



**GAUTENG PROVINCE**  
Department: Education  
**REPUBLIC OF SOUTH AFRICA**

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# **ENGINEERING GRAPHICS & DESIGN**



**GUIDELINES for the  
PRACTICAL ASSESSMENT TASK**

**GRADE 11**

**2023**

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## SECTION A (TEACHER GUIDELINES)

## INSTRUCTIONS FOR THE ADMINISTRATION OF THE PAT

*NOTE: These 'INSTRUCTIONS' are for the EGD Teachers, HODs and Officials!*

## 2023 PRACTICAL ASSESSMENT TASK (PAT) MANAGEMENT PLAN

No	PAT activity	2023 Dates
<b>GRADE 11</b>		
1	Handing out of the Gr. 11 PAT document to each learner	<i>No later than 01 Mar</i>
2	Revision of the Design Process as well as explaining and discussing the/each scenario	<i>No later than 01 – 03 Mar</i>
3	PHASE 1 presentations and assessment completed	<u>Before Wed 12 Apr</u>
4	Moderation of PHASE 1	13 Apr – 23 May
5	PHASE 2 presentations and assessment completed	<u>Before Tue 18 Jul</u>
6	Moderation of PHASE 2	19 Jul – 28 Sept
7	PHASE 3 / ALL PAT presentations completed	<u>Before Tue 10 Oct</u>
8	Final assessment of ALL PATs	<b>10 – 15 Oct</b>
9	ALL PAT marks submitted to EGD SES	16 – 20 Oct
10	Final provincial moderation of ALL 'complete PATs'	11 – 24 Oct

***NOTE: The date of 'Before Tuesday 10 October 2023' is NOT NEGOTIABLE!***

Although the PHASES could be completed either **cyclically** or during **block times**, as indicated in the ATP, it is recommended that **ONE ENTIRE day per term**, i.e., from **08:00 to 17:00+**, be allocated to each PHASE.

The **TOTAL TIME (maximum)** allocated for the completion of **ALL the PHASES** of the PAT may **NOT exceed 18 hours**.

To ensure that the PAT is completed within the stipulated timeframes, it is **essential that the teacher prepares and verbally communicates a management plan/pacesetter with target dates**. This will help learners monitor their own progress, and for the teacher to implement intervention programmes.

**NOTE:**

To ensure the integrity of the PAT as a 'third NSC examination paper', the following additional instructions must be adhered to. Non-compliance with any of these and afore-mentioned instructions will be deemed a serious irregularity.

- It is the **responsibility** of the **teacher** to ensure that **each learner's PAT** is of an **appropriate Grade 11 level and complexity**.
- **ALL presentation requirements** of the selected PAT **must be strictly adhered to**.
- Except for the required research component, **ALL the presentation requirements** of the PAT **must be completed at school under the supervision of the teacher**.
- **Explanatory examples**, e.g. graphical illustration, best practices from previous years' PATs, etc., **may ONLY be presented to the learners during the initial mediation of the PAT**. As the explanatory examples **may not be given to the learners or left for them to view indefinitely after the initial mediation**, learners **must be encouraged to take notes during the initial mediation, but may NOT take any photographs or videos**.
- Although the sharing of knowledge and ideas between learners is permissible, **no presentation may be shared or copied as the entire PAT must be completed individually**. **ALL the presentations, including the front page, table of contents (index), management plan etc., must be each learner's own original work**.

- **Except for clean A4 and A3 drawing sheets and grid/graph paper, NO templates, pre-prepared pages/drawing sheets, redrawn examples of the site plan etc., may be provided to the learners in any form or format.**
- **NO examples of possible or suggested solutions of any presentation of the PAT may be provided to the learners in any form or format.**
- **ALL learners must be encouraged to work on their own, with minimal intervention. Developmental feedback and guidance may therefore ONLY be given on presentations or a PHASE that has already been prepared/completed/attempted, or when the learner requests it.**  
**A learner must therefore first do/attempt a presentation requirement before 'assessment for learning' is applied, i.e., before feedback and guidance is given!**
- **When learners prepare drawings in CAD, the following must be adhered to:**
  - **The school must provide the facilities, including the CAD program(s) and computers. The school must hold the licenses of ALL the CAD programs used by the learners, and NO other programs may be used by any of the learners.**
  - **ALL CAD drawings must be prepared at school under the supervision of the teacher.**
  - **The opportunity to be trained using a CAD program must be made available to ALL learners, regardless of whether they use it or not.**
  - **As the teacher remains responsible for assessing both the competence displayed in using a CAD program and the layout and correctness of the drawing presentations, he/she must have sufficient knowledge of and skills in the CAD programs used.**
  - **Electronic and hard copy evidence of the history of the stage-by-stage development of each learner's CAD drawings must be retained at the school for a period of time as stipulated.**
  - **During the moderation process learners may be called upon to explain the functions and principles of operating the CAD programs uses, and to demonstrate drawing skills through performing capability tasks.**
- **The DECLARATIONS OF AUTHENTICITY (see page 16) must be completed and signed by learner and the teacher ONLY prior to the final assessment of the PAT.**
- **The SUMMATIVE ASSESSMENT SHEET (see page 15) must be completed in full for each learner following the final assessment of the PAT.**
- **It must be ensured that ONLY the completed SUMMATIVE ASSESSMENT SHEET, DECLARATION OF AUTHENTICITY and the CHECKLIST (see pages 12 & 13) are included after the table of content/index in each learners completed PAT file/portfolios.**

## ASSESSMENT AND MODERATION OF THE PAT

### Assessment

**The assessment of the PAT must be done according to the included ASSESSMENT CRITERIA AND CHECKLIST of this 2023 Grade 11 PAT document!**

Where a school has **more than one Grade 11 EGD teacher**, the **teachers must assist one another by conducting PAT assessment as a team**. This will ensure a consistent standard of assessment across all the learners.

