

AMPT20 PRINT FINISHING

UNIT-1 BINDING MATERIALS

- 1.1 Overview of binding and finishing; Print finishing- classification; materials; JDF and MIS in book binding and print finishing, trends and developments in finishing operations;
- 1.2 Adhesives- types, manufacturing, theory of adhesion; prevention of deterioration;
- 1.3 Production control, Network analysis and Quality control.

UNIT-2 GUILLOTINES

- 2.1 Jiggers; cutting – overview, work preparation; cutting machine – parts, types of motion;
- 2.2 Principles of single knife guillotines, semi-automatic and automatic programming systems, three knife trimmers; operation, mechanism and maintenance of guillotines;
- 2.3 Various adjustments; operational procedure of sensors and hydraulic systems; problems and remedies during cutting.

UNIT-3 FOLDING

- 3.1 Principles of folding, types of folding for sheet and web, methods of feeding and delivery; folding production line, folding terminology, folding diagram, folding scheme;
- 3.2 Problems involving folding; mechanism, operation and adjustment of folding machines; additional features- fold gluing, perforators, creasers and slitters.

UNIT-4 GATHERING AND SECURING OPERATION

- 4.1 Principles of gathering, types of machines, feeders, delivery, inline production;
- 4.2 Securing- types, characterization; stitching – wire and thread; adhesive binding;
- 4.3 Sewing- types, feeders and delivery; mechanical and loose leaf binding; materials, styles, purpose of each method.

UNIT-5 MISCELLANEOUS FINISHING OPERATION AND AUTOMATION IN BINDING

- 5.1 Edge treatment- characterization, edge staining, bookmark, rounding, backing, headband, edge treatment operation in production lines;
- 5.2 Case making- characterization, producing book covers, case making, casing in, inserting jackets; principles and operation of embossing, foil stamping- hot and cold, die-cutting, coating, indexing, round cornering, poly-bagging, preventing transit marking;
- 5.3 Lamination- types; In-Line Gluing Equipment, Off-Line Scoring, Shrink Wrapping,
- 5.4 Automated Off Line Kit Fulfillment, Integrated Off-Line Card and Label,
- 5.5 Hybrid finishing formats and equipment's, materials handling and mailing.

Reference Books:

1. Ralph Lyman, Binding and finishing, GATF, 1993
2. Arthur W. Johnson, The practical guide to Craft Book Binding, Thames and Hudson, 1985
3. Arthur W. Johnson, Book Binding, Thames and Hudson, 1984