

JUNE EXAMINATION **GRADE 12** 2024

ENGINEERING GRAPHICS AND DESIGN

PAPER 1

MARKS:100

STAR F

TIME: 3 Hours

This question paper consists of 6 pages.

INSTRUCTIONS AND INFORMATION

- 1. The question paper consists of FOUR questions.
- 2. Answer ALL the questions.
- 3.
- 4. stated.
- ALL answers must be drawn accurately and neatly. 5.
- ALL the questions must be answered on the QUESTION PAPER, as instructed. 6. ALL the pages must be re-stapled in numerical sequence and handed in 7.
- irrespective of whether the question was attempted or not.
- 8. Careful time management is essential in order to complete all the questions.
- 9. Print your name and class in the block provided on every page.
- 10. Any details or dimensions not given must be assumed in good proportion.

FOR OFFICIAL USE ONLY										
QUESTION	N OE	/ARK 3TAIN	S ED	<u>1</u> 2	SIGN	MODERATED		<u>1</u> 2	SIGN	
1										
2										
3										
4										
TOTAL										
	2	0	0			2	0	0		

FINAL CONVERT 100

COMPL

DO NOT FOLD THE QUESTION PAPER IN HALF

ALL drawings are in first angle orthographic projection unless otherwise stated. ALL drawings must be prepared using pencil and instruments, unless otherwise

ED MARK	CHECKED BY

ETE THE FOLLOWING

- NAME AND SURNAME
- NAME AND SURNAME
- CLASS AND TEACHER

CLASS AND TEACHER

GAUTENG - GRADE 12



The site plan of an existing building with a proposed new extension, a title panel and a table of

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			[00]				
		ANSWERS					
		1:400	1				
/ be foun	d?	NEW YORK	1				
an?		HAWKEYE	1				
		T STARK	1				
		EGD2024P1-GDE	1				
		ADDED A LEGEND	1				
		DIRECTION OF NORTH	1				
s?		6m	1				
		CONTOUR LINE	1				
ND 24?		В	1				
		INSPECTION CHAMBER	1				
		4	1				
		WATT/ELECTRICAL METER	1				
		GATE SWING	1				
		HEIGHT ABOVE SEA LEVEL	1				
hy would I?	the	OVER THE BUILDING LINE	1				
!?		RIVER	1				
er line		DIRECTION FLOW	2				
ext to	t to SERVITUDE						
ine the p	erimet	er of stand 24 in metres.	3				
ine the to	3						
2), draw, for a wal	in nea I-mour	t freehand, the elevation and nted URINAL.	3				
		TOTAL	30				
ANSWER 21: SHOW ALL CALCULATIONS. \checkmark APPLYING THE CORRECT FORMU (18 x 15) - (11,5 x 1.5) - (7 x 4,55) 4550 = 220.9m ² \checkmark CONVERTED TO METERS SQUARE							
221	NAME AND SURNAME						
ſ							
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ľ				2			



QUESTION 2: SOLID GEOMETRY

- The front view of a right regular hexagonal prism and a right regular pentagonal pyramid.
 - An auxiliary view for the front view of the prism.
 - The top view of the pyramid, as well as the axis and an auxiliary view of the prism.
- Cutting plane C-C.

Specifications:

The pyramid and the pyramid do NOT touch. Both solids are cut by cutting plane C-C.

Instructions:

- Draw, to scale 1:1, the following views of the TWO solids: 2.1 The given front view
- 2.2 A sectional top view
- 2.3 A sectional left view
 - The true shape of the cut surfaces of both solids

Planning is essential. Show ALL hidden detail. Show ALL construction.



ASSESSMENT CRITERIA						
1	FRONT VIEW + AUX	10				
2	SECTIONAL TOP VIEW	10 ½				
3	SECTIONAL LEFT VIEW	10 ½				
4	TRUE SHAPES	7				
	TOTAL	38				
NAME AND SURNAME						
CLASS						
	3					

Please turn over

STAPLE



QUESTION 3: PERSPECTIVE





TOTAL

ROOF DETAIL			FOR OFFICIAL USE ONLY			
NGLE	1		INCORRECT SCALE			
OVER & S	2					
R AND	3 ½		VIEWS (-2)			
, २ &	2		VIEWS ROTATED (-2)			
ERING, PLATE &	2		SECTION VIEWED INCORRECTLY(-2)			
TAL	10 ½		INCORRECT LETTERING (-1)			
			BREAK LINE (-1)			

ASSESSMENT CRITERIA						
	FLOOR PLAN					
		POSSIBLE	OBTAINED			
1	DOORS + WINDOWS + ROOF LINE	15 ½				
2	ALL FIXTURES	9				
3	ELECTRICAL	9				
4	HATCHING	3				
5	LABELS	2 ½				
	SUBTOTAL	39				
	WEST ELE	EVATION				
1	ROOF + RWDP	10				
2	WALLS + FFL + PORCH + WASH TROUGH	6 1/2				
3	DOOR + WINDOW	7 ½				
4	LABELS	1				
	SUBTOTAL	25				
	DETAILED SE	ECTION A	-A			
1	ROOF DETAIL	10 1/2				
2	FOUNDATION + WALL + DOOR + FIXTURE	9 1⁄2				
3	WINDOW & DOOR	3				
4	HATCHING	6				
5	LABELS	1				
PENALTIES (-)						
	TOTAL 94					
	NAME AND SURNAME					
CLASS						

6