The **final formal assessment of ALL the PATs** must be completed by **15 October 2023!**

Once the PATs have been assessed and moderated, the teacher/school **must retain ALL the PATs** for provincial moderation. **ALL the PATs must therefore be retained at the school, at least the until end of Term 1 of 2024.**

**Clarification of level descriptors and the verification of marks:**

- **1-mark level descriptor:**

***NOTE: There is NO percentage (%) for the 1-mark level descriptor!***

1-mark level descriptive	0	Requirement not met or presented incorrectly
	1	Requirement has been met and/or presented correctly

This level descriptor is used for **elementary/basic presentation requirements and/or drawing features**, and must be applied as follows:

- **'0' (zero) must be allocated** for the requirement **NOT** met, or if the presentation **thereof** is **INCORRECT**.
- **1 mark may only be allocated** if the requirement has been met **FULLY** and the presentation **thereof** is **CORRECT**.

- **2-mark level descriptor:**

2-mark level descriptive	0	Requirement not met, or <b>less than 30%</b> evidence of knowledge shown (very poor)
	1	Requirement included and <b>at least 30%+</b> evidence of knowledge shown (avg.)
	2	Presentation shows <b>at least 80% or more</b> evidence of knowledge (very good)

- **'0' (zero) must be allocated** if the requirement has **NOT** been included/ shown, or if the presentation of the requirement shows **less than 30% evidence of knowledge**, or when the requirement is **VERY POOR**.
- **1 mark must (*may only*) be allocated** if the presentation of the requirement shows **at least 30% or MORE evidence of knowledge**, or the requirement is **NOT complete** or **NOT completely correct**, **NOT compliant** and/or **clear**, i.e. **AVERAGE**.
- **2 marks may only be allocated** if the presentation of the requirement shows **at least 80% or MORE evidence of knowledge**, and the requirement is more than **80% complete**, **correct/compliant** and **clear**, i.e. **VERY GOOD**.

- **7-mark level descriptor**

DESCRIPTION for MARK	GENERAL INDICATORS	± PERCENTAGE	MARK
OUTSTANDING	<b>Error free</b>	<b>100%</b>	<b>7</b>
MERITORIOUS (VERY GOOD)	<b>Few errors</b>	<b>± 80% +</b>	<b>6</b>
SUBSTANTIAL (GOOD)		<b>± 70%</b>	<b>5</b>
ADEQUATE (SATISFACTORY)	<b>Some errors</b> (± ½ right and ½ wrong)	<b>± 55%</b> Just MORE than a 50%	<b>4</b>
MODERATE (ACCEPTABLE)		<b>± 40%</b> Just LESS than a 50%	<b>3</b>
ELEMENTARY (UNACCEPTABLE)	<b>Many errors</b>	<b>± 33%</b>	<b>2</b>
NOT ACHIEVED (VERY BAD)	<b>Completely wrong</b>	<b>± 25% &amp; LESS</b>	<b>1</b>
NON-/NO COMPLIANCE	<b>No evidence</b>	<b>Nothing to mark</b>	<b>0</b>

This implies that a **'7' can only be allocated** if the presentation requirement(s) is **100% correct/compliant**, i.e., **outstanding** and **error-free**.

- **Verification of ALL final marks out of 10:**

**Each final mark out of 10 MUST be verified** according to the descriptors contained in the rubric on page 14 of this document. This implies that a **'10' can only be allocated** if the presentation requirement(s) is **100% correct/compliant**, i.e., **perfect** and **error-free**.

- **Rounding-off of marks:**

Each mark out of 10 must be **rounded off before being captured** on the **SUMMATIVE ASSESSMENT SHEET** (see page 15 of this document) and the **recording/mark sheet**. A mark of 9,5 or 9,75 must, however, remain a 9 as the 0,5 or 0,75 is an indication of a mistake. The final mark out of 25, 50 and 25 for each of the three complete sections of the PAT must also be rounded off after being calculated.

### Moderation

The moderation of the PAT must be done according to the included **ASSESSMENT CRITERIA AND CHECKLIST** of this 2023 Grade 11 PAT document!

As monitoring and/or moderation of the PAT can take place at any stage during the development of the PAT, **ALL completed presentation requirements of ALL the PATs MUST always be available at the school.**

**NOTE:**

A tolerance range of **ONLY 5%** is permissible between the **average assessed mark** and the **average moderated mark** of the **PATs selected for moderation**. Only once moderation has been completed **must the more than 5% difference** between the average marks of the moderated PATs **be applied to the remainder of the PAT's**.

