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SYLLABUS FOR THE TRADE

OF

DESKTOP PUBLISHING OPERATOR

(SEMESTER PATTERN)

UNDER

CRAFTSMAN TRAINING SCHEME

Designed in 2014

by

Ministry of Labour and Employment

Directorate General of Employment and Training

New Delhi

GENERAL INFORMATION

1. Name of the Trade	:	DESKTOP PUBLISHING OPERATOR
2. N.C.O. Code No.	:	3121.50
3. Duration of Craftsmen Training	:	One year (Two Semesters)
4. Entry Qualification	:	Passed 10th class examination
5. Unit strength	:	20 Trainees
6. Space norms	:	70 Sq. M.
7. Power norms	:	4.3 kW
8. Instructors Qualifications	:	Degree in printing technology with knowledge and 01 year experience of computer application and Desk Top Publishing.

<div align="center">OR</div>

Diploma in Printing technology with knowledge and 02 year experience of computer application and Desk Top Publishing.

<div align="center">OR</div>

NTC/NAC in the Trade of Desktop Publishing Operator with National Craft Instructor Certificate (if available) with 3 years post qualification experience after NAC/NTC in the relevant field.

Job Role:

1. DTP operator in any print and book publishing houses or self employment.
2. Graphic Designer, Graphic Artists, Design Executives in advertising agencies, print media houses.
3. Re-toucher in Photo Studio, Visualiser , Quality Executive, Pre-press Professional in Newspaper/Magazines/ Flex Industries.
4. Instructors in training Institutes.

Objective:

 On completion of course the trainee should be able to:-

1. Operate Computer and Peripheral Independently.
2. Learn about Graphic art Techniques.
3. Design Logos, Cover pages, Advertisements, Letter heads etc.
4. Create various types of layout with Formatting
5. Create Illustration images, Pictures, for various formats meant for printing purpose.

Syllabus for the Trade of "DESKTOP PUBLISHING OPERATOR"

Under C.T.S.

First Semester : Code no. DTPO-01
Duration : 6 Months (26 weeks)

Week No.	Trade Practical	Trade Theory
1 2	**Fundamentals:** • Introduction of personal computer & its applications. • Keyboard practice wth emphasis on accuracy and speed. • Typing Master for speed. • Practice to store & retrieve Information's through storage media. • Use of System & Application Software.	**Fundamental & Basics of Computer Fundamentals:** • Introduction to computer, Hardware & Software. • Computer Application • Input Devices :Keyboard , Mouse, OCR, OMR, MICR, Scanner etc. • Storage Media- Magnetic Disk , Hard Disk , Floppy Disk , CD etc. • Output Devices : Hard copy devices & Soft copy devices. **Types of software** • System & Application Software. Concepts :- • Bits, Bytes, RAM, ROM, ASCII etc.
3 4	**Operating Systems :** **Ms windows:** • MS Windows and its use. • File management, folder, maintenance wizard, setting through control panel. • Using essential accessories and removal • Installation of various software**.** **Internet :** • Use of Internet accessing/ browsing • E-mailing Downloading	**Operating Systems:** **Ms windows:** • Introduction & version • Desk Top & its terminology • Set up using control panel • Windows accessories • File Management Folder Concept **Networking Concept :** • LAN, MAN, WAN • File & Printer Sharing • Introduction & Use of Internet

5-7	**Understanding & File Manipulations in various Software** **Word Processing** : • Basics of Word Processing • Text Selection-Opening Documents and Creating Documents Saving Documents/ Quitting Document cursor Control, Using the interface (menu toolbar). Editing text (copy, delete, move, etc) Finding and replacing text. Spell check feature/Auto correct feature. Grammar facility. Auto text. • Character formatting, Page formatting. • Document Enhancement. • Adding borders and shading. Headers and footers, Setting up multiple columns, Sorting blocks, Margin & hyphenating. Document & Data sources Merging Using mail merge feature for labels and envelopes. Inserting table, Graphics, pictures and text. Using template and wizards, text wrapping, printing documents.	**Printing Process:** • Introduction • History of Printing and Types • Comparative Analysis of various printing processes **Document Set Up :** **Conceptualization of Document** **Desk Top Publishing:** • Introduction • Merits and Demerits • Word Processing through MS Word.
8-13	**Adobe Page Maker :** • **Basic concept:** Creating and opening publication, using the tool box, working with palettes, text and graphics, starting a publication from the template, saving and closing a publication. • **Tutoria**l - positioning ruler guides, typing text, formatting graphics. Creating columns, creating styles, changing type style and alignment. Rotating and	**Typography** : • Types(Fonts), Type sizes, Different families (Style) • Point system and other system of measuring.

