

Syllabus for Desktop Publishing Operator and Multimedia

Course Name	DESKTOP PUBLISHING OPERATOR AND MULTIMEDIA, V2
Course Code	STC-ITE/DPOM/2109, V2
Occupation	DTP Operator / Assistant of Multimedia Designer
Job Description	The individual is responsible for review text, graphics, or other materials created by writers and designers. Edit graphics, such as photographs or illustrations. Import text and graphics into publishing software. Integrate images and text to create cohesive pages. The Individual's tasks vary depending on the size and structure of the organization.
Anticipated Volume of Training	390 Hrs (Theory: 90 Hrs + Practical: 180 Hrs) Employability skill: 60 Hrs., OJT: 60
Trainees' Entry Qualification	Class 8 pass and pursuing continuous regular schooling, OR Class 8 Pass with 1 year experience, OR Class 8 Pass + ITI, OR Class 10 Pass OR previous relevant qualification of NSQF Level 2 with 1 yr experience
Trainers Qualification	Diploma in Computer Science/ Technology with 2 yrs experience OR BCA or Graduate in any discipline with Computer Application/ Science

Structure of Course:

Module No.	Outcome	Theory (Hrs)	Practical (Hrs)	OJT (Hrs)	Total (Hrs)
1	Demonstrate safe working practices and utility of computer hardware components, installation of Operating System and other system software / Application Software. ITE/2109/OC1	20	40		60
2	Create, edit, and format document/ graphics by using different word processing software and graphics editor. ITE/2109/OC2	20	40		60
3	Explain the networking concept including sharing of different resources, use of Internet, accessing/ browsing, downloading and e-mailing. ITE/2109/OC3	20	40		60
4	Demonstrate the processes of publishing and acquisition of document along with Print, bind and publish to form a full-fledged book format. ITE/2109/OC4	10	20		30
5	Explain the uses of application software such as Adobe Photoshop, Corel Draw etc. for editing and designing purpose. ITE/2109/OC5	10	20		30
6	Design and develop using Multimedia programs/ software. ITE/2109/OC6	10	20		30
7	OJT ITE/2109/OC7			60	60
8	Employability skill 60 hrs DGT/VSQ/N0102				60
TOTAL:		90	180	60	390

SYLLABUS:

Module No. 1: Demonstrate safe working practices and utility of computer hardware components, installation of Operating System and other system software / Application Software.

Theory Content:

Safe working practices

1. Scope of the DTPO trade.
2. Safety rules and safety signs.
3. Types and working of fire extinguishers.
4. Introduction to computer components
5. Introduction to computer system.
6. Concepts of hardware and software.
7. Function of motherboard components and various processors.
8. Various Input/ Output devices in use and their features.

Introduction to Operating System

1. Introduction to operating System
2. Main features of Windows OS
3. Concept of various shortcut commands.
4. Introduction to the booting process.
5. Introduction to various types of memories and their features.
6. Basic Hardware and software issues and their solutions.
7. Usage of Application software and Antivirus.

Practical Content:

1. Visit DTPO Lab of the institutes and locate the electrical connections with computer system setup.
2. Identifying safety symbols and hazard identification
3. Practice safe methods of fire fighting in case of electrical fire.
4. Use of fire extinguishers
5. Identify computer peripherals and internal components of a disassembled desktop computer.
6. Assemble components of desktop computer.
7. Practice on Windows interface and navigating windows. (10hrs)
8. Practice on managing files and folders using removable drives. (10hrs)
9. Customize the desktop settings and manage user accounts. (06hrs)
10. View system properties and control panel details. (06hrs)
11. Work with keyboard shortcut commands.
12. Print and scan document using different commands.
13. Install Windows operating system.
14. Install necessary application software for Windows i.e. Office Package, PDF Reader, Media Player etc.

15. Install Drivers for printer, scanner, webcam and DVD etc.
16. Burn data, video and audio files on CD/DVD using application software.

Module No. 2: Create, edit, and format document/ graphics by using different word processing software and graphics editor.