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**NOTE:**

- ***SECTION B*** of this document is the '**2023 NSC PAT Question Paper**' for the **Grade 11 EGD learners**.
- ***Any pre-2020 (i.e., 2019 and older) Grade 12 EGD Civil PAT/'civil design project' scenario that can be adapted to be relevant and compliant with the Grade 11 PAT presentation requirements, and of which no examples of any presentations are available to the 2023 Grade 11 learners, may be used as the scenario for the 2023 Grade 11 PAT.***

***The scenario and presentation requirements must however be adapted to comply with the prescribed Grade 11 content of the '2023 Examinable Content Mapping' document and the DBE's Grade 11 '2023/2024 EGD ATP'.***

**GRADE 11 SECTION B (LEARNER TASK)****General information and instructions:**

- **The PAT is a compulsory formal assessment task** that will contribute towards your final Promotional mark.  
*NOTE: You will not be awarded a final EGD Promotional mark if you do not submit a PAT!*
- **ALL the presentation requirements of the selected PAT must be strictly adhered to** and, with the exception of the research component, be **completed at school**, under the **supervision of your teacher**.
- Although the sharing of knowledge and ideas is permissible, **no presentations may be shared or copied**. The **entire PAT must be completed individually** and **ALL the presentations**, including the **front page, table of contents, management plan etc., must be your own original work**.
- The PAT **must be completed in phases** and **within the given time frames of your teacher's pacesetter/management plan**.
- **ALL freehand drawings and instrument drawings must be prepared in pencil**.
- The PAT **must be of an appropriate higher-order Grade 11 complexity**.
- The PAT **will be assessed according to the ASSESSMENT CRITERIA AND CHECKLISTS** (see pages 10 & 11) of this PAT document.
- The **ASSESSMENT CRITERIA AND CHECKLIST** (see pages 12 & 13) **must be used to provide clear evidence of your own continuous self-evaluation** and the **meeting of the deadlines** during the development of the PAT.
- Prior to the final submission of your complete PAT, you **must complete and sign the DECLARATIONS OF AUTHENTICITY** (see page 16).
- **ONLY the 2023 SUMMATIVE ASSESSMENT SHEET** (see page 15), your **completed and signed DECLARATION OF AUTHENTICITY**, your **completed 2023 CHECKLIST** and **ALL your presentations must be included** in the **correct sequence** in your **PAT file/portfolio**.
- Untidy and messy work, as well as the late submission of presentation requirements, will be penalised.

**GRADE 11 PRACTICAL ASSESSMENT TASK 1**

**A civil design project**

**Scenario**

**NOTE:**

***Any pre-2020 (i.e., 2019 and older) Grade 12 EGD Civil PAT/‘civil design project’ scenario that can be adapted to be relevant and compliant with the Grade 11 PAT presentation requirements, and of which no examples of any presentations are available to the 2023 Grade 11 learners, may be used as the scenario for the 2023 Grade 11 Civil PAT.***

***The scenario and presentation requirements MUST however be adapted to comply with the prescribed Grade 11 content of the ‘2023 Examinable Content Mapping’ document and the DBE’s Grade 11 ‘2023/2024 EGD ATP’, i.e.:***

The civil design project must **be limited to a single-storey brick building, presented as 1<sup>st</sup> angle orthographic** working drawings with a **floor plan, detailed elevations** with a basic single line roof(s) (i.e., only the basic shape of the roof), and a **sectional elevation(s)** showing the **detail of the foundation to the ceiling height**, but **not including the ceiling itself**.

- **Only the following may be included in the views or drawing(s):**
  - **Annotation (notes), labels, dimensioning, scales**
  - **Relevant abbreviations and graphical symbols**
  - **On ALL relevant views/elevations: windows, doors and fixtures such as toilet (WC), bath, sink, shower, built-in cupboards etc.**
  - **Hatching detail and the application of colours**
  - **Calculation of perimeters and total- and floor areas**
  - **Complete civil working drawing name/title panel**
  
- **The following may NOT be included in any of the views, or as a drawing(s):**
  - **Any roof detail**, including the ceiling and any rain-water items
  - **Any plumbing and drainage detail**
  - **Any electrical fixtures and wiring diagrams**
  - **A Site Plan**

***The research topics may also NOT include or be on any of the prescribed ‘2023 EGD Examinable Content’ for Grade 11 or Grade 12!***

***A separate ‘MS Word’ version of this page, on which you can insert your adapted scenario, will be sent together with this PAT document!***

## PHASE 1 PRESENTATION REQUIREMENTS

1. Analyse the given scenario and formulate a design brief in two paragraphs:
  - The first paragraph must, in your own words, give a **brief background to the project**, as well as a **clear description of what has to be designed**.
  - The second paragraph must, in your own words, give a **clear overview of your role in the project**, as well as a **'narrative' description of the complete DESIGN PROCESS** that you are going to implement to complete this project (PAT).

**NOTE: Paragraphs ONLY, i.e., a ¼ to a ⅓ of a page, and NOT an essay(s)!**

From the scenario and your teacher's management plan, include the following as part of the design brief:

- A list of at least **FIFTEEN** of the **given specifications**.
- A list of at least **THREE possible constraints**. However, the specifications that you have listed **may not be repeated or reworded** as possible constraints.
- Your **own** management plan that **specifies target dates** for the completion of each presentation requirement.

**NOTE:**

- *It is recommended to you first identify and list the **THREE** constraints, and to then identify and list the minimum **FIFTEEN** 'other' specifications!*
- *Each specification & constraint must be 'numbered/bulleted' individually!*

2. Conduct research on **THREE** of the related features/requirements for the project, **as prescribed by your teacher**.

