculations.	vlookup function.
	<ul> <li>Assign values to fields / formulae from</li> </ul>	n Insert Table function.
	a list.	- students write an algorithm to a problem
	• Insert a table in a spreadsheet.	involving some of the above features.
11	• Extract data from a larger table	Advanced filtering
	• Sum values based on criteria	sumif function
12	• Perform basic calculations using vba	Intro to vba concepts

## <u>TERM 2</u>

WEEK	TOPIC	<b>OBJECTIVES</b>	CONTENT
1	Spreadsheet	• Calculate the amount payable on a loan	PMT function
	Management	• Perform calculations across sheets	sumif, countif
2		• Display summary data for presentation	Pivot Tables
3			
4		Unit Test 2	
5	Database	• Describe and create a basic database	BD concepts: purpose, uses, types, DBMS, DBM,
	Management	with one table using MS Access	RDBMS, fields, records
6		• Modify a database	DB population; design modification
		• Add data to a DB (table)	
		• Delete fields and records	
7		• Add a new table	New table in DB; Pri. & For. keys; Referential
		• perform table linking, ref. Integrity	Integrity; Relationships:- 1:1, 1:M, M:M
		• Test integrity of link (record deletion or	- Students write an algorithm based on the
	-	addition)	above processes
8		• Create a Form for data entry	Forms, sub-forms;
		• Create a sub-form	Queries: select fields - 1 table, 2 tables, single
		• Extract data using simple select queries	criterion
9		• Extract data using various techniques	Queries: preset summaries (count, max, etc.),
		• Reproduce Truth Tables	multiple criteria, wildcards, math operators, And /
			Or conditions
			- Students write an algorithm based on the
			above processes
10		• Add new fields to queries by way of	Calculated queries
		<ul> <li>Droduce reports from selected fields</li> </ul>	Creation of reports
11	Problem Solving	Describe the steps to Prob. Solving	Steps To Proh Solving: IPO charts: basic math
11	r robeni Sorving	Create an IPO	based scenarios
		<ul> <li>Analyse a simple math based prob</li> </ul>	
12		• A maryse a simple main based prob.	
14			

<u>TERM 3</u>

<b>WEEK</b>	TOPIC	<b>OBJECTIVES</b>	CONTENT
1	Problem Solving	• Describe the steps to Prob. Solving	Steps To Prob Solving; IPO charts; basic math
		• Create an IPO	based scenarios.
		• Analyse a simple math based prob.	
2		• Define sequence, repetition & iteration	IPO charts; algorithms; problem statements
3		• Define variable & constant	
		• Write an algorithm to a simple prob	
		following an IPO analysis (sequence)	
4		• Solve a prob containing an simple If	IPO charts; algorithms; problem statements which
5		statement	include logical decisions
		•	
6		• Solve a prob which requires breaking	Multi-part problem
		into seb-section and solving each part	
		individually before reconnecting the	
7			
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