COMPUTER APPLICATIONS TECHNOLOGY (CAT)
SUBJECT ASSESSMENT GUIDELINES (SAGs)
(Updated January 2021)
Implementation Grade 12 2021

CONTENTS

OVERVIEW OF COMPUTER APPLICATIONS TECHNOLOGY

Computer Applications Technology is the study of the integrated components of a computer system (hardware and software) and the practical techniques for their efficient use and application to solve everyday problems. The solutions to problems are designed, managed and processed via end-user applications and communicated using appropriate information and communication technologies (ICTs). ICTs are the combination of networks, hardware and software as well as the means of communication, collaboration and engagement that enable the processing, management and exchange of data, information and knowledge.

CAT enables creative and logical reasoning about problems in the physical and social world and in the context of ICT itself, the increase of computer literacy, creative thinking and problem solving. Education is concerned with the development of the "whole being" and not merely with imparting knowledge.

A. MEANS OF ASSESSMENT

Paper 1 (Practical) 3 hours	(180 marks reduced to 100)	[100]
Paper 2 (Theory) 3 hours	(150 marks reduced to 100)	[100]
Practical Assessment Task	(180 marks reduced to 100)	[100]
School Based Assessment (SBA)		[100]

400 marks

B. REQUIREMENTS

To be read in conjunction with the: *National Curriculum Statement Grades R–12 (January 2012)*, of the Department of Basic Education, Republic of South Africa.

EXAMINATIONS

PAPER 1: One 3-hour practical paper of 180 marks (reduced to 100 marks)

This will be a practical paper, externally set, administered internally, externally marked and externally moderated in Grade 12. This will be a 3 hour paper, out of 180 marks, reduced to 100 marks.

This paper assesses the practical skills pertaining to Solution Development, i.e., the application packages studied; namely word processing, spreadsheets and databases as well as creating a simple web page using html and a text based html editor.

Presentations will only be assessed in the Practical Assessment Task and NOT in the examinations. These skills will be assessed in an integrated manner based on real-life scenarios. Problem solving and aspects of computer management will form part of the assessment of the application questions in this paper. The paper will comprise of questions based on a scenario and will cover the following content areas in an integrated manner:

Table 1: Weighting per content area

Content Areas	Marks/180
System Technologies – File and Folder Management	20 ±5
Solution Development – Word Processing including integration	50 ±5
Solution Development – Spreadsheet including integration	50 ±5
Solution Development – Database including integration	40 ±5
Solution Development – Web Development (HTML Design)	20 ±5

The formal assessment will cater for a range of cognitive levels and abilities of learners in the ratio given below: Refer to *APPENDIX I – Blooms Questioning Levels:*

- Lower order (Routine procedures, rote learning) 30%
- Middle order (Multi-step procedures) 40%
- Higher order (Problem solving) 30%

An information sheet with HTML tags will be provided for use with the question on web development. An MS Access Input Mask List will be provided for use with the database question. The information sheet will also include anything that is supplied as part of the DBE information sheet.

The learner will not be required to enter large amounts of data. The required data could be retrieved from the data disk or imported from documents such as a text file, word processing document, a database table or a spreadsheet.

DETAILS OF THE PRACTICAL EXAMINATION (PAPER 1)

Educators need to ensure that the full package (word processor, spreadsheet, and database), including wizards and help, is installed and available on the computers used by learners taking this subject and this examination. Learners will require the use of a Text Editor, e.g. Notepad, WordPad and Notepad ++ for the HTML coding. Learners writing through the medium of Afrikaans must have an Afrikaans spell check installed. **Microsoft Office 365 (desktop) and Windows 10 are the minimum software requirements.**

In the three-hour exam, learners will be required to solve problems using the application packages namely word processing, spreadsheets, databases and Web development. The learners will be examined on the skills and content described in *Curriculum and Assessment Policy Statement (CAPS) Computer Applications Technology* – **Section 3**. Department: Basic Education Republic of South Africa (2011, Updated 2012).

PAPER 2: One 3-hour theory paper of 150 marks (reduced to 100 marks)

The paper will cover all theory aspects, including elements of Solution Development (viz. application packages and file management). A section will also assess the understanding of the technologies studied to make informed decisions in a real – life end – user scenario, ranging from choices of technology to its responsible use.

This will be a written paper externally set, externally marked and externally moderated in Grade 12. This will be a 3-hour paper, out of 150 marks, reduced to 100 marks.

Table 2: Weighting per content area

Content Areas	**Marks/150**
System Technologies	60 ±3
Internet and Network Technologies	30 ±3
Information Management	15 ±3
Social Implications	15 ±3
Solution Development	30 ±3

Table 3: Breakdown of the structure of the question paper: (Note: This does not total 150 as all topics overlap into the Short Questions and Integrated Scenario)

Section	Description	Marks/150
A	• **Questions 1 & 2: Short questions** A range of short questions aligned to all the topics.	±25
B	• **Question 3: System Technologies** Questions related to the content, concepts and skills in the systems technologies topic area.	±25
	• **Question 4: Internet and Network Technologies** Questions related to the content, concepts and skills in the Internet and WWW, e-communication and network technology topic areas.	±15
	• **Question 5: Information Management** Questions related to the management of information. In particular, using Input, Processing and Output (Algorithms) to solve a problem.	±10
	• **Question 6: Social Implications** Questions cover the concepts and skills in the social implications focus area, namely impact of ICTs on society and health, social, legal, ethical, security and environmental issues.	±10
	• **Question 7: Solution development** Questions focused on the solution development topic area, namely the knowledge and understanding that supports the practical application of skills. Viz. the theoretical concepts behind the practical use of applications.	±15
C	• **Questions 8 & 9: Integrated Scenario** This section is based on a single scenario and will be aligned to all the topics. This section will also assess the understanding of these technologies to make informed decisions in a real-life end-user scenario, ranging from choices of technology to its responsible use.	±50

DETAILS OF THE THEORY EXAMINATION (PAPER 2)

The content assessed in the paper is as described in *Curriculum and Assessment Policy Statement (CAPS) Computer Applications Technology* – Section 3. Department: Basic Education Republic of South Africa (2011, Updated 2012). Due to the conceptual progression of content across the grades, content and skills from Grade 10 to 12 will be assessed in the external papers at the end of Grade 12.

The formal assessment will cater for a range of cognitive levels and abilities of learners in the ratio given below: Refer to *APPENDIX I – Blooms Questioning Levels*

- Lower order (Knowledge/remembering) 30%
- Middle order (Understanding/applying to a known scenario) 40%
- Higher order (Analysing/evaluating/creating/applying to an unknown scenario) 30%

PRACTICAL ASSESSMENT TASK (PAT)

The Practical Assessment Task (PAT) is an analysis of the learner's individual interaction with information and the way in which he or she presents that information. This information will be finally presented in a number of documents, to communicate a solution in an integrated manner.

The purpose of the PAT is to give learners an opportunity to demonstrate their skills in the use of the application packages that they have studied, i.e. word processing, spreadsheet, database and a fourth package of their choice. The fourth package that a learner must master can differ from school to school. For this reason, the fourth package is only assessed in the Practical Assessment Task and not in the final practical paper. This project will form 25% (100 marks) of the overall Grade 12 assessment.

The PAT requirements and assessment criteria will be provided, internally marked and externally moderated. The learner in conjunction with the educator's approval must choose a task or topic that matches the criteria.

Refer to the following IEB documents for further information:

- CAT – Grade 12 – IEB PAT Task Guidelines (APPENDIX N)
- CAT – Grade 12 – IEB PAT Assessment Tools (APPENDIX N)

School based assessment (SBA) comprises 25% of the total assessment for the National Senior Certificate. The requirements for the school-based component of the Senior Certificate assessment are outlined in Table 4.

All schools must make available the SBA evidence of all learners, should it be required by the IEB or Umalusi. This can include all Grade 11 SBA work as well, if so decided by Umalusi.

These Subject Assessment Guidelines must be read in conjunction with the IEB Manual for the Moderation of School Based Assessment (2011) or latest version, available at www.ieb.co.za.

Table 4: SBA Portfolio Requirements for Grade 12

	Descriptions	Mark
Test 1/ Exam	**Standardised Theory Test** OR **Midyear Theory Paper** Content Areas covering Theory topics (e.g., hardware, software, networking, legal, ethical, security, safety, etc.)	17,5
Test 2/ Exam	**Standardised Practical Test** OR **Midyear Practical Paper** Content Areas covering Solution Development topics (apply integrated skills of word processing, spreadsheets, databases and Web Development)	17,5
***Task/Test**	Alternative assessment **OR** Test (Theory **OR** Practical **OR** Integrated)	15
Exam P1	Grade 12 Preliminary Examination Paper 1	25
Exam P2	Grade 12 Preliminary Examination Paper 2	25
Total	SCHOOL BASED ASSESSMENT (SBA)	100

*Alternative types of assessment for CAT are given in Appendix J and K of the SAGs. These types of assessments could be used as an alternative to a test.

- **Minimum time allocation for all tests and/or tasks 45 to 60 minutes.**

SCHOOL BASED ASSESSMENT (SBA)

The SBA will be externally moderated. Each learner is required to collate the evidence of the SBA tests and exams during their Grade 12 year. They should be informed of the requirements for the SBA towards the end of their Grade 11 year.

- All Tests, Tasks and Examinations in the SBA must be moderated by an educator either in your school or in your cluster. Refer to APPENDIX F – Sample Evidence of Moderation.
- The Tests and Prelim papers must include an Analysis Grid. Refer to APPENDIX I – The Blooms Questioning Levels; APPENDIX G – Sample Practical Paper Analysis Grid APPENDIX H – Sample Theory Paper Analysis Grid.

Details of the Alternative Assessment Task if chosen as an option

Alternative types of assessment for CAT are given in Appendix J and K. These types of assessments are optional to a test.

The tasks should be detailed and follow the principles of assessment. The tasks should be descriptive, allow for formative assessment and give details of deadlines and how the task is to be structured. The task must give the learner all the information required to help them produce their task. The task and the rubric must be moderated using the principles of assessment.

The task will count 15% of the Total SBA mark.

Refer to APPENDIX J for the Theory Task Documentation and APPENDIX K for the Practical Task Documentation.

A test could be a practical test or a written test. A test for formal assessment must not consist of a series of small tests but should cover a substantial amount of content and the duration should be at least 60 minutes. Each test and examination must reflect different cognitive levels as per the 30:40:30 level division.

C. MODERATION

Regional Moderation of the learner PAT and SBA (if requested by the IEB)

Please refer to the *Manual for Regional Moderators* dated 2011.

The Educator's and Learner's Files will be moderated using *APPENDIX D – SBA & PAT Moderation Form*. The Files will also be moderated according to the Umalusi Monitoring Instrument as supplied to the IEB from Umalusi. See APPENDIX L for the latest version.

The school must provide the PAT and SBA results electronically for all learners in the subject and in rank order to the Regional Moderator (RM). The RM will make his/her selection from the list. If some marks are outstanding then the results should be headed *Preliminary PAT and SBA results*.

The RM selects 10% sample of learner's PATs across a range of marks (a min of 5 PATs).

Educators may make use of electronic submission methods when submitting their educator and/or learner files to Regional Moderators, as determined in conjunction with the RM. During regional moderation educators need to present:

- An Educator's File
- The 10% sample of learners' PATs
- If requested by the IEB, the Learners' SBA Files (10%) identified for sample moderation

National Moderation for SBA and/or PAT (if requested by the IEB)

If Learners' Files and/or Educator's File have been called for National Moderation after Regional Moderation, a copy of the completed moderation tool (Appendix D) must be included in the Educator's File as evidence of regional moderation. This must be signed by the educator as well as the RM. It is important that Appendix D draws the attention of the sample moderating team at national moderation to particularly good work, any problems identified and any circumstances with which they should be familiar in order to help them make fair and pertinent recommendations. It is the responsibility of the educator to inform the school management of the outcome of the regional process in order to prepare for national moderation.

If Learners' Files and/or Educator's File have been called for National Moderation only, due to there not being an appointed RM for a particular school/area, then Appendix D is not required.

SBA and PAT evidence must be submitted to the IEB if requested by the IEB. Educators must include:

- The list, provided by the IEB, of learners identified for national year-end moderation.
- Fill in the list provided by the IEB for all your learners' SBA and PAT marks to be used for data capture.
- Their reasons for deducting marks to facilitate moderation. They should indicate these on the mark sheets.
- An Educator's SBA and PAT File together with evidence of moderation of tasks and rubrics.
- Learners' SBA Files identified for national year-end moderation and any additional Learners' Files that you wish to send should the sample not give a good representation of the group. NOTE: If a school has been called for National Moderation then ALL PAT files of all learners need to be submitted to the IEB for National Moderation.

Pack your selected Learners' SBA and/or PAT Files together with the Educator's File in a box or envelope. Attach a copy of the ranked mark sheet supplied by the IEB on the outside of the box/envelope clearly indicating your school's centre number, subject, grade and 'SBA' and/or 'PAT'. Should you wish to submit these Files electronically (keeping in mind that all written theory tests and tasks need to be submitted as well, then this can be done with the SBA/PAT IEB Moderator's written permission.

The committee moderates a smaller sample of the work produced by learners against specific criteria and is required to submit a report that is returned to schools. The moderation committee uses the completed forms submitted after regional moderation to guide their work and this committee has the authority to make motivated recommendations for the changing of marks should they deem this to be necessary.

Educator's SBA and PAT File for both Regional and/or National Moderation

Please ensure that all of the documentation is clearly organised. The Educator's SBA and PAT File should have a table of contents and each section should be clearly demarcated using file dividers or tabs so that sections are separated and easily accessible. Educators may make use of electronic submission methods when submitting their educator files to Regional Moderators.

The following should be included in the Educator's SBA in the following order:

- A front cover that includes a heading 'Educator's SBA', the centre number, the cluster number, the cluster name and the educator's name and surname.
- *Appendix D* – Regional Moderation form.
- *Appendix C – Educator's Record of Marks* – shows the results for all learners on one sheet in an electronic format.
- *Appendix E – Letter from the Principal* – signed by the Principal.
- A copy of all tests and examinations.
- Assessment tools and marking guidelines used to evaluate the tests and examination.

- Evidence of analysis in prelim exams and tests as a minimum requirement.
- A list of learners for regional and/or national moderation.
- Evidence of moderation, i.e. moderated tests, minutes, policies or checklists.
- PAT description and Assessment Tools.
- Two CD/DVDs (labelled 'SBA' and 'PAT' with the centre number) containing **ALL** learners' SBA evidence and PAT evidence separately. Each learner's work should be in a separate folder with their examination number as the name of the folder.

Learner's SBA File for both Regional and/or National Moderation

Please ensure that all the documentation is clearly organised. The Learner's SBA File should have a table of contents and each section should be clearly demarcated using file dividers or tables so that sections are separated and easily accessible. Educators may make use of electronic submission methods when submitting their educator and/or learner files to Regional Moderators.

The following should be included in the Learner's SBA File in the following order:

- A front cover that includes a heading 'SBA', the centre number, learner's name and surname and examination number.
- *APPENDIX A – Consolidation Form for Learners* – includes all SBA/PAT marks in an electronic format.
- *APPENDIX B – Declaration Form* for Learners – learner and educator to sign.
- Scripts for all tests and exams.
- Assessment tools for all tests and examinations that clearly indicate the marks awarded to each learner. Show where and why the marks were deducted.

There must be evidence of the assessment in the form of a comment or a mark on the actual mark sheet or script.

Learner's PAT File for both Regional and/or National Moderation

Please ensure that all the documentation is clearly organised. The Learner's PAT File should have a table of contents and each section should be clearly demarcated using file dividers or tables so that sections are separated and easily accessible.

The following should be included in the Learner's PAT File in the following order:

- A front cover which includes a heading 'PAT', the centre number, learner's name and surname and examination number.
- Appendix A – *Consolidation Form for Learners* – includes all SBA/PAT marks in an electronic format.
- Appendix B – *Declaration Form* – Learner and Educator to sign.
- Printouts for all Phases and Tasks.
- Assessment tools for all Phases and Tasks, which clearly indicates the marks awarded to each learner. Show where and why the marks were deducted.

There must be evidence of the assessment in the form of a comment or a mark on the actual mark sheet or printouts.