	moving of text block and graphics, placing text file, setting tab, indents, and leaders copying graphics between publication, positioning and resizing the logo. • **Creating a publication** setting up pages, changing document setup, using master pages, choosing a measurement system and setting up rulers, adjusting layout, numbering pages, arranging pages creating running header and footers importing text, threading text blocks, balancing columns, edit story. Customizing the dictionary. hyphenation, leading frames layers, locking, objects wrapping text around graphics cropping a graphic using libraries assembling publication into a book, indexing a publication , creating table of contents , applying color, edit color creating custom color, color libraries table editor, importing, linking and exporting a graphic. OLE(object linking and embedding).TIFF image. PDF HTML formats .printing of publication proof corrections with appropriate proof reading marks.	• casting off • Proof reading and its marks. • House of style • Page composition through Page Maker	
14-19	**Quark Xpress :** • Specifying Document setting • Creating and opening publications, use of palates & Control • Typing & text manipulations • Positioning Resizing. Scaling and stacking typing text.	**Composing Process:** • Introduction of various methods of composing..	

Formatting graphics. Creating columns. Creating style. Changing type style and alignment. Rotating and moving of text block and graphics. Placing text file. Setting tab. indents. Leaders. Copying graphic between publications. Viewing page in appropriate format. • Master pages. Master items & spreads • Tables manipulations • Box and line manipulations. • Drawing merging & reshaping items. • Web document Feature. • Setting up pages, changing document setup. Choosing a measurement system. Adjusting layout. Numbering pages. Rearranging pages, Continued lines & linked text chains importing text. Creating columns. Editing, customizing the dictionary, hyphenation, leading Long documents. Drop caps. Special Characters, Spell Check. Anchoring items to flow with text • Grouping & locking object. Wrapping text around graphics. Using libraries. Indexing a publication creating table of contents applying color. Edit colors creating custom color libraries. • Halftone separating & Trapping. • Importing linking and exposing a graphic and document. OLE (object linking and embedding). EPS. PDF. HTML. Formats. • For outputs. Printing of	• **Output device** :- Inkjet printer, laser printer, Image setters. • Computer to plate or computer to Cylinder. **Paper:** • Introduction and preparation • Various paper sizes (Conventional and metric) and their uses.

	publication proof corrections with appropriate proof reading marks .	• Various paper calculations Page composing through Quark Xpress
20-21	**Scanning:** • Use of scanner for picking up illustration, line drawings • Setting of Scanner • Selection line per inch, Dots per inch, Pixel inch. • Selection of highlights. Middle tone and shadow are. Contrast, Brightness, Saturation. • Reading of color strip and do color correction • Making of OCR.	**Scanning:** • Principle of scanning • Types of scanners (Flatbed & Drum) and its use • Resolutions, DPI, LPI, PPI • Graphic drawings inputs of pictures, sketches etc. • Preparation of OCR
22-23	Project work / Industrial training	
24-25	Examinations	
26	Admission for next session	

Second Semester : Code no. DTPO-02
Duration : 6 Months (26 weeks)

Week No.	Trade Practical	Trade Theory
1-5	**Adobe Photoshop** • **Image Fundamentals**: - Digital image pixel. Resolution. DPI, raster image/bitmaps. Vector image/graphics. • **Various File Format**:- Bitmap, JPEG, PSD, PDD, TIFF,GIF, WMF. • **Understanding Various Tools**:- Marquee-Rectangular/Elliptical. Move Lasso, Polygonal l Lasso Magnetic Lasso, Magic wand. Crop Air brush, Paint brush, Pencil, Rubber Stamp, Pattern stamp, Erase, Paint bucket, Direct selection, Path component selection , Pen custom shape, eye dropper, Hand Zoom. • **Understanding various Palettes:**-Navigator, info, Color, Swatches Style History, Layers. • Paths, Character, Paragraph, Foreground Colors. • Background colors. Default colors. • Switch colors. • Details about Status Bar. Option Bar. • Edit Image in Standard mode. Quick Mask Mode. • **Various Image Display Options**:- Standard Screen	**Document Designing & Advance Features** **Graphic Reproduction** • Tonal Value • Tonal Gradation • Continuous tone, half tone, • Moiré pattern • Highlight, Middle tone, Shadow areas

