## KENYA EDUCATORS CONSULTANCY EXAMS





## JUNIOR SECONDARY SCHOOL GRADE 7 END TERM 1 EXAM- 2023 INTEGRATED SCIENCE

Time: 2 hours

| Name                                    | School |   |
|---|--------|---|
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## **INSTRUCTIONS TO CANDIDATES:**

.Do not open the booklet until you are told to do so.

.Read each question carefully.

.Answer ALL the questions.

.Write your answers, in either blue or black ink, in the spaces provided in the booklet

## FOR EXAMINERS ONLY

| Questions<br>1-24 | Candidate Score | Candidate performance level |
|-------------------|-----------------|-----------------------------|
| Out of 100 marks  |                 |                             |

| 1. | List down 3 components of integrated science.                             | (3mks)                                  |
|----|---|---|
|    |   |   |
|    |   |   |
|    |   |   |
|    |   |   |
| 2. | Identify 4 career opportunities related to knowledge and skills gained in |   |
|    | integrated science.   | (4mks)                                  |
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|    |   | ,                                       |
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| 3. | What is a laboratory?   | (2mks)                                  |
| ٥. | •   |   |
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| 4  | T: (1   | (4 1 )                                  |
| 4. | List down 4 hazards likely to be found in the laboratory.                 | (4mks)                                  |
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|    |   |   |
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|    |   |   |
| 5. | Describe the first aid procedure for cuts.                                | (8mks)                                  |
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6. Study the picture below and answer the questions that follows.

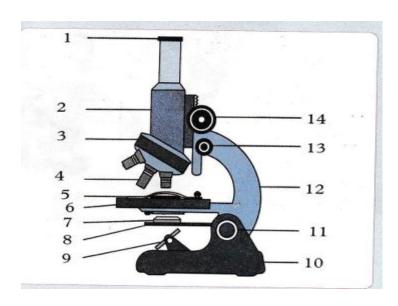


|    | i.     | Discuss 2 possible causes of the injuries shown in the pictures. | (4mks)                                  |
|----|--------|--|---|
|    |        |  |   |
|    |        |  |   |
|    |        |  |   |
| 7. | List 4 | I safety measures to be observed in the laboratory.              | (4mks)                                  |
|    |        |  |   |
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|    |        |  |   |
| 8. | State  | 3 basic skills you need in the laboratory.                       | (3mks                                   |
|    |        |  |   |
|    |        |  | • |
|    |        |  |   |

9. Draw 4 apparatus and write their names.

(4mks)

10. Observing the diagram below, identify and discuss the following parts of a microscope. (5mks)



| Part 12 |
|---------|
| Part 1  |
| Part 14 |
| Part 8  |
| Part 3  |

11. Study the picture shown below and answer the questions that follows.



| i.   | State the uses of the above apparator. | (1mk)  |
|------|--|--------|
|      |  |        |
| ii.  | Name the apparator.                    | (1mk)  |
| iii. | Name the parts labelled A to E.        | (5mks) |
|      | A                                      |        |
|      | В                                      |        |
|      | C                                      |        |
|      | D                                      |        |
|      | E                                      |        |

| ma<br>and     | 12. During an integrated science lesson, students were making mixtures. Anyango made a mixture of milk and water while Olekete made a mixture of cooking oil and spirit. Describe the types of mixtures that was made by the 2 students. (4m) |                 |
|---------------|---|-----------------|
| ••••          |   |                 |
|               |   |                 |
|               |   |                 |
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|               |   |                 |
|               |   |                 |
| 13. Lis       | t down 3 examples of heterogeneous mixtures.  | (3mks)          |
|               |   |                 |
| ••••          |   |                 |
|               |   |                 |
| 14. i. N      | Name 3 basic quantities and their SI units.   | (3mks)          |
|               |   |                 |
|               |   |                 |
| ••••          |   |                 |
| ••••          |   |                 |
| ii.           | Define international system of units  | (1mk)           |
|               |   |                 |
|               |   |                 |
| 45 11         |   |                 |
| 15. L1s<br>i. | It mixtures that can be separated using the following methods.  Simple distillation   | (1mk)           |
| 1.            | Simple distination  | (1 <i>IIIK)</i> |
|               |   |                 |
| ii.           | Decantation.  | (1mk)           |
|               |   |                 |
|               | Character and has   |                 |
| iii.          | Chromatography.   | (1 <i>mk</i> )  |
|               |   |                 |
| iv.           | Solvent extraction.   | (1mk)           |
|               |   |                 |
|               |   |                 |

| 16. | Briefly                                 | y explain how a mixture of sand and salt can be separated.                     | (4mks)                                  |
|-----|---|--|---|
|     | •••••                                   |  |   |
|     | •••••                                   |  | •••••                                   |
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|     | •••••                                   | ••••••   | • |
|     | • |  | • |
|     | • |  | • |
|     | •••••                                   |  | •••••                                   |
|     |   |  |   |
| 17. | Write                                   | the meaning of these hazard symbols they observed.                             | (4mks)                                  |
|     |   |  |   |
|     | (a                                      | (b) (c) (d)  |   |
|     |   |  |   |
|     | 1                                       |  |   |
| 18. | Name                                    | any 5 safest ways of handling a microscope after use.                          | (5mks)                                  |
|     |   |  |   |
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| 19. |   | ss how to handle and care for the following types of apparatus <i>a</i> ments. | ınd                                     |
|     | i.                                      | Glassware  | (1mk)                                   |
|     | ii.                                     | Metallic apparatus   | (2mks)                                  |

|     |         |  | • • • • • • • • •                       |
|-----|---------|--|---|
|     | iii.    | Heating instruments  | (3mks)                                  |
|     |         |  |   |
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|     |         |  | . <b></b>                               |
|     |         |  |   |
|     |         |  |   |
| 20  | Define  | e field of view as used in the microscope.                         | (1mk)                                   |
| 20. | Demi    |  |   |
|     |         |  |   |
| 21. | List do | own 5 safety precautions to observe when heating using a Bunsen bu | ırner<br>(5mks)                         |
|     |         |  |   |
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| 22. |         | 4 importance of information on packaging of laboratory instruments | and                                     |
|     | chemi   | cals.  | (4mks)                                  |
|     | •••••   |  | . <b></b>                               |
|     | •••••   |  | • • • • • • • • •                       |
|     | •••••   |  |   |
|     | •••••   |  |   |
| 23  | I ict / | methods used in separation of mixtures.                            | (4mks)                                  |
| 25. | LIST 4  | methods used in separation of mixtures.                            | ( <del>I</del> IIIIS)                   |
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| 24. | List 4  | uses of chromatography.  | (4mks)                                  |
|     |         |  | · • • • • • • • • • • • • • • • • • • • |
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