

Printing Technology

DIPLOMA STANDARD

1. SCIENCE AND BASIC ENGINEERING:-

Units and Measurements - Force and measurement - Properties of Matter, Thermal properties of Materials, Illumination and Electromagnetic Spectrum, Acids, Alkalies and pH, Electrical systems - Electric Motors - Electronics - Mechanical components, Hydraulics.

2. PRINTING MATERIALS:-

Materials, Metals used for Image carriers for different processes - Light sensitive materials, substrates, papers, Boards and their characteristics, Printing Inks - Constituents and general characteristics, Requirements of paper and ink for various printing processes.

3. PRINT DESIGN AND PRODUCTS:-

Factors involved in Print planning, Typography and Design principles, various kinds of printed products - their formats, Designing factors, colour application.

4. TYPESETTING:-

Selection of Types of various jobs - Style of the House, style of the work casting off, Typesetting for various kinds of jobs, Proofing methods.

5. COMPUTERISED TYPE - SETTING:-

Basic structure of Computer, Hardware - Input and Output Devices, Software - operating system; - Software used in Desktop Publishing; Digital imaging method, Scanners, Image Editing, Colour Correction, Colour Management, Laser Printer - Paper, Polymaster - Methods of Colour Proofing, Care and Maintenance of Computer Division.

6. REPRODUCTION:-

Reproduction Camera, - Optical principles, Line and Half-tone Photography - contact Photography, Principles of colour Separation - Electronic colour - Scanners - (Drum and Flat Bed) - Imagesetter - Colour Correction, Colour Management Systems - Automatic Film Processor - Quality Control Aids, Proofing Systems.

7. FILM ASSEMBLY AND PLATE MAKING:-

Film Assembly - Pagination, Image Registering System, - Plate making Techniques - Wipe-on process - Presensitized Plates - Plate Selection, Care and Storage, Autoplate Processor, Computer - to - plate Imaging, Quality Control Aids.

8. PRINTING:-

Principles involved in different printing processes - Machines for letterpress, Offset, Gravure, Flexography and Screen Printing.

Construction of Machines - Production Control - Workflow - Delivery and Drying Methods - Web Offset - Wet-onWet Printing - Printing problems - causes and remedies.

9. BINDING AND FINISHING:-

Ware House Operation - Securing operation - Forwarding, Covering and Finishing Operations - Automation in Binding and Finishing, Production Control - Workflow sequence - Carton Designing and Flexible Packaging - Printing Process for Packaging - Surface Coating and Lamination.

10. MANAGEMENT:-

Structure of Organisation - Office Procedures, Costing and Estimating - Classification of Accounts, Leadership - Delegation and Authority, - Human Relation - Productivity - Quality Control System(ISO) - Selection and use of ISO - Benefits of Quality Systems - Inspection and Testing.