	mode. Full Screen Mode with Menu Bar, Full Screen mode. • **Various Edit Commands**:- Transform Preferences, Define Brush etc. • **Various Image Commands** : Inverse. Adjust, Extract, Liquify etc. • Mode RGB /CYMK /LAB /Grayscale. Adjust Brightness/ Contrast. Hue/ Saturations, desaturate, Replace Colours, invert, Variations, Canvas size, Rotate canvas, crop, Trim- Various Layer Commands. Rearranging Layers, Lock Layers, Merge down, Merge. • Visible, Flatten Image. Working with layers set. • Various Select commands • Various Filter Effects, Render 3D Transform, Lens Flare. Lightning Effects. Motion Blur. Radial Blur... • Various View Commands. • Print Option • Industrial visit of graphic design studios /Add agency/ Newspaper etc.	• Contrast and other details • Photo editing Software.. • Color correction techniques
6-11	**Corel Draw:** • **Introduction** : Creating Opening drawing. Setting up the drawing page. Using the rulers. Grid. And guidelines. Viewing document. • **Drawing and Shaping** Objects:- Drawing. Moving & Shaping Object, drawing lines and curves, dimensions line. • Working with Style & Templates. Organizing Objects:- Arranging & Changing the order of objects. • Grouping, Ungrouping	**Graphic Design:** • Principles of page design • Elements of design • Color-Define color, type of colors, impact of colors, color wheel. • Achieving of different colors through appropriate color percentage.

	locking and unlocking objects. • Using and setting layers • Aligning & editing objects data. • Working with pattern and texture fills. • Applying and editing line ending shapes, splitting and erasing portions of objects positioning moving stretching and rotating objects • Working with multiple on screen color palettes.Adding graphics symbols and specials character editing • Formatting text & paragraph, hyphenating text . • creating and editing blends , envelopes. • creating and modifying vector and bitmap . • Extrusions, creating drop shadow. • Objects, working with linked bitmap. • Applying special effects to bitmap by 3D. • Effects : blur effects, contour effects. • Creating documents for various formats using layout. • Creating color seperations , working with halftone and bitmap screens. • Importing and exporting files, OLE (Object Linking and Embedding) • Printing of document/ Design.	• Selection of types (Fonts) for text/Display work. • Preparation of Graphics • Creation of rough sketches • Color Selections • Font & Image selection • Illustration Work
12-16	**Adobe In Design :** • Document and column set up for a variety of publications • Identification of tools • Use of rulers, guides and	**Page Make-up** • Principles of page make of Books. • Board Room/Seminar Presentation material preparations.

	snap-to guides • Page formatting • Formatting type including styles, sizes, leading, tracking, kerning • Using the edit menu – cutting, copying, pasting • Multiple pasting, editing stories, spell checking • Formatting paragraphs, moving/resizing text blocks, leading adjustment etc.. • Placing graphics, resizing graphics, text wraps • Setting up templates and style palettes • Grouping and aligning objects, multiple pasting with "step and repeat: functions • Graphic formats, links, resolutions • Color, color libraries and color separation • Bi-fold brochures and other custom layouts. • Rotation tool, drop caps, page numbering and insertion of special symbols. • Styles and creating a custom style palette, use of templates • Printing solutions and PPD's and PDF's generation	• Copy preparation procedures • Copy fitting procedures • Page making through adobe In Design **Costing and estimating:** • Costing and estimating of various jobs • Preparations of masters/ use of masters for taking out proofs.
17-18	**Bilingual Software:** • Setting of Bilingual (Hindi / Any Regional language) matter • Solid and Tabular setting with any multi script language software i.e. ileap Office / ISM publisher	**Digital Printing:** • **Types of digital Printing.** • Uses in commercial operations. • Inkjet bubble jet /thermal printer/laser printer used for small and big formats. • Page composing through Regional Language Software
19-20	**Printer & Publishing:** • Installation of New Printer by printer setup. • Use of Inkjet/DeskJet/Laser Printer for taking out copies	**File and Print Management:** **Printing:** • Various Types of Printers and their uses. • Merit & Demerits

		• File format supported for printing i.e. EPS, PDF, TIFF etc. and also convertion in PDF,
21	**Binding:** • Project Work & Binding the pages in form of Book using spiral/spico binding machine.	**Binding:** • Preparation of Project Work for DTP unit. • Various Binding techniques
22-23	**Project work on various Designs / Industrial visits**	
24-25	**Examinations**	
26	**Admission for next session**	
	NOTE : Employability skills is common for all Trades.	

