Everything You Need to Know About the ST Science Ministry Exam

The ministerial examination, commonly known as the ministry exam, is a compulsory written exam that students take at the end of Secondary IV. It counts for 50% of the theory component mark. The exam is divided into 3 parts, and students have 3 hours and 15 minutes to complete it.

An Exam Divided in 3 Parts

Part	Question Type	Number of Questions	Number of Questions in Each Major Area		
			Earth and Space	Material World	Technological World
A	Multiple-choice	15	4	10	1
B	Constructed-response	5	1	3	1
C	Technological analysis	5	0	0	5

Documents Provided

- Student Booklet (part A, B, and C)
- Scannable answer sheet (part A)
- Reference document
  - List of formulas and quantities
  - Periodic table of elements
  - Diagrams of the technical object

Authorized Materials

- Pencils
- Ruler
- Calculator

Forbidden

Any data or programs stored on a calculator must be deleted before the exam.

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ST Concepts Subject to Assessment

Material World

Solutions

- ☐ Concentration (g/L)
- ☐ pH scale
- ☐ Ions
- ☐ Concentration (%)
- ☐ Concentration (ppm)
- ☐ Electrolytes and electrical conductivity

Organization of Matter

- ☐ Rutherford-Bohr atomic model
- ☐ Groups in the periodic table
- ☐ Periods in the periodic table

Chemical Changes

- ☐ Combustion
- ☐ Photosynthesis and respiration
- ☐ Acid-base neutralization
- ☐ Balancing chemical equations
- ☐ Law of conservation of matter

Electricity and Magnetism

- ☐ Electrical charge
- ☐ Static electricity
- ☐ Ohm's law
- ☐ Electrical circuits
- ☐ Relationship between power and electrical energy
- ☐ Forces of attraction and repulsion
- ☐ Magnetic field of a live wire

Energy Transformations

- ☐ Law of conservation of energy
- ☐ Energy efficiency

Technological World

Mechanical Engineering

- ☐ Links
- ☐ Guiding control
- ☐ Motion transmission systems
- ☐ Speed changes
- ☐ Motion transformation systems

Electrical Engineering

- ☐ Power supply
- ☐ Conduction
- ☐ Protection
- ☐ Insulation
- ☐ Control
- ☐ Transformation of energy

Materials

- ☐ Constraints of materials
- ☐ Ceramics
- ☐ Properties of materials
- ☐ Plastics
- ☐ Degradation and protection of materials

Earth and Space

- ☐ Carbon cycle
- ☐ Greenhouse effect
- ☐ Permafrost
- ☐ Salinity
- ☐ Watershed (catchment area)
- ☐ Oceanic circulation
- ☐ Glaciers and pack ice
- ☐ Energy resources

Study tools

Summary by Major Area

Earth and Space
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Material World
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Technological World
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Practice Tools

Simulations

Part A
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Part B
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Technological Analysis

Food dispenser
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Carousel
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Conveyor toaster
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