**Assignment**:-

Select one from the topics listed below and prepare presentation. The presentation should be prepared in such a way that it contains

* Introduction: Brief identification of the topic and the significance of the topic stated in such a way to get the attention of the audience and make them want to hear more. Brief indication of what is covered in the remainder of the presentation.
* Body of presentation: Should cover each of the subtopics such as background, evolution of the technology, mechanisms, fabrication processes, challenges, future potential, applications, etc.
* Summary, conclusions: Restatement of the significance and relevance.

**Topics**

• Glass fibers for composites

• Glass fibers for fiber-optic communications

• Liquid-crystal display glass

• Gorilla glass (strengthened glass)

• Single crystal sapphire

• Endoscopic uses of glass fibers

• Ceramic hosts for lasers

• Light-emitting diode (LED) lasers

• Medical uses of lasers

• Evolution of LED lighting

• LEDs in modern televisions

• Ceramics in modern computerized tomography equipment

• Ceramics in the atomic force microscope

• Modern applications of piezoelectricity

• Medical applications of ultrasound

• Radioactive glass microspheres for liver cancer treatment

• Ceramics for spine and joint repair

• Carbon fibers for composites

• Diamond-like coatings

• Miniaturized multilayer capacitors and their applications

• Evolution of flash memory devices

• Evolution of ceramic semiconductors for digital cameras

• Soft ferrite materials and applications

• Ceramics for oxygen separation

• Ceramics in the solid oxide fuel cell

• Ceramics in nuclear applications

• Ultrahigh-temperature ceramics

• Bioceramics and bioglasses