D. ADMINISTRATIVE AND SUPPORT DOCUMENTATION

APPENDIX A

COMPUTER APPLICATIONS TECHNOLOGY AMENDED 2021

CONSOLIDATION FORM FOR LEARNERS

Centre Number		Learner's Examination Number	

School Based Assessment (SBA)						
					Scaled Marks	
Task description	**Date of Submission**	**Brief Description**	**Actual Mark**	**Max Mark**	**Actual Mark**	**Max Mark**
Test/Exam 1 Theory				1	0	17,5
Test/Exam 2 Practical				1	0	17,5
Alternative Task/Test*				1	0	15
Prelim Paper 1 Practical				180	0	25
Prelim Paper 2 Theory				150	0	25
				Total SBA	0	**/100**

* Modify to reflect your Task/Test choice

Practical Assessment Task (PAT)						
					Scaled Marks	
Task Description	**Date of Submission**	**Brief Description**	**Actual Mark**	**Max Mark**	**Actual mark**	**Max Mark**
PAT Phase 1, 2 & 3				180	0	**100**

Total SBA + PAT:	0	**/200**

APPENDIX B

COMPUTER APPLICATIONS TECHNOLOGY

DECLARATION FORM FOR LEARNERS

This form must be completed by the learner, verified by the educator and included as the 1st Page of the learner's SBA file

Centre Number		Learner's Examination Number	

DECLARATION BY THE LEARNER

I, _____

(PRINT full names)

declare that all the external sources used in my SBA/PAT have been properly referenced and that the remaining work contained in this SBA/PAT is my own original work. I understand that if this is found to be untrue, I am liable for disqualification from the Senior Certificate Examination.

Signed: _____ Date: _____

LEARNER

DECLARATION BY THE LEARNER'S EDUCATOR

I, _____

(PRINT name and title of educator), at

_____

(PRINT name of school)

declare that the work provided by this learner has been monitored and checked for plagiarism.

Signed: _____ Date: _____

EDUCATOR

This declaration must be completed and filed immediately after

Appendix A: Consolidation Form for Learners *in the learner's SBA/PAT file*

APPENDIX C

COMPUTER APPLICATIONS TECHNOLOGY

SUMMARY OF STUDENT MARKS
AMENDED 2021

Name of school

Candidate's Examination Number	Surname	Name	PRACTICAL ASSESSMENT TASK (PAT)		SCHOOL BASED ASSESSMENT (SBA)											SBA + PAT
					Test/Exam 1 Theory		Test/Exam 2 Practical		Alternative Test/Task		Prelim Paper 1 Practical		Prelim Paper 2 Theory		TOTAL	
			Actual	TOTAL	Actual	Scaled	Actual	Scaled	Actual	Scaled	Actual	Scaled	Actual	Scaled		
		Maximum Marks	180	100	1	17.5	1	17.5	1	15	180	25	150	25	100	200
				0		0.00		0.00		0.00		0.00		0.00	0	0
				0		0.00		0.00		0.00		0.00		0.00	0	0
				0		0.00		0.00		0.00		0.00		0.00	0	0
				0		0.00		0.00		0.00		0.00		0.00	0	0
				0		0.00		0.00		0.00		0.00		0.00	0	0
				0		0.00		0.00		0.00		0.00		0.00	0	0
				0		0.00		0.00		0.00		0.00		0.00	0	0
				0		0.00		0.00		0.00		0.00		0.00	0	0
				0		0.00		0.00		0.00		0.00		0.00	0	0
				0		0.00		0.00		0.00		0.00		0.00	0	0
				0		0.00		0.00		0.00		0.00		0.00	0	0
		Average	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0

* Modify to reflect your Task/Test choice

EDUCATOR : SIGN ______________________ PRINCIPAL : SIGN ______________________

APPENDIX D

REGIONAL PORTFOLIO MODERATION CHECKLIST
Amended 2021
All CAT Educators are to fill out Section A and place form in front of Educator's File

SECTION A – SBA & PAT Moderation Form

Centre Number					
Educator's Name		**School**			
Cluster Name		**Cluster Number**			
Number of Cluster Meetings attended		**out of a possible (maximum)**		2	
Number of learners entered for the National Senior Certificate Examination with the IEB		**SBA: Printed/Digital**			
Data Files Included (Y/N)		**PAT: Printed/Digital**			

SECTION B – To be filled in by Moderator

Moderator's Name			**Moderator's School**			
Educator's File						
Educator's File available	Y/N	Content page	Y/N	Cover sheet with centre's details clearly labelled		Y/N
SBA						
Test 1 Theory			Y/N	Assessment Tool with memorandum present		Y/N
Test 2 Practical			Y/N	Assessment Tool with memorandum present		Y/N
Task/Test			Y/N	Assessment Tool with memorandum present		Y/N
Prelim Examination: Practical			Y/N	Assessment Tool with memorandum present		Y/N
Prelim Examination: Theory			Y/N	Assessment Tool with memorandum present		Y/N
Is the duration of tests and the exams indicated?			Y/N	Are the instructions clear?		Y/N
Examination analysed to cognitive levels – analysis grids present						
PAT Task Descriptions						
Practical Assessment Task (PAT)	Y/N	Assessment Tool present (e.g. rubric, memoranda, checklists)				Y/N
Recording/Administration						
Appendix C – Learner's achievement accurately recorded			Y/N	Appropriate mark allocation?		Y/N
Appendix E – Letter from Principal			Y/N	All documentation signed and dated?		Y/N
Evidence of minutes/agendas of cluster meetings			Y/N			
Tests and Examinations Standard						
Test 1 Theory	inappropriate	consolidating	acceptable	Evidence of moderation		Y/N
Test 2 Practical	inappropriate	consolidating	acceptable	Evidence of moderation		Y/N
Task/Test	inappropriate	consolidating	acceptable	Evidence of moderation		Y/N
Prelim Examination: Practical	inappropriate	consolidating	acceptable	Evidence of moderation		Y/N
Prelim Examination: Theory	inappropriate	consolidating	acceptable	Evidence of moderation		Y/N

Learner's SBA Files			
Appendix A – Consolidation Form for Learner	Y/N	Accurately converted, recorded and allocated?	Y/N
Appendix B – Declaration Form accurately completed	Y/N	Cover sheet with learner's details clearly labelled?	Y/N
Content page present	Y/N		
Learner's PAT Files			
PAT Assessment Tools for Learner	Y/N	Accurately converted, recorded and allocated?	Y/N
Appendix B – Declaration Form accurately completed	Y/N	Cover sheet with learner's details clearly labelled?	Y/N
Content page present	Y/N		

Moderation of evidence provided: Tests, Examinations and Practical Assessment Task			
Practical Assessment Task (PAT)			
Appendix D – Regional SBA Moderation Form available if National Moderation requested	Y/N	IEB list used for capturing marks available	Y/N
Project based on a common scenario?	Y/N	Topic of a suitable nature?	Y/N
Correct documentation according to guidelines?	Y/N	Marked according to assessment tool and accurate?	Y/N
School Based Assessment (SBA)		**Requested by the IEB?**	**Y/N**
Appendix D – Regional SBA Moderation Form available.	Y/N	IEB list used for capturing marks available	Y/N
Test 1 – Theory – scripts included?	Y/N	Marked according to assessment tool and accurate?	Y/N
Test 2 – Practical – printouts/electronic files included?	Y/N	Marked according to assessment tool and accurate?	Y/N
Task/Test – printouts/electronic files included	Y/N	Marked according to assessment tool and accurate?	Y/N
Prelim Examination: Practical – printouts/ electronic files included?	Y/N	Marked according to assessment tool and accurate?	Y/N
Prelim Examination: Theory – scripts/printouts included?	Y/N	Marked according to assessment tool and accurate?	Y/N

Additional Comments:

_____

_____

_____

EDUCATOR'S SIGNATURE Date:

_____ _____

RMs SIGNATURE Date:

_____ _____

(Moderator to please sign and date the front of the Educator's File as well as SBAs/PATs moderated using a green pen)

APPENDIX E

COMPUTER APPLICATIONS TECHNOLOGY

LETTER FROM THE PRINCIPAL

SCHOOL ADDRESS

_____

_____

_____

_____

The IEB
P O Box 875
Highlands North
2037

Dear IEB Moderator

RE: SCHOOL BASED ASSESSMENT AND MODERATION OF SBA IN GRADE 12

COMPUTER APPLICATIONS TECHNOLOGY

We certify that:

Educators of the same subject have ensured that	**Circle your response**	
they have met regularly to reflect on and discuss issues of standardisation	YES	NO
the assessments they have set learners are of the required standard	YES	NO
the memoranda they have used for marking are accurate and functional	YES	NO
the assessments learners have completed meet the criteria described in the IEB Subject Assessment Guidelines	YES	NO
marking is complete and of the appropriate standard	YES	NO
all administrative procedures have been correctly completed	YES	NO
all information on the 1st page of the SBA/PAT (Appendix A) in each learner's SBA File is complete and correct	YES	NO

_____ EDUCATOR

_____ PRINCIPAL

DATE: _____

DATE: _____

APPENDIX F

COMPUTER APPLICATIONS TECHNOLOGY

SAMPLE EVIDENCE OF MODERATION FORM

Centre Number/ School				**Date**	
Assessment Type	**Alternative Assessment Task**	**Test**	**Exam**	**Length**	
Set By				**Moderated by**	

Please tick the appropriate column (Yes/No)

Use of marking grid	**Yes**	**No**	**Comment**
Updated marking grid used			
Allocation of marks justified			

Comments:

MODERATOR'S SIGNATURE _____ Date: _____

To be completed and returned to the school.

APPENDIX G

COMPUTER APPLICATIONS TECHNOLOGY

PRACTICAL ANALYSIS GRID

TEST/TASK/EXAM TOTAL: 1

	Taxonomy			Content Areas					
	Lower Order	Middle Order	Higher Order						
Question Number	Routine Procedures	Multi-step Procedures	Evaluation and Problem Solving	Computer Management	Word Processing	Spreadsheets	Database	Web Development	Question Totals
	30%	40%	30%	11%	28%	28%	22%	11%	100%
1.1									0
1.2									0
1.3									0
1.4									0
1.5									0
1.6									0
1.7									0
1.8									0
1.9									0
1.10									0
									0
									0
									0
									0
Total Question 1	0	0	0	0	0	0	0	0	0
2.1									0
2.2									0
2.3									0
2.4									0
2.5									0
2.6									0
2.7									0
2.8									0
2.9									0
2.10									0
									0
									0
									0
Total Question 2	0	0	0	0	0	0	0	0	0

	Taxonomy			Content Areas					
	Lower Order	Middle Order	Higher Order						
Question Number	Routine Procedures	Multi-step Procedures	Evaluation and Problem Solving	Computer Management	Word Processing	Spreadsheets	Database	Web Development	Question Totals
	30%	40%	30%	11%	28%	28%	22%	11%	100%
3.1									0
3.2									0
3.3									0
3.4									0
3.5									0
3.6									0
3.7									0
3.8									0
3.9									0
3.10									0
									0
									0
									0
									0
									0
									0
									0
									0
									0
Total Question 3	0	0	0	0	0	0	0	0	0
4.1									0
4.2									0
4.3									0
4.4									0
4.5									0
4.6									0
4.7									0
4.8									0
4.9									0
4.10									0
									0
									0
									0
									0
									0
									0
									0
Total Question 4	0	0	0	0	0	0	0	0	0

	Taxonomy			Content Areas					
	Lower Order	Middle Order	Higher Order						
Question Number	Routine Procedures	Multi-step Procedures	Evaluation and Problem Solving	Computer Management	Word Processing	Spreadsheets	Database	Web Development	Question Totals
	30%	40%	30%	11%	28%	28%	22%	11%	100%
5.1									0
5.2									0
5.3									0
5.4									0
5.5									0
5.6									0
5.7									0
5.8									0
5.9									0
5.10									0
									0
									0
									0
									0
									0
									0
									0
Total Question 5	0	0	0	0	0	0	0	0	0
6.1									0
6.2									0
6.3									0
6.4									0
6.5									0
6.6									0
6.7									0
6.8									0
6.9									0
6.10									0
									0
									0
									0
									0
									0
									0
									0
Total Question 6	0	0	0	0	0	0	0	0	0

	Taxonomy			Content Areas					
	Lower Order	Middle Order	Higher Order						
Question Number	Routine Procedures	Multi-step Procedures	Evaluation and Problem Solving	Computer Management	Word Processing	Spreadsheets	Database	Web Development	Question Totals
	30%	40%	30%	11%	28%	28%	22%	11%	100%
7.1									0
7.2									0
7.3									0
7.4									0
7.5									0
7.6									0
7.7									0
7.8									0
7.9									0
7.10									0
									0
									0
									0
									0
Total Question 7	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8.1									0
8.2									0
8.3									0
8.4									0
8.5									0
8.6									0
8.7									0
8.8									0
8.9									0
8.10									0
									0
									0
									0
									0
									0
Total Question 8	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PERCENTAGES	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0**

APPENDIX H

COMPUTER APPLICATIONS TECHNOLOGY

SAMPLE THEORY ANALYSIS GRID

TEST/TASK/EXAM TOTAL: 1

	Taxonomy			Content Areas						
	Lower Order	Middle Order	Higher Order							
Question Number	Knowledge	Applying Knowledge in Familiar Contexts	Reasoning and Reflecting Applying Knowledge in Unfamiliar Contexts	Solution Development	Systems Technologies	Internet Technologies	Network Technologies	Information Management	Social Implications	Question Totals
	30%	40%	30%	20%	40%	10%	10%	10%	10%	100%
1.1										0
1.2										0
1.3										0
1.4										0
1.5										0
1.6										0
1.7										0
1.8										0
1.9										0
1.10										0
										0
										0
										0
										0
Total Question 1	0	0	0	0	0	0	0	0	0	0
2.1										0
2.2										0
2.3										0
2.4										0
2.5										0
2.6										0
2.7										0
2.8										0
2.9										0
2.10										0
										0
										0
										0
Total Question 2	0	0	0	0	0	0	0	0	0	0

	Taxonomy			Content Areas						
	Lower Order	Middle Order	Higher Order							
Question Number	Knowledge	Applying Knowledge in Familiar Contexts	Reasoning and Reflecting Applying Knowledge in Unfamiliar Contexts	Solution Development	Systems Technologies	Internet Technologies	Network Technologies	Information Management	Social Implications	Question Totals
	30%	40%	30%	20%	40%	10%	10%	10%	10%	100%
3.1										0
3.2										0
3.3										0
3.4										0
3.5										0
3.6										0
3.7										0
3.8										0
3.9										0
3.10										0
										0
										0
										0
										0
										0
										0
										0
										0
Total Question 3	0	0	0	0	0	0	0	0	0	0
4.1										0
4.2										0
4.3										0
4.4										0
4.5										0
4.6										0
4.7										0
4.8										0
4.9										0
4.10										0
										0
										0
										0
										0
										0
										0
										0
										0
Total Question 4	0	0	0	0	0	0	0	0	0	0

	Taxonomy			Content Areas						
	Lower Order	Middle Order	Higher Order							
Question Number	Knowledge	Applying Knowledge in Familiar Contexts	Reasoning and Reflecting Applying Knowledge in Unfamiliar Contexts	Solution Development	Systems Technologies	Internet Technologies	Network Technologies	Information Management	Social Implications	Question Totals
	30%	40%	30%	20%	40%	10%	10%	10%	10%	100%
5.1										0
5.2										0
5.3										0
5.4										0
5.5										0
5.6										0
5.7										0
5.8										0
5.9										0
5.10										0
										0
										0
										0
										0
										0
										0
										0
										0
Total Question 5	0	0	0	0	0	0	0	0	0	0
6.1										0
6.2										0
6.3										0
6.4										0
6.5										0
6.6										0
6.7										0
6.8										0
6.9										0
6.10										0
										0
										0
										0
										0
										0
										0
										0
										0
Total Question 6	0	0	0	0	0	0	0	0	0	0

	Taxonomy			Content Areas						
	Lower Order	Middle Order	Higher Order							
Question Number	Knowledge	Applying Knowledge in Familiar Contexts	Reasoning and Reflecting Applying Knowledge in Unfamiliar Contexts	Solution Development	Systems Technologies	Internet Technologies	Network Technologies	Information Management	Social Implications	Question Totals
	30%	40%	30%	20%	40%	10%	10%	10%	10%	100%
7.1										0
7.2										0
7.3										0
7.4										0
7.5										0
7.6										0
7.7										0
7.8										0
7.9										0
7.10										0
										0
Total Question 7	0	0	0	0	0	0	0	0	0	0
8.1										0
8.2										0
8.3										0
8.4										0
8.5										0
8.6										0
8.7										0
8.8										0
8.9										0
8.10										0
										0
Total Question 8	0	0	0	0	0	0	0	0	0	0
9.1										0
9.2										0
9.3										0
9.4										0
9.5										0
9.6										0
9.7										0
9.8										0
9.9										0
9.10										0
										0
Total Question 9	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0
PERCENTAGES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0

