CURRICULUM AND ASSESSMENT POLICY STATEMENT

SENIOR PHASE

GRADES 7-9

TECHNOLOGY

4 ASSESSMENT REVIEW

4.1 INTRODUCTION

Assessment is a continuous planned process of identifying, gathering and interpreting information about the performance of learners, using **various forms of assessment**. It involves four steps: generation and collection of evidence of achievement; evaluation of this evidence; recording of the findings and use of this information to understand and thereby assist the learner's development in order to improve the process of learning and teaching.

In a subject with a significant practical nature, like Technology, it is important to develop and assess the skills and values together with the associated subject knowledge. In Technology, knowledge without the skills that are needed to implement a practical solution has little worth. Similarly, skills cannot be taught without the skills to identify the problem, the knowledge needed to design solutions to problems or to satisfy the needs and wants, which is the essence of the Technology subject.

4.2 INFORMAL DAILY ASSESSMENT

(Formative Assessment / Assessment for Learning)

Assessment for learning has the purpose of continuously collecting information on a learner's achievement that can be used to improve learning and teaching.

4.2 BARRIERS TO LEARNING AND ASSESSING

- Although there are many barriers to learning, teachers need to identify and build on learners' strengths in order to affirm their uniqueness. All learners need to experience success and learners succeed differently.

- Alternative strategies must be applied: more time, enlarged text, use of information communication technology, amanuensis or scribes in cases of learners with special educational needs.

- The use of alternative assessment relates to the change in the form of assessment used to accommodate all learners. It is important to vary the assessment strategy appropriately.

- Personal involvement by learners on tasks often improves their attention span, patience, persistence and commitment.
- Designing and making real products that can be used to give learners a sense of achievement and improve their self-esteem.

The following strategies, depending on the physical barriers of learners, could apply when supporting learning and teaching:

- Use the **support of others** to help pupils take part safely in practical work, for example the assistance of adults or other learners to help with holding or manipulating tools or carrying out activities according to instructions. It is important that the learners retain control of the making process and be the decision makers.

- Learners can **describe their design ideas for others to record or to translate** into a drawing, while still retaining control of the design idea and the modifications.

- Work on **shorter, more focused tasks**, rather than longer, open tasks. This approach could provide learners with incremental elements of success and regular motivation and reward.

- Use **ICT applications**, such as specialised software, to help with sequencing and following instructions during practical work.

- Use **modelling, role-play, tape recorders, video and photographs** to communicate, develop and record their ideas.

- Communicate **using a range of methods** avoiding over-reliance on the written word.

4.3 INFORMAL DAILY ASSESSMENT (Formative Assessment/ Assessment for Learning)

When incorporated into classroom practice, the formative assessment process provides information needed to adjust teaching and learning while they are still happening. The process serves as practice for the learners and a check for understanding during the learning process. The formative assessment process guides teachers in making decisions about future instruction.

Examples that may be used in the classroom during the formative assessment process to collect evidence of learning:
Observations, Questioning, Discussion, , Learning/Response Logs, Graphic Organizers, Peer/Self Assessments, Practice Presentations, Visual Representations, Kinesthetic Assessments, Individual Whiteboards, Constructive Quizzes
Assessment for learning has the **purpose** of *continuously collecting information* on a learner's achievement that can be used to improve their learning.

Informal assessment is a **daily monitoring** of learners' progress in developing a knowledge base together with the related skills and safe attitudes needed in practical subjects.
This is *done through* **observation, discussion, practical demonstrations, learner-teacher conferences, informal classroom interactions**, etc. Informal assessment may be as simple as stopping during the lesson to observe learners or to discuss with learners how learning is progressing or intervening to demonstrate the correct and safe handling of a tool.

Informal assessment ***should be used to provide feedback to the learners*** **and to** ***inform planning*** for ***teaching but need not be recorded***. It should not be seen as separate from learning activities taking place in the classroom. In Technology the "enabling" activities that precede a practical assessment task are intended to develop the knowledge, skills and values to the point where the learners are ready to be assessed formally (this is analogous to the "learner" stage preceding the driver's licence test).