Theory Content:

Manipulation of Word Processing Software

1. Introduction to the Word processing Software
2. Creating, saving and formatting and printing documents using Word.
3. Working with objects, macro, mail merge, templates and other tools in Word
4. Merits and demerits Word Processing Software

Introduction of Networking

1. Data Communications: Components, Data representation.
2. Basic concepts: Servers, Client, Workstation, Hosts (Definition & Applications).
3. Types of computer networks: LAN, MAN and WAN.
4. Types network architecture: Peer-to-peer, Client-Server and Distributed.
5. Transmission Types: Simplex, Half duplex and Full duplex

Network Topologies

1. Type of Topology - Bus Topology; Ring Topology; Star Topology; Mesh
2. Topology; Tree Topology; Hybrid Topology.
3. Network Control Devices -Hubs; Switches; Routers; Bridges; Repeaters; Gateways; Modems.

Concept of sharing of different resources, use of Internet accessing/ browsing

Practical Content:

1. Practice to create text file by Notepad and edit file by using different menu under notepad.
2. Practice to create Document file in Word, and edit and format file by using different tools available under Word.
3. Practice to create basic symbols by using MS Paint and format the drawing by using different tools available.

Module No. 3: Explain the networking concept including sharing of different resources, use of Internet, accessing/ browsing, downloading and e-mailing.

Theory Content:

Introduce the Networking concept including sharing of different resources, use of Internet, accessing/ browsing, downloading and e-mailing.

Practical Content:

1. Share a printer with Network

2. Share data and file among different nodes.
3. Practice web browsing, create email id, and sending-receiving mails with attachment.
4. Practice web browsing, create email id, and sending-receiving mails with attachment.
5. Download relevant documents, images & font.

Module No. 4: Demonstrate the processes of publishing and acquisition of document alongwith Print, bind and publish to form a full-fledged book format.

Theory Content:

1. Create, edit, format and develop publication using Quark Xpress application software
2. Install and setup scanner and scan the documents and images.
3. Print, bind and publish to form a full-fledged book format.

Practical Content:

1. Create new publication using existing layout, and save it.
2. Draw graphics by using different tools available in tool box.
3. Apply colour to the object by creating own solid, blended colours.
4. Group/ ungroup, lock / unlock objects and wrapping text around the object.
5. Create threaded text by linking and also unthreading it by unlinking.
6. Create table and also manipulate table.
7. Design a Newsletter in Demi/ Tabloid size paper.
8. Import and linking text and graphics within document and also exporting text and graphics from Quark Xpress to PDF and other web layout format.
9. Design a magazine cover using graphics and images, and separate the above magazine cover in CYMK colour modes and generate in EPS and PDF and print it separately.
10. Install scanner and driver.
11. Scan picture, line drawing and document and store it as a digital file.
12. Adjust different scanner properties.
13. Make Optical Character Recognition document.
14. Install new printer and check/ change different printer properties. Take the printout simplex, duplex mode.
15. Configure advanced print features.
16. Bind the printed papers into book form by using spiral or comb binding machine.

Module No. 5: Explain the uses of application software such as Adobe Photoshop, Corel Draw etc. for editing and designing purpose.

Theory Content:

1. Create, format, edit and develop images using Adobe Photoshop software.
2. Draw, edit, format and develop graphics design using Corel draw application software.

Practical Content:

1. Configure Application software- PhotoShop.
2. Identify interface, palettes and tool bars.

3. Create and edit bitmap images.
4. Crop and transform images by appropriate tools.
5. Retouch a damaged photograph by using layers.
6. Make multiple passport size photographs by using Action button.
7. Prepare a cut-out of a given photograph and change its background and colours.
8. Configure Application software – Corel Draw.
9. Identify interface, palettes and tool bars.
10. Draw an illustration/ sketch using different tools.
11. Design the sketch of ‘cup and plate.’
12. Design an advertisement using Artistic text and extrude tools.
13. Design the cover page of a given magazine.
14. Design a suitable logo for ‘Skill Development.’
15. Print all the above work outcomes.

Module No. 6: Design and develop using Multimedia programs/ software.

Theory Content:

1. Introduce Multimedia concept including definition, types, importance, uses and applications.

Practical Content:

1. Perform photo editing and apply special effects by using Adobe Photoshop and Adobe Illustrator or like any other software.