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**NOTE:**

- The research must be usable and should therefore be in the form of **graphic material**, i.e., of relevant pictures and/or illustrations for each topic.
  - Evidence of at least **FIVE different examples** of **each research topic** must be included in your PAT file/portfolio, unless otherwise stated.
  - The research material must be aesthetically presented and may NOT exceed **FOUR A4** or **TWO A3** pages per topic.
  - There must be clear evidence that the research has been used in your proposed design solution.
  - Include a list of **ALL** references used (Bibliography) directly after the research.
- NOTE: Include the references directly after the research, i.e., as part of no. 2!**

3. Prepare neat detailed freehand drawings of the **floor-plan layout** of **TWO** possible design solutions for the proposed new building. Each freehand drawing must show the correct presentation of **ALL** the building features, the permanent fixtures well as the primary dimensions and labels, as required by the project. The calculations for a (any significant) **floor area** and the **total area of the entire building** must be clearly shown **in a table** on the drawing sheet of each freehand drawing.

**NOTE:**

- **Grid/Graph paper must be used** to assist with the preparation of the freehand drawings so that **ALL** features and fixtures are drawn to proportion. The **grid/graph paper used must be included** in the **PAT file/portfolio** as evidence.
- NOTE: You should use the 'block sizes' as a scale, e.g., 1 Block = 500 x 500.**
- **ALL** aspects of the freehand drawing, including dimensions, tables, labels, and possible information blocks **must be prepared using a pencil ONLY**. The use of **any other drawing instruments**, e.g., a ruler or compass, **will be penalised**.

- The drawings may be prepared on either A4 or A3 drawing sheets.
  - **NO borders or title panels are required** for the drawing sheets.
  - ALL the freehand drawings **must comply with the guidelines and graphical symbols** contained in the **SANS 10143**.
  - The drawings **must provide clear evidence** that a **high level of competency has been attained** in the **freehand drawing method**.
4. **Select the best solution** that demonstrates an in-depth understanding of the scenario within the context of the design brief, specifications and constraints.

On a separate page, compare and evaluate the TWO freehand solutions by:

- **Creating a table** with a **minimum of FOUR descriptive criteria** that will facilitate measurable comparisons  
*NOTE: NOT just a 'word', but a self-explanatory criterion!*
- **Creating and applying a simple, self-explanatory rating scale** to score each solution against each criterion  
*NOTE: You must explain the ratings/values of your created scale!*
- **Justifying each rating scale score** by describing the positive and/or negative aspects of each solution against each criterion.

Complete the process by writing a **comprehensive summary** giving reasons for your selected freehand solution. The summary **must also include whether any late changes were made to the selected freehand solution, or not**. If there were, they must be clearly described.

## PHASE 2 PRESENTATION REQUIREMENTS

5. **Present the selected solution** as a set of **working drawings** and a **pictorial drawing** (5.1 and 5.2) that meet the following criteria:
- **All the working drawings** must be prepared on appropriately sized drawing sheets, set up with **correct borders**.
  - **ONLY ONE** of the drawing sheets **must be set up** with a **complete CIVIL TITLE PANEL**, as prescribed by the **SANS 10143**
  - The drawings should provide clear evidence that a **high level of competency** had been attained in the following **required drawing methods**:
    - Instrument drawing
    - CAD (Computer-aided Drawing/Design)
- NOTE:**
- **Schools that do not have CAD facilities** must prepare all the required drawings (5.1 and 5.2) using a pencil and drawing instruments.
  - **ONE entire working drawing** should, if possible, be prepared using a pencil and drawing instruments and the other using a CAD program.
  - The **perspective drawing** may be prepared either by using drawing instruments or by using a CAD program.
- The title panel and **ALL aspects** of all drawings must comply with the guidelines, drawing symbols, graphical symbols and representations contained in the **SANS 10143**.

- 5.1 Draw, *within the confounds of the Grade 11 content of the '2023 Examinable Content Mapping' document*, detailed LAYOUT DRAWINGS of the selected freehand solution of the complete building, clearly showing ALL the required building features.

The layout drawings must show the following orthographic views:

- 5.1.1 The complete FLOOR PLAN, drawn to a suitable scale, but preferably not smaller than scale of 1 : 75 (i.e., preferably 1 : 50 or 1 : 75).
- 5.1.2 TWO ELEVATIONS, drawn to the same scale as the floor plan, with one view showing the front view (front/main entrance) of the building, and the other showing a side view.  
*NOTE: Draw the elevations that you will require for the perspective (5.2)!*
- 5.1.3 A DETAILED SECTION(S), drawn to scale 1 : 20, showing all the detail from the foundation to the ceiling height, but not including the ceiling itself, on a cutting plane that passes through at least an external or internal door, and a window.  
**NOTE: Use break lines to divide the detailed section into TWO or more parts, each representing a width of between  $\pm 1\frac{1}{2}$  m to 2 m.**

Include the following on ALL relevant views:

- ALL exterior features, including door and window detail.  
**NOTE: ALL window and door frames must be shown in the TWO elevations**
- Basic single line roof, i.e., only the basic shape of the roof
- ALL permanent fixtures (*according to the symbols in SANS 10143*)
- Titles, labels and notes
- Scales used
- Detailed dimensioning
- Cutting plane(s)
- All hatching detail



- 5.2 Draw a 'large' detailed 'human eye view' TWO-POINT PERSPECTIVE DRAWING of the exterior (outside) of the building. The horizon line (HL) must (*at scale 1 : 1*) be  $\pm 1,8$  m above the ground line (GL), and the orientations of the perspective must be as prescribed by the original task, or as prescribed by your teacher.