Assessment *for learning must be developmental*. *Learners or teachers* can mark these enabling tasks. *Self-assessment and peer assessment* actively involve learners in assessment. This is important as it allows learners to learn from and reflect on their own performance. The results of informal daily assessment tasks are not formally recorded unless the teacher wishes to do so.
The results of daily assessment tasks are not taken into account for promotion and certification or reporting purposes.

The following outline provides teachers with *an informal programme for assessment* that may be followed in order to achieve *effective curriculum delivery.*

Form of Assessment	**Term 1**	**Term 2**	**Term 3**	**Term 4**
Test: Class and revision tests	1	1	1	Consolidation
Enabling Activity / Practical Demonstration	Selected activities available per week	Selected activities available per week	Selected activities available per week	Consolidation
Class work / Worksheet / Case Study				Consolidation
Homework				Consolidation
PAT **Note:** **(**PAT in terms 1 & 3 will be done formally)**	******	Use PAT as in CAPS	******	Use PAT as in CAPS

Evidence of the above-mentioned forms of assessment should be found in the learner's exercise book / subject file per week.

4.4 FORMAL ASSESSMENT (Summative Assessment / Assessment of Learning)

All assessment tasks that make up a formal programme of assessment for the year are regarded as formal assessment. Formal assessment tasks are **marked and formally recorded by the teacher** for progression and certification or reporting purposes. *All formal assessment tasks are subject to moderation for the purpose of quality assurance and to ensure that variety and appropriate standards required for the grade are maintained.*

Formal assessment provides teachers with a **systematic way of evaluating how well learners are progressing** in a grade and in a particular subject and gives insight into the success of the teaching strategy and methodology. ***Examples of formal assessments*** are *tests, examinations, practical tasks, projects, oral presentations, demonstrations, performances, etc.*
Formal assessment tasks *form part of a year-long formal programme of assessment in each grade and subject and may be adapted to meet the needs of inclusivity where necessary.*

The following forms of assessment are used for formal assessment in Technology:

- An **assignment** in term 1 - Practical Assessment Task 1
- A **mid-year examination** in term 2
- A **project** in term 3 – Practical Assessment Task 2 and
- A **final end of year examination** in term 4.

Tasks done by learners for formal assessment purposes must be monitored by teachers at all times.

4.4.1 FORMS OF ASSESSMENT USED IN TECHNOLOGY

A) AN ASSIGNMENT

An assignment allows for a more **holistic assessment of knowledge, skills and values** and their application in different contexts. The assignment is **less open-ended than the project** in that it *does not require of learners to collect, analyse and/or evaluate data and information* that will result in the synthesising of the findings. It however, will be a **problem-solving and/or decision-making and application of knowledge exercise with clear guidelines regarding a specified length**. The *focus will be determined by the content covered* according to the annual teaching plan. The *teacher will provide learners with resources* and information required

to deliver the task. **All assessment criteria applicable to the task must be discussed with the learners prior to the commencement of the task.**

In Technology an assignment is a **Practical Assessment Task** which makes up the main formal **assessment of a learner's skills and knowledge application during the allocated term. It covers the following design process skills: Investigate, Design and Make.**

An Assignment is **administered over a shorter period of time when compared to a project** and **follows a clear set of instructions**.

B) A PROJECT

The project will be any **piece of work in which knowledge, skills and values** which lead towards **competence in the specific or integrated content, are demonstrated**. The task will **involve collecting, analysing and/or evaluating data and information that will result in the synthesising of the findings into a written product that may be reported, modelled or performed by the learners**. **Learners will *collect data/ resources/information outside of contact time to perform the task*. *The completion of the project will be facilitated by the teacher in class time to ensure the authenticity of the product*.**

The **topic and nature** of the project will be determined by the content covered according to the annual teaching plan.

Learners should be given **enough time to complete the project**. They need adequate guidance at the outset of the project and progress should be monitored throughout. All assessment criteria applicable to the project must be discussed with the learners prior to the commencement of the project.

In Technology a project is *a Practical Assessment Task* which makes up the main formal assessment of a learner's skills and knowledge application during the allocated term. It covers the following design process skills; Investigate, Design, Make, Evaluate and Communicate.

A Project is administered over a longer period of time when compared to an Assignment and follows a broader set of instructions to allow for learner innovation and creativity.