Industrial Visit/ Project work:

1. Create own visiting card and letterhead including own style and logo, showing cutting mark and colour registration, symbol and take a print by using any colour printer.
2. Create a regional language magazine showing column structure and insert properly edited appropriate picture within magazine.
3. Create at least one banner and one poster on skill development.

Module No. 7: OJT

Outcome: Work in real job situation with special emphasis on basic safety and hazards in this domain

Practical Content:

Assessor will check report prepared for this component of Practical training of the course and assess whether competency has been developed to work in the real job situation with special emphasis on basic safety and hazards in this domain. (The trainee is expected to undertake work in actual workplace under any supervisor / contractor for **60 Hours**.)

Module No. 8 : Employability Skills (60 Hrs)

Introduction to Employability Skills

Duration: 2 Hours

After completing this programme, participants will be able to:

1. Discuss the Employability Skills required for jobs in various industries

- List different learning and employability related GOI and private portals and their usage

Constitutional values - Citizenship

Duration: 2 Hours

- Explain the constitutional values, including civic rights and duties, citizenship, responsibility towards society and personal values and ethics such as honesty, integrity, caring and respecting others that are required to become a responsible citizen
- Show how to practice different environmentally sustainable practices.

Becoming a Professional in the 21st Century

Duration: 3 Hours

- Discuss importance of relevant 21st century skills.
- Exhibit 21st century skills like Self-Awareness, Behavior Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. in personal or professional life.
- Describe the benefits of continuous learning.

Basic English Skills

Duration: 10 Hours

- Show how to use basic English sentences for everyday conversation in different contexts, in person and over the telephone
- Read and interpret text written in basic English
- Write a short note/paragraph / letter/e -mail using basic English

Career Development & Goal Setting

Duration: 2 Hours

- Create a career development plan with well-defined short- and long-term goals

Communication Skills

Duration: 5 Hours

- Demonstrate how to communicate effectively using verbal and nonverbal communication etiquette.
- Explain the importance of active listening for effective communication
- Discuss the significance of working collaboratively with others in a team

Diversity & Inclusion

Duration: 2 Hour

- Demonstrate how to behave, communicate, and conduct oneself appropriately with all genders and PwD
- Discuss the significance of escalating sexual harassment issues as per POSH act.

Financial and Legal Literacy

Duration: 5 Hours

- Outline the importance of selecting the right financial institution, product, and service
- Demonstrate how to carry out offline and online financial transactions, safely and securely
- List the common components of salary and compute income, expenditure, taxes, investments etc.
- Discuss the legal rights, laws, and aids

Essential Digital Skills

Duration: 10 Hours

- Describe the role of digital technology in today's life
- Demonstrate how to operate digital devices and use the associated applications and features, safely and securely
- Discuss the significance of displaying responsible online behavior while browsing, using various social media platforms, e-mails, etc., safely and securely
- Create sample word documents, excel sheets and presentations using basic features
- utilize virtual collaboration tools to work effectively

Entrepreneurship

Duration: 6 Hours

- Explain the types of entrepreneurship and enterprises
- Discuss how to identify opportunities for potential business, sources of funding and associated financial and legal risks with its mitigation plan
- Describe the 4Ps of Marketing-Product, Price, Place and Promotion and apply them as per requirement
- Create a sample business plan, for the selected business opportunity

Customer Service

Duration: 4 Hours

- Describe the significance of analyzing different types and needs of customers
- Explain the significance of identifying customer needs and responding to them in a professional

manner.

32. Discuss the significance of maintaining hygiene and dressing appropriately

Getting Ready for apprenticeship & Jobs

Duration: 9 Hours

33. Create a professional Curriculum Vitae (CV)
 34. Use various offline and online job search sources such as employment exchanges, recruitment agencies, and job portals respectively
 35. Discuss the significance of maintaining hygiene and confidence during an interview
 36. Perform a mock interview
 37. List the steps for searching and registering for apprenticeship opportunities