APPENDIX I

COMPUTER APPLICATIONS TECHNOLOGY

BLOOMS QUESTIONING LEVELS

COGNITIVE	LOWER ORDER SKILLS		MIDDLE ORDER SKILLS	HIGHER ORDER SKILLS		
THEORY	KNOWLEDGE/REMEMBERING		UNDERSTANDING/ APPLYING	ANALYSING/EVALUATING/CREATING		
PRACTICAL	ROUTINE PROCEDURES		MULTI-STEP PROCEDURES	EVALUATION & PROBLEM SOLVING		
BLOOMS	KNOWLEDGE	COMPREHENSION	APPLICATION	ANALYSIS	SYNTHESIS	EVALUATION
Description	**Information Gathering** Retrieving, recalling or recognising knowledge from memory. Remembering is when memory is used to produce definitions, facts or lists, or recite or retrieve knowledge/learning.	**Confirming** Constructing meaning from different types of functions whether they are written or graphic.	**Making use of knowledge** Applying related and refers to situations where learned material is used through products like models, presentation, interviews and simulations.	**Taking apart** Breaking concepts into parts, determining how the parts relate or interrelate to one another or to an overall purpose. Mental actions include differentiating, organizing and attributing as well as being able to distinguish between components.	**Putting Together** Putting the elements together to form a coherent or functional whole; reorganising elements into a new pattern or structure through generating, planning or producing.	**Judging outcomes** Making judgements based on criteria and standards through checking and critiquing.
What the learner does	Learner recalls or recognises information, ideas and principles in the approximate form in which they were learned.	Learner translates, comprehends, or interprets information based on prior learning.	Learner selects, transfers, and uses data and principles to complete a problem or task.	Learner distinguishes, classifies and relates the assumptions, hypotheses, evidence, or structure of a statement or question.	Learner originates, integrates, and combines ideas into a product, plan or proposal that is new to him or her.	Learner appraises, assesses, or critiques on a basis of specific standards and criteria.
The skills demonstrated at this level are those of	• observation and recall of information • knowledge of dates, events, places; • knowledge of major ideas • mastery of subject matter	• understanding information; • grasping meaning • interpreting facts • comparing • contrasting	• using information • using methods, concepts, theories in new situations • solving problems using required skills or knowledge • translating knowledge into a familiar context	• seeing patterns • organization of parts • recognition of hidden meanings • identification of components • inferring causes • predicting • consequences	• using old ideas to create new ones • generalising from given facts • relating knowledge from several areas • predicting, drawing conclusions • translating knowledge into a unfamiliar context	• comparing and discriminating between ideas • assessing value of presentations • making choice based on reasoned argument • verifying value of evidence • recognising subjectivity

Sample trigger words	• collect • define • examine • identify • label list • name quote • repeat • tabulate • tell • what • when • where • who	• compare • contrast • describe • differentiate • discuss • distinguish • estimate • explain extend • illustrate interpret • paraphrase • predict • summarize	• apply calculate • change • complete • compute • construct • demonstrate • discover • examine • illustrate • modify • relate • show • solve use	• analyse • arrange • categorise • classify • compare • connect • contrast • divide • extract • infer order • select • separate	• combine • compose • create • design • develop • formulate • hypothesize • integrate • modify • plan • prepare • rearrange • rewrite • substitute	• argue • assess • conclude • convince • decide • discriminate • explain • judge • justify • measure • predict • rank • summarize • test
Theory Question Stems	• Choose the best description • Give appropriate term ... • Identify • List • Name • Provide definitions • Select appropriate answer • State true or false • What • Will	• Describe • Discuss the term • Explain	• Advantages • Conclude • Disadvantages • Examples • Identify where • Identify • Motivate why • Suggest • Support the recommendation • Why	• Argue • Compare • Determine • Discuss how • Discuss the importance of Explain • Generate • Give/list tips	• How could you tell ...? • Justify • Predict • Propose solutions • Provide reasons • Recommend • Suggest • Why is it important ...?	
Practical Question Stems	• Rename Move • Wrap the headings Format • Resize • Insert a comment/column • Hide • Delete • Exclude	• Adjust • Use the data • Show all the formulas • Replace the words • Activate protection Merge • Split • Edit according to the editing symbol indicated • Print only	• Insert/Apply a function or formula • Convert	• Arrange the data • Construct a formula or function • Create a named range • Design a chart/graph • Import • Export • Generate a Lookup • Devise input • Plan a query • Group the report • Process a mail merge • Merge the form letter		

APPENDIX J – THEORY TASK 1

Scenario

You and a few of your peers start a company and rent a small building to conduct your business. You have set aside a budget of R200,000 to setup the technology in your company to allow for your business to work effectively and efficiently. You want to ensure your business will have a minimum of five employees who need workstations with access to the internet.

Theory Task Details

Step 1

You need to think of a topic (with your educator's approval) that you can relate to in order for you to be able to:

- collect information
- process the data
- display the results

EXAMPLES

- A gym club
- A school CAT Lab
- A grocery store
- A local branch of a bank
- A Doctors' Practice
- A Graphic Design or Video Production Studio

This task can be done individually or in a group of a maximum of two learners. In this task, you need to provide:

Step 2 – 20 marks

Company details

- Give a summary of what your business will be doing.
- A list of technical requirements for your company will need to run sufficiently. Both Hardware and Software requirements must be considered.

Step 3 – 10 marks

Budget

- This should be done in a spreadsheet and embedded into the final network proposal.
- Set up two different quotes for all hardware and software required for your network.
- Compare quotes and chose the one you feel is most suited to your requirements. You must justify your choice.
- Add the chosen quotation figures to the budget.

Step 4 – 6 marks

Floor, device setup

- Set up a floor plan of the office that you will be renting.
- Indicate layout of devices.

Step 5 – 10 marks

Network plan

- Data Transfer Medium, Logical Topology, Media Access Method, Speed of Data Transfer and Protocol must be indicated. All choices must be justified.
- How all the devices would be connected to the network
- Naming of devices on the network
- Responsibility of each device on the network.

Step 6 – 4 marks

Internet connection

- The type of connection you will have
- ISP and contract/package

Bonus Work

- Indicate what makes your network stand out from others, for example, special devices that only your company may need in the network.

TOTAL MARKS: 60

A sample rubric follows that is suitable for marking Task 1 Theory (The rubric is out of 60, which includes 5 marks for group work, if undertaken. These marks can be left out if group work is not done.)

MARKING GUIDELINES FOR PORTFOLIO TASK 1

Company Details – Summary		
0–1: Summary vague, unclear	2–3: A basic understanding of what the company is going to do is present. Contains errors in grammar or spelling.	4–5: A concise but clear summary provided that leaves the reader with an understanding of what the business is about.
List of technical requirements		
0–3: Technical specifications are unclear, incomplete, missing or unjustified.	4–9: A basic list and understanding of what the technical requirements will be, is present. Contains errors in grammar or spelling.	10–15: A concise but clear and complete list that provides full and justified reasons for all required hardware and software.
Budget		
0–2: Minimal hardware or software purchased does not keep to budget or compared to other quotes. Presented extremely poorly.	3–6: Acceptable hardware and software required for a functional network, calculations and comparisons are lacking and justification of choice lacking. Some use of advanced spreadsheets functions and graphs present.	7–10: Hardware and software would make for a good network setup. Components well compared and choice justified. Use of advanced spreadsheet functions and graphs is excellent and relevant.
Floor plan with device setup		
0–2: Referencing of where floor plan was obtained from or how it was designed not present. Components layout unclear with no key to give details of different devices. Incorrect layout planned	3–4: Floor plan referenced or explained on how developed. Components shown on diagram but missing detail.	5–6: Impressive floor plan, easy to read with a clear key and description of network components.
Network plan		
0–2: No understanding of topologies, protocols or medium shown in network plan.	3–6: Some understanding shown but would leave person setting up the network unclear. Not all functions that were listed earlier would work with setup.	7–10: Good understanding of topologies, protocols and mediums, easy to follow and would ensure network is setup correctly and all functions listed would work.
Internet Connection		
0: Minimal discussion. No mention of ISP or packages considered	1–2: Decent but missing some necessary information.	3–4: Sufficiently detailed to include all required information pertaining to the internet connection. ISP and package chosen with justifiable reasons given.
Bonus Work		
0: No Extra Effort Evident	1–3: Clearly shows learner(s) put in additional effort	4–5: Exceptional extra work
Division of Work (If done in a group) Leave out if Task done individually		
0: No indication of how functioned in group or how work was split.	1: Minimal detail of how worked as team and work split provided.	2: Detailed report back on experience as team and how work split.
Individuals contribution		
0: Individual let team down, their contribution was poor.	1: Worked well in team and produced respectably in the team.	2–3: Worked well in the team, helped the team produce good work and carried themselves well.

APPENDIX K – PRACTICAL TASK 2

Scenario

The Practical will be a task in which a survey (in an electronic format) will be sent out and responses obtained and then the results will be processed to get a solution for a particular scenario. Mail merging, electronic forms in a word processor and importing of data must form part of this practical task.

Practical Task Details

Step 1

You need to think of a topic (with your educator's approval) that you can relate to in order for you to be able to:

- collect information
- process the data
- display the results

EXAMPLE

- Free education for first year university
- Should school uniform still be part of a school's ethos?
- The using the Census to gauge the populations' general feeling about the country, for example, Water Delivery in Urban Areas or Electricity Costs in the country
- Friends' interests regarding sport/movies/etc.

Step 2 – 24 marks

You need to create an online form that can be emailed to at least 30 people who would need to complete this and email the form back to you. You can ask your friends to help. There must be proof that you have emailed this information and not just that completed it yourself. The proof can be by showing evidence of email conversations.

The following fields need to be in your Questionnaire/Survey at a minimum

FIELD	**CRITERIA**
Name	Title Case and Maximum of 60 letters
Surname	Title Case and Maximum of 50 letters
Age	Value field with maximum of 2 digits
Date of Birth	MMMM-yy-dd
Appropriate questions to use	List Box
Appropriate questions to use	Drop down box
Appropriate questions to have	Option Button/tick Box
Contact numbers	Number with a Default text
Gender	M or F

It is in your best interest to add extra fields and data, to ensure that the form is professionally designed.

Extra marks will be awarded for originality and the professional look of your form.

The following should be used:
- appropriate fonts and font sizes
- a page border
- tab stops
- automatic numbering/bullets
- table

The form must be protected by using editing restrictions so that only the form fields can be filled in and a generic password is to be used, for example, 1234.

Step 3 – 20 marks

Once you have collected all the information, you need to extract and capture the data in an Excel spreadsheet. The Excel spreadsheet needs to demonstrate the advanced skills that you have learned; therefore, you need to make use of Merging, Shading, Text Wrapping, etc.

The following functions should also be used at a minimum:
- Sum, Average, Max, Min
- Count formulas
- If statements
- VLookup

A suitable graph needs to be used to display the resulting information obtained.

The graph must have:
- a Title
- X and Y Axes
- results must displayed above the bars
- an image needs to be used for the bars, not just a normal colour

Display your expertise and creativity and you can get bonus marks!

Step 4 – 29 marks

To complete the task, you need to thank all the people who have completed your questionnaire/survey and give them feedback.

You must link your Graphs to the letter so that when changes are made, the letters will be updated automatically.

You need to create a Merge Document IMPORTING the data that is in the Excel spreadsheet.

The Merge Document needs to have the necessary fields to ensure each person who completed your questionnaire/survey gets a personalized letter.

Your own creativity will be awarded marks.

You should use:
- Drop Caps
- Correct layout for a formal letter
- Appropriate font
- At least Merge Fields for the Name, Surname, Contact number of each person
- An appropriate thank you image.

TOTAL MARKS: 75

A sample rubric follows that is suitable for marking Task 2 Practical.

MARKING GUIDELINES FOR PORTFOLIO TASK 2

Step 2 – Collection of Data							
Scale	6	5	4	3	2	1	0
Survey/Questionnaire	Proof of 40 Emails	Proof of 30 Emails	Proof of 20 Emails	Proof of 10 Emails	Proof of 5 Emails	Proof of <5 Emails	
Electronic Form Created						Yes	No
Criteria Correctly used	All 6 Criteria used as indicated in table	5 Criteria used as indicated in table	4 Criteria used as indicated in table	3 Criteria used as indicated in table	2 Criteria used as indicated in table	1 Criterion used as indicated in table	No
Design of form		5 suggestions used	4 suggestions used	3 suggestions used	2 suggestions used	1 suggestion used	No
Form Professionally designed			The standard of a Gr 12 Learner is evident	Grade 11 skills used	Grade 10 skills only used	Basic skills used	No
Form Restricted						Yes	No
Password						Yes	No
Total Step 2	**/24 Marks**						

Step 3 – Spreadsheets							
Scale	6	5	4	3	2	1	0
Skills used			The standard of a Gr 12 Learner is evident		Very basic formatting skills were used		No skills
Functions used	Advanced Functions Used	Suggested Functions Used			Very basic functions used		No functions
BAR Graph	Extra initiative used not only suggestions	All 4 suggestions used	3 suggestions used	2 suggestions used	1 suggestion used		Nothing done
Creativity			Did more than was expected				
Total Step 3	**/20 Marks**						

Step 4 – Word Processing - MERGING							
Scale	6	5	4	3	2	1	0
Letter		Correct formal for a formal letter is evident	Some information missing with regards to a formal letter	Informal Letter created			
Graph			Paste special, Linked to Excel	Just pasted not linking done			
Merge	Excellent use of merge fields	Some use of merge fields				No merge fields	
Merge Fields			Imported from Spreadsheet	Typed in			
Skills used	Skills are evident of a Gr 12 learner's work		Skills are evident of a Gr 11 leaner's work		Some effort was made		
Image			Correct Image used with some formatting done	Correct Image used no formatting		Imaged used but wrong	No image
Bonus Marks							
					Exceptional extra work	Clearly shows some additional effort	No Extra Effort Evident
Total Step 4	**/31 Marks**		GRAND Total	/75		%	

APPENDIX L – THEORY CURRICULUM

System Technologies

Grade 10	Grade 11	Grade 12
	(All systems technologies concepts and skills from Grade 10, together with the new systems technologies concepts and skills can be assessed in Grade 11)	(All systems technologies concepts and skills from Grade 10 and Grade 11, together with the new systems technologies concepts and skills can be assessed in Grade 12)
• The main components of a computer system: – Hardware and software • Definition/description of Hardware		
• Generic model/definition of a computer – Input Processing Output Model (IPO) • Concepts of data and information: – Explain the difference between data and information • Give examples of uses of data and information within a familiar organisation such as the school • Information processing cycle: input, processing, output, storage as well as communication. • Introduce algorithms using pseudocode or simple English for a variety of real-life examples. (Look at the simple Input, Processing and Output for each example.)	• Advanced Information processing: Input, output, processing, storage and communication, using algorithms to create a step by step solution to a real-life problem. This can include, if statements, repeated code i.e., list steps to be repeated. • Role and use of data, information, knowledge, conclusion/decision as part of information management	• Analyse real life examples using IPO and algorithms • Advanced examples of Input, output, processing, storage and communication as part of the information processing cycle • Know how to apply digital tools to: – Communicate – Gather – Analyse – Use information – Solve problems including using algorithms
• Identifies and distinguishes between computer types and associated software: – Laptops, desktop, server, embedded computers, smart wear, tablets, smartphones, 2-in-1 devices single board computer e.g. Raspberry PI and Arduino • Understand computers and their uses • Advantages and disadvantages of using computers • Dedicated devices such as ATMs and electronic appliances (embedded computers)	• Types of computers and typical features – Personal, SOHO, mobile, power, disabled users • Categorize computers – Portable (mobile)/non-portable – Processing power – Usage	• Types of computer systems for different uses: – Client/server • Know how to use computers as tools to access information and to communicate with others around the world