Evidence of the following must be included:

- All views/drawings used to produce the perspective drawing  
*NOTE: These can be placed in a plastic sleeve in the PAT portfolio.*
- The construction method used to produce the perspective drawing

**NOTE:**

*The perspectives should NOT look like a test or exam paper question for a perspective drawing!! By using photocopies of the FLOOR PLAN and the ELEVATIONS of 5.1.1 & 5.1.2, the perspectives should be a 'larger drawing' in the centre of an A3 drawing sheet!*

**NOTE: Use a photocopy of the perspective drawing, which may contain artistic features, as the picture for the cover page of your PAT file/portfolio.**

### PHASE 3: PRESENTATION REQUIREMENTS

Create a PAT file/portfolio containing the following in the given sequence:

- A **complete cover page**, 'including the school's name & centre no., your full name & class/group, your teacher's title, initials & surname, the year (2023) & grade (Grade 11), and copy of your own perspective drawing'.
- A **table of contents/index**
- The **2023 SUMMATIVE ASSESSMENT SHEET** (see page 15 of this document)
- The **completed DECLARATION OF AUTHENTICITY** (see page 16 of this document)

Include the following PHASE 1 and PHASE 2 presentation requirements in the PAT file/portfolio after the DECLARATION OF AUTHENTICITY:

1. ALL the **design brief** requirements
2. **Evidence** of ALL the **resource material used** for the **required research**
3. The **TWO freehand drawings** of the possible design solutions
4. ALL the evidence of the **selection of the best solution**
5. ALL the required **working drawings** (5.1) and the **perspective drawing** (5.2)
6. The '**ASSESSMENT CRITERIA AND CHECKLIST FOR THE 2023 CIVIL PAT**' (see pages 12 & 13), which **must provide clear evidence of your own continuous self-evaluation** and the **meeting of the deadlines during the development of the PAT**.  
*NOTE: 'Individual' CHECKLISTS, cut from the 'combined 'ASSESSMENT CRITERIA AND CHECKLIST FOR THE 2023 CIVIL PAT', may also be used!*

#### NOTE:

Include the following on **each page**:

- **Clear numbering** according to the **numbers of the presentation requirements**
- **Your** (the learner's) **name**
- The **date of completion** and **submission**

#### Assessment criteria and checklist for the 2023 EGD Civil PAT

- The **GRADE 11 SUMMATIVE ASSESSMENT SHEET** of this PAT document must be used to indicate the final totals out of 10 for each assessment criterion.
- The contribution of each aspect of the PAT is as follows:
  - The **design process**, i.e. presentation requirements numbers 1, 2, 3, 4, 6 and 7, will contribute **40 marks** to the final PAT mark out of 100
  - The **working drawings** and the **pictorial drawing**, i.e. presentation requirement number 5, will contribute **35 marks to the final PAT** mark out of 100
  - **Drawing methods, drawing skills** and **presentation**, which should be assessed according to ANNEXURE A, will contribute **25 marks to the final PAT** mark out of 100

<b>ASSESSMENT CRITERIA AND CHECKLIST FOR THE 2023 GRADE 11 EGD CIVIL PAT (Page 1)</b>							
1-mark level descriptive	0	Requirement not met or presented incorrectly			Checked	Maximum mark	Comments
	1	Requirement has been met and/or presented correctly					
2-mark level descriptive	0	Requirement not met, or <b>less than 30%</b> evidence of knowledge shown (very poor)					
	1	Requirement included and <b>at least 30%+</b> evidence of knowledge shown (avg.)					
	2	Presentation shows <b>at least 80% or more</b> evidence of knowledge (very good)					
<b>1. Design Brief</b>							
1.1	1 <sup>st</sup> paragraph: background and <i>clear</i> description of what to design				2		
1.2	2 <sup>nd</sup> paragraph: your role and description of the design process you are going to use				2		
1.3	A list of at least FIFTEEN given specifications in the scenario				2		
1.4	A list of at least THREE possible constraints in the scenario				2		
1.5	A management plan with possible target dates for ALL the presentation requirements				2		
					<b>TOTAL</b>	<b>10</b>	
<b>2. Research, as prescribed by you teachers (Restricted to a maximum of FOUR A4 or TWO A3 pages per topic.)</b>							
Relevant and usable research on:	2.1					2	
	2.2					2	
	2.3					2	
	Clear evidence that the research has been used in your proposed design solutions				2		
	A list of ALL references (Bibliography)				2		
					<b>TOTAL</b>	<b>10</b>	
<b>3. Freehand drawings of TWO possible design solutions</b>				<b>Final mark for each solution</b>			
Assess each freehand solution as follows:	The new building showing all the rooms and areas		2	<b>Solution 1</b>		<b>10</b>	
	Correct presentation of building features (walls, doors etc.)		2				
	ALL fixtures (toilets, hand-wash basins, etc.)		2				
	Correct presentation of all fixtures according to SANS 10143		2				
	Relative size/proportion of ALL features to each other		2	<b>Solution 2</b>		<b>10</b>	
	Primary labels (2) + primary dimensions (2) (2 + 2 = 4)		4				
	2 x area calculations shown and within the specifications (2 + 2 = 4)		4				
	Design: functionality and effective utilisation of space		2				
<b>Subtotal = 20 ÷ 2 = TOTAL</b>			<b>20</b>				
<b>4. Selecting the best freehand solution (This must be a separate presentation.)</b>							
A suitable table created for the selection process					2		
A minimum of <b>FOUR descriptive</b> criteria to compare and evaluate					2		
A simple rating scale created, and used to score each solution against each criterion					2		
Each score justified by describing the positive and/or negative aspects against each criterion					2		
Comprehensive summary with reasons for selected solution (including possible late changes)					2		
					<b>TOTAL</b>	<b>10</b>	
<b>5. Layout drawings and a pictorial drawing of selected solution</b>							
<b>Drawing sheet preparation</b>							
Appropriately sized drawing sheets used					1		
Correct borders on all the drawing sheets of all the working drawings					2		
Complete SANS 10143 compliant civil title panel on ONE of working drawing's drawing sheet					7		
<b>NOTE: Use the 7-mark simplified rubric on page 45 of the CAPS.</b>					<b>TOTAL</b>	<b>10</b>	
<b>5.1 Detailed layout drawings of the proposed new building and covered walkway</b>							
5.1.1	<b>FLOOR PLAN</b> showing:						
	Correlation with selected freehand solution and selection process summary				2		
	ALL internal and external walls				2		
	ALL doors and windows				2		
	ALL permanent fixtures				2		
	Detail of any additional features required by the scenario, <i>or as prescribed by your teacher</i>				2		
	Title, labels and notes (2) + Detailed dimensioning (2)		(2 + 2 = 4)		4		
	Hatching detail (2) + Cutting plane (2)		(2 + 2 = 4)		4		
	Suitable scale selected and correctly indicated				2		
					<b>Subtotal = 20 ÷ 2 = TOTAL</b>	<b>10</b>	

