82. **B. Follow the instructions given by the teacher or in the manual** - Following established procedures is the safest and most reliable way to conduct a scientific experiment.
83. **B. Cover it with a clean bandage and report it to the teacher** - A small cut needs to be cleaned and protected from infection, and the incident must be reported.
84. **B. To prevent trips and falls** - Clutter in walkways is a major cause of accidents, and keeping them clear is a basic safety rule.
85. **B. Use a fume cupboard or work in a well-ventilated area** - This is the safest way to handle substances that produce harmful fumes, as it prevents inhalation.

SECTION B

Sub-strand 1.1: Introduction to Integrated Science

A. Grade 7 learner, Ali, is having a conversation with his grandfather, who is a retired farmer. His grandfather explains how understanding the weather patterns and soil composition has helped him in farming.

a) Name two components of Integrated Science that Ali's grandfather implicitly used in his farming practices. (2 marks)
i. **Meteorology/Atmospheric Science/Physics** (understanding weather patterns)

ii. **Soil Science/Agronomy/Chemistry** (understanding soil composition, nutrients)

iii. **Biology** (understanding plant growth and crop cycles)

iv. **Ecology** (understanding the interaction between weather, soil, and living organisms in the farm ecosystem)

b) Explain how the knowledge of each component you named in (a) is important in agriculture. (4 marks)

i. **Meteorology/Atmospheric Science:**

- **Optimal Planting/Harvesting Times:** Knowledge of rainfall patterns, temperature ranges, and frost dates helps farmers determine the best times for planting seeds and harvesting crops to maximize yields and minimize losses.

- **Water Management:** Understanding precipitation levels and evaporation rates informs irrigation schedules, ensuring crops receive adequate water without wasteful over-irrigation or drought stress.

- **Pest and Disease Control:** Weather conditions (e.g., humidity, temperature) influence the spread of pests and diseases; predicting these conditions allows farmers to implement preventative measures.