• Types of input: – Data – unprocessed text, numbers, images, video and audio – Instructions – programs, commands and user response	• Input devices for physically challenged users • Interpret input device(s) specifications given in adverts	
• Generic/common input devices: – Keyboard and mouse: o Ergonomic considerations – Pointing devices o Touch pad, trackball, keyboards, touch screen, stylus and joystick – Digital camera – Scanning and reading devices o Flatbed, handheld and sheet feed scanners, mouse scanner o Radio-frequency identification (RFID), magnetic stripe, bar-coding, QR code o Optical character recognition (OCR) – Video input – video camera and webcam – Audio input: Microphone and voice recognition – Biometric input, e.g. fingerprint or retinal scanners	• Advantages, disadvantages and limitations: – Scanners and digital cameras – Biometric input – Input hand-held devices	• Making buying decisions: – What to buy?/Why?/Fit for purpose • Recommend input device(s) for a specific scenario
• Types of output: text, graphics, audio and video • Hard copy vs soft copy	• Output devices for physically challenged users • Interpret output device(s) specifications given in adverts	
• Generic/common output devices: – Monitors (size, quality, HDMI, VGA, FHD) – Printers (inkjet and laser, 3D: purpose, advantages, disadvantages print speed, quality, cost) – Audio output: o Headsets and speakers – Other output o multifunction devices, data/DLP projector	• Advantages, disadvantages and limitations: – Display devices	• Making buying decisions: – What to buy?/Why?/ Fit for purpose • Which printer is best for task? Why? – Use given factors such as Budget, speed, colour, cost per page, graphics capability, photo printing, paper type and size, system compatibility, future needs, wireless capability, mobility, fit for purpose – Resolution, economy and environmental considerations • Recommend output device(s) for a specific scenario
• Generic/common storage devices and media: – Mechanical hard drive (HDD) (fixed and portable) – Solid State drive (SSD) – USB flash drives – Optical drives: CDs, DVDs and Blu-Ray – Memory cards and card reader	• Online/Cloud storage – Advantages/ disadvantages • Suitable storage media for backup • Interpret specifications given in Adverts	• Capacity, robustness, backup, fit for purpose • Recommend storage device(s) for a specific scenario

• Measuring capacity (KB, MB, GB and TB, PB, EB) of storage media • Robustness, capacity of storage media • Primary storage (memory) vs secondary storage		
• System Unit: Motherboard, CPU and primary storage memory (BIOS, RAM, ROM), secondary storage and peripherals • Measuring speed in GHz	• Understand the role of basic components of the system unit – Motherboard – houses components – CPU – processing – RAM – holds data and instructions during processing/execution. Types of RAM, e.g. DRAM, SRAM, SDRAM, DDRRAM chips. – ROM - PROM, EPROM, EEPROM – stores start-up instructions – Graphic/Video Cards • Interpret system specifications given in adverts	• Making informed decisions regarding the basic components of the system unit, e.g. buying a system that will be suitable for running software (system requirements) regarding processor and RAM • Interpret specifications regarding CPU and RAM (basic) • Recommend system unit for a specific scenario • Improving components/devices specific to the task
• Identify hardware components • Identify ports and connectors such as network, USB (including variations), HDMI/VGA ports • Methods for connecting peripherals (cabled, wireless, e.g. USB, Bluetooth, WiFi)	• What software/other equipment is required, e.g. device drivers, OCR	
	• Overview and basic concepts of start-up process (booting)	
	• Basic troubleshooting hardware problems including the following: – disk errors – resolution – non-responding programs, mouse, keyboard – printing problems – checking amount of used or free space on storage medium – connections	• Advanced troubleshooting For example: – UPS
• Define and describe Convergence		• Know about upgrading and how to integrate equipment with new products/technology • Understand when to upgrade hardware/software covered in previous sections, when to buy new equipment or software and make informed decisions
• Identify software components – Definition/description of Software – System software vs application software – Graphical user interfaces (GUI) ○ Identifying and using typical components of a GUI such as icons, toolbars, menu usage and navigation, radio buttons,	• Software: basic system requirements – Hard disk space, CPU, RAM – What does it mean? – How does it link with software? • Software installation – Portable storage medium – Internet download	• Risks of using flawed software • Recommend specific software for a specific scenario • Factors that influence performance such as: – RAM – Type of processor, processor speed, number of cores, amount of cache – Number of applications running and caching – Disk optimisation

checkboxes, dialogs, lists and combo boxes ○ Minimizing, restoring, resizing, moving and closing windows – Freeware, shareware and proprietary software – Open source software – definition, benefits and disadvantages – Licensing and licensing agreements including end-user, site license agreements, subscription model and creative commons		
• System Software – Define and describe system software – Operating system – basic function/purpose, typical features of a GUI – Operating systems associated with: ○ Desktop OS ○ Mobile OS ○ Embedded OS – Define a driver – Define and describe Auto configuration of devices – Hot swappable/plug-and-play (autoconfiguration) – Basic security (PC/laptop) – log on, username, password (concept of authentication), other authentication such as screen lock pattern, biometric scanning apps	• System Software general troubleshooting – e.g. disk cleanup, wizards (e.g. fixing connection problems, printing problems)	
• Define and describe Utility programs	• Utility Programs: – Schedule/update – Backup/Archive – Firewalls	
• Application Software (Apps) – Define and describe application software – Common/generic examples such as Office suites, financial applications, designing and gaming/entertainment	• Application Software (Apps) Installation: – Compatibility issues – Versions, patches and service packs – Updating software • Software for physically challenged users: – screen readers – voice recognition software – etc.	• Software that enhances input: – Typing tutor/keyboarding skills • Know how to use application packages and when to use which one
• Windows Operating System – Basic accessories such as calculator, paint and snipping tool. – Icons, shortcuts, Start button, task bar, Pinning, Creating shortcuts – Start menu, notification area, search box, – My Computer, My Documents, Recycle Bin,	• Windows Operating System – Task View – Notification Area – Action Center – Quick Actions – Printing ○ Changing the default printer ○ Printing and printer queue management – personal computer	• Windows Operating System – Windows Task Manager – Identify general hardware configuration of a computer in terms of: ○ the processor ○ memory ○ hard drive size – General troubleshooting ○ e.g. disk cleanup, wizards (e.g. fixing connection

– Universal apps, Windows Store/App Store/Play Store – File explorer – Desktop background – Access Apps/software – Creating shortcuts – Adding new peripheral such a printer, mouse		problems, printing problems)
Basic file operations: • Describe file organisation • Basic concepts and introduction to file organisation: drives, folders and files – Examples of different types of files – File extensions (association) – common/generic extensions such as o archived/compressed, forms of text files, webpages o applications like word processor, spreadsheet, database and presentations o graphics, movie, sound, animation o PDF	Basic file operations: – Sharing Files – Emailing or messaging files – Printing documents – advanced options – Sharing with other users or networks – Cloud storage and sharing	
• Management of files/folders File specification – Drive, path, filename and file extension – Creating a new folder or other new items. – File naming – conventions – Renaming – Opening/viewing – Copying and pasting – Moving – Deleting permanently or sending it to the Recycle Bin. – Restoring – Different options to select one or various files and folders. – Searching files/folders – Sorting files/folder • File Explorer, e.g. This PC, hierarchy	• Management of files/folders – Verifying or modifying the Properties/attributes – types, size, hidden, read only – File Password protection – File Import and export – Compressing/ decompressing files and folders	• Management of files/folders – File Metadata – e.g. author, title properties – File search (advanced) – wildcard search – File conversion
• New related technology – purpose – how do they work? – advantages and disadvantages	• New related technology – purpose – how do they work? – advantages and disadvantages	• New related technology – purpose – how do they work? – advantages and disadvantages

Internet and Network Technologies

Grade 10	Grade 11	Grade 12
	(All internet and network technologies concepts and skills from Grade 10, together with the new internet and network technologies concepts and skills can be assessed in Grade 11)	(All internet and network technologies concepts and skills from Grade 10 and Grade 11, together with the new internet and network technologies concepts and skills can be assessed in Grade 12)
• Describe a network • Aims and objectives of networks • Advantages such as facilitating communications and sharing hardware, software, data, information; • Disadvantages such as security and privacy issues	• Basic network security such as passwords, usernames and access rights	
• Personal area network (PAN) / Home area network (HAN)/LAN (Local Area Network)/MAN (Metropolitan Are Network)/WAN (Wide Area Network), GAN (Global Area Network) – Definition, purpose, role, uses • Internet as an example of a GAN – Advantages, disadvantages and limitations	• Wireless local area networks (WLAN) – Definition, purpose, role, uses – Advantages, disadvantages and limitations • VPN (Virtual Private Network)	
• Basic components of a network: – Workstations and servers – Network interface card (NIC) – Network devices for connection: router and switch – Communication medium – Network software • What is needed to set up a PAN/HAN?	• Types of digital communications: Voice over Internet Protocol (VoIP), File Sharing such as FTP and video conferencing – Advantages and disadvantages – Good practices	
• Connection – Wired vs wireless including input and output devices – Data transmission speed • Data transfer and synchronising between devices	• Topology of LANs – Star – Ring – Bus – Point-to-Point – Mesh – Tree – Hybrid Cabling and Speed of Data Transfer – UTP/STP – Coaxial Cabling – Fibre Optic Cable • Disadvantages of communication channels – EMI – Eavesdropping – Attenuation – Crosstalk	

• Obtaining Internet access: – Identify hardware and software needed for connecting to the Internet using a PC – ISP – Definition and purpose	• Overview of portable and mobile Internet access (basic concepts – Define and describe) • Examples – Wi-Fi Hotspots, WiMAX, Bluetooth, NFC, – Portable and mobile – LTE, 4G, 5G Basics (Speed and type of connectivity) – Cellular data service o Cell phone as a modem	• Concept of broadband and bandwidth • Throttling and Shaping • Make buying and informed decisions regarding Internet connection and access – Router, types of connections, e.g. ADSL/Fibre, wireless technologies, including their advantages, disadvantages and limitations – ISP, Internet services – Consideration of access points, coverage (wireless) – Data transmission speed - measured megabits per second (mbps) – CAP, bundle
• Define and describe the Internet	• Define and describe an Intranet	
• Overview of the World Wide Web (WWW) – Describe the WWW – Web address/uniform resource locater (URL), URL shortener – Webpage, website, hyperlink – Types of websites, their purpose/what they offer and examples o Portal, news, informational, business, Weblog (blog), Wiki, social network, educational, entertainment, advocacy, web application, content aggregator, personal	• Simple concept of an IP address	
• Overview of online services such as eCommerce and Social Networking: – Banking, shopping, booking/reservations, electronic funds transfer (EFT)	• Cloud Computing – Internet of Things (IoT) (basic concepts and examples) – Uses of computer communications: social websites – Advantages and disadvantages – Bad practices e.g. fake news and good practices e.g. verifying apps	• Government Internet services and information such as tax return, TV license payment and election information
• Web Browsers – Define, describe and give purpose – Examples of Web Browsers • Typical features of web browsers such as: – Bookmarks – History and favourites – Home page settings	• Private browsing, e.g. Incognito, InPrivate (anonymous browsing) • Website accessibility • Define and describe a cookie • Encryption, SSL, digital certificates and signatures • Evaluate webpages/websites	• Typical features of web browsers such as: – Blocking websites – Caching – Browser plug-ins – o What are they? Why are they needed? o Examples: Pop-up blocker/Ad blocker, toolbar extension

• Search engines – Define, describe and give purpose – Search engine operators – Basic searching techniques ○ Keywords/key phrases	• Advanced Search Techniques, for example by date or time	• Search Engine Optimization
• Concept of downloading and uploading	• Define and describe Peer-to Peer Networks, Streaming, Torrenting	• Define and describe Client-Server Networks
	• Explore web applications: Blogs/Vlogs/Podcasts/Vodcasts – Uses – Advantages and disadvantages – Good practices • Cloud-based applications, e.g. Google docs, Office 365 – Uses – Advantages and disadvantages	• Web-based applications vs stand-alone applications • Advantages, disadvantages, examples and what they offer (purpose) • Applications dealt with in the Practical Curriculum (word processing, spreadsheet, database, presentation. html) • Document management software such as PDF file formats
• Applications to facilitate e-communications: e-mail, instant messaging, text, picture and video messaging, mailing list, Weblog	• Types of digital communications such as video conferencing: – Advantages and disadvantages – Good practices	• Uses of computer communications such as: – Wikis – GPS, Geo-tagging (location-based services)
• Netiquette – Apply netiquette rules such as spelling check, messages, being courteous and concise, not gossiping, reducing the size of attachments and not typing in capital letters		
• Basic e-mailing – Taxonomy of e-mail addresses – ISP vs web-based e-mail – E-mail software features such as Cc and Bcc fields, attachments and address books – Compose messages – Send and receive, forward, reply, reply all	• Managing e-mail: – Organise using e-mail folders – Sort by, flag, prioritise – Distribution lists, message rules • Register a web-based e-mail address	
	• Social networks/networking – e.g., WhatsApp, Instagram, Twitter, Facebook etc.	
	• Uses and Abuses of Social Networking. Protecting yourself against abuses (Teach in classroom setting how Social Media aids the education process)	
• New related technology – purpose – how do they work? – advantages and disadvantages	• New related technology – purpose – how do they work? – advantages and disadvantages	• New related technology – purpose – how do they work? – advantages and disadvantages

Information Management

Grade 10	Grade 11	Grade 12
	(All information management concepts and skills from Grade 10, together with the new information management concepts and skills can be assessed in Grade 11)	(All information management concepts and skills from Grade 10 and Grade 11, together with the new information management concepts and skills can be assessed in Grade 12)
• Information sources and data gathering tools – Electronic reference works, e.g. Wikipedia, Internet articles – Printed media, e.g. books – Surveys: questionnaires/interviews • Information vs knowledge • Find and access information and data – Role of surveys and questionnaires • Sifting information – Process of keeping only gathered information that meets the criteria/will solve the problem • Manipulating information – Extract core meaning – Summarise using own words • Data handling using spreadsheet – Data questions: How many? What is most popular? What is least common? How many more than? What is the average? • Processing data • Presentation of information: – Graphs, tables, techniques and tools in applications – Report writing – elements of a report: Introduction, body, conclusion, bibliography/references, copyright/plagiarism issues – Summarising information/report using presentation software	• Task definition, data and information gathering for the PAT (Not Examinable) • Quality control of information for the PAT (Not Examinable): • Evaluate questions (types/levels/variety) for the PAT (Not Examinable) ○ Questions that can be answered explicitly by facts, e.g. questions starting with words such as What? When? Where? Who? How many? etc. ○ Questions that will help you to examine, explore, query, e.g. questions starting with Why? How? etc. ○ Questions that will help you to adjust alter or predict, e.g. questions starting with If? What if? etc. ○ Questions that will help you to make a judgment, critique, review or find meaning of some sort, e.g. questions starting with Would it be better if? What recommendation? How can I determine? What would be the best way? etc. • Evaluate information for the PAT (Not Examinable) ○ Authority (who created it?) ○ Accuracy (are the facts substantiated?) ○ Currency (is it up-to-date/still relevant?) ○ Objectivity (any bias?) ○ Coverage (how well does it cover the topic?) – Evaluate websites: Criteria ○ Affiliation (e.g. who supports the Website?) ○ Audience (e.g. level at which it is written/who is it intended for?) ○ Authority (e.g. who is the author and what are his/her credentials?) ○ Content (e.g. organisation of content and working links)	• Gather information and data for use in the I P O system, advanced examples • Discuss the writing of professional/formal reports for the PAT (Not Examinable) • Discuss the use of spreadsheet and database in professional reports for the PAT (Not Examinable) • Database Normalisation – 1NF, 2NF, 3NF for the PAT (Not Examinable) • Setting questionnaires for the PAT (Not Examinable) – Reinforce Information Management skills for the PAT (Not Examinable) – Use information and data gathered: Processing and analysing and go through an excellent example of a PAT to show what the criteria and requirements are. (Not Examinable)

	○ Currency (e.g. is the information on the Webpage up to date?) ○ Design (e.g. is it easy to navigate and visually pleasing? How quickly does it download?) ○ Objectivity (e.g. does it reflect any preconceptions?) • Role of spreadsheet and database to process and manipulate data to provide information for the PAT (Not Examinable)	

Social Implications
This topic needs to be done in conjunction with and applied to previous topics.

