

**DEPARTMENT OF CERAMIC ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY
(BANARAS HINDU UNIVERSITY)
Varanasi-221005 (U.P.) INDIA**

Syllabus for Ph.D. Entrance Examination-2017-18 will be as follows;

- a. Atomic bonding and Crystal structure of ceramic materials
- b. Basic Materials Thermodynamics and Phase equilibria
- c. Mechanical, Thermal, electrical, optical and magnetic properties of ceramic materials and their applications.
- d. Application and Processing of Ceramics.
- e. Processing and application of Composites
- f. Fundamentals of materials characterization: X-ray Diffraction, Thermal Analysis: TG-DTA/DSC, electron microscopy (SEM and TEM), FTIR, UV-Vis.