A PAT is intended to **formalise the practical component of Technology contextualised within a knowledge focus area.**

- The Practical Assessment Task is designed to **give learners the opportunity to develop and demonstrate their ability** (i.e. capability) as they progress through the tasks.
- Each PAT **focuses primarily on one of the knowledge foci of Technology** (viz. structures, mechanical systems and control, electrical/electronic systems and control and processing), but **may be integrated and may target more than one knowledge focus.**

C) CASE STUDY

A case study will involve a **detailed description of a specific situation** or phenomenon. The description can either be real or hypothetical and can be taken from a book, newspaper, magazine, video or the radio. Case studies will **assess whether a learner can apply knowledge, skills and values to an unfamiliar context.** The focus will be determined by the content covered according to the annual teaching plan. The teacher will provide learners with resources and information required to deliver the task. All assessment criteria applicable to the task must be discussed with the learners prior to the commencement of the task.

D) TEST/S

Tests usually **consist of a range of questions**. Learners are required to **respond within a specified time. Questions are useful to assess knowledge recall and test understanding and comprehension.** If questions are correctly phrased, they can also test application of knowledge. Since they are generally easy to mark reliably this is a good way to conduct summative assessment, can also be a very useful formative tool.

E) EXAMINATION

Examinations will be administered twice a year as part of the internal examination timetable of the school/district/province. The examinations will comprehensively address the knowledge and skills covered up to the time of the examination. More than one type of question will be incorporated and the focus will be on the application of knowledge in an integrated manner.

The mid-year examination will cover the content for terms 1 and 2 and end-of-year examination will cover the work done during term 3 and 4.

Each examination must cater for a range of cognitive levels skills and values and attitude. All question papers set by the teacher throughout the year must be moderated by the head of department at the school. This is done to ensure that the prescribed weightings are adhered to by the teacher.

4.4.2 TYPES OF QUESTIONS FOR PEN AND PAPER TEST

The value of memorising by rote learning has little weight in a subject requiring ***innovation***, ***creativity*** and ***problem-solving*** skills.

The ability to ***think laterally*** and to develop ***original*** and ***appropriate solutions*** is a key element in learning Technology. • Learners should be able to **investigate** using a variety of sources, demonstrate their ability to **draw** in a specific style, **write** a design brief, give specifications and constraints, **select** appropriate materials for a model, **plan** the sequence

of manufacture of a product, **evaluate** a design objectively, **analyse** a system using systems diagrams and **communicate** their solutions using a range of techniques.

Questions that integrate knowledge, skills and value have more value in technology than a mere recall of knowledge facts.

4.4.3 TYPES OF QUESTIONS THAT CAN BE USED TO DEVELOP FORMAL ASSESSMENT TASKS

The format of the test/examination paper or formal assessment task can include any of the question types mentioned below. The actual structure and combination will depend on the content definition and the subject specific requirements as per the CAPS Section 4. **As a rule, the memorandum and/or rubric are prepared as the assessment tasks are being developed.**

A. SHORT ANSWER QUESTIONS

A short answer item is a question used to find out about what the learner knows. It requires the learner to provide an answer, rather than to select an answer. Short answer items use questions that restrict the answer to a short paragraph, sentence, or single words. Short answer questions are more appropriate for some topics rather than others. They are useful for recall of facts, analysis of data and solving of problems

Examples of short answer items could include lists of items or equipment, brief descriptions of a procedure, sequence of an activity or reasons to explain an event.

ADVANTAGES	DISADVANTAGES
• Easy and relatively quick to write. • Less influenced by guessing than multiple choice or true/false questions. • Easy to score/mark with a high reliability of marking, especially with model answers or a marking guide. • Provides more scope for the learner to show their knowledge than with a limited response question.	• Where a short answer is required, the learner should be given clear guidance on the target length of the answer. • When a marking guide is developed, the teacher / test developer should recognise that there are likely to be correct answers discovered later in addition to those expected and that these should be added to the marking guide as they are identified.

HINTS

a) Ask for specific information.

b) Phrase the question precisely and concisely.

c) Ensure that there are a single or defined number of correct answers.

d) Avoid phrasing a question that offers a clue to the answer.

e) Indicate the marks allocated for the question.