Grade 10	Grade 11	Grade 12
	(All social implications concepts and skills from Grade 10, together with the new social implications concepts and skills can be assessed in Grade 11)	(All social implications concepts and skills from Grade 10 and Grade 11, together with the new social implications concepts and skills can be assessed in Grade 12)
• How technology can benefit or harm the environmental: – Green computing (recycling, e-waste)		• Define and describe drone technology
• How technology can benefit or harm the economy: – Saving paper – Labour – communication costs – efficiency, accuracy and reliability – Private, business and education use – Crypto currency (digital currency), e.g. Bitcoin	• How technology can benefit or harm the economy: – Hardware failure – Software bugs – Mobile offices, virtual office, decentralisation of labour, office automation – Remote access creating opportunity for e-commuting /e-working	
• How technology can benefit or harm society (people): – Ergonomics – Digital Divide – Online harassment (CyberStalking) – Factors influencing health and health risks	• How technology can benefit or harm society (people): – Options available for enhancing accessibility such as speech recognition, screen readers and magnifiers, on-screen keyboards, screen, mouse and keyboard settings	• How technology can benefit or harm society (people): – Distributed computing power – Information overload – Describe and define Virtual Reality, Artificial Intelligence and augmented reality (Examples) – Impact and use of social networking sites and technologies such as: ○ Facebook ○ Twitter ○ Youtube ○ Cyber profile /digital footprint ○ Crowdfunding ○ Virtual communities such as Second Life

• Ethical/Legal issues: – Ethical use of computer – Software piracy – Licensing – Intellectual property – Recognise and acknowledge the ownership of electronic material		• Ethical/Legal issues: – Use information sources from around the world, – Fake News – Deep and Dark Web – Impact of Cryptocurrencies
• Define and Describe: – Hackers – Crackers		• Computer crimes in relation to hardware, software, information, identity theft and Multi-step verification, bandwidth theft, theft of time and services – Internet-related fraud scams – Internet attacks, e.g. DDoS attacks – Taking over PCs, e.g. bots (botnets), zombies – Right to access vs right to privacy – Misuse of personal information
• Safety/Security Issues: – E-mail threats, issues and remedies – Malware namely viruses, trojans, worms, hoaxes, spam, phishing, e-mail spoofing and pharming, ransomware – Safe e-mail and Internet use – dangers and tips to ensure safe use – Computer criminals – types and what they do/how they operate – Hardware theft and protection	• Safety/Security issues: – Unauthorized access – Ethical use of networks – Acceptable use policies of schools – Network safety and security issues – Privacy issues – obtaining and using private information, BYOD – respect privacy and products of others – Define and describe Social engineering – Protecting oneself when online o Malware, e.g. ransomware and security software o E-commerce and e-banking (e.g. https)	• Define and describe chatbots • Social Engineering – Pornography
	• Data: – Role of databases, big data – Computer and human error and the effects thereof such as accuracy and validity – data input – Data types used, e.g. database – Verification and validation of data, e.g. database – Information accuracy – why is it important? – Data protection such as backup	
• Impact of new related technologies	• Impact of new related technologies	• Impact of new related technologies

APPENDIX M – PRACTICAL CURRICULUM

Solution Development
This topic can be examined in both Theoretical & Practical Assessments.

GRADE 10	GRADE 11	GRADE 12
Operating System	**Operating System**	**Operating System**
	(All operating system concepts and skills from Grade 10, together with the new operating system concepts and skills can be assessed in Grade 11)	(All operating system concepts and skills from Grade 10 and Grade 11, together with the new operating system concepts and skills can be assessed in Grade 12)
• Windows Operating System Management – Create a Quick Launch Icon – Account Options (Sign out / Lock / Switch User) – Personalisation (Background, Lock Screen, colours) – Taking screenshots (e.g. snipping tool, print screen)	• Windows Operating System Management – Create a Desktop Shortcut – Install an Application/Software – Uninstall an Application/Software – Using Disk Clean-up – Adjusting and Troubleshooting Audio Settings – Updating Windows Device Drivers – Using Task Scheduler – Backing up Files to an External Hard drive	• Windows Operating System Management – Using Storage Sense – Connecting to Wi-Fi / Airplane Mobile / Mobile Hotspot – Managing Printing (Default Printer and Printer Queue management) – Updating Time and Language Settings (Date & Time; Region) – Applying Ease of Access Functionality • Digital Virtual Assistants – Using Cortana / Google Assistant/ Siri
• Windows Settings – – System – Display, notifications, power – Devices – Bluetooth, printers, mouse – Personalization – Background, lock screen, colours – Time & Language – Speech, region, date – Gaming – Game bar, DVR, broadcasting, Game Mode – Ease of Access – Narrator, magnifier, high contrast	• Windows Settings – – Network & internet – Wi-Fi, airplane mode, VPN	• Windows Settings – – Personalization – Background, lock screen, colours – Privacy – Location, camera – Update & Security – Windows Update, recovery, backup – Phone – link your Android, iPhone – Apps – uninstall, defaults, optional features – Accounts – Your accounts, email sync, work, other people
File & folder management	**File & folder management**	**File & folder management**
• File Explorer • File(s) / Folder(s) – File Names using correct conventions – Understanding File Extensions – Using File Paths to find files – Create a Folder(s) – Rename File / Folder – Move File / Folder – Copy File / Folder	• File Explorer – Modify Layout (change the view of the file list i.e., what details are displayed) – Sort by (ascending / descending) – Group by – Add Columns – Show/Hide File Name Extensions – Show/Hide Hidden Items – Searching for Files & Folders (including wildcards) – Open a file with a program other than the default program	

• Using the Recycle Bin		
• Compressed Files / Folders – Compress files/Folders – Extract All from a Compressed File		
• File Properties – Type of File – Opens With – Location – Size – Created, Modified, Accessed dates – Attributes – Read-only, Hidden	• File Properties – Details of different file types – Description – Title; Subject; Comments – Origin – Authors/Producers/ Publisher – Image – Dimensions; Weight; Width; Resolution; GPS – Media – Contributing Artists; Album; Year; Length	• File Properties – Previous Versions – Password Protect files
WORD PROCESSING	**WORD PROCESSING**	**WORD PROCESSING**
	(All Word Processing concepts and skills from Grade 10, together with the new Word Processing concepts and skills can be assessed in Grade 11)	(All Word Processing concepts and skills from Grade 10 and Grade 11, together with the new Word Processing concepts and skills can be assessed in Grade 12)
• Standard Word Processing Features		
• Workspace, ribbons, tabs and menus		
• Document Management – Open new and existing documents, close, save, save as – Templates: Use inbuilt templates – Printing (basic options) – Info – Protect document, inspect document, version history	• Document Management – Input data from different file formats:.txt, .csv, .rtf – Templates: Save documents as – Printing (including options such as range of pages, odd or even, number of copies, print quality, pages per sheet) – Share – share with people, email, present online – Export – Create PDF	
• Selecting data using keyboard and/or mouse		
• Clipboard – Cut, Copy, Paste, Undo, Format Painter	• Clipboard – Paste special	
• Font Formatting – Font type, style, size, colour, highlight, effects, bold, underline, italic, subscript, superscript, clear formatting, change case		
• Paragraph Formatting – Bullets and numbering (basic), Indents (hanging), aligning, spacing, borders, shading, sorting, formatting symbols	• Paragraph Formatting – – Customise bullets and numbering – Outline numbering/multi-level lists – Customise spacing – Tab	• Paragraph Formatting – – Line and Page breaks (pagination - widow/orphan control; Keep with Next; Keep Lines together; Page Break before)
• Using existing quick styles in gallery (simple)	• Styles – (heading/paragraph) – Change/edit a style – Create a new style	

• Editing – find, replace, select	• Editing – find and replace (extend to more options)	
• Symbols	• Equations	
• Inserting Pages – page breaks	• Pages – Inserting Cover pages, blank page	
• Tables – Insert, Table tools, Table design, Table properties – Design: Table styles, borders and shading – Layout: Rows and columns, header rows – Cells: size, distribution, merging and splitting – Text alignment and direction – Table: split, auto fit, gridlines – Working with data: sorting, convert to text and working with formulae		
• Insert and manipulate illustrations – Pictures, shapes, icons, SmartArt, Charts, Screenshots		
• Links – link (Hyperlink)		• Links – bookmark, cross reference
• Comments		
• Header & Footer (simple) – header, footer, page numbers	• Headers and footers (date, author, path and filename, document title) • Page numbers: Different first page, odd, even, starting from a specific number, numbering formats	
• Text – Textbox, Word Art	• Text – Quick parts, drop cap, date & time	
• Design Page background – watermark, page colour, page borders	• Design Document formatting – Themes, Colours, Fonts, Paragraph spacing, Effects, Setting up defaults	
• Layout - Page setup – customizing margins, orientation, size, columns, breaks, line numbers, hyphenation	• Layout - Section breaks and sections, including linking and delinking	
• Arrange – position, wrap text, bring forward, send backward, selection pane, align, group, rotate		
• Review – Proofing – spelling, grammar	• Review – AutoCorrect	• Review – Proofing – thesaurus, word counts – Accessibility – Language – translate, select language – Tracking – track changes, show mark-up, reviewing pane – Changes – accept or rejecting – Compare – compare versions – Protect – block authors, restrict editing

	• References – Table of contents/figures – creating, add text, updating – Footnotes – inserting, endnotes, navigating, show notes – Research – smart lookup, researcher – Citations & Bibliography – insert citation, managing sources, style, creating bibliographies – Captions – inserting, insert table of figures, cross reference, update table – Index – mark entry, inserting, updating – Table of Authorities – mark citation, inserting, updating	
	• Mailings – Mail merge (source – spreadsheet) – Create – letters, emails & labels – Recipients – select & edit – Mail merge fields – insert, rules, update – Preview results – find recipients, check errors – Finish Merge to print, email, document	• Mailings Mail Merge – different data sources, e.g. word processing table, database, csv file, e-mail list • Merge with data collected via electronic forms (Microsoft/Google Forms via spreadsheet)
• View options – Work with more than one document/window, zoom – Document views: Draft and full screen reading – Read mode, print layout, web layout, outline, draft, ruler, grid lines, navigation pane, zoom, split windows, arrange windows, properties		• Macros – record & view
• Help – Accessing online/offline help including FAQs (frequently asked questions)		
• Plan, design and solve problems using word processing documents for specific scenarios.	• Plan, design and solve problems using word processing documents for specific scenarios.	• Plan, design and solve problems using word processing documents for specific scenarios.

GRADE 10	GRADE 11	GRADE 12
SPREADSHEET	**SPREADSHEET**	**SPREADSHEET**
	(All Spreadsheet concepts and skills from Grade 10, together with the new Spreadsheet concepts and skills can be assessed in Grade 11)	(All Spreadsheet concepts and skills from Grade 10 and Grade 11, together with the new Spreadsheet concepts and skills can be assessed in Grade 12)
• Standard Spreadsheet Features		
• Workspace ribbons, tabs and menus		
• Rows, columns and cells • Formatting rows, columns and sheets - Size (width and height), insert, delete, hide • Cells – Insert, delete, format • Working with worksheets – Rename, tab colour, hide/unhide	• Work with worksheets: – Move, copy, delete – linking cells and formulas	
• Spreadsheet Management – Open new and existing spreadsheets, close, save, save as – Printing (basic options)	• Spreadsheet Management – Printing (Including print area, scaling, entire workbook)	
• Selecting data using keyboard and/or mouse		
• AutoFill Cells	• Auto fill options	
• Clipboard – paste, cut, copy, format painter		
• Font Formatting – Font type, style, size, font colour, fill colour, borders, bold, underline, italic		
• Format Cells: borders, shading, alignment, wrapping, merge, text orientation, merge, split		
• Number Formatting: General, Number, Currency, Accounting, Date, Time, Percentage		
• Increase and Decrease Decimal place shown	• Rounding off numbers and the difference between rounding and formatting	
• Cell reference – The importance of using cell references rather than constant values in cells and formulae – Cell ranges: range names – Values and contents	• Cell referencing – Absolute cell referencing	
• Styles – Format as a table, Cell Styles	• Styles – Conditional formatting	
• Editing – find, replace, select		

• Formulas – SUM, AVERAGE, COUNT, MIN, MAX – Basic calculations using basic operators including +, -, *, /, order of precedence and the use of brackets – TODAY, MODE, MEDIAN – use of relational operators (> < <= >= <> =)	• Formulas – Simple IF function – Use of relational operators (> < <= >= <>) in simple IF functions – BETWEEN, ROUND, SMALL, LARGE, COUNTIF, COUNTA, COUNTBLANK, SUMIF, POWER, RAND	• Formulas – Nested IF – Vertical & horizontal lookup, including error indicator #N/A VLOOKUP; HLOOKUP, XLOOKUP – ROUNDUP, ROUNDOWN, INT, TRUNC, SUBTOTAL FUNCTION (AVERAGE, COUNT, SUM) – Basic date and time calculations: DATE, YEAR, MONTH, DAY, DAYS, HOUR, MINUTE, SECOND, TIME, NOW – WEEKNUM(); WORKDAY(); NETWORKDAYS(); YEARFRAC(); EDATE() – CHOOSE(); AND(); OR(); MATCH(), INDEX() – Text functions LEFT, RIGHT, MID, CONCATENATE, LEN, VALUE, FIND, SUBSTITUTE
• Identify appropriate functions to suit scenario and solve problems	• Identify appropriate functions to suit scenario and solve problems	• Identify appropriate functions to suit scenario and solve problems
• Error indicators: – #######, #NAME!, #DIV/0!, #REF! – #VALUE!, #NUM!	• Error indicators: – circular reference	
• Insert Pictures, shapes, icons (including associated tools)		
• Charts/Graphs – Create/Insert, format and edit o Pie, column/bar o Purpose of each/when to use o Create, format and edit o Interpretation of information presented in a graph	• Charts/graphs: Create/Insert, format and edit – Doughnut, line, area Charts – Meaningful titles and labels – Gridlines – Legends • Chart Options appropriate to the graph type chosen	• Charts/graphs: Create/Insert, format and edit – Changing the scale on the axes – Minimum and maximum values – Re-labelling axes, etc. – Creating stacked bar and column graphs using a graphic, etc. – Creating Combo Charts – Emphasizing parts of chart, e.g. largest pie slice • Appropriate chart/graph for a given scenario • Sparklines • Filters • Pivot Chart and Pivot Tables • Links • Pictographs (data as a picture)
• Page Layout – Themes – Page Setup – Margins, Orientation, Size, Print Area, Breaks, Background, Print Tiles	• Page Layout – Scale to fit – Sheet Options – Gridlines, Headings – Arrange	

• Data – Sort & Filter (Basic)	• Data – Get & Transform Data - Import/export data – Sort & Filter (Advanced)	• Data • Get & Transform Data - Queries & Connections • Data Tools – Text to columns, Remove Duplicates, Data Validation, Consolidate • Outline – Group, Ungroup, Subtotal
• Review – Spelling, Thesaurus – Language – Translate – Comments – Create, Show		• Review – Protect – Sheet, Workbook, Allow Edit Ranges
• View – Workbook Views – Normal, Page Break Preview, Page Layout – Show – Gridlines, Formula Bar, Headings – Zoom	• View – Workbook Views – Custom Views – Window – New Window, Arrange All, Freeze Panes, Split, Hide, Switch Windows	• View – Macros
• Accessing online/offline help including FAQs (frequently asked questions)		
• Plan, design and solve problems using spreadsheets for specific scenarios	• Plan, design and solve problems using spreadsheets for specific scenarios	• Plan, design and solve problems using spreadsheets for specific scenarios

GRADE 10	GRADE 11	GRADE 12
	DATABASE	**DATABASE**
		(All Database concepts and skills from Grade 11, together with the new Database concepts and skills can be assessed in Grade 12)
	• Standard Database Features	
	• Workspace, ribbons, tabs and menus	
	• Database structure – Objects: table, form, query, report	
	• Tables – Work with different views, i.e. Design and Table View – Choose appropriate data types: Short Text, Number, Large Number, Currency, Date and Time, Yes/No, Lookup & Relationship, Rich Text, Long text, Attachment, Hyperlink and Calculated Field – Designate appropriate Primary key – Adjust Field properties: Name & Caption, Default Value, Field Size, Memo Settings – Adjust Field Format and Decimal places – Set the following Field validation: Required, Unique, Indexed, Validation Rules, Validation Text/Message – Apply an Input Mask using Input Mask Characters 0 Digit (0 to 9, entry required, plus [+] and minus [–] signs not allowed) 9 Digit or space (entry not required, plus [+] and minus [–] signs not allowed) 3 Digit or space (entry not required; spaces are displayed as blanks while in Edit mode, but blanks are removed when data is saved; plus [+] and minus [–] signs allowed) L Letter (A to Z, entry required) ? Letter (A to Z, entry optional) A Letter or digit (entry required) A Letter or digit (entry optional) & Any character or a space (entry required) C Any character or a space (entry optional) . , : ; - / Decimal placeholder and thousand, date and time separators (The actual character used depends on the settings in the Regional Settings Properties dialog box in the Windows Control Panel.) < Causes all characters to be converted to lower case > Causes all characters to be converted to upper case ! Causes the input mask to display from right to left, rather than from left to right. Characters typed into the mask always fill it from left to right. You can include the exclamation point anywhere in the input mask. \ Causes the character that follows to be displayed as the literal character (for example \A is displayed as just A)	

