

KENYA JUNIOR SCHOOL EDUCATION ASSESSMENT

GRADE 7 DECEMBER ASSIGNMENT

INTEGRATED SCIENCE PRACTICAL

LEARNER'S DETAILS



Name: _____.

School: _____.

Assessment Number: _____ Date: _____.

School Code: _____ Signature: _____.

PRACTICAL / DRY PRACTICAL ASSESSMENT

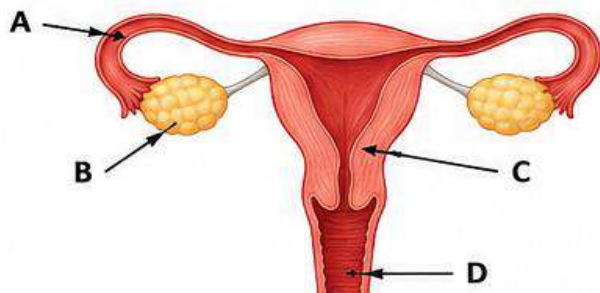
TOTAL: 30 MARKS

Time: 1 Hour

Instructions: Answer all questions. Study the diagrams provided and answer the questions that follow.

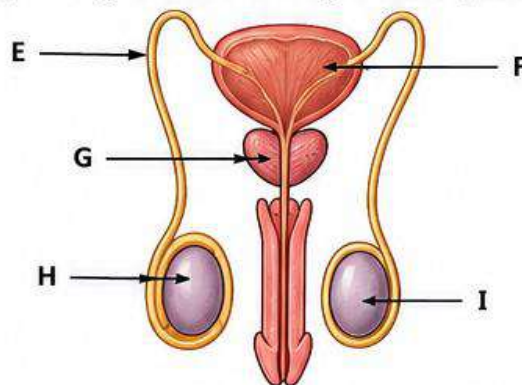
TASK 1: BIOLOGY – 10 MARKS

1. Study the diagram of the female reproductive system below.



- (a) Name the parts labelled A, B, C and D. (4 marks)
- (b) State one function of each of the following parts:
- Ovary (1 mark)
 - Uterus (1 mark)
 - Fallopian tube (1 mark)
 - Vagina (1 mark)

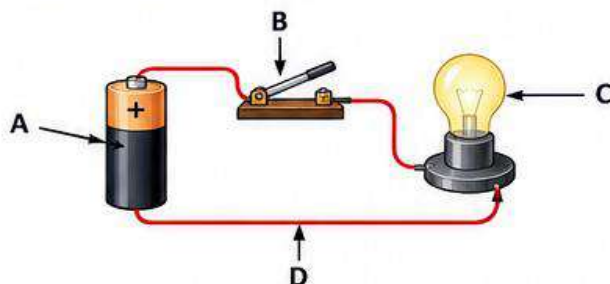
Study the diagram of the male reproductive system below.



- (c) State one function of the testes in the male reproductive system. (1 mark)
- (d) Name the organ in the male reproductive system through which urine and semen pass out of the body. (1 mark)

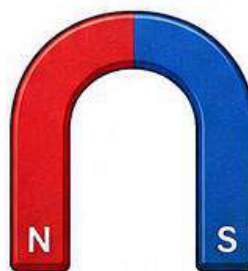
TASK 2: PHYSICS – 10 MARKS

2. Study the simple electric circuit below.



- (a) Name the components labelled A, B, C and D. (4 marks)
- (b) State the function of the following components:
- Cell/battery (1 mark)
 - Switch (1 mark)
 - Bulb (1 mark)

3. Study the two magnets below.



Magnet A

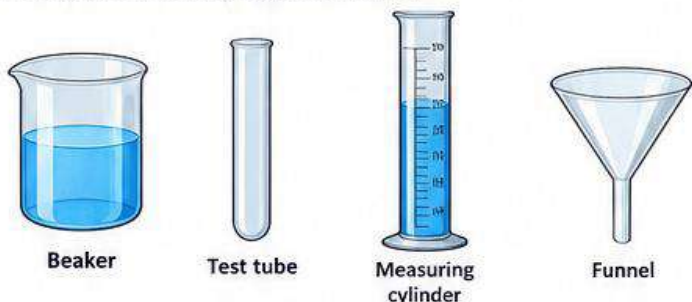


Magnet B

- (a) Name the two types of magnets shown. (2 marks)
- (b) State one use of magnets. (1 mark)

TASK 3: CHEMISTRY – 10 MARKS

4. Study the laboratory apparatus below.



- (a) Identify any two laboratory apparatus shown. (2 marks)
- (b) State one use of each apparatus identified in (a). (2 marks)