B. DIAGRAMS/CARTOONS/GRAPHS

This type of question requires the learner to look at a drawing, picture, cartoon or a graph and write the correct information in a blank space, interpret, analyse the information presented and/or develop his/her own diagram, cartoon or graph. Interpretation and drawing of graphs are used more for higher-level questions.

ADVANTAGES	DISADVANTAGES
• Useful in measuring the learner's knowledge of tools, supplies or components. • Useful for higher level questions. • Assists learners with low literacy skills by the use of pictorial materials. • Can be used effectively to test many aspects of the subject. • Can be incorporated with other forms of assessment such as case studies or short questions	• Preparation and presentation of clear diagrams or pictorial material is difficult. • Grids for graphs must be drawn accurately when preparing the answer sheet. • Sufficient amount of graph paper needs to be supplied.

HINTS

a) Grids for the graphs must be age appropriate.

b) Only include this type of question if learners have worked with it in their informal activities.

C. FILL THE SPACE/GAP QUESTIONS

"Fill in the gap" questions are another variation of short answer questions. The question consists of a true statement in which one or two important words have been left out.

ADVANTAGETS	DISADVANTAGES
• Little scope for the learner to guess the correct answer. • Useful for assessing recall of information.	• Often difficult to write questions that have only one correct answer. • Sometimes the word(s) omitted make it difficult to understand the meaning of the sentence.

HINTS

a) Omit only a relevant key word.

b) Use straightforward sentences.

c) Check that learners can infer the meaning even without a deleted word.

d) Do not use “a” or “an” to provide a clue.

e) Give credit for all potential answers that make sense.

D. MULTIPLE CHOICE QUESTIONS

A multiple choice is a question or incomplete statement followed by three to five options from which the learner selects the best answer(s). Incorrect options are called distracters. Distracters are used to side-track learners who may not know the correct answer.

ADVANTAGES	DISADVANTAGES
• Marking / scoring is uniform, standardised and usually quick. • Objectivity in marking reduces any teacher variability factors. • Assesses a learner's knowledge as well as their ability to discriminate amongst several possible alternatives. • Can test judgment as well as memory. • Provides a better sample of the topic being assessed than most other formats given the same period of time. • Can be used to assess low, medium and higher order questions.	• Relies on the learner having appropriate reading and comprehension skills. • Construction of effective questions is often difficult and time consuming. • The quality of the question often depends on appropriate "distracters" or incorrect options. • Economies of scale can only be achieved with large numbers of learners.

HINTS

a) Allocate approximately one multiple-choice question per minute.

b) Questions should be meaningful and represent a specific problem in the stem of the question.

c) Questions should be stated in positive rather than negative terms.

d) Distribute answers equally in the positions of *a, b, c,* and *d.*

e) Avoid the use of grammatical clues at the end of a stem, for example: *a, an, are, is, this, these.*

f) Avoid the use of "some/none/all of the above" as an option.

g) Try to include at least four possible responses for each question.

h) Use between 1 or 2 questions to assess each of the topics completed during the term.

i) Use plausible distracters.

j) Use a question format.

k) Be grammatically correct.

l) Avoid giving clues for the correct answer.

E. MATCHING AND ALTERNATIVE CHOICE QUESTIONS

The matching question is a type of multiple-choice question that is helpful for assessing knowledge of related information. It consists of two lists or columns of related information from which the learner is asked to match the appropriate items.

ADVANTAGES	DISADVANTAGES
• A lot of content can be covered in one question. • Easier to write than multiple choice questions. • Useful variation in questioning. • Objective and easy to mark/score.	• Need a large number of items to match within the question. • Specific instructions/guidelines should be given for matching items.

HINTS

a) Need 7-10 items to match within the question.

b) Allow one or two extra options.

c) Make sure learners are familiar with this type of questions.

F. TRUE/FALSE QUESTIONS

The true or false question is basically a statement that has to be identified as correct or incorrect.

ADVANTAGE	DISADVANTAGES
• Useful for assessing the basic knowledge of facts.	• Can encourage guessing. • Questions should not require only recall of trivial information.

HINTS

a) Ensure that the statement is entirely true or false.

b) Include only one idea in each question.

c) Use clear language and avoid double negatives.

d) Place true and false answers in random order.

e) Use false answers so that they represent misconceptions, and true answers for correct ideas.

f) Include many questions on a topic to reduce the impact of guessing answers.

g) Avoid the terms 'usually', 'always', 'none'.

h) Avoid trick questions.