	"" characters enclosed in double quotation marks will be displayed literally.	
	• Records – Add and Delete Records – Apply Sorting and Filters to records – Find and Replace data in records	
	• Forms – Work with different views, i.e. Form, Layout and Design View – Create a Form using the Form Wizard – Adding existing fields – Changing tab order – Formatting Form Font and Numbers – Inserting a background image on a Form	• Forms – Use of a **Switchboard**/Main form as a menu item which links multiple forms
	• Queries – Work with different views, i.e. Datasheet, SQL and Design View – Design and Run simple select queries using the Query Wizard – Select/Deselect fields displayed in queries – Add query sorting options – Add query selection criteria	• Queries – Add fields with calculations in queries, reports – Cross tab queries – Queries using: and, or, not, wildcards (*), IS Null operator, between or >= AND<=, Year(date())
	• Reports – Work with different views, i.e. Report View, Print Preview, Layout View and Design View – Design basic reports using a Report Wizard – Report Wizard including using summary options: sum, avg, count, min and max – Formatting Report Font and Numbers – Adjusting Report and Page Headers and Footers	• Reports – Design reports – grouped – Group headers and footers – Calculations in groups such as sum, average, counting, maximum, minimum
	• Accessing online/offline help including FAQs (frequently asked questions)	
	• Plan, design and solve problems using databases for specific scenarios	• Plan, design and solve problems using databases for specific scenarios

GRADE 10	**GRADE 11**	**GRADE 12**
PRESENTATIONS (NOT IN GRADE 12 FINAL PRACTICAL EXAM)	**HTML**	**HTML**
• Standard Presentation Features	• Structure and design of a simple HTML page	(All HTML tags and skills from Grade 11, together with the new HTML tags and skills can be assessed in Grade 12)
• Workspace ribbons, tabs and menus – Slides, designs, layouts	• HTML Editors	
• Presentation Management – Open new and existing spreadsheets, close, save, save as – Templates • Printing (basic options) • View options – normal, slide sorter, notes, slide show • Page setup – Orientation, size		

- Editing: Cut, copy, paste, find, replace
- Text: Entering, editing and deleting text
- Formatting
  - Font type, style, size, colour, highlight, alignment
  - Paragraph: spacing, alignment, bullets, indentation
- Insert
  - Tables
  - Images
  - Illustrations
  - Links
- Slides: Insert, delete, numbers, headers and footers, transitions
- Slide Transitions
- Presenting a Slide Show
- Custom animations (basic)
- Reviewing/proofing: spelling and grammar
- Accessing online/offline help including FAQs (frequently asked questions)

- Use an HTML Editor to create webpages using HTML tags

HTML Basic Tags

TAG	Description
<body></body>	Defines the body of the webpage
<body bgcolor="pink">	Sets the background colour of the webpage
<body text="black">	Sets the colour of the body text
<head></head>	Contains information about the webpage
<html></html>	Creates an HTML document – starts and ends a webpage
<title></title>	Defines a title for the webpage
 	Inserts a line break
<!-- -->	Comment

HTML Text Tags

TAG	Description
<hl></hl>	Creates the largest heading
	Creates the smallest heading
	Creates bold text
	Creates italic text
	Sets size of font, from "1" to "7"
 	Sets font colour
	Sets font type

HTML Paragraph and List Tags

TAG	Description
	Creates a new paragraph
	Aligns a paragraph to the "left" (default), can also be "right" or "center"
	Creates a numbered list
<ol type="A","a", "I","i","1">	Defines the type of numbering used
	Creates a bulleted list
<ul type="disc", "square","circle">	Defines the type of bullets used
	Inserted before each list item, and adds a number or symbol depending on the type of list selected

HTML table tags

TAG	Description
<table></table>	Creates a table
<tr></tr>	Creates a row in a table
<td></td>	Creates a cell in a table
<th></th>	Creates a table header (a cell with bold, centred text)
<table width="50">	Sets the width of the table
<table border="1">	Sets the width of the border around the table cells
<table cellspacing="1">	Sets the space between the table cells
<table cellpadding="1">	Sets the space between a cell border and its contents
<tr align="left">	Sets the alignment for cell(s) ("left", can also be "center" or "right")
<tr valign="top">	Sets the vertical alignment for cell(s) ("top", can also be "middle" or "bottom")
<td colspan="2">	Sets the number of columns a cell should span
<td rowspan="4">	Sets the number of rows a cell should span

HTML Image Tags

TAG	Description
<img src="name">	Adds an image
<img src="name" align="left">	Aligns an image: can be "left", "right", "bottom", "top"
<img src="name">	Aligns an image in the "center", can also be "middle"
<img src="name" border="1">	Sets the size of the border around an image
<img src="name" width="200" height ="200">	Sets the height and width of an image
<img src="name" alt="alternative text">	Displays alternative text when the mouse hovers over the image or when the image is not found
	Inserts a horizontal line
<hr size="3"/>	Sets size (height) of a line
<hr width="80%"/>	Sets the width of a line, in percentage or absolute value
<hr color= "ff0000"/>	Sets the colour of the line

HTML link tags

TAG	Description
	Creates a hyperlink
<img src="name">	Creates an image link
	Creates a target location in the document
	Links to a target location created somewhere else in the document

• Plan, design and a Presentation for a specific scenario	• Plan, design and develop a webpage for a specific scenario	• Plan, design and develop a webpage for a specific scenario

APPENDIX N – Practical Assessment Task (PAT) GUIDELINES AND ASSESSMENT RUBRIC

Computer Applications Technology

Practical Assessment Task (PAT)
Grade 12 – 2021

TASK GUIDELINES

INTRODUCTION

Description

The Practical Assessment Task (PAT) is an assessment of the learner's individual interaction with information and the way in which he or she presents that information. The information will finally be presented in a number of documents to communicate a solution in an integrated manner.

Purpose

The purpose of the PAT is to give learners an opportunity to demonstrate their skills in the use of the application packages that they have studied, i.e. word processing, spreadsheet, database and a fourth package of their choice. The fourth package that a learner must master can differ from school to school. For this reason, the fourth package is only assessed in the Practical Assessment Task and not in the final practical paper. This project will form 25% (100 marks) of the overall Grade 12 assessment.

Skills required

All skills acquired during Grade 10–12 CAT curriculums. These serve as guidelines to the minimum skills that should be demonstrated in the PAT.

Process

The PAT works with a scenario. Each of the packages allows the learner to develop some solution based on the scenario. A scenario should be chosen that leads to a natural way for a database or spreadsheet to be used.

The PAT must be seen as a process which includes planning a proposal for a solution. The PAT should be gradually completed over a period of months and evidence of planning should be provided.

The PAT is also about sourcing and accessing information to solve a problem/present an idea and using the application programs in an integrated manner.

Composition of the project

The project has two distinct components:

- ***Research process***: applying skills for sourcing, accessing, retrieving, processing and managing information. (Phases 1 and 2)
- ***Presentation***: applying the end-user skills using the following application packages: word processing, spreadsheets, databases and presentation of a hard copy/print.

Word Processing

Word processing skills will be assessed through all phases of the Practical Assessment Task. Study the Assessment Tool for Word Processing as marks for Word processing will be applied to skills displayed throughout all phases of the Practical Assessment Task.

Use different word processing documents to manage and process data/information:

- One of the documents must be a template
- Create documents using online forms, tables, columns, section breaks, footnotes, comments, hyperlinks, mail merge, referencing techniques.

This project should allow for independent thought and creative thinking in the application packages used.

Review and Monitoring

As this project has a large scope, much of the research work will have to be done outside of class time. The research process will be facilitated and monitored by the teacher. For this reason, the documentation for each phase is specified in the task. Progress reports must be submitted at specified intervals. These documents are assessed as they are submitted. The final project will be assessed when it is presented.

Referencing

It is compulsory to use the option in word: References > Manage Sources > new > Create source

Any work (quoted text, reworded text, illustrations, graphs, pictures, etc.) that learners have not created themselves, must be properly referenced (preferably using the Harvard standard). It is the responsibility of the learners to provide references for all their sources. It is the responsibility of the teacher to ensure that all work is properly referenced and sources acknowledged. It is not sufficient to supply a Referencing List and Bibliography without citing and referencing the text and graphics used within the documentation of the project.

Resources

Learners are encouraged to read various articles to help them to understand the requirements of the various tasks.

Assessment Tools

Detailed assessment tools facilitate the external moderation of the papers as they stipulate the evidence required from the project. The project will be moderated as the phases are completed to ensure the learner does the work independently.

Learners are encouraged to study the assessment tools during and after each phase and reflect on their efforts. This will help them to improve on the subsequent phases and the final product. Note, however, that the phases will not be re-assessed.

The three phases will be assessed as follows:

Phases		**Marks per phase**		**Suggested time spent on each phase***
Phase	**Details**	**Marks**	**%**	
1	Task definition and information finding strategies	40	19	2 weeks
2	Task 1 – Access information and determine relevance	40	19	2 weeks
	Task 2 – Use the information – Planning			2 weeks
3	Task 1 – Use the information – Processing/ analysing	100	62	3 weeks
	Task 2 – Use the information – Final presentation/ synthesis			2 weeks
TOTAL PRACTICAL ASSESSMENT TASK (PAT)		**180**	**100**	**11 weeks**

***** The learners must be provided with deadline dates, in accordance with your school terms, at the start of the Grade 12 year.

PLANNING THE TASK

The PAT is open-ended, and learners may approach this as a very broad topic or (preferably) choose a 'subtopic' within the overall topic. Educators are to ensure that learners choose a suitable topic for their PAT based the learner's own interests. The learner should not simply re-use a topic from previous years, or the examples provided below:

TOPIC 1
Plan and organise a tour for Grade 11 History students going across South Africa. The tour is to last 2 weeks and should cover a distance of approximately 3 000 kms (in total). You can accommodate up to 40 students and 2 teachers.

TOPIC 2
Your school wants to introduce tablets, mobile devices, BYOD and e-books for all the subjects. Your task is to investigate the feasibility of implementing such a system. Take into account costs of devices, Operating Systems and networking features, staff requirements and budgetary constraints.

TOPIC 3
You want to start up a small business that sells coffee beans to restaurants, coffee shops and corporates who have their own coffee machines in their offices for employees. Come up with a name for your business and think about things like sourcing of the beans, marketing and distribution.

PHASE 1

Name: _____ Due Date: _____

Task 1: Task definition and Information finding strategies

In completing this task, you will be required to:

- Provide a broad **description of the task or the problem** that you have to solve in your own words – part of it has already been given in the topic section. Expand on it to describe in your own words exactly what needs to be done.
- Formulate the Main question or **key objective** (i.e. what is the entire task about?).
- Ask **questions** that will provide the type and amount of information that will satisfy the definition of the problem and solve the problem. Your questions should portray different *types* of thinking:

Closed-ended:	Can be answered with a single word or short phrase, or with 'yes' or 'no'. Gives facts, is easy and quick to answer.
Open-ended:	Requires a longer, more developed answer, needs reflection, gives opinions, may require investigation/research. Cannot be answered with 'yes' or 'no'.

- Questions should also be categorised according to question category, i.e. factual, investigative, comparison and change.

For each question:

- Determine the **methods** used to gather information, e.g. questionnaires, interviews, emails.
- Develop a list of relevant **sources**, i.e. Internet, magazines, newspapers, brochures, online encyclopaedia's, opinion polls, surveys, emails, etc.
- Develop a **plan/strategy for searching** – what *keywords* will you use when you use electronic sources?

You may use a table with headings similar to the table provided below to present your information finding strategies:

Question	Open/closed ended	Question Category	Method of gathering information	Sources	Keywords used for electronic sources

Submission of Evidence

Hand in a document (between three to six pages) prepared in an appropriate application which contains the following:

Evidence	☑ / ☒	Comment
The **description** of the problem describes what is expected in the project		
A main **question** was formulated		
A variety of **questions** are formulated The questions support the main question		
Questions are categorised according to: • Open Ended/Closed ended • Question Type • Method of gathering information • Sources • Keywords		
Referencing list		
Run spell check – screen dump evidence of spelling check		
Checked the Word Processing Assessment Tool and mark off requirements achieved during Phase 1		

PHASE 2

Name: _____ Due Date: _____

Task 1: Access information and determine relevance

In completing this task you will have to provide the following evidence for each question:

- **Access the information** and **provide evidence** of the sources found, e.g. notes taken from books, clippings from magazines, newspapers, copies of printed material, brochures, screen dumps from electronic material, printouts of websites, your survey or opinion poll, etc. Make a **summary**, highlight important facts or add comments. Screen dumps of copies of information found must be included in your document.
- Indicate **how** the information will be used and **why** it will be used to answer each question or part of a question posed in ***Phase 1***. Write down the answers to your questions in your own words or highlight texts and indicate which question(s) it will answer or partly answer.
- Indicate how you will determine whether the **information is usable and of good quality**, e.g. if it is statistics, look at the date it was published, by whom, when it was last updated, etc. – Proof of Authenticity of Source
- Referencing List (citation to sources should be provided when evidence of source is discussed). A full Referencing List should be provided at end of task.

You may use a table with headings similar to the table provided below to present your evidence and information on sources found to answer each question posed:

Question	Type of Source	Answer to Question	Evidence Bookmark to screen dump/ Reference to Appendix	How/ why information will be used	Citation of reference	Proof of Authenticity

Task 2: Use the information – Planning

In completing this task you will have to:

- Start planning the final solution by creating a **framework** on how you will organise your information, e.g. use headings and sub-headings, mind maps, diagrams, structure and organisational charts, story boards, etc.
- Indicate how at least **three** of the **four application packages** will be used, i.e. word processor, spreadsheet and database. Plan how the packages will be **integrated**.
- Run spell check – screen dump evidence of spelling check

You may use a table with headings similar to the table provided below to present your planning

Question	Software Packages Used	Description of plan of task	Description of integration

Submission of Evidence

Hand in a document prepared in an appropriate application containing:

Evidence	☑ / ☒	Comment
Evidence of information found, e.g. notes, photocopies, clippings, printouts, electronic copies, screenshots, etc.		
Completed questionnaires/surveys/notes on interviews conducted		
Important facts have been highlighted or **summarised**		
Evidence that information found is **linked/cross-referenced** to questions		
Evidence that the information is **usable** and of **good quality** (listing the date it was published, last updated, etc)		
Evidence of **how** the information will be used and **why** it will be used (indicate which question(s) it will answer or partly answer)		
Framework: an appropriate format – e.g. diagram, mind map, word outline, story board, etc. – forms a whole		
Purpose and use of at least **two** of the **following packages** is clearly stated and appropriate: • Spreadsheet • Database • Presentation • Movie • WebPage		
Checked the Word Processing Assessment Tool and mark off requirements achieved during Phase 2		
Purpose and **integration** between packages is clear		

PHASE 3

Name: _____ Due Date: _____

Task 1: Use the information – Processing/analysing

In completing this task you will be required to:

Create the documents using the appropriate application programs to manipulate/process information/data to answer the questions.

*At least **two** packages*:

- Create and use a **spreadsheet** to manipulate/process information/data:
  - Use basic and advanced **formulas and functions** to manipulate and/or process data. Extra marks will be awarded for the use of more advanced features such as Nested IF statements, V Lookup, Pivot Tables, etc.
  - Use **multiple sheets**, e.g. to summarise data/information.
  - Use **graphs**, e.g. to display results of processed data for easy interpretation thereof.

- Create and use a **database** to store data, manipulate/process/extract information/data:
  - Design a database and normalise the database to 1NF, 2NF and 3NF
  - Create at least **two tables** with at least five fields and at least ten records, to provide realistic, real-life, meaningful data records – using appropriate data types, field properties, data input and validation of data.
  - Create at least one meaningful **relationship** with referential integrity.
  - Create input **form(s)** for easy input of data and ensure data validation during input by making use of combo boxes and buttons on the forms. Extra marks will be awarded for the inclusion of a main form or switchboard which links multiple forms.
  - Create at least **three** meaningful **queries**, which include advanced criteria ad expressions/calculations.
  - Create at least **two** meaningful **reports**, grouped according to specific fields that include calculations on fields per group and/or per report.