5. Three substances are tested using indicators.

Substance	Universal Indicator Colour
A	Red
B	Green
C	Blue

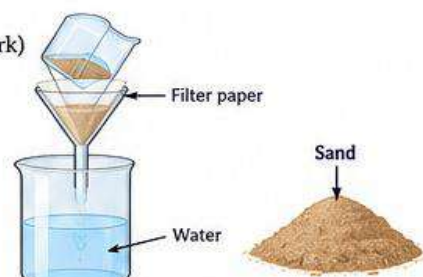
- (a) Which substance is acidic? (1 mark)
- (b) Which substance is neutral? (1 mark)
- (c) Which substance is alkaline/basic? (1 mark)

6. (a) State one laboratory hazard that may occur when handling chemicals.
- (b) State one safety precaution used to prevent laboratory accidents. (1 mark)



Chemical hazard

7. A mixture contains sand and water. State the method that can be used to separate the sand from the water. (1 mark)



Marking scheme

Grade 7 Integrated Science Practical / Dry Practical Assessment:

TASK 1: BIOLOGY (10 MARKS)

1. Female and Male Reproductive Systems

(a) Name the parts labelled A, B, C and D: (4 marks)

- **A:** Fallopian tube (Oviduct)
- **B:** Ovary
- **C:** Uterus (Womb)
- **D:** Vagina

(b) State one function of each of the following parts: (4 marks)

- **i. Ovary:** Produces and releases ova (egg cells) and female hormones (estrogen and progesterone).
- **ii. Uterus:** Holds, nourishes, and protects the developing fetus during pregnancy.
- **iii. Fallopian tube:** Site of fertilization (where the egg meets the sperm) and conducts the egg towards the uterus.
- **iv. Vagina:** Acts as the birth canal during childbirth and receives sperm during sexual intercourse.

(c) State one function of the testes in the male reproductive system: (1 mark)

- Produces sperm cells and the male sex hormone (testosterone).

(d) Name the organ in the male reproductive system through which urine and semen pass out of the body: (1 mark)

- **Penis (or Urethra)**

TASK 2: PHYSICS (10 MARKS)

2. Simple Electric Circuit

(a) Name the components labelled A, B, C and D: (4 marks)

- **A:** Dry cell / Battery / Source of electrical energy
- **B:** Switch
- **C:** Electric bulb / Lamp
- **D:** Connecting wire / Conductor

(b) State the function of the following components: (3 marks)

- **i. Cell/battery:** Provides electrical energy / voltage to drive current through the circuit.
- **ii. Switch:** Opens or closes the electric circuit to control the flow of electric current.
- **iii. Bulb:** Converts electrical energy into light energy (and heat energy).

3. Magnets

(a) Name the two types of magnets shown: (2 marks)

- **Magnet A:** Horse-shoe magnet (*or U-shaped magnet*)
- **Magnet B:** Bar magnet

(b) State one use of magnets: (1 mark)

- Used in magnetic compasses for navigation. (*Other acceptable answers: used in loudspeakers, magnetic door latches, electric motors, magnetic locks, recycling separators*).

TASK 3: CHEMISTRY (10 MARKS)

4. Laboratory Apparatus

(a) Identify any two laboratory apparatus shown: (2 marks) (Choose any two from below)

- Beaker
- Test tube
- Measuring cylinder
- Funnel (*Filter funnel*)

(b) State one use of each apparatus identified in (a): (2 marks)

- **Beaker:** Used for holding, heating, or mixing liquids.
- **Test tube:** Used to hold, mix, or heat small amounts of liquid or solid chemicals.
- **Measuring cylinder:** Used to accurately measure the volume of liquids.
- **Funnel:** Used to channel liquids or fine-grained substances into containers with narrow openings, and to hold filter paper during filtration.

5. Indicators and pH Test

(a) Which substance is acidic? (1 mark)

- **Substance A** (*Red colour indicates an acid*)

(b) Which substance is neutral? (1 mark)

- **Substance B** (*Green colour indicates neutral, pH 7*)

(c) Which substance is alkaline/basic? (1 mark)

- **Substance C** (*Blue colour indicates a base/alkali*)

6. Laboratory Safety

(a) State one laboratory hazard that may occur when handling chemicals: (1 mark)

- Chemical burns on skin/eyes, toxic gas inhalation, or chemical spill/corrosion.

(b) State one safety precaution used to prevent laboratory accidents: (1 mark)

- Wearing protective gear (goggles, lab coat, gloves) OR avoiding tasting/smelling unknown chemicals.

7. Separation of Mixtures

- **State the method that can be used to separate the sand from the water: (1 mark)**
- **Filtration**

