

**Quiz (Corrosion of Aluminium)**

Iron was used to make window frames. Today, aluminium is used instead because the rusting of iron causes great damages to iron-made objects.

- (a) Explain why the rusting of iron causes great damages to iron-made objects.
- (b) Explain why aluminium is more corrosion resistant than iron though it is more reactive.
- (c) Name the process used to enhance the corrosion resistance of aluminium.

**Suggested Answer**

- (a) The rust formed is just loosely attached to the surface of the iron made object. It falls from the iron surface easily. When the fresh iron surface is exposed to the environment, it reacts with air and water. Thus, rusting continues until the iron piece corrodes completely.
- (b) A layer of protective oxide layer forms on the aluminium surface. This oxide layer is tough and is impermeable to air and water. It can protect aluminium underneath from further corrosion.
- (c) Anodization