



### **EXAMINATIONS COUNCIL OF ZAMBIA**

#### **GRADE SEVEN COMPOSITE EXAMINATION – 2021**

# **Integrated Science**

SUBJECT 4/1

**60 MINUTES** 

TD/INT3/G7/2021

- Read these instructions carefully.
- 2 Do not turn this page before you are told. Your teacher will tell you when to turn this page to begin the questions.
- There are 50 questions in this Integrated Science Paper. You will be given exactly 60 minutes to do the questions.
- For each question, four answers are given, but only one of the four is right. Work out which is the best answer. Then, on your answer sheet, mark the box completely by shading the answer space of the letter of your choice. If you had chosen answer D for a question, you would show it like this:-

A B C

- You must shade your answer spaces completely and darkly using an HB pencil. If you have to change your answer, you must rub out the shading very neatly before shading the new one. use a clean rubber.
- 6 When you have finished one page, go straight on without waiting to be told. If you have time left at the end of the question paper, use it to check your work carefully.
- 7 Look at your ANSWER SHEET. On the top left hand side are boxes which should have Examination Year, your School Number and Examination Number. It should also say Subject 4, Paper 1.
- 8 Look at your ANSWER SHEET again. At the bottom left hand side, it should have your Surname, Forename, Subject Integrated Science, Name of Primary School, and your Secondary School of Choice.
- 9 Put up your hand now if:

You have any question.

You have the wrong answer sheet.

You will not be able to ask questions once the examination has begun.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD.
USE ONLY AN HB PENCIL FOR YOUR ANSWERS.

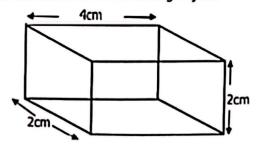
This question paper consists of 12 printed pages.

CEC2/2021/P3

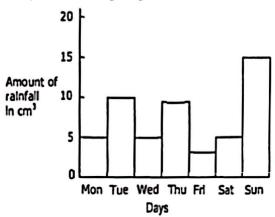
Scanned with CamScanner

1	Which A B C D	of the following is a source of light in the solar system? Earth Mars Moon Sun
2	Study 1 2 3 4	the following lists. Iron, Zinc, Copper, Aluminium Carbon, Hydrogen, Zinc, Carbon dioxide Iron, Zinc, Hydrogen, Oxygen Carbon dioxide, Copper, Zinc, Oxygen
	Which A B C D	list consists of metals only?  1  2  3
3	Which A B C D	Leprosy, scurvy and warts  Measles, scabies and chicken pox Scabies, marasmus and leprosy Warts, scurvy and syphilis
4	Which A B C D	of the following is the best way of looking after HIV and AIDS patients? Give them good nutrition and love Let them use their own cups Stop them from getting married Support but isolate them from the community
5	Many A B C D	cooking pots are made of metals instead of clay because a metal is a worse conductor of heat. a better conductor of heat. heavier than clay. lighter than clay.
6	Which A B C D	Food and water Light and shade Plants and manure Soil and grass

7 What is the volume of the following object?

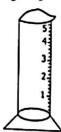


- A 8cm<sup>3</sup>
- B 10cm<sup>3</sup>
- C 16cm<sup>3</sup>
- D 20cm<sup>3</sup>
- One of the methods of conserving animal species from becoming extinct is by ...
  - A keeping the animals in game parks.
  - B keeping old animals only.
  - C killing all the old animals.
  - D killing some animals for a period of time.
- 9 What do doctors use to determine the body temperature of patients?
  - A Ammeter
  - **B** Barometer
  - C Hydrometer
  - D Thermometer
- 10 Excessive use of alcohol harms the body by causing...
  - A liver damage.
  - B pneumonia.
  - C rickets.
  - D severe bleeding.
- **11** Which of the following is **not** a ventilator?
  - A Air vent
  - B Door
  - C Roof
  - D Window



On which day was the lowest rainfall recorded?

- A Friday
- **B** Monday
- C Sunday
- **D** Wednesday
- 13 In the water cycle, what is the change from liquid to gas state called?
  - A Condensation
  - **B** Evaporation
  - **C** Precipitation
  - **D** Transpiration
- 14 Why are ventilators important in a building?
  - A Allow free air circulation
  - B Allow light to enter
  - C Control heat
  - D Provide more air
- 15 The property of Copper that makes it useful all over the world is its ...
  - A brown colour.
  - B good conduction.
  - C good insulation.
  - D softness.
- **16** Which of the following is **not** a deficiency disease?
  - A Dysentery
  - **B** Kwashiorkor
  - C Marasmus
  - **D** Rickets



What does the above apparatus measure?

