



INTEGRATED SCIENCE

Learners's Name		Assessment Number	
School Name		School Code	
Learner's Signature		Date	

INSTRUCTIONS TO LEARNERS

1. Write your name and assessment number in the spaces provided above.
2. Write the name and code of your school in the spaces provided above.
3. Sign and write the date of the assessment in the spaces provided above.
4. This paper consists of two sections: A and B.
5. Section A comprises Multiple Choice Questions numbered 1 to 20.
6. Section B comprises short, structured questions number 21 to 26.
7. Answer **ALL** the questions in section A on the separate ANSWER SHEET provided.
8. Answer **ALL** the questions in section B in the spaces provided in this QUESTION PAPER.
9. Do **NOT** remove any page from this question paper.
10. Answer **ALL** the questions in English.

For official use only SECTION B

Question	21	22	23	24	25	26				
Maximum score	6	6	4	4	8	2				
Learner's Score per question.										

SECTION A

Read all the instructions carefully

1. You have been given this question paper and a separate answer sheet. This section consists of 30 multiple choice questions.
2. Answer **ALL** questions on the ANSWER SHEET provided, NOT on the question paper.
3. Do all the necessary rough work on the question paper.

HOW TO USE THE ANSWER SHEET

4. Use an ordinary HB pencil.
5. Confirm that the answer sheet you have been provided with has the following:

YOUR ASSESSMENT NUMBER

YOUR NAME

NAME OF YOUR SCHOOL

NAME OF THE SUBJECT

6. Keep the answer sheet clean and dry. **DO NOT** fold it.
7. For each of the questions 1-20, four options are given. The options are lettered A, B, C and D. In each case, only **ONE** of the four options is correct. Choose the correct option.
8. On the answer sheet, the correct answer is to be shown by drawing a **DARK LINE** inside the box in which the letter you have chosen is written.

Example:

In the Question Paper:

16. Which substance is acidic?

A. Soap solution

B. Lemon juice

C. Ash solution

D. Toothpaste

16. [A]

{B}

[C]

[D]

The correct answer is B.

On the answer sheet, in the set of boxes given for number 16, draw a **DARK LINE** inside the box with the letter **B** printed in it as marked below.

9. Your dark line **MUST** be within the box. **DO NOT** make any marks outside the boxes.
10. For each question, **ONLY ONE** box is to be marked.

This paper consists of 7 printed pages.

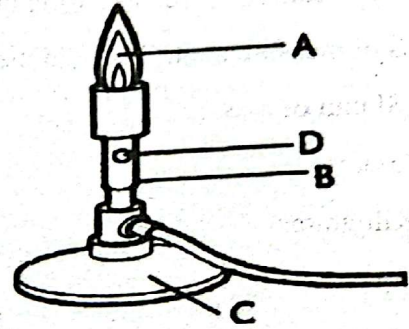
Learners should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

Section A

- Grade 7 learners were discussing the components of Integrated Science. Which component deals with the study of composition of elements and reaction of substances?
 - Mathematics
 - Biology
 - Physics
 - Chemistry
- During a practical lesson, grade 7 learners were given a mixture of sand and sugar solution. Which of the following steps should they have used to separate the mixture?
 - Evaporate then sieve
 - Evaporate then filter
 - Sieve then filter
 - Filter then evaporate
- A solid that dissolves in a liquid is represented by X while the liquid it dissolves in is represented by Y. Which of the following shows Y and X respectively?
 - Solvent and solute
 - Solute and solvent
 - Solution and solvent
 - Solute and solution
- An oil refining company uses a certain method to separate petrol from the crude oil. Which of the following methods is the company most likely to use?
 - Sublimation

- Evaporation
- Fractional distillation
- Simple distillation

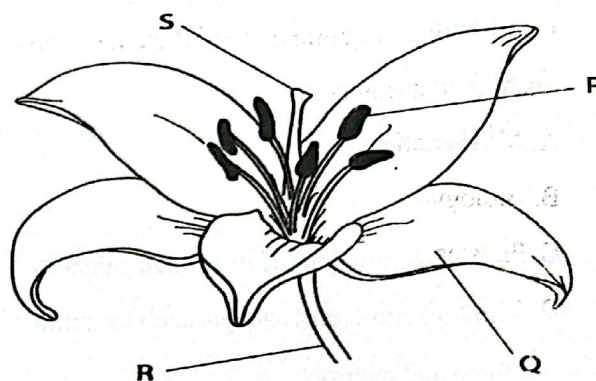
- Grade 7 learners of Kyeni School were asked by their teacher to name the parts of a Bunsen burner. What is the name of the part labelled B?



- Gas inlet
 - Collar
 - Base
 - Barrel
- Which organ in the human body is responsible for pumping of blood to all parts of the body?
 - Lungs
 - Kidneys
 - Heart
 - Liver
 - Walter used a litmus paper to identify acids and bases. Which of the following substances turned blue litmus red?
 - Lemon juice
 - Baking powder
 - Tooth paste
 - Wood ash

8. A mixture that has its components uniformly distributed throughout the mixture is known as
- homogeneous mixture
 - heterogeneous mixture
 - soluble mixture
 - immiscible mixture
9. Grade 7 learners were discussing different basic units of measurement. What did they mention as the SI unit of mass?
- Grams
 - Kilograms
 - Tonnes
 - Milligrams
10. Which of the following laboratory safety rules should always be followed when heating a substance?
- Always point the test tube towards others
 - Wear safety goggles
 - Heat flammable substances directly
 - Smell all chemicals before heating
11. Kamau was asked by Integrated Science teacher to measure exactly 200cm^3 of distilled water during a practical lesson. Which of the following apparatus would you recommend him to use?
- Round bottom flask
 - Measuring cylinder
 - Boiling tube
 - Test tube

The diagram below shows parts of a flower. Use it to answer questions 12 and 13.



