



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF EDUCATION

VHEMBE WEST DISTRICT

GRADE 09

TECHNOLOGY
FINAL EXAM MEMO

MARKS: 100

This **MEMO** consists of **SIX (05)** pages including the cover.

Question 1

- 1.1. A. ✓
- 1.2. B. ✓
- 1.3. A. ✓
- 1.4. A. ✓
- 1.5. B. ✓
- 1.6. A. ✓
- 1.7. B. ✓
- 1.8. B. ✓
- 1.9. B. ✓
- 1.10. C. ✓

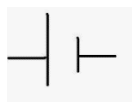
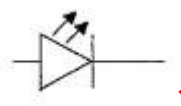
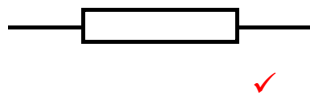
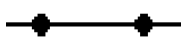
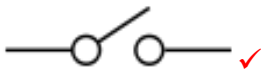
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Question 2

- 2.1. False ✓
- 2.2. True ✓
- 2.3. True ✓
- 2.4. False ✓
- 2.5. False ✓
- 2.6. True ✓
- 2.7. True ✓
- 2.8. True ✓
- 2.9. True ✓
- 2.10. True ✓

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Question 3

Components	Symbols	Functions
3.1 Lamp/bulb	 ✓	Converts electric energy to light energy ✓
3.2 Cell	 ✓	Supplies electrical energy to the circuit ✓
3.3 Ammeter	 ✓	An ammeter is used to measure current. ✓
3.4 LED (Light-emitting diode)	 ✓	Converts electric energy to light energy. ✓
3.5 Resistor	 ✓	Reduce the amount of electric pressure in the circuit. ✓
3.6 Switch	 ✓	Used to open and close an electric circuit ✓
	 ✓	
3.7 Thermistor	 ✓	Reduce the resistance of the circuit when the temperature goes high ✓

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QUESTION 4

4.1 Oxidation is the chemical reaction between metals and oxygen in the presence of water. ✓✓

4.2 Painting, ✓ galvanizing, ✓ electroplating ✓

4.3 It is caused by oxidation. ✓✓

4.4 Repainting or electroplating ✓✓

4.5 Any metal that does not have a protective coating e.g nail garden chairs water pipes ect ✓

4.6:

4.6.1 Salting is the process of preserving fresh meat or fish by coating it with a layer of salt and allowing the meat to dry. ✓✓

4.6.2 Pickling is process whereby fruits or vegetables are mixed with spices and vinegar or oil and closed in a jar until fermentation takes place. ✓✓

4.6.3 Drying is a process of dehydrating food so that all moisture is removed to prevent growth of bacteria. ✓✓

4.7 To lengthen the life span. ✓✓

Dry fruit is rich in vitamins and dietary minerals. ✓✓

Dried fruit is often added to baking mixes and breakfast cereals any two

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QUESTION 5

5.1.1 Brown, Grey, Yellow and Silver Stripes ✓✓

5.1.2 White, Grey, Red and Gold Stripes ✓✓

5.1.3 85 000 000 000 Ohms' (Ω) with 5% tolerance ✓✓

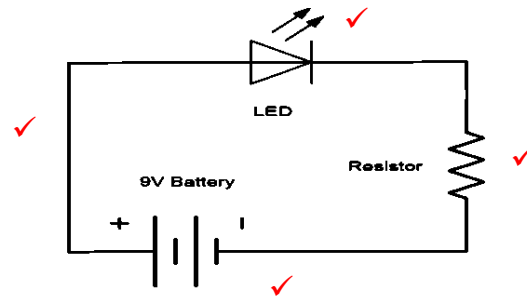
5.1.4 12 000. Ohms (Ω) with 10% tolerance ✓✓

5.1.5 Fuse is a piece of metal inside a circuit which get melted if the circuit is hot and cut off the flow of electricity and prevents any further damage ✓✓

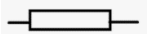
5.2.

Number	Current (I)	Voltage (V)	Resistance (Ω)
1	4✓	12	3
2	0.03✓	1.5	50
3	12	6	0.5
4	2	4✓	2
5	0.5	5✓	10
6	3	9	3✓

5.3



Note:

award a mark if a learner uses the symbol for the LRD () instead of LED.
award a mark if a learner uses the symbol  for resistor.

5.4.

Input	Battery ✓
Output	Light emitting diode ✓
Control	Resistor ✓ Conductor ✓

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QUESTION 6

6.1.1. Sterile - material that is free from any living microorganisms, such as bacteria, viruses, and fungi. ✓✓

6.1.2. Thermoplastic – a type of plastic that becomes soft when heated and hardens when cooled. ✓✓

6.1.3. Biodegradable – decays or decomposes into natural elements which are absorbed by the environment. ✓✓

6.2. Silo / Any large container ✓✓

6.3.1 Paper ✓

Plastic ✓

Metal ✓

6.3.2. Glass ✓✓

6.4. Keep the environment clean. ✓✓

Make profit. ✓✓

6.5. Air pollution that may result in climate change. ✓

Some materials contain explosives. ✓

6.6. Because plastics have different characteristics ✓ and mixing them together would alter these characteristics. ✓

6.7. Because plastic is light in weight and comfortable. ✓✓

6.8. Plastic, ✓ because it can bend easily than wood. ✓

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