



MAFIKENG HIGH SCHOOL

GRADE 8

TECHNOLOGY

JUNE 2023

MARKS: 100

DURATION: 2 Hours

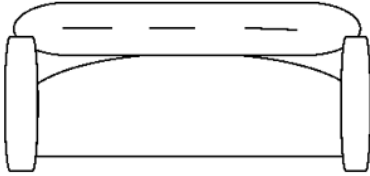
**EXAMINER: NKUNA TJ
MODERATOR: MATONYANE BS**

MEMORANDUM

This question paper consists of 12 pages.

1	Question	Answer	Marks
	1.1	A√	1
	1.2	A√	1
	1.3	D√	1
	1.4	B√	1
	1.5	A√	1
1.2	1.2.1	True√	1
	1.2.2	False√	1
	1.2.3	True√	1
	1.2.4	True√	1
	1.2.5	False√	1
	1.3	COLUMN B	
		D√	1
		C√	1
		B√	1
		A√	1
			[15]

QUESTION	ANSWER	MARKS
2	STRUCTURE	
2.1.	1. D	1
	2. F	1
	3. E	1
	4. A	1
	5. B	1
	6. C	1
2.2.1	Buttresses	1
2.2.2	Strut	1
2.2.3	Column	1
2.2.4	King post	1
2.3.1	1. I am going to design and make a pitched roof using a corrugated iron that will not be easily affected by bush fires	3
2.3.2	A. Rafter B. King post C. Queen post D. Strut	4
2.3.4	Cement	2
	Concrete/Crusher	
2.4.		
2.4.1	Lack of strength	1
2.4.2.	Lack of stability	1
2.4.3	Lack of stability	1
		[22]

3	3.1	A design cause the bridge to collapse✓✓	2
	3.2	Compression /bending force✓	1
	3.3	Weight of cars✓	1
	3.4	<p>COLUMNS STRUCTURE</p>  <p>2 MARKS FOR RIGID 2 MARKS FOR ARCH</p>	4

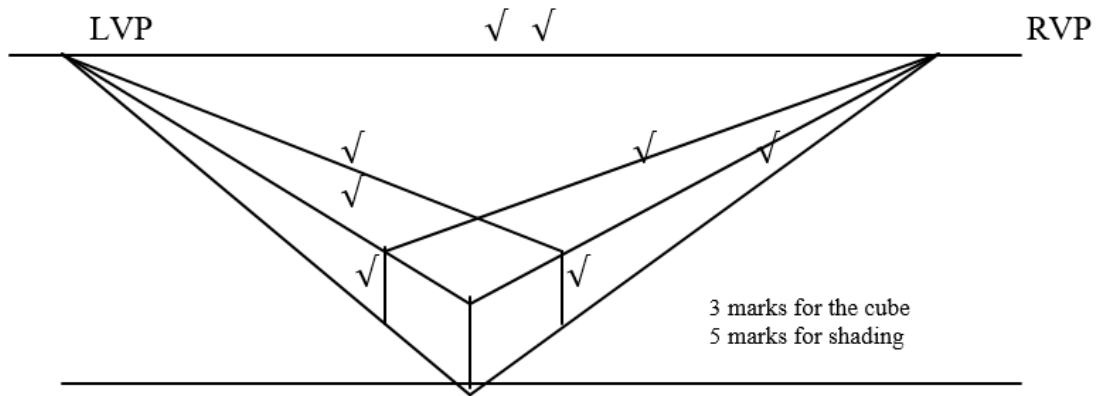
	3.4	a) Cantilever bridge ✓	
--	-----	------------------------	--

		b) Truss bridge✓	1
		c) Cable stayed bridge✓	1
			11

4			
	4.1		
	B	Dimension line [Thin And Continuous]	2
	C	Outline [Thick And Continuous]	2
	D	Hidden details line [Thin And Interrupted]	2
	E	Center line [Dashed and dot line]	2

[8]

5



[8]

6	6.1	Driver✓, idler and driven gear	3
	6.2	Changes the rotation of the two gears in the same direction✓✓	2
	6.3	a) Clockwise ✓	1
		b) anti-clockwise✓	1
		c) Clockwise ✓	1
	6.4	$\text{Gear ratio} = \frac{\text{output gear}}{\text{input gear}} \checkmark$ $= \frac{10}{20} \checkmark$ $= 2:1 \checkmark$	4
	6.5	Slow✓	1
	6.6	Change rotary movement into reciprocating movement ✓✓	2
	6.7	Wheel with an axle that is off-centre✓✓	2
	6.8	Car jack/meat mincer/wind pumps✓	1
			18

Question 7.

- 7.1 Biodegradable material is material that can be decomposed by bacteria/ nature.
- 7.2 Danger to animal life, environmental pollution. (any relevant answer)
- 7.3 Recycle, reuse.
- 7.4 Paper, wood/timber , fish cans.

[8]

Question 8

- 8.1 Martha loses stationery because she does have pencil case. (3)
- 8.2 I am going to design and make a pencil case using biodegradable material. (4)
- 8.3 Length 32 cm, Biodegradable material, have a replaceable lid. (4)

[11]

TOTAL MARKS: [100]