# INDIAN INSTITUTE OF TECHNOLOGY KANPUR KANPUR-208016, INDIA

TA - 101 (Technical Art)

2016 -2017 II Semester

#### **Course Objective**

To learn the basics of Technical Drawing in THEORY and PRACTICE using free hand sketching, drafting with help of hand-held drafting tools, and computer-aided drafting (AutoCAD). In general, it provides necessary information about the shape, size, surface quality, material, manufacturing process, etc., of the object.

## **Course Content**

Introduction to brief history of sketching, orthographic projections, principles of dimensioning, isometric drawing and projections, pictorial views, missing lines and views, sectional views, perspective views, introduction to computer aided Design/Drafting, relationship between lines and planes, auxiliary view, intersection of lines, planes and solids, development of lateral surfaces of simple solids.

• The lecture notes and solutions will be posted on course webpage/BRIHASPATI.

#### **Text Book**

- 1. French T. E., Vierck, C. J., Foster, R. J., Engineering Drawing and Graphic Design. Tata McGraw-Hill Edition, Fourteenth Edition, 2012. (Original edition: McGraw-Hill Book Company New York, Fourth Edition, 1984: Available in Library).
- 2. 3. Bhatt, N. D., Elementary Engineering Drawing, Charoter Publishing, Anand, Thirty First Editions, 1990.

## **Reference Book**

- 1. Bethune J D, Engineering Graphics with AutoCAD, Prentice-Hall, Englewood Cliffs, First Edition, 1995
- 2. Luzadder, W. J., Duff, J. M., Fundamentals of Engineering Drawing, Prentice-Hall India, New Delhi, Eleventh Edition, 1983.