

Chemistry Practical Class 11 Bending a Glass Tube Viva Questions with Answers

Q1: What type of flame would you use for general heating purposes?

Answer:

For general heating, a non-luminous oxidising flame is utilised since it produces the most heat due to the full burning of hydrocarbons.

Q2: Why is a broad flame used for bending a glass tube?

Answer:

If a narrow flame is used, folds are created at the bend.

Q3: What are the precautions to be taken during the experiment?

Answer:

- At the point of bending, heat the tube for at least 4-5 cm.
- Keep your face much further and hold the glass tube away.
- Never force the glass tube to bend. This may cause the tube to break.

Q4: Why does glass not possess a sharp melting point?

Answer:

Glass is an amorphous solid. The constituent particles are not arranged in a regular pattern. As a result, it lacks a sharp melting point.

Q5: Why should the tube be rotated while heating?

Answer:

While heating, the tube is rotated to achieve consistent heating on all sides.

Q6: Why is the red hot tube bent slowly?

Answer:

The red hot tube is quite soft. If it is bent abruptly, it may flatten. The slow bending procedure prevents the glass tube from flattening.

Q7: What is the composition of soda glass?

Answer: $\text{Na}_2\text{SiO}_3 \cdot \text{CaSiO}_3 \cdot 4\text{SiO}_2$

Q8: Give an example where bent glass is used.

Answer:

It is being used internally for showcases, shower doors and enclosures, elevator glass panels, and room partitions. Bent glass is also used in domes, solariums, aquariums, barrel vaults, and rotating doors, among other architectural applications.