- A Force .
- B Mass
- C Volume
- **D** Weight
- 18 Farmers are advised **not** to crowd their animals because ...
  - A treatment would be easy.
  - B space would be less.
  - C management would be easy.
  - D diseases would be easily spread.
- 19 Which of the following organs is **not** part of the digestive system?
  - A Large intestine
  - **B** Kidneys
  - C Pancreas
  - D Small intestine
- 20 Grade 5 learners left plant materials in a pit to decompose in order to make ...
  - A Compost manure.
  - B Compound D.
  - C Inorganic fertilizer.
  - D Phosphates.
- 21 Study the following list of food types.
  - 1 Pumpkin
  - 2 Mango
  - 3 Pawpaw
  - 4 Carrot

The list contains food rich in...

- A Carbohydrates.
- B Fats.
- C Proteins.
- D Vitamins.

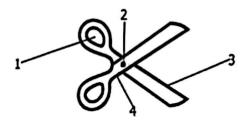
G7/ Integrated Science/2021

A B C D

- 22 A farmer keeping cattle cleaned the kraal twice a week in order to prevent ...
  - A accumulation of dung.
  - B an outbreak of diseases.
  - C bad smell of animal urine and dung.
  - D dust from settling in the kraal.
- Which of the following is the difference between organic and inorganic fertilizers?

Organic	Inorganic
Made from natural material	Made from chemicals
Sold as granules in bags	Sold as manure
Very expensive	Very cheap
Small amounts required	Large amounts must be used

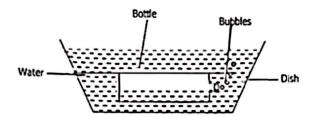
- 24 Communication is important because it...
  - A encourages the use of television.
  - B helps to pass messages.
  - C prevents drums from extinction.
  - D promotes cell phone production.
- 25 The following diagram shows a simple machine.



Which numbered part represents the pivot?

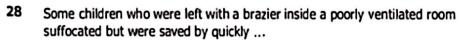
- A 1
- B 2
- C 3
- D 4
- 26 Which of the following animals is classified as a mammal?
  - A Cow
  - B Duck
  - C Frog
  - D Lizard

27 Study the following experiment showing a property of matter.



The experiment shows that air ...

- A has no weight.
- B has mass.
- C has shape.
- D occupies space.



- A blowing air on them using a fan.
- B pouring cold water on them.
- C taking them out for fresh air.
- D taking them to the hospital.

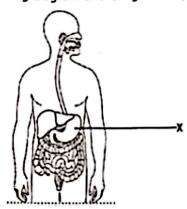
29 Dust from quarrying and mine dumps affects the environment by causing ... pollution.

- A air and land
- B air and noise
- C land and water
- D noise and water

#### 30 Sound can be made louder by...

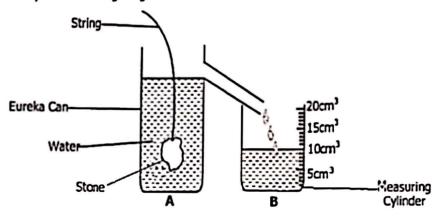
- A keeping vibrations without changing.
- B making the vibrations stronger.
- C making the vibrations weaker.
- D stopping the vibrations suddenly.

31 Study the following diagram of the digestive system.



What happens in the part labelled X?

- A Absorption of food
- B Absorption of water
- C Temporal storage of food
- D Temporal storage of water
- 32 Study the following diagram.



What is the volume of the stone?

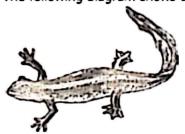
- A 5cm<sup>3</sup>
- B 10cm<sup>3</sup>
- C 15cm<sup>3</sup>
- D 20cm<sup>3</sup>

G7/Integrated Science/2021

- 33 Learners carried out an investigation to find out whether the following substances were conductors or insulators.
  - Plastic
  - Rubber
  - Paper

The above were discovered that they were ...

- A objects.
- B metals.
- C good conductors.
- D bad conductors.
- 34 Which of the following plants is propagated using suckers?
  - A Potatoes
  - **B** Maize
  - C Cassava
  - **D** Bananas
- Which of the following is an alternative energy source in view of load shedding?
  - A Geothermal
  - **B** Hydro
  - C Solar
  - D Wind
- 36 The following diagram shows an animal.