TRADE: DESKTOP PUBLISHING OPERATOR

LIST OF TOOLS & EQUIPMENT

FOR A BATCH OF 20 TRAINEES

S1.No	Name of the items	Quantity
1	WORKSTATION/NODES : i7 Processor or Equivalent and above with major minimum features as below : 1) 32/64 Bit Processor (3.06 GHz or Higher,4 MB 4-Core) or Higher. 2) Network Card : Integrated Gigabit Ethernet(10/100/1000). 3) RAM : 2 GB/ 4 GB DDR3 or Higher. 4) 320 GB / 500 GB HDD or Higher. 5) 19'' TFT Monitor 6) DVD Writer 7) PS2 / USB Keyboard, USB/Optical Mouse with latest Licensed of Operating System and anti virus/ OEM Pack(Preloaded). 8) Professional/Ultimate Edition with Internet Facility. (Note : Model should be with latest configuration.)	10 nos. (for Trainees) + 1 no. (For Faculty)
2	Color Laser Printer 2400*1200 DPI Black & Color, Paper size A4, 2 GB Memory, Printing speed 8 to 16 page per minute or higher OR Color Inkjet Printer 1200*600 DPI Black & Color, Paper size A4 1GB Memory, Printing speed 4 to 8 page per minute or Higher. (Note : Model should be with latest configuration.)	1 No.
3	Laser printer with 2 GB RAM and Post Script emulation cartridge. Monochrome Paper size A3 Resolution 1200 DPI or higher. (Note: Model should be with latest configuration.)	1 No.
4	Page scanner flat bed type scanner (Reflection & Transmission) with standard accessories 4800 DPI or higher with OCR software (Note: Model should be with latest configuration.)	1 No.

5	Softwares	
	(Latest version) i) Adobe Creative Suite 6 Design Standard ii) Adobe Page Maker 7.0 iii) Ms office or Open Office iv) Corel Draw v) iLeap office / Any Bi-lingual/Regional Language software vi) Quark Xpress for Windows. vii) Anti-virus Software. (Compatible with Operating System with Upgradeable license)	1 set Each for Each System.
6	Networking (LAN) All the computer system should be connected in LAN. The printer connected to any of the places in the Lab should be shared within Lab	As per requirement
7	Internet connectivity Minimum speed 2 MBPS or Higher	1 No.
8	625 VA or higher line interactive UPS with 20 minute battery backup or 5 KVA online UPS with 2 hours battery backup	12 Nos. 1 No.
	Equipments	
9	Multimedia Projector	1 No.
10	Spiral/Spico Binding Machine	1 No.
11	Air conditioner 1.5 tons with Voltage Stabilizer	3 Nos.
	Furniture items	
12	Chairs for Computer.	20 Nos.
13	Table with Laminated Board/Novapan top for computers, printers and other machines.	15 Nos.
14	Steel cupboard.	3 Nos.(2 for Faculty) (1 for stationary)
15	Storable cabinet - back up/ software	1 No.
16	Book Case.	1 No.

17	Steel Shoe rack (Pigeon Hole Type with 9 compartments)	02 nos.
18	Instructor Chair (Lab & Classroom)	3 Nos (1 for each Faculty) 1 No. (for Classroom)
19	Instructor table with Laminated Board top (Lab & Classroom)	3 Nos. (1 for each Faculty) 1 No. (for Classroom)
20	Single Seated Desk/Dual Desk	20Nos./10 Nos.
21	Student lockers (steel) with 8 compartments	2 Nos.
	Tools & Miscellaneous items	
22	Em scales, steel rules, scissors, Eye glass 10 X.	5 Nos. (Each)
23	Paper cutter (standard size)	1 No.
24	Tape holder	2 Nos.
25	Reference Book for each software.	5 Nos.

Note : Lab should be dust proof and having Electrical wiring with proper earthing.

LIST OF RAW MATERIALS

FOR A BATCH OF 20 TRAINEES

sS.No.	Name & Description of items	Qty.	Remarks
1	Photo copies Paper A4 size (80 GSM)	08 Ream	
2	Matt coated paper (premium A4 size)	03 Pkts (50 sheets each Pkt)	(180 GSM)
3	Glossy Paper A4 size	03 Pkts (50 sheets each Pkt)	210 GSM or above
4	Glue Stick	06 Nos.	
5	Printer Cartridge for Laser Printer(Black)Toner	As per requirement	
6	Printer Cartridges for Colour Laser Printer/ Colour Inkjet printer	As per requirement	
7	Display File (A4 size) 50 sheets	25 Nos.	
8	Binding Covers (Front & Back)	50 Nos	Transparent/Opaque
9	Spicos/Spirals	25 Nos	
10	Cello Tape ½" & 1"	04Nos each	

NOTE: Beside above, other common materials/items can be made available as per requirement of the section.

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