<b>ASSESSMENT CRITERIA AND CHECKLIST FOR THE 2023 GRADE 11 EGD CIVIL PAT (Page 2)</b>				
5.1.2	<b>TWO ELEVATIONS</b> , that show the front of the building, and a side view of the building			
	Prescribed views shown		2	
	External walls and features		2	
	Door and window detail, including the door and window frames		2	
	Basic single line roof, i.e., only the basic shape of the roof		2	
	Elevations drawn to same scale as the floor plan		2	
			<b>TOTAL</b>	<b>10</b>
5.1.3	<b>DETAILED SECTION(S)</b>			
	Section(s) correct according to the indicated cutting plane(s)		1	
	Foundation, slab and wall detail		2	
	External and/or internal door detail		2	
	Window detail		2	
	Labels and notes		2	
	Detailed dimensioning		2	
	ALL hatching detail		2	
Scale 1 : 20 used and indicated correctly (1) + Break lines (1)		2		
(1 = 1; 2 = 1; 3 = 2; 4 = 3; 5 = 3; 6 = 4; 7 = 5; 8 = 5; 9 = 6; 10 = 7; 11 = 7; 12 = 8; 13 = 9; 14 = 9; 15 = 10)			<b>Subtotal = 15 ÷ 1,5 = TOTAL</b>	<b>10</b>
5.2	<b>TWO-POINT PERSPECTIVE DRAWING</b>			
	Evidence of the views, as well as construction and projections used to prepare the drawing		1	
	Correct orientation of the building with the HL at ±1,8 m above the ground line (GL)		2	
	Detail and correctness of the perspective drawing		7	
	<b>NOTE: Use the 7-mark simplified rubric on page 45 of the CAPS.</b>	<b>TOTAL</b>	<b>10</b>	
6.	<b>Continuous self-evaluation and the meeting of deadlines</b>			
	Completed checklists as evidence of continuous self-evaluation	(mark out of 10 ÷ 2)	5	
	Meeting ALL the deadlines	(mark out of 10 ÷ 2)	5	
	<b>TOTAL</b>			<b>10</b>
7.	<b>Presentation of the complete PAT file/portfolio</b>			
	Complete cover page with a copy of the perspective drawing		1	
	Table of contents		1	
	Summative assessment sheet and declaration		1	
	Correct sequencing of ALL presentation requirements		1	
	Name and numbering on the presentation requirements		1	
	Final presentation of the portfolio, e.g., binding, general appearance, etc.	(mark out of 10 ÷ 2)	5	
			<b>TOTAL</b>	<b>10</b>
<b>Assessment of drawing methods, drawing skills and presentation</b>				
a.	<b>Freehand drawings</b>			
	Freehand drawing methods and skills	(See ANNEXURE A on page 17)	10	
	<b>NOTE: • No evidence of grid/graph paper used = max. 7 marks, even if drawn excellently • Not drawn in freehand = 0 marks, &amp; some evidence of instruments used = max. 5 marks</b>			
	Neatness (2) + correct line types used (2) + line consistency (2) + printing (2) + dimensioning (2)	(Also see ANNEXURE A on page 17)	10	
b.	<b>Instrument drawings</b>			
	Use of drawing instruments, drawing methods and skills	(See ANNEXURE A on page 17)	10	
	Neatness (2) + correct line types used (2) + line consistency (2) + printing (2) + dimensioning (2)	(Also see ANNEXURE A on page 17)	10	
c.	<b>CAD drawings</b>			
	Competence displayed in using a CAD program	(See ANNEXURE A on page 17)	10	
	Layout and correctness of the drawings presentation	(See ANNEXURE A on page 17)	10	

**SIMPLIFIED RUBRIC FOR ALLOCATION AND VERIFICATION OF MARKS****NOTE:**

- The final mark out of 10 of each assessment criterion, i.e., the overall level of achievement according to the presentation requirement, **must be verified according to this rubric.**
- This rubric must also be used to allocate marks for all aspects of the assessment criteria which require a mark out of 10.

