

## Chemistry Practical Class 11 Cutting Glass Tube and Glass Rod Viva Questions with Answers

**Q1:** Why glass does not possess a sharp melting point?

**Answer:**

Glass is an amorphous solid crystalline structure possessing densely packed molecules. As a result, glass does not have a very high melting point.

**Q2:** Mention the various steps which are involved in the cutting of a glass tube.

**Answer:**

- Scratching
- Breaking
- Heating the cut edges
- Cooling

**Q3:** Which type of glass softens easily?

**Answer:** Soda-lime glass

**Q4:** Why is it required to round off the freshly cut edges of the glass tube or the glass rod?

**Answer:**

Because sharp edges might cause harm when handled, the edges of glass tubes or rods are rounded off for safety and to offer a decent look with a smooth finish.

**Q5:** What are the precautions to be taken during the experiment?

**Answer:**

- In a single stroke/attempt, try to make a single deep scratch of the needed length.
- Please be careful when filling the glass tube/rod and breaking it.
- To achieve optimal balance, keep your face away from the glass tube/rod and hold it away with a piece of cloth.

**Q6:** Why should the tube be rotated while heating?

**Answer:**

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

**Q7:** 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.

**Q8:** What type of glass is preferred for drawing out a jet?

Answer:

Because soda-lime glass (soft glass) has a lower melting point and hence softens easily, it is used to draw out a jet.

**Q9:** Why is the glass tube of a smaller diameter chosen for drawing out a jet?

Answer:

To draw a jet from a tube with a bigger diameter, the tube must be stretched too far, which is not feasible.

**Q10:** How many types of glass are there? Name them.

**Answer:**

Soda-lime glass and Borosilicate glass are two different forms of glass. The soda-lime glass melts easily at 300-400°C, whereas Borosilicate glass is difficult to melt and softens at 700-800°C. As a result, Borosilicate glass is widely used in the manufacture of laboratory glass apparatus.