4.4.4 SETTING A QUALITY QUESTION PAPER FOR GRADES 7 TO 9

- The **content for term 1 and 2** must be addresses in the **mid-year examination.**
- The ***content for term 3 and 4*** must be addressed in the ***end of year examination.***
- The mid-year and end of year examination for **Grade 7 – 9 is 100 marks for 120 minutes**.
- The **weighting of the end of year examination for Technology is 40**%.
- In Grade 8 and 9 prior knowledge from Grade 7 and 8 may be necessary to interpret and answer some questions.

STEPS IN SETTING A GOOD QUALITY QUESTION PAPER

Step 1	Determine the *knowledge, skills and values* applicable to the paper
Step 2	Select *appropriate marks allocated* to each question.
Step 3	Brainstorm the *nature or type of each question and sub-questions* e.g. factual, data-response, critical evaluation, problem-solving, numerical, visual, closed or open-ended.
Step 4	Decide on the *cognitive levels* to be addressed in each question.
Step 5	Decide on *how each question should be structured*, for example 'scaffolding'.
Step 6	Set the question paper and the marking memorandum *simultaneously*.
Step 7	Apply suggested *time allocations* for each question.
Step 8	Develop the *cover page, including time allocation*.
Step 9	Ensure that the paper is *moderated and all quality control checks (annexures accompanying specific formal assessment activities)* that have been completed.

(Extract from Trevor Hall's Implementation of the National Curriculum in Grades 10 – 12)

4.4.5 COVERAGE OF *SPECIFIC AIMS* ACROSS THE QUESTION PAPERS

CONTENT WEIGHTING

The format of the question paper should be followed consistently as prescribed in the tables on the next page for every question paper set. *Questions may be divided into sub-questions to differentiate between topics, subject to maintaining the total number of marks allocated for specific questions.*

CONTENT WEIGHTING: Grades 7- 9		
SPECIFIC AIM 1: Investigate, design, make, evaluate and communicate **Design Process Skills**	**SPECIFIC AIM 2:** Structures, Processing, Mechanical and Electrical/ Electronic Systems & Control **Knowledge**	**SPECIFIC AIM 3:** (Technology, Society and the Environment) Indigenous / Impact / Bias **Values and Attitudes**
50%	**30%**	**20%**
50 MARKS	**30 MARKS**	**20 MARKS**
Notes: • Content and skills must cover a Grade focus across a broad range of topics, concepts and skills • Although the question paper is divided largely into Content Sections, Specific Aims1 and 3 are integrated across and or within the questions.		

4.4.6 COVERAGE OF COGNITIVE LEVELS ACROSS THE QUESTION PAPERS

COGNITIVE LEVELS: Grades 7 - 9		
LOW ORDER	**MIDDLE ORDER**	**HIGH ORDER**
Recognise, List, Identify Describe, Retrieve, Name, Locate, Find, Label, Infer Give an example, Interpret Summarise, Paraphrase, Classify, Compare, Explain Exemplify	Sequence, Implement, Calculate, Execute, Manipulate, Solve, Adapt, Investigate, Examine, Organise, Deconstruct, Categorise, Probe, Integrate, Structure, Distinguish	Validate, Check, Analyse Hypothesise, Critique Experiment, Judge, Test Detect, Monitor, Develop Design, Construct, Plan Produce, Invent, Devise Make, Formulate
30 %	**40 %**	**30 %**
30 MARKS	**40 MARKS**	**30 MARKS**
Notes: • When setting questions within a Section, consideration must be given to the increasing cognitive complexity of the questions across the full question paper and within each question where possible. • Progress questions from low to high order where possible.		

The format of the question paper should be followed consistently as prescribed in the table below for every question paper set. Questions may be divided into sub-questions to differentiate between topics, subject to maintaining the total number of marks allocated for specific questions.

