

## 2.16 31536 PRESS TECHNOLOGY

### UNIT-1 LETTER PRESS PRINTING MACHINE

- 1.1 Letterpress cylinder Machines: Classification, relative merits and limitations, Mechanical and Operational features. Automatic feeding, inking and delivery systems.
- 1.2 Pre-make ready and Make-ready operations involving text matter, line and halftone blocks underlay, interlay & overlay.
- 1.3 Principle of Imposition Schemes up to 16 pages half sheet work and sheet work.
- 1.4 Running defects: Analysis of causes and their remedies.
- 1.5 Introduction to Label Printing.

### UNIT-2 FLEXOGRAPHY PRINTING

- 2.1 Types of image carriers, their suitability and uses.
- 2.2 Flexography printing machine, Types of machine.
- 2.3 Flexography printing machine operations and suitability.
- 2.4 Different types of inking system.
- 2.5 Types of ink and chemical used in flexography printing.

### UNIT-3 DIGITAL PRINTING

- 3.1 Introduction to digital printing, Toner based digital printing and Non-toner based printing.
- 3.2 Digital Printing Fundamentals - Pixel image, Digital image.CCD and CMOS.
- 3.3 Introduction to various software used in digital printing.
- 3.4 Selection of technology for digital printing - Variable data printing, print on demand,
- 3.5 Different types of card printing (ATM, Credit Card, RFIF), MICR printing and various types of inkjet printing.
- 3.6 Brief introduction of 3D technology
- 3.7 Printing on different substrate i.e. Glass, Plastics, gold printing, edge decoration, paper, plastic etc.
- 3.8 3D web technology, multimedia in multiple production.
- 3.9 Print on demand.
- 3.10 Hybrid printing technology.

#### Reference books:

1. Letter Press Printing I-II, C.S. Misra Anupam Prakashan Allahabad.
2. Akshar Mudran Shastra, C.S. Misra Anupam Prakashan,Allahabad.
3. Durrant, W.R., Machine Printing, Focal Press, London.
4. Hutchings, E.D., Printing By Letterpress, Heinemann,