

Laerskool Van Dyk Primary

TECHNOLOGY EXAM

GRADE 7

EXAMINATOR: Ms S. Chetty

MODERATOR: Ms I. Peens



DATE: Nov 2020

EMIS: 7001609946

TIME: 45 min

TOTAL: 30

*Prof. Moderated
2/11/2020*

Name and Surname: _____

Grade 7. _____

<u>30</u>	<u>%</u>	Code	Competence	Percentage
		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

NUMBER OF PAGES: 6

INSTRUCTIONS:

Write neatly and answer all the questions in this answer book.

This paper consists of 6 questions.

When drawing/sketching use a pencil and a ruler.

Question layout		
1. Multiple choice	(Knowledge and design skills)	/5
2. True or false	(Knowledge and design skills)	/5
3. Oblique drawing		/3
4. Structures		/6
5. Free hand sketch		/4
6. Impact and biases		/7
Total		/30

SECTION A

Question 1: Multiple choice

UNDERLINE the correct answer:

1.1. Drawing to scale means that:

- a) You accurately represent an object that is too small or too large to be drawn to actual size
- b) Draw a scale
- c) You draw without a ruler (1)

1.2. Constraints can be defined as:

- a) Investigating problems
- b) Testing the evaluating products
- c) Things that limit your choices (1)

1.3. Ferrous metal:

- a) Contains iron
- b) Does not contain iron
- c) Is not a metal (1)

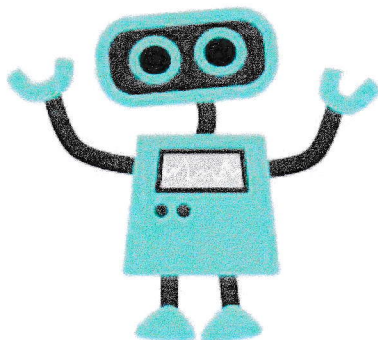
1.4. A refugee is:

- a) Someone who flees from danger in his/her country
- b) A type of structure
- c) Someone who dislikes other people (1)

1.5. Design brief is a:

- a) products details, like its function and appearance.
- b) short statement that describes a need or problem.
- c) set of questions about the product. (1)

[5]



Question 2 : True or False

State whether the following statements are true or false: CIRCLE the correct answer.

2.1. A permanent magnet loses its magnetism.

TRUE / FALSE (1)

2.2. The design process consists of five stages.

TRUE / FALSE (1)

2.3. Dimensions are accurate measurements on drawings.

TRUE / FALSE (1)

2.4. Poverty is the state of being rich and having a big income

TRUE / FALSE (1)

2.5. Outlines are thin, faint lines (light).

TRUE / FALSE (1)

[5]

SECTION B

Question 3: Oblique drawing

3.1. What type of drawing is this?

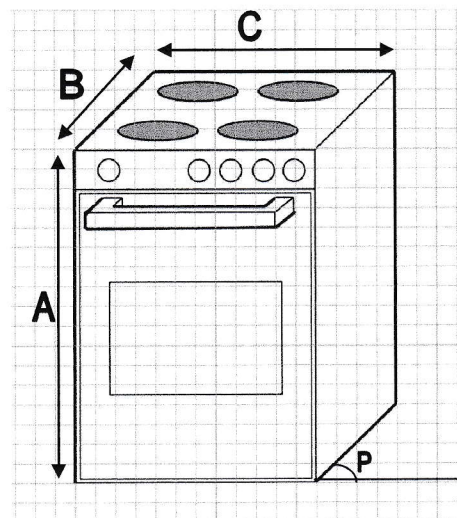
_____ (1)

3.2. What does the dimension A, on the drawing indicate?

A: _____ (1)

3.3. What is the degree for angle P?

P = _____ (1)

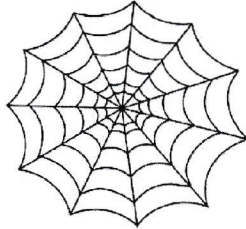


[3]

Question 4: Structures

Study the following structures and complete the table that follows:

A: Spider web



B: Chair



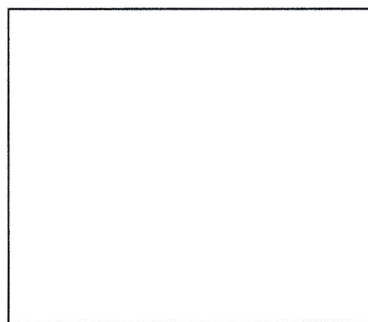
	Spiderweb	Chair
Classification: (Example: Manmade / natural)		
Type of structure: (Example: Frame, shell)		
Purpose: One each: (Example: Span, protect)		

[6]

Question 5: Free hand sketching

Draw a free hand circle by following these four steps:

1. Draw a cross in the block provided (+).
2. Now carefully draw a X, dividing each quarter in half.
3. Estimate a similar length from the centre along each line and mark it on the lines that you've drawn.
4. Place your pencil on one of the intersections. Looking at the next line, keep moving your hand and joining all the points together. Look at the lines and not at your hand. Once all the points have been joined, you will have drawn a circle.



[4]

SECTION C

Question 6: Impact and Biases

Read the following case study and answer the questions that follow.

RECYCLING SCRAP METALS

Metals such as copper, steel and iron are some of the materials that can be recycled. However, the effects of recycling have not all been positive.

Many honest South Africans are able to make some money by collecting old, scrap metal. They take the copper, iron, steel and aluminium they collect to local recycling centres. These centres check the metal and pay the metal collectors, but the job they do is also good for the environment.

Unfortunately, some dishonest South Africans have decided to steal metal to take the recycling centres as an easy way to make money. These thieves steal metal from the fixtures of buildings, such as copper pipes, steel taps, manhole covers and iron beams. Electrical cables are another popular target because they are made from copper. The result is electrical blackouts and other problems.

The government has measurements in place to address these problems. In 2007 in Cape Town, a special task team known as "The Copperheads" was created to fight this kind of thefts.

- 6.1. In this case study, people recycle to get money and by recycling they help save the environment by preserving and reusing natural resources.

What negative impacts are there because of recycling in the case study?

_____ (1)

- 6.2. Why is the job that the recyclers do good for the environment?

_____ (1)



6.3. If you had to start a recycling centre, what other materials would you choose to recycle? And how will you help people identify products made out of these specific materials? Name 2

Example: Metal- look for cool drink cans and canned food cans

(4)

6.4. How would you prevent thieves from stealing and selling stolen metal?

(1)

[7]

Total [30]