STRUCTURE OF THE: THE MID-YEAR EXAMINATION

	GRADE 7		GRADE 8		GRADE 9	
SECTION A	**Content Knowledge**	**Marks (30)**	**Content Knowledge**	**Marks (30)**	**Content Knowledge**	**Marks (30)**
Short form questions	**Term 1** • Design process • Graphic communication • Levers and Linkages • Mechanical Advantage	18	**Term 1** • Design process • Frame Structures • Structural members • Structural failure • Types of forces • Mechanical advantage	21	**Term 1** • Design process skills • Different types of forces acting on structures	15
	Term 2 • Types of structures • Strengthening Structures: folding, tubing and triangulation	12	**Term 2** • Reinforcing of material • Metal sections – (I-beam, angle iron, T-bar, etc.)	9	**Term 2** • Mechanical system and control: Types of gears and their movement, • hydraulic jack	15
SECTION B	**Design Process skills integrated with SA 1 and or SA 3**	**Marks**	**Design Process skills integrated with SA 1 and or SA 3**	**Marks**	**Design Process skills integrated with SA 1 and or SA 3**	**Marks**
	i. Investigation ii. Design skills, iii. Aspects of Making skills iv. Evaluation skills iv. Graphic communication skills	50	i. Investigation ii. Design skills, iii. Aspects of Making skills iv. Evaluation skills iv. Graphic communication skills	50	i. Investigation ii. Design skills, iii. Aspects of Making skills iv. Evaluation skills iv. Graphic communication skills	50
SECTION C	**Technology, Society and the environment integrated with SA 1 and or SA 2**	**Marks**	**Technology, Society and the environment integrated with SA 1 and or SA 2**	**Marks**	**Impact of Technology on the Society and the environment. Integrated with SA 1 and or SA 2**	**Marks**
	Values and attitudes. (Indigenous/Impact/Bias)	20	Values and attitudes: Impact of technology	20	Impact of Technology on environment/Safety requirements/Bias)	20

STRUCTURE OF THE END OF YEAR EXAMINATION

	GRADE 7		GRADE 8		GRADE 9	
SECTION A	**Content Knowledge**	**Marks (30)**	**Content Knowledge**	**Marks (30)**	**Content Knowledge**	**Marks (30)**
Short form questions	**Term 3** • What is magnetism? • Different types of permanent magnets • Simple electric circuits Energy source – cell / switch / bulbs / buzzers • Complex mechanisms • Levers, cranks, pulleys • Mechanical advantage	18	**Term 3** • Levers (single & linked) • 2nd class lever (single & linked) • 3rd class levers (single & linked) • Gear systems • Mechanical advantage calculations • Gear ratios, velocity ratios / gear wheel diameters	12	**Term 3** • Electrical and electronic systems • Design process skills • Ohm's law • Calculations of V,I, R • Simple circuit diagrams	18
	Term 4 • Nutritious & tasty meals for refugees • Evaluate food in terms of flavour, texture and nutritional value • Clothing worn by specialised occupations like fire department, NSRI • Chemicals that waterproof textiles • Burning characteristics of textiles	12	**Term 4** • Electrical systems & control • Simple circuit components, input devices, output devices • Logic gates • Photovoltaic cells • Alternating current • Generating electricity • Thermal power stations • Hydroelectrically power stations • Wind-driven turbines	18	**Term 4** • Processing metals & plastics • Recycling of plastics • Corrosion of metals • Properties of plastics • Preserving food (storing/pickling/drying)	12
SECTION B	**Design Process skills integrated with SA 1 and or SA 3**	**Marks**	**Design Process skills integrated with SA 1 and or SA 3**	**Marks**	**Design Process skills integrated with SA 1 and or SA 3**	**Marks**

	i. Investigation ii. Design skills iii. Aspects of Making skills iv. Evaluation skills iv. Graphic communication skills	50	i. Investigation ii. Design skills iii. Aspects of Making skills iv. Evaluation skills iv. Graphic communication skills	50	i. Investigation ii. Design skills iii. Aspects of Making skills iv. Evaluation skills iv. Graphic communication skills	50
SECTION C	**Technology, Society and the environment integrated with SA 1 and or SA 2**	**Marks**	**Technology, Society and the environment integrated with SA 1 and or SA 2**	**Marks**	**Impact of Technology on the Society and the environment. Integrated with SA 1 and or SA 2**	**Marks**
	Values and attitudes. (Indigenous/Impact/Bias in technology / Recycling) • Materials and building techniques used by indigenous people	20	Values and attitudes: Impact of technology / Bias of technology	20	Indigenous Technology / Safety requirements/ Recycling)	20

