Our Ever Changing Earth

Exercises

Give reasons for the following:

- **1.** There are U-shaped valleys in glaciated areas.
- **2.** Floodplains are very fertile.
- **3.** Buildings collapse during an earthquake.
- **4.** Volcanic eruptions cause loss of lives and destruction to property.
- **5.** Tsunamis cause immense damage to coastal areas.

Solutions

Give reasons for the following:

- 1. There are U-shaped valleys in glaciated areas as the glacier is like a river of ice, cutting broad valley into the valley with very steep sides.
- **2.** Floodplains are very fertile because when the river floods, the surrounding plains are covered with fertile silt, when the flood waters recede.
- **3.** Buildings collapse during an earthquake as sudden movements are caused in the crustal plates. This is due to enormous amount of pressure building up when crustal plates push against each other. The vibrations are so strong in the earth's crust that buildings collapse.
- **4.** Volcanic eruptions cause loss of lives and destruction of property as lava, ash, rocks and gases come out from the crater and flow down the sides of the volcano causing destruction along its path.
- 5. Tsunamis cause immense damage to coastal areas as they are tidal waves triggered off by large underwater earthquakes which occur on the ocean floors and travel at a speed up to 800 km/hr. When these waves reach coastal areas, they slowdown in speed but rise up rapidly in height up to 15 metres. So these waves cause much destruction and loss of life.