<b>VERIFICATION AND MARK ALLOCATION</b>			
<b>DESCRIPTION FOR MARK</b>	<b>GENERAL INDICATOR</b>	<b>± %</b>	<b>MARK</b>
<b>ALL/MORE than ALL</b> the REQUIREMENTS are met. - <b>PERFECT</b> -	<b>Error-free</b>	<b>100%</b>	<b>10</b>
<b>ALL (ALMOST ALL)</b> the REQUIREMENTS are met. - <b>OUTSTANDING</b> -	<b>Very few errors</b>	<b>90% +</b>	<b>9</b>
<b>ALMOST ALL (MOST OF)</b> the REQUIREMENTS are met. - <b>VERY GOOD</b> -	<b>Few errors</b>	<b>80% +</b>	<b>8</b>
The REQUIREMENTS are met <b>SUBSTANTIALLY</b> . - <b>GOOD</b> -	<b>Some errors</b>	<b>70% +</b>	<b>7</b>
The REQUIREMENTS are met <b>ADEQUATELY</b> . - <b>SATISFACTORY</b> -		<b>60% +</b>	<b>6</b>
The REQUIREMENTS are met <b>MODERATELY</b> . - <b>ACCEPTABLE</b> -	<b>Many errors</b>	<b>50% +</b>	<b>5</b>
<b>ONLY SOME</b> of the REQUIREMENTS are met. - <b>UNACCEPTABLE</b> -		<b>40% +</b>	<b>4</b>
<b>VERY FEW</b> of the REQUIREMENTS are met. - <b>NOT ACHIEVED</b> -	<b>Mostly wrong</b>	<b>30% +</b> Only a few correct features	<b>3</b>
The REQUIREMENTS are <b>NOT</b> met. - <b>VERY POOR</b> -	<b>Completely wrong</b>	<b>29% and LESS</b>	<b>2</b>
		Something done incorrectly/ poorly	<b>1</b>
<b>NOT DONE</b>	<b>No work handed in!</b>	<b>Nothing to mark!</b>	<b>0</b>

**PAT 2023: GRADE 11 SUMMATIVE ASSESSMENT SHEET**

**2023 GRADE 11 PAT  
SUMMATIVE ASSESSMENT SHEET**

NAME OF SCHOOL: ..... DISTRICT: .....

NAME OF LEARNER: ..... (NAME AND SURNAME)

NAME OF TEACHER: ..... (NAME AND SURNAME)

NAME OF MODERATOR: ..... (NAME AND SURNAME) DATE: .....

PART A: Design Process			PART B: Working and pictorial drawings			Drawing competency and skill			
CRITERIA		MARK	CRITERIA		MARK	CRITERIA		MARK	
1	A design brief demonstrating a clear understanding of the scenario and the specifications, constraints and a management plan		All drawing sheets are appropriately set up with a border and an appropriate title block/panel.				Freehand drawing: ANNEXURE A METHOD	The drawings display correct freehand drawing methods and skills and the method used to ensure proportion and size.	
2	Evidence of relevant and usable research with the inclusion of a bibliography		Orthographic drawings Assess each view's accuracy and correctness according to the stipulated requirements and drawing principals	5.1.1	View 1 Floor Plan			The final drawing presentation is neat and there is consistency of line work/line quality, printing and dimensioning.	
3	TWO detailed freehand drawings of possible solutions  1st Solution  2nd Solution			5.1.2	View 2 Elevations (x2)		Instrument drawing: ANNEXURE A METHOD		The drawings display the correct use of drawing instruments, drawing methods and skills.
				5.1.3	View 3: Detailed section(s)			The final drawing presentation is neat and there is consistency of line work/line quality, printing and dimensioning.	
4	Selecting the best solution which demonstrates a clear understanding of the design brief		Pictorial Drawing	5.2	The correct drawing method and the presentation of the 2-point perspective drawing		CAD drawing: ANNEXURE A METHOD	The level of competence is displayed in using a CAD program.	
6	Clear evidence of evaluation and the meeting of deadlines of all the requirements							NO CAD drawings	
7	The presentation of the complete PAT portfolio		With CAD drawings				/ 60		
<b>SUBTOTAL</b>		/ 70	<b>SUBTOTAL</b>		/ 50		CALCULATION without CAD		X 0.63
CALCULATION		X 0.572	CALCULATION		X 0.7		CALCULATION with CAD		X 0.42
<b>Teacher's TOTAL</b>			<b>Teacher's TOTAL</b>			<b>Teacher's TOTAL</b>			
<b>TOTAL: A</b>		/ 40	<b>TOTAL: B</b>		/ 35		<b>TOTAL: C</b>		/ 25
<b>Moderated TOTAL</b>			<b>Moderated TOTAL</b>			<b>Moderated TOTAL</b>			
<b>TOTAL: A</b>		/ 40	<b>TOTAL: B</b>		/ 35		<b>TOTAL: C</b>		/ 25
<b>TEACHER'S TOTAL:</b>			A + B + C =		/ 100		<b>TEACHER:</b> Initial		<b>MODERATOR:</b> Initial
<b>MODERATED TOTAL:</b>			A + B + C =		/ 100				

**DECLARATION OF AUTHENTICITY**

**DECLARATION OF AUTHENTICITY**

To be submitted with each learner's practical assessment task portfolio

NAME OF THE SCHOOL: .....