Learning Outcome – Assessment Criteria

Module No.	Outcome	Assessment Criteria
1	Demonstrate safe working practices and utility of computer hardware components, installation of Operating System and other system software / Application Software.	After completion of this module students will be able to: 1.1 Identify different computer components 1.2 Install and setup operating system 1.3 Install related software in a computer following safety precautions.
2	Create, edit, and format document/ graphics by using different word processing software and graphics editor.	After completion of this module students will be able to: 2.1 Identify Word tools in the Ribbon. 2.2 Create a resume using various tools 2.3 Demonstrate the use of shortcut keys autocorrect and macros 2.4 Perform Mail merge in MS Word 2.5 Create different kinds of graphics with different tools
3	Explain the networking concept including sharing of different resources, use of Internet, accessing/ browsing, downloading and e-mailing.	After completion of this module students will be able to: 3.1 Identify different cables and connectors used in networking 3.2 Set up network connections and check connectivity 3.3 Demonstrate Web Browsing, creation of E-Mail ID and, sending and receiving mails
4	Demonstrate the processes of publishing and acquisition of document alongwith Print, bind and publish to form a full-fledged book format.	After completion of this module students will be able to: 4.1 Create and edit complex page layouts in a WYSIWYG environment. 4.2 Print, bind and publish to form a full-fledged book format.
5	Explain the uses of application software such as Adobe Photoshop, Corel Draw etc. for editing and designing purpose.	After completion of this module students will be able to: 5.1 Create and edit images for both print and web 5.2 Format and develop images for both print and web 5.3 Create all types of designs including brochures, logos, invitation cards etc.

6	Design and develop using Multimedia programs/ software.	After completion of this module students will be able to: 7.1 Perform photo editing and apply special effects by using different software
7	OJT	Work in real job situation with special emphasis on basic safety and hazards in this domain (OJT).
8	Employability Skill	As per guided curriculum

List of Tools, Equipment & materials needed for 30 Trainees:

LIST OF TOOLS & EQUIPMENT			
DESKTOP PUBLISHING OPERATOR (for batch of 30 Candidates)			
S No.	Name of the Tools and Equipment	Specification	Quantity
A. Trainees Tools/ Equipment			
1.	Desktop Computer	CPU: 32/64 Bit i3/i5/i7 or latest processor, Speed: 3 GHz or Higher. RAM:-4 GB DDR-III or Higher, Wi-Fi Enabled. Network Card: Integrated Gigabit Ethernet, with USB Mouse, USB Keyboard and Monitor (Min. 17 Inch. Licensed Operating System and Antivirus compatible with trade related software.	12nos. (For Trainee) + 1 no. for Instructor
2.	Laptop	4 th Gen Ci5 or higher Processor, 4GB RAM, 1TB Hard Disk, Win8/latest reloaded Licensed OS, 2GB Graphic Card, DVD Writer, Standard ports and connectors.	1 no.
3.	Wi-Fi Router	With wireless connectivity	1 no.
4.	Switch	16 port	1 no.
5.	Structured Cabling in Lab	To enable working with wired networks for practical	As required
6.	Internet Connectivity	Broadband connection with min. 2 mbps speed	As required
7.	Laser Printer	Colour A4 Size	1 no.
8.	Digital Flexographic Printer	Colour	1 no.
9.	Optical Scanner	Flatbed A4	1 no.
10.	Digital Still Camera	High resolution amateur camera	1 no.
11.	Digital Web Cam	High Resolution(3.1 mp or higher)	4 nos.
12.	Micro Phone Cum Head Phone	Wired	5 nos.
13.	External DVD or Blu-Ray Writer	24X or higher external (usb)	2 nos.
14.	LCD Projector	3000 lumens or higher	1 no.

