

# Inorganic fibres

## Module 4: FAQ

Q1. Define Glass.

Ans. A glass is an inorganic product of fusion which has cooled to a rigid condition without crystallization.

Q2. Why is it difficult process pure glass?

Ans: This is so because of its high melting temperature (~1700 °C) and rapid crystallization on solidification.

Q3. On what parameters does the diameter of drawn glass fibre depend?

Ans: The diameter of drawn glass fibre is dependent on: viscosity of the glass melt, the hydrostatic pressure, the diameter and length of the nozzle and the winding speed

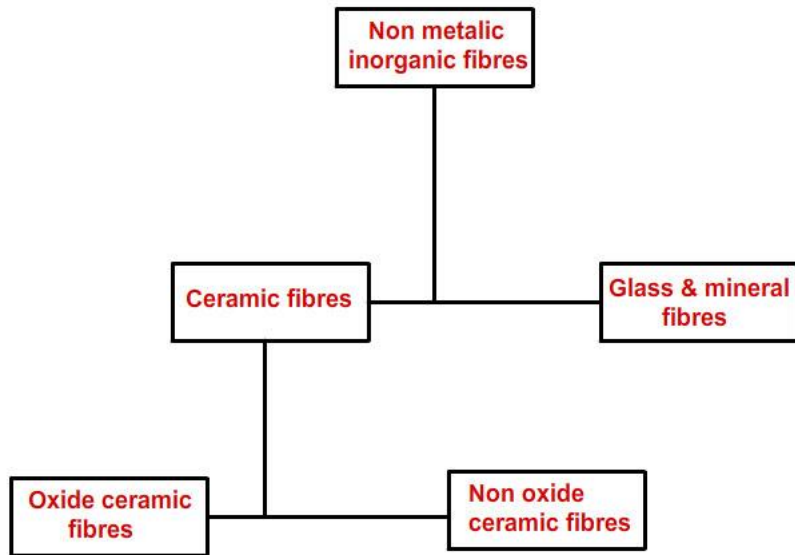
Q4. What is the main difference between the structure of glass and ceramic?

Ans: Glass is amorphous while ceramic is crystalline

Q5. What is the main role of coupling agents in composites.

Ans: The coupling agent plays a key role in a composite to provide a proper adhesion between the fibre and the matrix so that the stress is transferred efficiently.

Q6. With the help of a flow chart show the classification of inorganic non-metallic fibres



Q7. Explain the direct method of preparation of ceramics.

Ans: The direct production of fine ceramic fibres requires the spinning of precursors (salt solution, sols or precursor melts) into fibres, which are then heat treated and pyrolysed for a very short time.