

# AMPT10 PRINTING MATERIALS

## UNIT-1 METALS

- 1.1 Type of metals and characteristics of metals used for type alloys for foundry types,
- 1.2 Hot metal composition and stereos Physical and chemical properties of aluminium, zinc, copper, nickel, chromium, magnesium in relation to printing applications.

## UNIT-2 PHOTOGRAPHIC MATERIALS

- 2.1 Main kinds of films and photographic papers used in graphic origination Films positives,
- 2.2 Mainbase, stripping, thickness, right and wrong reading, negatives; paper positive materials.
- 2.3 Developers, Reducers, Intensifiers.

## UNIT-3 LIGHT SENSITIVE MATERIALS

- 3.1 Various sensitized materials, used and relationship with processes Silver halide emulsions classification according to speed,
- 3.2 Contrast and spectral sensitivity, characteristics and gamma value curve.

## UNIT-4 PAPER AND INK

- 4.1 Fibrous and Non-fibrous materials used in paper and board manufacturing.
- 4.2 General characteristics and requirements of printing inks formulations pigments, vehicles, varnishes, solvents, agents.

## UNIT-5 ADHESIVES

- 5.1 Classes and characteristics of adhesives used in binding and warehouse work and their range of applications Selection for specific purpose.

## UNIT-6 MISCELLANEOUS MATERIALS

- 6.1 Book binding materials Different types of rubber used in printing. Use of leather, cloth, rexine,
- 6.2 Threads, tapes, stitching wire, metal foils and covering materials used for binding and print finishing.

## UNIT-7 MATERIALS HANDLING

- 7.1 A brief Survey of materials handling and storage, Handling and storage of paper, printing surfaces, films, chemicals and other printing materials Systems and methods of storage.
- 7.2 Precautions in handling, storage, use and care of various printing substrates,
- 7.3 Materials and chemicals. wastage reduction.
- 7.4 Receiving, storage and delivery of raw, semi-finished and finished products.

## UNIT-8 MANAGING PRINTERS MATERIALS RESOURCES

- 8.1 Material management overview, materials management duties, purchasing function,
- 8.2 Materials management links with other areas, inspection & quality control, materials storage and buildings,
- 8.3 Materials identification and location, stock records, material handling equipment, training,

8.4 Stock and inventory control, waste materials, presentation and disposal, packing and dispatch of materials.

**Reference Book:**

1. Printing Surface Preparation by C. S. Mishra