4.5 PROGRAMME OF ASSESSMENT IN TECHNOLOGY: GRADES 7, 8 AND 9

FORMAL ASSESSMENT IN TECHNOLOGY				
TERMS	**TERM 1**	**TERM 2**	**TERM 3**	**TERM 4**
FORMS OF ASSESSMENT	**PAT 1: Assignment**	**Mid-year examination**	**PAT 2: Project**	**End-of-year Examination**
MARK ALLOCATION	70 marks	100 marks	100 marks	100 marks
TERM WEIGHTING (%)	100 %	100 %	100 %	100 %
CASS	**20 %**	**10 %**	**30%**	
PROMOTION MARK	**60 % CASS (SBA) per year**			**40 % End-of-year-exam**
	100 %			

	TERM 1	TERM 2	TERM 3	TERM 4
NUMBER OF TASKS	**1**	**1**	**1**	**1**
FORM OF ASSESSMENT	**TASK 1: Practical Assessment Task: ASSIGNMENT**	**TASK 2: EXAM**	**TASK 3: Practical Assessment Task PROJECT**	**TASK 4: EXAM**
CONTENT COVERED	Work done in term 1 **SA 2:** Structures / Processing / Systems & Control **SA 3:** Impact / Bias of Technology on Society and/or the environment	Work across terms 1 and 2 **SA 2:** content focus spread across the exam is term 1 and term 2. **SA 3:** Impact / Bias of Technology on Society and/or the environment	Work in Term 3 or integrate term 2 with term 3 **SA 2:** Structures / Processing / Systems & Control **SA 3:** Impact / Bias of Technology on Society and/or the environment	Work across terms 3-4 **SA 2:** Structures / Processing / Systems & Control **SA 3**: Impact / Bias of Technology on Society and/or the environment
SKILLS ADDRESSED	Work done in term 1 **Design Process Skills; SA 1 Investigate: = 10 marks Design = 20 marks Make = 40 marks** (Graphic communication skills are integrated across design and make)	Work across terms 1 and 2 **SA 1, 2 and 3** Respond to questions across cognitive range; **Design Process Skills; SA 1:** Design skills, ii. aspects of Making skills- ; iii. Evaluation skills and iv. Graphic communication skills; **SA 3:** Express a point of view regarding impact and or bias of technology based on values within the environment and or society	Work in Term 3 or integrate term 2 with term 3 **Design Process Skills; SA 1 Investigate=10 marks Design=20 marks Make= 55 marks Evaluate=5 marks Communication 10 marks** (Graphic communication skills are integrated across design and make)	Work across terms 3-4 **SA 1, 2 and 3** Respond to questions across cognitive range; **Design Process Skills; SA 1:** Design skills, ii. aspects of Making skills; iii. Evaluation skills and iv. Graphic communication skills; **SA 3:** Express a point of view regarding impact and or bias of technology based on values within the environment and or society
MARK ALLOCATION	**70 marks**	**100 marks**	**100 marks**	**100 marks**
DURATION	Four weeks	105 Minutes	6 weeks	120 Minutes
MARKING GUIDELINE	Analytical Rubric / Scoring Rubric /or suitable instrument	Memorandum and Rubrics	Analytical Rubric / Scoring Rubric / or suitable instrument	Memorandum and Rubrics

