

GENERAL INFORMATION

Name of Trade	:	Offset Printer
Entry Qualification	:	S.S.C (10 th Pass)
Duration of Craftsmen Training.	:	One Year
Scheme of Teaching	:	40 Hours per Week
Total Hours	:	Practical 28 Hours per week Theory 12 Hours per week (Including Library, N. C. C. etc)

SYLLABUS FOR PRACTICAL TRAINING:

1. Heading, care and maintenance of offset machines, equipment and other machine room materials, lubrication, overhauling, Dress-correct working posture.
2. Handling and care of offset proof press.
3. Make ready and proofing in single colour / two colours on proof press.
4. Understanding use of plates their variety & DTP output.
5. Adjustment of automatic feeders, single sheet and steam feed.
6. Preparation of Offset plate for mounting on cylinder with necessary packings.
7. Care and treatment of offset blanket in use.
8. Preparation of damping rollers.
9. Adjustment of inking rollers.
10. Ink fountain setting.
11. Machine operating setting the lays, feeding and delivery adjustment - running Problems, causes and remedy.
12. Colour mixing and matching.
13. Multicolour works-study of colour sequence, their alteration and their effect On final results in Offset printing.
14. Set-off Anti -set -off (spray) equipment setting.
15. Wash up rollers, hand and mechanical.
16. Safety Hazards, preventive measures to be taken.
17. Single colour printing of
 - (a) Text matter
 - (b) Halftone work in conjunction with text matter.
 - (c) A Brochure in single colours.
18. Printing of Brochure in two colours.
19. Printing of Publicity Literature / Folder in single colour as well as multi colour.
20. Printing of Business Stationery / Forms.
21. Printing of Calendar / Diary / Desk Calendar comprising of dates, multi colours pictures etc.
22. Printing of Poster in single colour / multi-colour.
23. Printing of Labels of small in multiples and multi colour printing.
24. Printing of Titles in single as well as multi colour.
25. Practicing running papers of different varieties & thicknesses.
26. Use of Densitometer & measuring Density of Ink & printed product.

SYLLABUS FOR RELATED INSTRUCTIONS (THEORY)

1. Brief history, origin and development of printing (Graphic Arts) including modern trends.
2. Printing Processes- their characteristic and applications Identifying features.
3. Various kinds of printed products and their format such as : Book work, Job-work, Business stationery, News papers, packaging Materials, Publicity Materials etc.
4. Letter Press Printing- type and functions of machines in general use. Basic Methods of imparting impressions.
5. Offset Printing - out line of Auto Lithography Reproduction Photo Lithography Reproduction Principles and techniques of Offset printing.
6. Outline of setting (composing) process. Its characteristics and limitation, developments from Hand composing to computer aided composing. Desk Top Publishing System and its economic use in Offset printing.
7. Types of original and their suitability for different printing processes. Specific requirement of Offset process.
8. Pre-Press Techniques-Letter assembly, Reproduction Photography and Plate making importance of pre-press.
9. Introduction to machines and press work classification and functions of printing. Machines of all processes in general use.
10. Impression and ink transfer methods in all process.
11. Types of Rollers and their specific uses.
12. Outline of single colour and multicolour printing.
13. Materials used for image carriers and light sensitive materials
14. Paper - its variety and characteristics - classifications, selection for different classes of printing, jobs and processes. International and Indian Standard paper size and their subdivisions. Indian nomenclature for paper and Boards - GSM and basic weight.
15. Printing Inks - Its constituents, general characteristics and varieties. Relationship with paper blanket and damping system etc.
16. Machines for Offset-Sheet fed / web fed, single colour / Multi colour sizes and speed.
17. Design and functions of sheet fed machines.

18. Feeding Mechanism design - operation and construction of sheet fed systems, Gripper design etc.
19. Care required in handling Blanket.
20. Care required in the fixing of plate - their types, characteristics.
21. Inking system on Offset machine.
22. Damping system.
23. Effects of Humidity and temperature on Blankets, Ink and machine.
24. Ph and Offset Printing.
25. Densitometry.-Reflection & Transmission Density.