The animal above is a ...

- A mammal.
- B vertebrate.
- C warm blooded.
- D wasp.
- 37 Which of the following is not an elicit drug?
  - A Alcohol
  - **B** Cocaine
  - C Heroin
  - D Panadol

Which of the following correctly gives the age at which boys and girls reach puberty?

	Boys	Girls
A	8	10
B'	11	10
C	15	15
D	16	15

- 39 A learner described an animal as having the following features.
  - moist skin
  - cold blooded
  - lives on land and in water

Which type of animal did the learner describe?

- A · Amphibian
- B Bird
- C Mammal
- D Reptile
- 40 Which diseases are caused by tsetse flies in man and in cattle?

	Man	Cattle
A	Bilharzia	Black foot
В	Dysentery	Foot and mouth disease
C	Malaria	Anthrax
D	Sleeping Sickness	Nagana

- 41 Why is lightning seen first before the thunder is heard?
  - A Lightening takes place before thunder.
  - **B**. Light travels faster than sound.
  - C Sound travels faster than light.
  - D Thunder takes place before lightening.



What is the simple machine shown in the diagram?

- A Lever
- **B** Screw
- C See-saw
- D · Wedge
- 43 Which of the following are ways of preventing the spread of HIV and AIDS?
  - A Abstain from sex and avoid shaking hands.
  - B Avoid drug abuse and HIV positive people.
  - C Eat a balanced diet and sleep under a mosquito net.
  - D Not sharing combs and razor blades.
- 44 Study the following first aid procedure.
  - 1 Put the victim in an airy place
  - 2 Use mouth to mouth resuscitation
  - 3 Take the victim to a clinic or hospital

Which accident may prompt you to follow the laid down first aid procedure?

- A Chocking
- **B** Electric shock
- C Snake bite
- D Suffocation
- 45 The movement of blood in the body is called ...
  - A absorption.
  - B circulation.
  - C digestion.
  - D respiration.



The use of the above in a circuit is to ...

- A close and open the circuit.
- B join the wires in a circuit.
- C protect electrical appliances.
- D provide electric energy.
- 47 Musical instruments and decorative objects are made from a combination of copper and zinc which is called ...
  - A brass.
  - B bronze.
  - C tin.
  - D zinc.
- 48 Study the following table showing metals and non-metals.

Metals	Non-Metals
Aluminium	Hydrogen
Carbon	Carbon dioxide
Copper	Oxygen
Iron	Zinc

Which of the following substances are placed in a wrong column?

- A Aluminium and oxygen
- B Carbon and zinc
- C Iron and oxygen
- D Zinc and aluminium
- 49 Which of the following is not a health risk associated with early sexual debut?
  - A Cervical cancer
  - B Contraction of STIs and HIV
  - C Stopping of the menstrual period
  - D Teenage pregnancy
- 50 During the test for starch, the brown colour indicates that there is...
  - A less starch.
  - B more starch.
  - C no starch.
  - D starch.

STOP! PLEASE CHECK ALL YOUR WORK CAREFULLY.

G7/Integrated Science/2021

## Page 1 of 1

**25.** B

26. A

**27.** D

<b>1.</b> D	<b>28.</b> C
2. A	<b>29.</b> A
<b>3.</b> B	<b>30.</b> B
<b>4.</b> A	<b>31.</b> C
<b>5.</b> B	<b>32.</b> B
6. A	<b>33.</b> D
<b>7.</b> C	<b>34.</b> D
8. A	<b>35.</b> C
<b>9.</b> D	<b>36.</b> B
<b>10.</b> A	<b>37.</b> A
<b>11.</b> C	<b>38.</b> B
<b>12.</b> A	<b>39.</b> A
<b>13.</b> B	<b>40.</b> D
<b>14.</b> A	<b>41.</b> B
<b>15.</b> B	<b>42.</b> D
<b>16.</b> A	<b>43.</b> D
<b>17.</b> C	<b>44.</b> D
<b>18.</b> D	<b>45.</b> B
<b>19.</b> B	<b>46.</b> D
<b>20.</b> A	<b>47.</b> A
<b>21.</b> D	<b>48.</b> B
<b>22.</b> B	<b>49.</b> C
<b>23.</b> A	<b>50.</b> C
<b>24.</b> B	