HOW TO ADMINISTER THE FORMAL ASSESSMENT TASK

Grade 7 – 9	Term 1	Term 2	Term 3	Term 4
INFORMAL ASSESSMENT: They following activities can be used as Informal Assessm	• Teachers allocated FAT as given in CAPS, and learners respond to instruction • Teacher must manage the process and collate learners work across the four weeks. • Monitoring progress and assess parts of the work continuously • Pg 42 CAPS for role of learners / Teachers and School.	• Set by the teacher; Question paper and marking instruments must be moderated by SMT for layout and content accuracy. (See Mod instrument in CAPS) • Written under exam conditions • Comply with the structure as indicated in the table of the midyear and end-of-year exam. • Examination consisting of three sections will be set by the teacher and moderated before the exam is written • **Section A** – Response to short form questions within content - **30 Marks** • **Section B** Specifics Aim 1 integrated with SA 2 and 3 **50 Marks** • **Section C** Specific Aims 3 integrated with SA 1 and 2 - **20 Marks**	• Teachers use context given for the 3 and provide the learners with the stated scenario and a set of instructions to complete a Project Portfolio and to submit a "working" model that will address the problem identified in the scenario;" • Option to Integrate: • Learners complete a project portfolio under supervision of the teacher within reason on a given template. • Group work may be used for the making of a model / product to support class room management of large numbers • Pg 42 CAPS for role of learners / Teachers and School.	• Set by the teacher; Question paper and marking instruments must be moderated by SMT for layout and content accuracy. (See Mod instrument in CAPS) • Written under exam conditions • Comply with the structure as indicated in the table of the midyear and end-of-year exam. • **Section A** – Response to short form questions within content - **30 Marks** • **Section B** Specifics Aim 1 integrated with SA 2 and 3 - **50 Marks** • **Section C** Specific Aims 3 integrated with SA 1 and 2 - **20 Marks**
Cognitive levels	**A PAT is largely based within Middle and High Order**	**30% L + 40% M + 30 % H**	**A PAT is largely based within Middle and High Order**	**30% L + 40% M + 30 % H**
End of year weighting for progression	**20%** **SBA / CASS**	**10%** **SBA / CASS**	**30%** **SBA / CASS**	**40%** **END OF YEAR EXAM**

4.6 RECORDING AND REPORTING

Recording is a **process in which the teacher documents the level of a learner's performance in a specific assessment task.** It **indicates learner** progress towards the achievement of the knowledge as prescribed in the Curriculum and Assessment Policy Statements. *Records of learner performance should* ***provide evidence*** *of the learner's conceptual progression within a grade and her/his readiness to progress or be promoted to the next grade.* **Records of learner performance should also be used to verify the progress made by teachers and learners in the teaching and learning process**.

Reporting is a **process of communicating learner performance to learners, parents, schools and other stakeholders.** Learner performance can be reported in a number of ways. These include **report cards, parents' meetings, school visitation days, parent-teacher conferences, phone calls, letters, class or school newsletters**, etc. Teachers in all grades report in percentages against the subject. Seven levels of competence have been described for each subject listed for Grades R – 12.

The various achievement levels and their corresponding percentage bands are as shown in the table below.

CODES AND PERCENTAGES FOR RECORDING AND REPORTING

RATING CODE	DESCRIPTION OF COMPETENCE	PERCENTA GE
7	Outstanding achievement	80 – 100
6	Meritorious achievement	70 – 79
5	Substantial achievement	60 – 69
4	Adequate achievement	50 – 59
3	Moderate achievement	40 – 49
2	Elementary achievement	30 – 39
1	Not achieved	0 – 29

Note 1: Assessment may make use of fewer than seven level descriptors. Any assessment scale should have clear descriptors that give detailed information for each level. This means that a descriptor should say ***why*** an achievement is deemed to be 'outstanding' or 'elementary'.

Note 2: Teachers will record actual marks against the task by using a record sheet; and report percentages against the subject on the learners' report cards.

4.7 MODERATION OF ASSESSMENT

Moderation refers to the **process that ensures that assessment tasks are fair, valid and reliable.** Moderation **should be implemented at school, district, provincial and national levels. *Comprehensive and appropriate moderation practices must be in place for the quality assurance of all subject assessments.* One purpose of moderation is to identify areas in which teachers may need development and support in their areas of work and for support to be provided.**

4.7.1 Practical Assessment Tasks (PAT)

- **Teachers will assess the PATs** in Grades 7 – 9.
- The **subject head for Technology** or **head of department** at the school must **ensure that the practical nature of the subject is dealt with adequately**, *especially during the PATs*, and **must plan for the acquisition of resources to enable this to happen**.

4.7.2 Formal Assessment (SBA)

- All tasks in Grades 7 – 9 for ***formal assessment are internally set and internally moderated***. The *subject advisor should moderate a sample of these tasks during his/her school visits*, to *verify the standard of the internal moderation*. *The subject head for Technology or head of department at the school will manage this process.*
- **A teacher must keep all formal assessment tasks, assessment instruments and record sheets on file.**