12. Name the part labelled Q
- Leaf
 - Petal
 - Sepal
 - Stalk
13. Identify the part of the flower that produces pollen grains.
- P
 - Q
 - R
 - S
14. Which of the following is **not** a scientific skill that integrated science aims to develop in students?
- Observation
 - Prediction
 - Integration
 - Classifying

15. Which of the following substances is a compound?

- A. Oxygen
- B. Iron
- C. Water
- D. Hydrogen

16. Which component of integrated science explores more on concepts such as motion, force and energy?

- A. Biology
- B. Mathematics
- C. Physics
- D. Chemistry

17. The blood vessels in the human circulatory system help in transportation of blood throughout the body. Which blood vessel transports deoxygenated blood towards the lungs?

- A. Vena cava
- B. Pulmonary vein
- C. Pulmonary artery
- D. Aorta

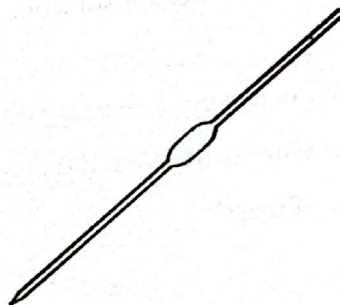
18. Juma came across a container that contained hydrochloric acid. The bottle had the symbol shown below. What is the meaning of the symbol?



TW-002

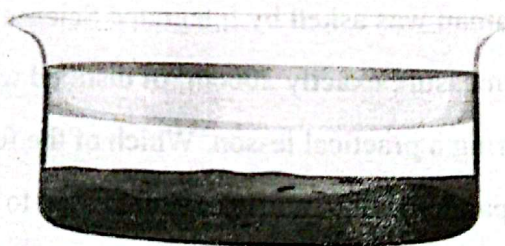
- A. Explosive
- B. Corrosive
- C. Flammable
- D. Biohazard

19. Identify the apparatus drawn below.



- A. Thermometer
- B. Burette
- C. Tongs
- D. Pipette

20. Grade 7 learners were discussing different types of mixtures. Their teacher showed them a sample of mixture of sand and water where the sand settles at the bottom of the container after some time as shown below.



This type of mixture can be separated by

- A. sieving
- B. using separating funnel
- C. filtration
- D. using a magnet

SECTION B 30 MARKS

21. During a class activity, learners were asked to classify different types of laboratory hazards.

a) Give **two** examples of materials that are classified as flammable. (2 marks)

i. _____

ii. _____

b) Outline first aid measures for someone who has ingested a corrosive substance. (4 marks)

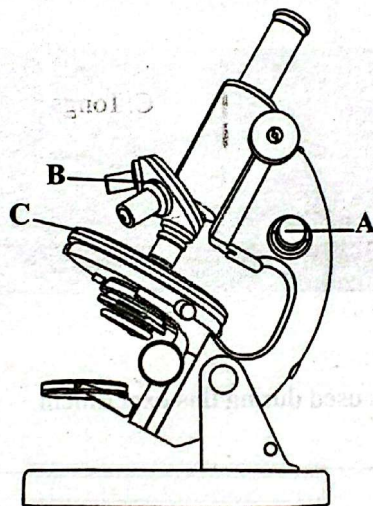
i. _____

ii. _____

iii. _____

iv. _____

22. The diagram below shows parts of a microscope. Study it carefully and answer the questions that follow.



Complete the table below by naming the labelled parts and their functions. (6 marks)

Part	Name	Function
A		
B		
C		

23. List **four** common accidents in the laboratory.

(4 marks)

i. _____

ii. _____

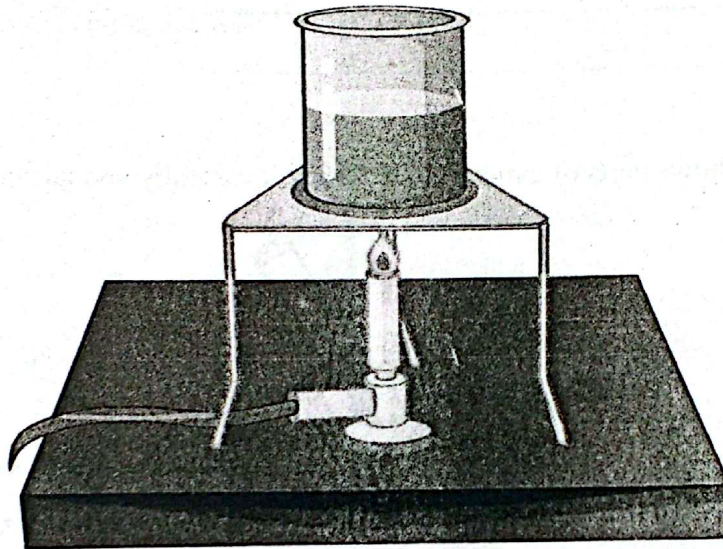
iii. _____

iv. _____

24. Lewis is a chemical engineer. He was invited by a school headteacher to speak to their grade 7 learners about the importance of studying integrated science. List four points he probably spoke about. (4mks)

- i. _____
- ii. _____
- iii. _____
- iv. _____

25. Study the diagram below showing a science experiment setup and answer the questions that follow.



a. Identify four pieces of apparatus used during this experiment.

(4marks)

- i) _____
- ii) _____
- iii) _____
- iv) _____

b. State four safety measures to be observed during such a practical in the laboratory.

(4 marks)

- i) _____
- ii) _____
- iii) _____
- iv) _____

26. Grade 7 learners were discussing the effects of force on an object. List **two** effects of force on a stationary object.

(2 marks)

i) _____

ii) _____