- Create and use a **Presentation** to present information/data
  - Presentation consisting of at least 5 to 8 body slides
  - Slides display aesthetically pleasing layout with a consistent design
  - Graphics are referenced and advanced features such as action buttons, multimedia, hyperlinks are included
  - Content is accurate, well organised and shows originality

- Create and use a **Movie** to present information/data
  - Movie is between 3 and 5 minutes consisting of at least 5 to 8 body slides
  - Movie is aesthetically pleasing, well organised and shows originality
  - Technical skill is displayed in the sound effects, music use of other media and special effects

- Create and use a **Webpage** to present information/data
  - Web site must identify authority, be useful, show obvious purpose and be easily navigated
  - Design of website must be aesthetically pleasing, well organised and show originality
  - Information is accurate and referenced
  - The correct syntax of code must be used (HTML or other language)

- **Integration** with other programs, i.e. Mail Merge, Paste Link, Export (e.g. spreadsheet to database, database to spreadsheet) Import, etc.

Task 2: Use the information – Final presentation/synthesis

Finalise submission/final documentation and presentation of idea/proposal:

- Decide which of the **information** manipulated/processed will support your discussion/ proposal and will be used in your final documentation and report.
- Create a **report,** a timeline of your investigation, of your findings/proposal or solution supported by evidence collected/processed in the previous phases – use an appropriate package to compile a report on the solution/plan. This report should include the following:
  - A **Title page** which includes the learner's name, the year and the title of the project.
  - A **Table of contents** which is generated automatically from the document, which implies correct page numbering and headings.
  - An **Introduction** which includes a short abstract of the project, its objectives and the purpose of the project.
  - The **Body/paragraphs** which discuss the task and the solution.
  - A **Conclusion/Evaluation** which provides a solution/makes a proposal/presents your ideas, evaluates the process or provides future developments.
  - A **Bibliography** formatted to the Harvard standard, which provides a list of references and acknowledgements, which have been cited throughout your report.

- Provide **electronic files** and **completed documents** used for processing/manipulating the information/data.

Submission of Evidence

Evidence	☑ / ☒	Comment
At least **two** of the **four** packages have been used.		
All completed **word processing** documents, e.g. letters, online forms, templates, etc. and electronic files used for processing/manipulating the information/data. Refer to phase 1, phase 2 and phase 3.		
All completed **spreadsheets** and graphs – (Ensure each sheet fits onto one page – printed spreadsheets must include one copy with formulas and one copy with data).		
The completed **database** – Tables, Queries, Reports and Forms (Form View) Evidence provided of field properties, data types, combo boxes, query criteria and expressions, calculations in reports in the form of screenshots.		
All completed documents using a **fourth package**, i.e. web site, movie, graphics, presentation, brochure, newsletter, etc. and electronic files with printed evidence where possible.		
A report using an appropriate package and should include: • **Title page** – learner's name, year, title of project • **Table of contents** – automatically generated • **Introduction** – short abstract, objectives, purpose of project • **Body/Paragraphs** – discuss the task and the solution – content relevant and sufficient • **Conclusion** - give the solution/make a proposal/ present your idea/future development to the problem posed in the Introduction. • **Evaluation** – have you met the requirements as laid out in the Introduction where the problem was posed? Include a report of items you could have or would have liked to have implemented. • **Bibliography** – a list of references – Harvard standard		
Time Management – work handed in by the due date		

Computer Applications Technology

Practical Assessment Task (PAT)
Grade 12 – 2021

ASSESSMENT TOOLS

Centre number: .....

Student name: .....

Examination number: .....

Due Date: _____ **Date Submitted:** _____

PHASE 1			
Task definition and information finding strategies			
	Max	**Actual**	**Comments**
Introduction – A brief description of the problem/task **4–5** Clearly describes and states everything that is expected **2–3** Vague, leaves the reader unsure of the purpose of some points **1** Vague, no purpose can be found	**5**		
A suitable main question was formulated	**2**		
A variety of questions have been formulated: ***Closed-ended****: Can be answered with a single word or short phrase, or with 'yes' or 'no'. Gives facts, is easy and quick to answer.* ***Open-ended****: requires a longer, more developed answer, needs reflection, gives opinions, may require investigation/research. Cannot be answered with 'yes' or 'no'.* *Categories indicated – factual, investigative, comparison and change* **8–10** At least 20 good questions of the different types and categories; types/categories are correctly identified **6–7** A good set of questions of the different types and categories; mostly correctly identified **4–5** Good questions of the different types and categories; some correctly identified **2–3** Mostly questions of one type and one category; mostly correctly identified **1** Mostly questions of only one type and category; incorrectly identified	**10**		
Questions are grouped/arranged in a table with relevant headings	**2**		
Relevance of questions **3–4** All questions are relevant to the topic and support the main question **1–2** Most questions are relevant to the topic and support the main question	**4**		
A variety of relevant sources are provided for questions posed*, i.e. Internet, magazine, newspapers, brochures, e-mails, questionnaires, interviews, discussions, etc.* **5–6** Relevant sources are provided for all of the questions; at least three different types of sources are indicated **3–4** Two basic forms, contribute to solution, well-designed – some instructions and labels and buttons not present **2** Sources are provided for a few questions; sources are mostly relevant; only one type of source is indicated **1** Sources are provided for a few questions; sources are not relevant to the questions posed; only one type of source is indicated	**6**		
The criteria as to how the information will be accessed, gathered, recorded, evaluated and organised has been provided, *i.e. search words/phrases (keywords) on Internet, URL of websites, survey questions, questions used in questionnaires, e-mail details and questions, how data will be organised in a database, spreadsheet, word processing document, presentation, website, etc.* **5–6** Relevant criteria have been provided for all of the questions **3–4** Relevant criteria have been provided for most of the questions **1–2** Criteria is provided for a few questions; is not at all relevant to the questions	**6**		
Accuracy – appropriate document submitted free of typing, spelling and grammar errors (-1 per error to a maximum of 3)	**3**		
Time Management: Phase 1 handed in by the due date (-1 per day late to a max of 2)	**2**		
TOTAL FOR PHASE 1	**40**		

Due Date: _____ **Date Submitted**: _____

PHASE 2			
Task 1 – Access information and determine relevance			
	Max	**Actual**	**Comments**
Evidence of questions and information *All questions have been copied and formatted correctly* *Relevant information has been found* **3** All of the questions **2** Most of the questions **1** Very few questions (<40%)	**3**		
Evidence of various sources, *i.e. notes taken from books, clippings from magazines, scanned articles from newspapers, photocopies of printed materials, brochures, screen dumps from electronic material, printouts of websites, surveys, completed questionnaires, evidence of interviews, email correspondence etc.* *Evidence provided of:* **3** At least three different sources **2** Two different sources **1** One source only	**3**		
Important facts and information *Summarised/highlighted/marked and cross-referenced to questions posed in Phase 1* *Indicate how the information will be used and why it will be used to answer the questions.* **5–6** All of the questions **3–4** Most of the questions **1–2** Some of the questions (<40%)	**6**		
Evidence that information is usable and of good quality, *i.e. Website URL, date created, date published, date updated, author, etc.* **3** Each website is validated **2** Some websites validation **1** Very few websites validated (<40%)	**3**		
Reference List – *added at end of report document; citing of references used throughout document to link information and pictures to references* **5–6** Reference list technically correct, i.e. numbered and complete with full references; citing for every reference **3–4** Reference list technically correct, i.e. numbered but some references incomplete; citing for most references **2** Referencing attempted with at least two items but with technical errors, i.e. not suitably numbered; no citing for references **1** Referencing attempted with at least one item but with technical errors, i.e. not suitably numbered; no citing for references	**6**		

Task 2 – Use the Information – Planning			
	Max	**Actual**	**Comments**
Framework in which you present your solution to the problem: *Evidence of a framework on how information will be organised and used* *Framework is created in an appropriate format, uses headings and sub-headings, in a table, diagrams, organisational charts, word outlines or story boards, etc.* **4** In all instances **2–3** In most instances **1** In some instances (<40%)	**4**		
Plan your final solution – *at least three packages (word processing, spreadsheet, database, web design, movie editing, graphics, DTP, presentation, etc.)* **5–6** Final plan uses at least three packages; has a purpose; is clearly stated and appropriate **3–4** Final plan uses at least three packages; mostly serves a purpose; is not always clearly stated and appropriate **2** Final plan uses at least two packages; some serve a purpose; not always clearly stated and appropriate **1** Final plan uses at least one package; some correctly used; lack meaning and do not serve a purpose	**6**		
Integration *between packages is clearly indicated, appropriate and purposeful* **3–4** Evidence of integration between packages; meaningful and serves a purpose **1–2** Evidence of integration between packages; does not necessarily serve a purpose	**4**		
Accuracy: document submitted free of typing, spelling and grammar errors (-1 per error to a maximum of 3)	**3**		
Time Management: Phase 1 handed in by the due date (-1 per day late to a max of 2)	**2**		
TOTAL FOR PHASE 2	**40**		

Due Date: _____ **Date Submitted**: _____

PHASE 3			
Task 2 – Use the information – Final presentation/synthesis (Report)			
	Max	**Actual**	**Comments**
Title page *includes the Project Title, Learner's full name, GRADE 12 CAT PAT 2021 and one or more suitable pictures* **2** All correct, well set out and easy to read **1** Some correct or layout not good; items missing	**2**		
Table of Contents **2** Table of Contents included; generated electronically and technically correct **1** Table of Contents present	**2**		
Introduction *clearly gives an overview of the task* **3** Give a clear overview of the task **2** Rather vague and does not give an entirely clear overview of the task **1** Present, but vague and no purpose can be found	**3**		
Outline (layout) of Report **3** All of the headings in a logical order and same style used for all headings **2** Most of the headings are in a logical order and the same style has been used **1** No logical order or different styles used	**3**		
Body/Paragraphs/Content *Arranged logically and according to content – related information is grouped together* *No unnecessary duplication of data/information* *Content fully explains the answers to ALL the questions asked in Phase 1* *Good use of graphics/images throughout, with helpful explanations where necessary to support/explain the content – screen shots are provided as evidence* *Spreadsheet data/charts included in relevant sections with helpful explanations* *Database queries and reports used in relevant sections with helpful explanations* *Other packages used in relevant sections with helpful explanations* *The following content should be included:* *Explain the process/development/course of action followed for the completion of this step in each Phase, obstacles encountered, disadvantages/advantages of methods used"* ***Phase 1 –** e.g. I used the Internet but then discovered that I needed to do a survey, etc.* ***Phase 2 –** e.g. I used a word processing package to do a survey but then discovered that I could use Google Docs instead, etc.* **9–10** All content is included, is relevant with suitable images, screen shots and explanations **7–8** Most of the content is included, is mostly relevant, images and screen shots included, explanations not always thorough **5–6** Some of the content is included, is mostly relevant, some images and screen shots included, explanations could be more thorough **3–4** Insufficient content is included, not always relevant, some images and screen shots are included, very little explanations **1–2** Insufficient content, few images or screen shots, very short explanations	**10**		

Conclusion **3** Clear, relevant and provide a solution to the task **2** Rather vague and does not give a clear summary of the task **1** Present, but vague and no purpose can be found	**3**		
Self-Evaluation/Future developments *present and is meaningful* **3** Meaningful self-evaluation; future developments are provided **2** Rather vague self-evaluation; only a few future developments are provided OR Meaningful self-evaluation; no future developments are provided OR Rather vague self-evaluation; future developments are provided **1** Either self-evaluation or future developments are present, but vague and no purpose can be found	**3**		
Bibliography & Referencing **4** Bibliography technically correct and adequate; Referencing technically correct and complete **3** Bibliography technically correct but inadequate; Referencing technically correct but incomplete **2** Both Bibliography and Referencing attempted but only one is technically correct **1** Bibliography and Referencing attempted with at least one item but with technical errors	**4**		
Accuracy: No spelling/grammar/punctuation/spacing/font size or other errors (-1 per error to a maximum of 3)	**3**		
Time Management: Phase 3 handed in by the due date (-1 per day late to a max of 2)	**2**		
Total for Task 2	**35**		
Reduced to a mark out of	**25**		

Task 1 – Use the information - Processing/analysing (create documents)

Suitable assessment tools/ must be substituted if another package is used. Choose **three** out of the four rubrics that follow – total marks = **75**.

<table>
<tr><th colspan="4">WORD PROCESSING</th></tr>
<tr><td colspan="4">Rubric to be used to assess all wording processing documents used by learners, e.g. Phase 1,2,3, Surveys, Forms, Questionnaires, Brochures, Reports, etc. Marks should be allocated for consistent use of word processing skills.</td></tr>
<tr><td></td><td>Max</td><td>Actual</td><td>Comments</td></tr>
<tr><td>Layout and formatting
Consistent use of the type of font in headings, sub-headings,
Consistent formatting, i.e. justification, line spacing, paragraphs
Accuracy, i.e. spelling, grammar, punctuation, capital letters
Styles are used throughout, is appropriate and consistent
Easy to read – fonts, e.g. 12pt
Consistent page numbering
Use of bullets and styles of bullets in a multilevel list

3 Layout shows creativity and structure and is aesthetically pleasing; consistent formatting has been used throughout the document
2 Layout shows some structure; slight inconsistencies with regards to design
1 Layout is cluttered, lacks structure and is confusing; design is inconsistent</td><td>3</td><td></td><td></td></tr>
<tr><td>Design and use of tables

<table>
<tr><td>Calculations and sorting done</td><td colspan="2">1</td></tr>
<tr><td>Merging/splitting/importing of tables
Text direction
Borders and shading
Position – centre, left, right
Table properties – row height, column width, cell alignment, text wrapping</td><td>Formatting done in tables</td><td>3</td></tr>
<tr><td>Meaningful and serves a purpose</td><td colspan="2">1</td></tr>
</table>
AND/OR Design and use of columns

<table>
<tr><td>Creating multiple columns</td><td colspan="2">1</td></tr>
<tr><td>Use of column and section breaks within columns
Work with various widths and spacing within columns
Insert lines between columns
Apply columns to whole document or parts of a document</td><td>Formatting done in columns</td><td>3</td></tr>
<tr><td>Meaningful and serves a purpose</td><td colspan="2">1</td></tr>
</table></td><td>5</td><td></td><td></td></tr>
<tr><td>Creating and design of an appropriate template, e.g. surveys, questionnaires, electronic forms, etc.