NAME OF LEARNER: .....  
(SURNAME AND INITIALS)

**I hereby declare that all the contents of the practical assessment task submitted by myself for assessment is my own original work and has not been plagiarised, copied from someone else or previously submitted for assessment.**

\_\_\_\_\_  
**SIGNATURE OF LEARNER**

\_\_\_\_/\_\_\_\_/2023  
**DATE** (DD/MM/YYYY)

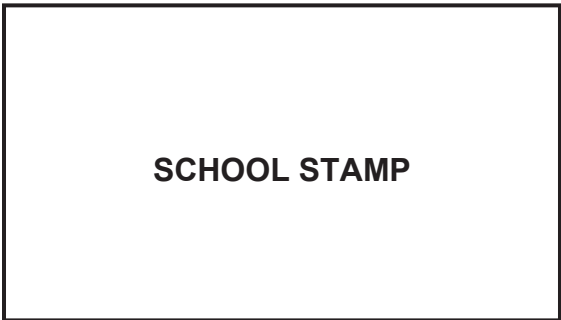


NAME OF TEACHER: .....  
(SURNAME AND INITIALS)

**As far as I know, the above declaration by the candidate is true and I accept that the PAT offered is his/her own work.**

\_\_\_\_\_  
**SIGNATURE OF TEACHER**

\_\_\_\_/\_\_\_\_/2023  
**DATE** (DD/MM/YYYY)



**ANNEXURE A: ASSESSMENT RUBRIC**

**ASSESSING DRAWING METHODS, DRAWING SKILLS AND PRESENTATION**

		LEVELS OF PERFORMANCE										
MARK ALLOCATION		10	9	8	7	6	5	4	3	2	1	0
		100%	99%-90%	89%-80%	79%-70%	69%-60%	59%-50%	49%-40%	39%-30%	29%-20%	19%-1%	0%
Freehand drawing	METHODS AND SKILLS	<p><b>NOTE:</b></p> <ul style="list-style-type: none"> <li>No evidence of grid/graph paper used = max. <u>7 marks</u>, even if excellent drawing methods and skills are displayed!</li> <li>Not drawn in freehand, i.e., completely drawn with instruments, = <u>0 marks</u></li> <li>If instruments were used for, or to assist with, some aspect = max. <u>5 marks</u>, even if excellent drawing methods and skills are displayed.</li> </ul>										
		<p>The drawings display correct freehand drawing methods and skills, as well as the method used to ensure good proportion and size</p>										
Instrument drawing	METHODS AND SKILLS	<p><b>Neatness (2) + correct line types used (2) + line quality/consistency (2) + compliant printing/writing (2) + compliant dimensioning (2)</b></p> <p><i>Additional descriptors/guidelines:</i></p> <p>The drawings are very neat and all line work/line quality, printing and dimensioning are outstanding and consistent.</p> <p>The drawings display the correct use of drawing instruments and an outstanding application of drawing methods and skills.</p>										
		<p>The drawings are very neat and all line work/line quality, printing and dimensioning are generally good and mostly consistent.</p> <p>The drawings display the correct use of drawing instruments and a satisfactory and mostly correct application of drawing methods and skills.</p> <p>The drawings are untidy with inconsistent line work/line quality, printing and dimensioning.</p> <p>The drawings display poor use of drawing instruments and a poor and incorrect application of drawing methods and skills.</p> <p>The line work/line quality, printing and dimensioning are unacceptable.</p> <p>The drawings display an incorrect use of drawing instruments with incorrect applications of drawing methods and skills.</p>										
CAD drawing	METHODS AND SKILLS	<p><b>Neatness (2) + correct line types used (2) + line quality/consistency (2) + compliant printing/writing (2) + compliant dimensioning (2)</b></p> <p><i>Additional descriptors/guidelines:</i></p> <p>The drawings are very neat and all line work/line quality, printing and dimensioning are outstanding and consistent.</p> <p>Displays a high level of skills, knowledge and ability in using a CAD program</p> <p>The level of competence displayed in using a CAD program</p> <p>Layout of the final drawing is correct and the line work, printing and dimensioning are compliant and consistent</p>										
		<p>The drawings are neat and the line work/line quality, printing and dimensioning are generally good and mostly consistent.</p> <p>Displays a satisfactory level of skills, knowledge and ability in using a CAD program</p> <p>The layout of the drawings is acceptable and the line work, printing and dimensioning are mostly compliant and consistent.</p> <p>The drawings are untidy, and the line work/line quality, printing and dimensioning are inconsistent.</p> <p>Displays a poor level of skills, knowledge and ability in using a CAD program</p> <p>The layout of the drawings is very poor and the line work, printing and dimensioning are not compliant and inconsistent.</p> <p>The line work/line quality, printing and dimensioning are unacceptable.</p> <p>Shows little to no skills, knowledge or ability in using a CAD program</p> <p>The layout, line work, printing and dimensioning are unacceptable.</p>										