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15.	Projector Screen	Matte(antiglare) screen roll type	1 no.
16.	Offline UPS	625 VA or Higher	13 nos.
17.	External Hard Disk	1 TB	1 no.
18.	Network Rack	4U for 24 port	1 no.
19.	Screw Driver Set	Standard	1 set
20.	Mini Dongle for Bluetooth Devices Connection	USB	2 nos.
21.	Patch Panel	24 Port	1 no.
22.	LAN Tester	UTP cat5 cable tester (RJ 45)	1 no.
23.	Binding Machine	Spiral Binding Machine A4 size	1 no.
B. Software (Latest Version)			
24.	MS Office	2010 (professional) or the latest version available at the time of procurement	13 Licenses
25.	Antivirus for – clients/ workstations in profile	Validity of an year or more which should be renewed upon expiry	13Licenses
26.	Adobe PageMaker	Version 7.0 or higher	13 Licenses
27.	Quark Xpress	Version 9 or the latest version available at the time of procurement	13 Licenses
28.	Corel Graphic Suite	Version X7 or the latest version available at the time of procurement	13 Licenses
29.	Adobe Creative Suite	Version CS 6 or the latest version available at the time of procurement	13 Licenses
30.	Regional Language Software	Ileap / Swarna Type Manager/ Any Other Bilingual Software	13 Licenses
31.	Open Office or equivalent	Latest version	Open source software
32.	GIMP / Infra View Image editor or equivalent	Latest version	Open source software
C. List of Other Items/ Furniture			
33.	Vacuum Cleaner	Hand Held, Blower &Sucker	1 no.
34.	Pigeon Hole Cabinet	20 compartments	1 no.
35.	Chair and table for the instructor	With armrest mounted on castor wheels, adjustable height/Standard	01 each(for class room & laboratory)
36.	Dual Desk or Chair and Tables for Trainees	Standard	12/ 24nos.
37.	Computer Table	Laminated top 150X650X750 mm with sliding tray for keyboard and one shelf of storage	13nos.
38.	Operators Chair	Without arms mounted on castor wheels, adjustable height	24nos.
39.	Printer Table	650X500X750 mm can be varied as per local specifications	03nos.
40.	Air Conditioner		As required
41.	Storage Cabinet	60X700X450mm	01no.

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42.	White Board	Minimum 4X6 feet	01 no.
43.	Steel Almirah	2.5 m x 1.20 m x 0.5 m	01 no.
D. Raw Materials			
44.	White Board Marker	Assorted colour	As required
45.	Duster Cloth	2' / 2'	As required
46.	Cleaning Liquid	500 ml	As required
47.	Photo Copy Paper	A4	As required
48.	Matt Coated Paper	A4, at least 130 GSM	As required
49.	Glossy Paper	A4, at least 130 GSM	As required
50.	Cartridges for Printer	Colour/monochrome as per model of the printer	As required
51.	Stapler	Small	2 pcs.
52.	Stapler	Big	1 pc.
53.	Scissors	Standard Size	5 pcs.
54.	Cello Tape	½” and 1”	As required
55.	Glue Stick	Standard size	6 nos.
56.	Pen drive	16 GB or higher	2 nos.
57.	CDs	52x or higher	50 nos.
58.	DVDs	4.7GB or higher	50 nos.
59.	Wall Clock	Analog	1 no.
60.	Optical Mouse	USB/PS2	As required
61.	Keyboard	USB/PS2	As required
62.	Battery	CMOS Batteries	As required
63.	Chord	3 Pin Power Chord	As required
64.	Battery for LAN tester	9 V	As required
65.	Battery	AA	As required
66.	Battery	AAA	As required

Marks Distribution

Outcome	Outcome Code	Total Th marks	Total Pr marks	Total OJT marks
Demonstrate safe working practices and utility of computer hardware components, installation of Operating System and other system software /	ITE/2109/OC1	30	120	0
Application Software.Create, edit, and format document/ graphics by using different word processing software and graphics editor.	ITE/2109/OC2	30	120	0
Explain the networking concept including sharing of different resources, use of Internet, accessing/ browsing, downloading and e-mailing.	ITE/2109/OC3	30	120	0
Demonstrate the processes of publishing and acquisition of document along with Print, bind and publish to form a full-fledged book format.	ITE/2109/OC4	20	100	0
Explain the uses of application software such as Adobe Photoshop, Corel Draw etc. for editing and designing purpose	ITE/2109/OC5	20	100	0
Design and develop using Multimedia programs/ software.	ITE/2109/OC6	20	90	0
Work in real job situation with special emphasis on basic safety and hazards in this domain (OJT).	TXT/3727/OC7	0	0	150
Employability Skills – 60 Hrs	DGT/VSQ/N0102	50	0	0