2 At least one template included; meaningful and serves a purpose
1 One template included; does not necessarily serve a purpose</td><td>2</td><td></td><td></td></tr>
</table>

Enhancing of word processing documents *WordArt/ClipArt/Graphics* *Special symbols and characters* *Drawing feature used* *Headers/Footers* **4** At least three enhancements have been used correctly; are meaningful and serve a purpose **3** At least two enhancements have been used correctly; are meaningful and serve a purpose **2** At least two enhancements have been used; most correctly used; mostly meaningful and serve a purpose **1** At least one enhancement has been used; some correctly used; lack meaning and do not serve a purpose	**4**		
Use of more advanced word processing features *Section breaks to change orientation of pages within documents* *Evidence of comments and/or tracking changes* *Evidence of footnotes and/or endnotes* *Appropriate use of at least two hyperlinks and/or bookmarks* *Design of meaningful online forms using fields (text, drop-down, check box, etc.)* **9** At least five advanced features have been used correctly; are meaningful and serve a purpose **7–8** At least four advanced features have been used correctly; are meaningful and serve a purpose **5–6** At least three advanced features have been used; most correctly used; mostly meaningful and serve a purpose **3–4** At least two advanced features have been used; some correctly used; some meaningful and serve a purpose **1–2** One or two advanced features have been used; some correctly used; lack meaning and do not serve a purpose	**9**		
Integration *with other programs, e.g. Mail Merge, Paste Special, Paste Link, Export and Import.* **2** Evidence of integration; meaningful and serves a purpose **1** Evidence of integration; does not necessarily serve a purpose	**2**		
TOTAL	**25**		

SPREADSHEET			
	Max	**Actual**	**Comments**
Design of the spreadsheet *allows for easy interpretation of the information* **3** Data is categorised, good formatting: labelled sheets, named ranges, comments, clearly displays headings, shading, borders, etc. **2** Data is not suitably categorised, some basic formatting **1** Data is not categorised, poor or no formatting	**3**		
Spreadsheet contents; *functions and formulas used are meaningful and appropriate to the situation where they are used* **3** Relevant data with meaningful formulae; good use of functions; contribute towards the solution **2** Clear data; most formulas and functions are meaningful; contribute towards the solution **1** A poor attempt, with little data, few formulas/functions meaningful; do not successfully contribute towards the solution	**3**		
Evidence of formulas and functions *Use of specific operators for user defined mathematical formulas* *Calculations with dates and time* *Absolute cell referencing* *Calculating percentages, etc.* *Conditional formatting* *Data validation, i.e. using List Box* *Basic functions: SUM, AVERAGE, MIN, MAX, COUNT, COUNTA, COUNTBLANK, LARGE, SMALL, COUNTIF, ROUND, MEDIAN, MODE, SUMIF, NOW, DATE, TODAY, etc.* *Advanced functions: Nested IF Statements, VLOOKUP, HLOOKUP, XLOOKUP, CONCATENATE, LEFT, RIGHT, LEN, MID, UPPER, LOWER, AND, OR, etc.* **9–10** Excellent use of formulas, functions and features; a number of advanced functions and/or features have been correctly used and are appropriate **7–8** Good use of formulas, functions and features; some advanced functions and/or features have been correctly used and are appropriate **5–6** Evidence of formulas, functions and features; mostly basic functions used; mostly correctly used and appropriate **3–4** Evidence of formulas, functions and features; some basic functions used; some incorrectly used and some inappropriate **1–2** Some formulas, functions and features used; basic functions; mostly incorrectly used and mostly inappropriate	**10**		
Multiple sheets *been used to provide a working solution* **3** Links between multiple sheets/workbooks have been used and are meaningful **2** Links between sheets have been attempted; are mostly meaningful to the solution **1** Multiple sheets exist, not linked, some appropriate or meaningful to the solution	**3**		

Design of graphs **2** Design is good, i.e. headings, labels, legends and other formatting make graph easy to interpret, shows data clearly **1** Incorrect graph types used or formatting incorrect, some details lacking	**2**		
Graphs contribute to the solution **2** All the graphs are meaningful and contribute to the solution; appropriate to the data used **1** Some of the graphs are inappropriate and do not contribute to the solution	**2**		
Integration *of spreadsheets with other programs, e.g. Mail Merge, Named range, Paste Special, Paste Link, Export, Import, etc.* **2** Evidence of integration; meaningful and serves a purpose **1** Evidence of integration; does not necessarily serve a purpose	**2**		
TOTAL	**25**		

DATABASE			
	Max	**Actual**	**Comments**
Tables *At least **two** tables created* *At least **ten** records with realistic, meaningful data* *At least **five** fields with meaningful field names – appropriate to solving task/problem* *Data types are appropriate and correspond with the content of the fields* *Field properties are appropriate and correspond with the content of the fields* **6** At least two tables created, with at least five fields and ten records; all fields, data types, field properties and data meaningful and appropriate **5** At least two tables created, with at least five fields and ten records; most fields, data types, field properties and data meaningful and appropriate **4** Two tables created, with five fields and ten records; some fields, data types, field properties and data meaningful and appropriate **3** Two tables created, with some fields and records; some fields, data types, field properties and data meaningful and appropriate **2** At least one table created with some fields and records; some fields, data types, field properties and data meaningful and others inappropriate; **1** One table created with some fields and records	**6**		
Relationship – *At least **one** meaningful relationship; referential integrity* **2** At least one meaningful relationship created; with referential integrity **1** A relationship has been created; no referential integrity	**2**		
Database Normalisation – *The database must be normalised to 3NF* **5–6** Normalised correctly to 3NF, including explanation* **3–4** Normalised correctly to 2NF, including explanation* **1–2** Normalised correctly to 1NF, including explanation* **0** Not normalised at all ***Normalisation explanation can be placed in its own named document or in the final report in Phase 3, Task 2	**6**		
Forms *Created for at least **two** tables* *Form is well-designed and appropriate* *Meaningful Instructions and labels are clear* *Use of fields is relevant* *Evidence of buttons – meaningful and serve a purpose* *Form is user-friendly* **3** At least two meaningful forms; well-designed with meaningful instructions, clear labels and buttons, user-friendly and contribute to the solution **2** Two basic forms, contribute to solution, well-designed – some instructions and labels and buttons not present **1** One basic form, does not contribute entirely to the solution; poor design – lacks labels, buttons and instructions	**3**		
Data validation – *at least **three** meaningful input checks that contribute to the solution, i.e. validation rule with text, List/Combo box, default value, input mask, etc.* **3** Excellent use of data validation; evidence of at least three input checks; have been correctly used and are appropriate **2** Good use of data validation; evidence of at least two input checks; have been correctly used and are appropriate **1** Evidence of at least one input check; attempt at correct use and mostly appropriate	**3**		
Total	**32**		
Reduced to a mark out of	**25**		

Queries – *at least **three** meaningful queries – answers questions/contribute to information needs* **4** At least three meaningful queries created, with sorting, advanced (calculated) fields/expressions and at least one query with fields from more than one table, use of Boolean operators **3** Three queries, with simple criteria, at least three fields used, some sorting, use of Boolean operators, some calculation is done **2** Two queries with simple criteria, some sorting **1** One query, using at least one field with some criteria, no sorting	**4**		
Reports - *at least **two** meaningful reports* **4** At least two meaningful reports, contributes to solution, grouping and sorting is used, include calculation on fields, layout good with suitable headings **3** Two basic reports, contribute to solution, some grouping or sorting is used, layout good with suitable headings **2** Two basic reports, do not contribute to the solution, no sorting or grouping is used; poor layout OR one meaningful report with most features **1** One basic report, lacking most features	**4**		
Use of a **Switchboard**/Main form as a menu item which links multiple forms	**2**		
Integration *of with other programs is meaningful and serves a purpose, e.g. Mail Merge, Export, Import, etc.* **2** Evidence of integration; meaningful and serves a purpose **1** Evidence of integration; does not necessarily serve a purpose	**2**		

If the rubric does not adequately describe the learner's solution, choose the best mark justified by the learner's evidence and indicate the reason for allocating the mark on the mark sheet.

PRESENTATION			
	Max	**Actual**	**Comments**
DESIGN			
Layout **4** Layout shows creativity and structure and is aesthetically pleasing. A consistent design has been used throughout the presentation. The use of fonts, backgrounds and colour has enhanced and not detracted from the content **3** Layout is pleasing and shows structure. Slight inconsistency with regards to the design throughout the presentation. Slight inconsistency in the use of fonts, backgrounds and colour which has enhanced, but at times detracted from the content **2** Layout shows some structure. Slight inconsistencies with regards to design. Inconsistency in the use of fonts, backgrounds and colour tends to be busy and detracts from the content **1** Layout is cluttered, lacks structure and is confusing. The design is inconsistent. Inconsistency in the use of fonts, backgrounds and colour detracts from the content	**4**		
Graphics/Advanced features – *hyperlinks, action buttons/multimedia* **4–5** Consistent visual theme. An outstanding effort enhancing the information through creative and relevant use of graphics, sound, animations, text and advanced features. Enhances and does not detract from the content **3** A visual theme enhancing the information through creative and mostly relevant use of graphics, sound, animations, text and some advanced features. Enhances and does not detract from the content **2** Some are unrelated to the theme and do not enhance overall concepts in the use of graphics, sound, animations and text. Tends to detract from the content **1** Unrelated to content. Showed little effort to enhance the presentation. Graphics, sound, animation and text tend to detract creating a "busy" impression	**5**		
Graphic Sources **1** All graphics are original. No ClipArt has been used. Sources are documented in the presentation for all images **0** No evidence of original graphics	**1**		

CONTENT			
	Max	**Actual**	**Comments**
Length **3** Evidence of a Title slide, contents page, 5–8 body slides, page numbers and conclusion slide. The topic was covered thoroughly and enough information was given to understand the topic **2** There has been a little deviation to instructions regarding length of presentation. The topic covered could have had more information **1** There have been many deviations to instruction regarding length of presentation. The topic was insufficiently covered **0** The content was insufficient to be relevant	**3**		
Organisation **3** All information is useful, clear and concise. Information was presented in a logical, interesting sequence and included appropriate headings and keywords **2** Information is mostly organised in a logical way. Information seems to flow logically from slide to slide. Most headings are appropriate and information is generally useful **1** Some of the information is useful and logically sequences. There has been an attempt at keywords **0** Very little of the information is useful. Information is not well organised, with evidence of wordiness. There is no logical flow from slide to slide	**3**		
Accuracy **3** All content is accurate and factual and free of spelling and grammar errors **2** Most of the content is accurate with minor spelling and grammar errors **1** The content is generally accurate with minor spelling and grammar errors **0** Content is confusing or contains a number of spelling and grammar errors	**3**		
Originality **3** Presentation shows considerable originality and inventiveness. The content and ideas are presented in a unique and interesting way **2** Presentation shows some originality and inventiveness. The content and ideas are presented in an interesting way **1** Presentation shows an attempt at originality and inventiveness on a few slides **0** Presentation is a rehash of other people's ideas. Shows very little attempt at original thought	**3**		
Overall impression **3** An outstanding presentation. Use of features was very effective **2** A good presentation. Used basic features with few enhancements **1** Little understanding of the topic and little evidence features was shown	**3**		
TOTAL	**25**		

MOVIE			
	Max	**Actual**	**Comments**
Content *Movie has a suitable title* *There is a clear outline as to the content of the movie* *Movie has a clear beginning, middle and end* *Movie includes meaningful content* *The entire movie is short (between 3-5 minutes)* *The content is in good taste* *A variety of content has been included: video clips, extracts from movies, facts, images, interviews, sound, etc.* **5–6** The movie has a clear focus related to the chosen topic, reflects broad research, shows notable insight and understanding of topic, the content is sufficient and shows insight **3–4** The movie has a clear focus related to the chosen topic. Information has been compiled from several relevant sources, substantial evidence of learning and efforts, the movie is slightly too long or too short, includes a variety of content **2** There is a focus that is maintained throughout the movie, information can be understood by the intended audience, adequate evidence of learning and efforts, there is insufficient content, or the content is irrelevant at times, a lack of variety of content **1** The movie has a focus but can be unclear at times. Less than adequate evidence of learning and effort are reflected, there is insufficient content, or the movie is too long, content is irrelevant, limited variety of content	**6**		
Organisation *Consistent (same style throughout)* *Simple (clear, straightforward, to the point)* **4** Organisation of presentation is excellent; transitions enhance the viewer's understanding of the topic; titles are clear and used to enhance understanding **3** Sequence of movie components is clear and evident; transitions provide easy movement from one scene to another, titles used sparingly to enhance understanding **2** Adequate preparation and sequence is shown, transitions used sparingly – adequate, titles present but may be inappropriate to content **1** Either lack of preparation or illogical sequence, transitions absent or overused that interferes with story, titles absent or interfere with content	**4**		
Originality **3** Movie shows considerable originality and inventiveness, the content and ideas are presented in a unique and interesting way **2** Movie shows some originality and inventiveness, the content and ideas are presented in an interesting way **1** Movie shows an attempt at originality and inventiveness in part of the presentation **0** Movie is a rehash of other people's ideas and/or images and shows very little attempt at original thought	**3**		

	Max	Actual	Comments
Technical *Sound – soundtrack, sound effects, music* *Dialogue* *Importing of clips, images, video clips, other media* *Continuity of clips, images* *Special effects to enhance the movie* **4** Sound enhances the story telling and also adds value and atmosphere, dialog enhances story with editing to show continuity. The movie is enhanced by the clips chosen in the editing process, editing enhances continuity and speed of editing enhances atmosphere of movie, there is appropriate use of special effects to enhance the degree of creativity **3** Sound helps viewer to understand the story being told, dialogue clear and editing enhances understanding. The clips chosen generally support the movie's objectives Editing creates a sense of continuity there is adequate use of special effects that enhance the degree of creativity **2** Sound does not enhance the understanding of the movie, dialogue audible but viewer has to strain to hear. There are some clips present that do not fit the movie's objectives, editing cuts clips to correct length and placed in order, there is satisfactory use of special effects that enhance the degree of creativity **1** Sound interferes with understanding of movie, dialogue absent or inaudible (if pertinent). Clips chosen do not relate to planned objective of movie, editing simply consists of putting filmed clips in order, there is ineffective use of special effects	**4**		
Accuracy **4** The language used is appropriate, the content throughout the movie is accurate, and there are no factual errors **3** Most of the content is accurate, content is appropriate **2** Most of the content is accurate, a number of accuracy errors occur **1** The content is confusing, incorrect or flawed	**4**		
Overall impression **4** Process and final product exceed expectation of learning target, compels the audience's attention **3** Process and final product meet expectation of learning target, interesting to an audience beyond the learners' who created it **2** Process and final product partially meet expectation of learning target, interesting to the learners' who created it **1** Process and final product do not demonstrate learner's ability to meet learning objectives, lacking in its ability to create interest			
TOTAL	**25**		

WEBSITE EVALUATION				
	Max	**Actual**	**Comments**	
DESIGN				
Authority *Is the author clearly identified?* *Is there a way of verifying the legitimacy of the website? Is there a phone number or postal address?* *Is there is a way to contact the author(s) via e-mail?* **3** All instances **2** Most instances **1** Few instances (<40%)	**3**			
Design *Is the information presented using a layout that is visually enhancing?* *Is the text legible?* *Does the use of graphics, backgrounds and textures enhance the site?* *Are consistent design features used throughout the site?* *Does the use of sound, graphic and video enhance the site's message?* *Does the page change frequently, making it difficult to use?* *Does the site contain some extra features for enhancement?* *e.g. Banners, Navigation Buttons, arrows, lines, Animated images, Hit counter, Online form, Alternate text, Frames, Search Engine* **5** All instances **3–4** Most instances **2** Some instances **1** Few instances (<40%)	**5**			
Content/Purpose *Is the information provided useful to the reader?* *Is the information on the topic thorough?* *Is the purpose of the website obvious?* *Is the information in good taste?*	**5**			

5 All instances **3–4** Most instances **2** Some instances **1** Few instances (<40%)				
IMPLEMENTATION				
Content/References *Is the information accurate?* *Is the information free of grammatical, spelling, and typographical errors?* *Is the information organised in a useful way?* *Is there sufficient information?* *Is the information interesting?* *Are there references to additional resources?* *Is the information clearly written?* *Is the information current enough for your needs?* **3** All instances **2** Most instances **1** Few instances (<40%)	**3**			

TESTING			
	Max	**Actual**	**Comments**
Navigation *Are there navigational tools provided to guide you through the resource?* *Are the links easy to identify?* *Are the links logically grouped?* *Is there a link back to the home page on each supporting page?* *Are the links relevant to the subject?* *Are the links reliable?* *Are there any remote links to other websites?* **3** All instances (>90%) **2** Most instances **1** Few instances (<40%)	**3**		
Workability *Is the site easy to use?* *Is the information logically organised?* *Is there an easy-to-locate table of contents or index?* *Does the site load quickly?* *Do images, textures, backgrounds, length of the page, substantially impact the amount of time it takes to display the site?* *Does the site cater for older browsers?* **3** All instances (>90%) **2** Most instances **1** Few instances (<40%)	**3**		
Coding *Have the correct HTML tags been used?* *Has the correct syntax been used (HTML and/or other language)?* **3** All instances (>90%) **2** Most instances **1** Few instances (<40%)	**3**		
TOTAL	**25**		

FINAL MARKS					
		SUB TOTAL		**TOTAL**	
Phase	**Details**	**Max**	**Pupil**	**Max**	**Pupil**
1	**Task definition and information finding strategies**	**40**		**40**	
2	**Task 1:** Access information and determine relevance	**40**		**40**	
	Task 2: Use the information - Planning				
3	**Task 1:** Word Processing (to be completed by all learners)	**25**		**100**	
	Processing/analysing (create documents) *NB: Third package is optional – if done, only the top two marks for the packages must be added out of a total of 50 marks.*				
	• Spreadsheet	25			
	• Database	25			
	• Third Package: (specify)	25			
	Task 2: Use the information – Final presentation/synthesis (Report)	**25**			
TOTAL PRACTICAL ASSESSMENT TASK (PAT)				**180**	

TEACHER COMMENTS: