

KCES's

Moolji Jaitha College (Autonomous), Jalgaon



SYLLABUS

B. Voc. Printing Technology

[W.e.f. Academic Year: 2019-20]

F.Y.B.Voc. (Printing Technology) NSQF Level V

(w.e.f. - June 2019)

F. Y. B. Voc. - Printing Technology (NSQF Level V)					
Semester I					
General Education Component					
Paper No.	Paper Code	Paper Title	Mode	Credits	Marks
1	PT-111	Introduction to Computer - I	Theory	02	100
2	PT-112	Soft Skills Development - I	Theory	02	100
3	PT-113	Computer Literacy Skills Lab	Practical	04	100
4	PT-114	Soft Skills Development Lab - I	Practical	04	100
Total				12	400
Skill Development Component					
5	PT-121	Basics of Printing Technology	Theory	02	100
6	PT-122	Production Process Materials	Theory	02	100
7	PT-123	Desktop Publishing - I	Theory	02	100
8	PT-124	Printing Workshop - I	Practical	04	100
9	PT-125	Print Finishing Lab - I	Practical	04	100
10	PT-126	Graphics Design Lab - I	Practical	04	100
Total				18	600
Total Credits = General Education Component + Skill Development Component					12+18=30
Job Roles: Image editor/Print production assistant					
Semester II					
General Education Component					
Paper No.	Paper Code	Paper Title	Mode	Credits	Marks
1	PT-211	Introduction to Computer - II	Theory	02	100
2	PT-212	Soft Skills Development - II	Theory	02	100
3	PT-213	Office Operations Lab - I	Practical	04	100
4	PT-214	Soft Skills Development Lab - II	Practical	04	100
Total				12	400
Skill Development Component					
4	PT-221	Offset Printing (sheet fed) - I	Theory	02	100
5	PT-222	Screen Printing	Theory	02	100
6	PT-223	Desktop Publishing - II	Theory	02	100
7	PT-224	Printing Workshop - II	Practical	04	100
8	PT-225	Screen Printing Lab	Practical	04	100
9	PT-226	Graphics Design Lab - II	Practical	04	100
Total				18	600
Total Credits = General Education Component + Skill Development Component					12+18=30
Job Roles: Graphic designer/Offset machine operator/Screen printing operator					

PT-111: Introduction to Computer - I

Unit 1 - Basics of Computer

Hours: 10

- 1.1 Computer: definition, characteristics, advantages and disadvantages
- 1.2 Generations of computer
- 1.3 Block diagram of computer
- 1.4 Types of computer: analog, digital and hybrid

Unit 2 – Memory

Hours: 08

- 2.1 Overview of Memory
- 2.2 Types of Memory
 - a. Primary Memory: RAM and ROM
 - b. Secondary Memory: Hard disk, CD, DVD, USB flash memory & Solid state memory

Unit 3 - I/O Devices

Hours: 12

- 3.1 Concept of software and hardware, Relationship between software and hardware
- 3.2 Input devices - Keyboard, Mouse, Scanner, Joystick, MICR, OMR & Bar Code Reader
- 3.3 Output devices - Monitor: *CRT, Flat panel & Touch screen*, Printer: *Dot Matrix, Ink-jet & Laser*, Plotter
- 3.4 Ports: overview, types – audio, graphics, network, USB and HDMI

Recommended Books:

- Computer Fundamentals by P. K. Sinha, BPB Publications
- Fundamentals of Computers by V. Rajaraman, PHI
- Fundamentals of Computers by E Balagurusamy, Tata McGraw-Hill Education
- Absolute Beginner's Guide to Computer Basics by Miller, Pearson Education India, 2007
- Computer Literacy BASICS by Connie Morrison, Dolores Wells, Cengage Learning
- Personal Computing Demystified by Larry Long, McGraw Hill Professional
- Computer Concepts: Illustrated Introductory by Dan Oja, June Jamrich Parsons, Cengage Learning

PT-112: Soft Skills Development - I

Unit 1- Sentence

Hours: 03

- 1.1 Definition
- 1.2 Types of sentence - declarative, interrogative, imperative and exclamatory
- 1.3 Affirmative and negative sentence
- 1.4 Subject and predicate

Unit 2 - Parts of speech

Hours: 10

- 2.1 Parts of speech: nouns, pronouns, adjectives, verbs, adverbs, prepositions, conjunction and interjection

Unit 3 - Tense

Hours: 08

- 3.1 Present tense: simple, continuous, perfect, perfect continuous
- 3.2 Past tense: simple, continuous, perfect, perfect continuous
- 3.3 Future tense: simple, continuous, perfect, perfect continuous

Unit 4 - Determiners

Hours: 05

- 4.1 Articles
- 4.2 Demonstrative
- 4.3 Possessive
- 4.4 Quantifier

Unit 5 - Modals

Hours: 04

- 5.1 Modals: can, could, may, might, will, would, shall, should and must
- 5.2 Basic punctuation rules
- 5.3 Basic capitalization rules
- 5.4 Synonym and antonym

Recommended Books:

- Elementary English Grammar & Composition For Class-7 by N.K. Aggarwala, Goyal Brothers Prakashan
- Basic English Grammar by Howard Sargeant, Saddleback Educational Pub
- Middle School English Grammar and Composition by P. C. Wren, S. Chand Publishing

PT-113: Computer Literacy Skills Lab

Practical No.	Name of Practical	No. of Hours
01	Introduction to various components of computer system	08
02	Installing peripherals of computer with start and shutdown process	04
03	Acquisition of computer hardware	04
04	Acquisition of computer software	04
05	Use of mouse comfortably	16
06	Use of keyboard for typing	16
07	Use of start menu, windows explorer, recycle bin, network and control panel	12
08	Use of taskbar and desktop context (right click) menu	08
09	Use of various windows utility programs	12
10	Installing and uninstalling of computer software	08
11	Files and folder management in windows explorer	12
12	Data access and management in network	08
13	Scanning the document	08

Recommended Books:

- Absolute Beginner's Guide to Computer Basics by Miller, Pearson Education India, 2007
- Computer Literacy BASICS by Connie Morrison, Dolores Wells, Cengage Learning
- Personal Computing Demystified by Larry Long, McGraw Hill Professional
- Computer Concepts: Illustrated Introductory by Dan Oja, June Jamrich Parsons, Cengage Learning

PT-114: Soft Skills Development Lab - I

Practical No.	Name of Practical	No. of Hours
01	Learn to handle dictionary to search word meaning	04
02	Find the meaning of 50 common nouns from dictionary	12
03	Find the meaning of 50 abstract nouns from dictionary	12
04	Find the meaning of 50 adjectives from dictionary	12
05	Find the meaning of 50 verbs from dictionary	12
06	Develop listening skills by listening various songs, documentaries and podcast	08
07	Read the news from the newspaper	12
08	Read the editorial from the newspaper	12
09	Read the article from the magazine	12
10	Learn and practice to introduce about yourself	08
11	Tell your favourite story	08
12	Speak about your favourite personality	08

Recommended Books:

- Elementary English Grammar & Composition For Class-7 by N.K. Aggarwala, Goyal Brothers Prakashan
- Basic English Grammar by Howard Sargeant, Saddleback Educational Pub
- Middle School English Grammar and Composition by P. C. Wren, S. Chand Publishing

PT-121: Basics of Printing Technology

Unit 1 - Printing Technology

Hours: 05

- 1.1 Definition, History and Scope
- 1.2 Application areas – Education, Marketing, Business, Day to day activities, etc
- 1.3 Recent trends

Unit 2 - Media

Hours: 05

- 2.1 Media - Definition, Types - print media, electronic media and multimedia
- 2.2 Print media products - books, magazines, newspapers, newsletters, brochures, flyers, business cards and banner

Unit 3 - Production of Print Media

Hours: 07

- 3.1 Type and History of type
- 3.2 Typefaces, classification of typefaces and design of typefaces
- 3.3 Typography
- 3.4 Page Layout
- 3.5 Graphic design

Unit 4 - Production Process

Hours: 05

- 4.1 Prepress-composition technology, platemaking, digital prepress
- 4.2 Printing
- 4.3 Postpress/finishing
- 4.4 Digital production equipment in the workflow

Unit 5 - Types of Print Technology

Hours: 08

- 5.1 Letterpress printing-Definition, Introduction, advantages, disadvantages & applications
- 5.2 Flexography printing-Definition, Introduction, advantages, disadvantages & applications
- 5.3 Offset printing - Definition, Introduction, advantages, disadvantages & applications
- 5.4 Gravure printing-Definition, Introduction, advantages, disadvantages & applications
- 5.5 Screen printing-Definition, Introduction, advantages, disadvantages & applications
- 5.6 Textile Printing-Definition, Introduction, advantages, disadvantages & applications
- 5.7 Electrophotography-Definition, Introduction, advantages, disadvantages & applications

Recommended Books:

- Handbook of Print Media: Technologies and Production Methods by Helmut Kipphan, Springer
- The Complete Book On Printing Technology by NIIR Board, APBP Publication

PT-122: Production Process Materials

Unit 1 - Substrate

Hours: 08

- 1.1 Substrates - overview, history and types
- 1.2 Basic elements of paper productions
- 1.3 Paper types - sizes, colours, grammage and packaging
- 1.4 Paper board and straw board - sizes and packaging
- 1.5 Paper finishing

Unit 2 - Printing Ink

Hours: 08

- 2.1 Printing ink – overview, structure and components
- 2.2 Types of inks – Offset, Gravure, Flexography, Letterpress, Pad inkjet and Screen
- 2.3 UV ink

Unit 3 - Print Allied Materials

Hours: 14

- 3.1 Pressroom chemicals – plate wash, blanket wash, ink wash, dampening solutions, acids, French chalk, asphaltum, paraffin, sponge, dampening cloth, Vaseline
- 3.2 Pressroom tools - Scraper, ink knife, wrench- allen, box and adjustable
- 3.3 Drying materials used in – IR drying, evaporative drying, chemical drying, UV drying, curing and powder spraying
- 3.4 Binding materials – binding cloth, paste, synthetic glue, packaging film, box pasting glue, lamination material, stitching wires, threads and niddle

Recommended Books:

- Handbook of Print Media: Technologies and Production Methods by Helmut Kipphan, Springer
- The Complete Book On Printing Technology by NIIR Board, APBP Publication
- Hand Book of Printing Technology by EIRI Board, EIRI Publication
- Hand Book of Offset Printing Technology by EIRI Board, EIRI Publication
- Introduction to Printing by Herbert Simonn, Fiber & Fiber Ltd
- Modern Technology of Printing and Writing INKS by NIIR Board, APBP Publication

PT-123: Desktop Publishing - I

Unit 1 - Graphics Design

Hours: 08

- 1.1 Overview graphics and graphics design
- 1.2 Types of graphics: vector and raster
- 1.3 Graphics design fundamentals - point, line, space, weight, size, scale, tone, texture, pattern and colour
- 1.4 Graphics design - Principles, advantages and limitations

Unit 2 - Computer graphics

Hours: 08

- 2.1 Computer graphics – overview and applications
- 2.2 Overview of Image, image size and resolution
- 2.3 Introduction to graphics software
- 2.4 Overview of 2D image and 3D image
- 2.5 Graphics file formats: JPEG, PNG, TIFF, GIF, CDR, PSD and PDF
- 2.6 Typography

Unit 3 - Patterns

Hours: 08

- 3.1 Colour mode - RGB, CMYK, HSV, colour wheel
- 3.2 Colour Separation
- 3.3 Brushes and theirs presets
- 3.4 Types of patterns
- 3.5 Texturing effects
- 3.6 Filter text effects

Unit 4 - Effects

Hours: 06

- 4.1 Types of masking – vector, clip and layer
- 4.2 Blend Mode Effects – drop shadow, inner shadow, inner glow, outer glow, strokes, Bevel and emboss
- 4.3 Realistic painting
- 4.4 Mat painting

Recommended Books:

- Basics Design: Print and Finish by Gavin Ambrose and Paul Harris, Bloomsbury Publishing
- Graphic Design: The New Basics by Ellen Lupton, Chronicle Books
- Photoshop CS6: Essential Skills by Mark Galer, Philip Andrews, Taylor & Francis
- Adobe Photoshop CS6 by Adobe Creative Team Adobe Press

PT-124: Printing Workshop - I

Practical No.	Name of Practical	No. of Hours
01	Introduction of various sections of baby offset machine	12
02	Introduction of various sections of single colour demy size offset machine	12
03	Introduction of various sections of double demy size offset machine	12
04	Introduction of various sections of two colour offset machine	12
05	Introduction of various sections of four colour offset machine	12
06	Study of material used in offset machine	12
07	Study of tools used in offset machine	08
08	Premake-ready operations of offset printing machines	40

Recommended Books:

- Handbook of Print Media: Technologies and Production Methods by Helmut Kipphan, Springer
- The Complete Book On Printing Technology by NIIR Board, APBP Publication

PT-125: Print Finishing Lab - I

Practical No.	Name of Practical	No. of Hours
01	Types of papers (as per colour, size and weights)	04
02	Counting of papers	08
03	Jogging and knocking of papers	08
04	Folding of Papers	08
05	Paper job mixing (gathering)	08
06	Paper insertion	08
07	Paper side pinning	08
08	Introduction to cutting machine	04
09	Cutting of papers	08
10	Cutting of labels	04
11	Trimming of books	04
12	Pasting of labels	04
13	Perforating of paper	08
14	Creasing of paper	08
15	Lamination to the paper	04
16	Numbering on bill book and forms	08
17	Study of flex banner machine	08
18	Study of materials used in flex banner printing	08

Recommended Books:

- Handbook of Print Media: Technologies and Production Methods by Helmut Kipphan, Springer
- Binding, Finishing and Mailing: The Final Word by T. J. Tedesco, Printing Industries Pr
- Basics Design: Print and Finish by Gavin Ambrose and Paul Harris, Bloomsbury Publishing
- The Complete Book On Printing Technology by NIIR Board, APBP Publication

PT-126: Graphics Design Lab - I

Practical No.	Name of Practical	No. of Hours
01	Introduction to Photoshop	04
02	Cutting and cropping images	12
03	Create logos	08
04	Create visiting cards	08
05	Create patterns	08
06	Create background designs	12
07	Create text effects	12
08	Create greeting card	08
09	Create soap boxes	08
10	Create jewellery advertises	08
11	Create 3D images	08
12	Create Mat painting	12
13	Create Graphics with animation	12

Recommended Books:

- Photoshop CC: The Missing Manual by Lesa Snider, O'Reilly Media Inc
- Photoshop CS6: Essential Skills by Mark Galer, Philip Andrews, Taylor & Francis, 2012
- Adobe Photoshop CS6 by Adobe Creative Team Adobe Press
- Basics Design: Print and Finish by Gavin Ambrose and Paul Harris, Bloomsbury Publishing
- Graphic Design: The New Basics by Ellen Lupton, Chronicle Books
- Photoshop CS4, Volume 1 by Elaine Weinmann, Peter Lourekas, Pearson Education

PT-211: Introduction to Computer - II

Unit 1 - Multimedia	Hours: 03
1.1 Overview	
1.2 Elements of multimedia - text, image, audio, video and animation	
1.3 Advantages, disadvantages and applications of multimedia	
Unit 2 - Network	Hours: 06
2.1 Overview	
2.2 Types - LAN, MAN and WAN	
2.3 Network topology - star, bus, ring, mesh and hybrid	
2.4 Understanding terminologies: server, client, internet and web	
Unit 3 - Data Communication	Hours: 06
3.1 Overview	
3.2 Components - message, sender, receiver, medium and protocol	
3.3 Transmission media - guided media and unguided media	
3.4 Types - simplex, half duplex and full duplex; Serial and Parallel	
Unit 4 - Operating system	Hours: 06
4.1 Overview	
4.2 Functions	
4.3 Types - batch, time-sharing, distributed, network and real-time	
Unit 5 - DBMS	Hours: 06
5.1 Overview of table, database and DBMS	
5.2 Advantages and disadvantages of DBMS	
5.3 DBMS users - end user, sophisticated users, application programmers and DBA	
Unit 6 - Emerging trends	Hours: 03
6.1 Tablet Computer	
6.2 Artificial intelligence	
6.3 Virtual reality	
6.4 3D printing	
6.5 Navigation technology	
6.6 VFX	

Recommended Books:

- Computer Fundamentals by P. K. Sinha, BPB Publications
- Fundamentals of Computers by V. Rajaraman, PHI
- Fundamentals of Computers by E Balagurusamy, Tata McGraw-Hill Education

PT-212: Soft Skills Development - II

Unit 1 - Communication

Hours: 10

- 1.1 Overview, Importance and purpose of communication
- 1.2 Communication process
- 1.3 Seven C's of communication - completeness, conciseness, consideration, concreteness, clarity, courtesy and correctness
- 1.4 Barriers to communication
- 1.5 Measures to overcome the barriers to communication

Unit 2 - Types of communication

Hours: 04

- 2.1 Verbal communication: overview, type - oral and written communication
- 2.2 Non-verbal communication - personal appearance, gestures, postures, facial expression, eye contacts, body language(kinesics), time language, silence

Unit 3 - Letter writing

Hours: 06

- 3.1 Letter writing - Overview, importance and types
- 3.2 Planning a letter
- 3.3 Components of letter
- 3.4 Layout of letter

Unit 4 - Job communication

Hours: 06

- 4.1 Job application: cover letter, CV, resume, appointment letter and resignation letter
- 4.2 Notice, circular and memo
- 4.3 Report: overview, structure and types

Unit 5 - Public communication

Hours: 04

- 5.1 Presentation Skills: overview, preparing a presentation, 10 - 20 - 30 Rule
- 5.2 Group discussion: overview, characteristics, objectives and advantages

Recommended Books:

- A Practice Course in English Pronunciation by Sethi, J, Prentice Hall of India, New Delhi
- Communication Skills by Prasad, P, S.K. Kataria & Sons
- Communication Skills by Sen, Leena, Prentice Hall of India, New Delhi

PT-213: Office Operations Lab - I

Practical No.	Name of Practical	No. of Hours
01	Introduction to office suite software	04
02	Basic operations in office suite software	04
03	Page layout operations by using word processing software	04
04	Editing a document by using word processing software	12
05	Formatting a document by using word processing software	12
06	Inserting illustrations in the document by using word processing software	12
07	Inserting header, footer and page numbering in the document by using word processing software	12
08	Performing the table operations in the document by using word processing software	12
09	Formatting the table in the document by using word processing software	12
10	Viewing the document by using word processing software	08
11	Preparing a document through mail merge by using word processing software	12
12	File type conversions (docx to pdf and pdf to docx)	08
13	Pages management operations of pdf files	08

Recommended Books:

- MS-Office by S. S. Shrivastava, Firewall Media, 2008
- Learning Ms Office 2007 by Ramesh Bangia, Khanna
- MS Office 2007 in A Nutshell by Saxena Sanjay, Vikas Publishing House

PT-214: Soft Skills Development Lab - II

Practical No.	Name of Practical	No. of Hours
01	Learn social etiquettes	04
02	Learn business etiquettes	04
03	Learn telephone etiquettes	04
04	Learn to ask for and give information	04
05	Learn to make requests and responding to requests	04
06	Tell about industry visit to your friend	04
07	Conversation with your friend regarding to plan for a trip	04
08	Write informal letters	12
09	Write inquiry letters	12
10	Write complaint letters	12
11	Write your resume	12
12	Write a covering letter for applying job	08
13	Write a resignation letter	08
14	Prepare a notice	08
15	Prepare a oral presentation on the given topic	08
16	Group discussion	12

Recommended Books:

- Business Communicator – V.K. Jain, O. P. Biyani, S. Chand, New Delhi.
- The Communicator – Board of Editors , Orient Blackswan Pvt. Ltd
- The Art of Powerful Communication – Dinesh K. Vohra, Are Maria Publications, Pune

PT-221: Offset Printing (sheet fed) - I

Unit 1 - Offset Machine

Hours: 08

- 1.1 Offset machine - overview and types (sheet fed and web fed)
- 1.2 Sheet fed – overview, sections, advantages and disadvantages
- 1.3 Construction and Design of offset machine
- 1.4 Sheet feeding mechanism, sheet board, function of blowers, function of flower foot, stream feeder, double sheet detector, sheet lifting and forwarding, sheet control, sheet register, front lays and side lays
- 1.5 Sheet Insertion and transfer – direct method
- 1.6 Gripper Designs and setting of grippers

Unit 2 - Inking system

Hours: 08

- 2.1 Inking system - overview
- 2.2 Rubber roller - overview, advantages and disadvantages
- 2.3 Maintenance of rollers
- 2.4 Ink store and feed system and distribution system
- 2.5 Fitting of rollers
- 2.6 Adjustment of rollers in inking system
- 2.7 Wash-up device

Unit 3 - Dampening System

Hours: 08

- 3.1 Dampening system - overview
- 3.2 Different dampening system – Conventional, continuous feeding, air knife, flap, squeegee roller, reverse roller, brush and alcohol dampening system
- 3.3 Cleaning of dampeners

Unit 4 - Cylinder

Hours: 06

- 4.1 Cylinder - overview
- 4.2 Types of Cylinder - Plate Cylinders, Blanket Cylinder and Impression Cylinder
- 4.3 Adjustment of cylinders

Recommended Books:

- Handbook of Print Media: Technologies and Production Methods by Helmut Kipphan, Springer
- The Complete Book on Printing Technology by NIIR Board, APBP Publication
- Hand Book of Offset Printing Technology by Engineers India Research Institute
- Sheetfed Offset Press Operating by Lloyd P. DeJidas, Thomas M. Destree, PIA/GATF Press
- Offset Printing - Controlled Process by Rolf Hansson, Optirep, 2012

PT-222: Screen Printing

Unit 1 - Introduction

Hours: 08

- 1.1 History
- 1.2 Characteristics
- 1.3 Overview of Screen Printing process
- 1.4 Materials and Equipments
- 1.5 Applications

Unit 2 - Screen Preparation

Hours: 08

- 2.1 Plate making – frame, screen fabric and stencil
- 2.2 Screen coating
- 2.3 Stencil making
- 2.4 Screen exposure
- 2.5 Screen developing
- 2.6 Screen blackout
- 2.7 Screen preparation for press

Unit 3 - Screen Printing Process

Hours: 08

- 3.1 Workflow
- 3.2 Components and operations
- 3.3 Drying machineries
- 3.4 Quality control of screen inks

Unit 4 - Advance machines

Hours: 06

- 4.1 Flat bed screen printing machines
- 4.2 Rotary screen printing machines
- 4.3 Screen printing machines for curved surfaces

Recommended Books:

- Screenprinting by Jane Sampson, The Crowood Press
- Screen Printing: A Contemporary Approach by Samuel Hoff Delmar, 1997
- The Complete Guide to Screenprinting by Brad Faine, North Light Books
- Screen Printing Primer by Samuel T. Ingram, GATF Press

PT-223: Desktop Publishing - II

Unit 1 - Shapes and symbols

Hours: 06

- 1.1 History, uses and applications of CorelDRAW
- 1.2 Outline –overview and uses
- 1.3 Shape: overview, types – rectangular, elliptical, polygon and custom; uses of shapes
- 1.4 Symbol: overview, types- static, ecstatic and functional

Unit 2 - Text and bitmap

Hours: 08

- 2.1 Special Effect- overview, types – adjust, transform and correction
- 2.2 Bitmaps effects - blur, distort, artistic, art strokes, noise and 3D
- 2.3 Tracing- overview, types - quick, centreline and outline

Unit 3 - Product design

Hours: 08

- 3.1 Design for product marketing
- 3.2 Table design – calendar, bill book, wall charts, newspaper and folding brochure
- 3.3 Glossy shading
- 3.4 Background design

Unit 4 - Layout and designs

Hours: 08

- 4.1 Layouts – overview and types
- 4.2 Flyer Designs
- 4.3 Album Designs
- 4.4 Magazines front and inner pages
- 4.5 Banner Management
- 4.6 Advertising management

Recommended Books:

- CorelDRAW X8: The Official Guide by Gary David Bouton, McGraw Hill 2017
- Basics Design: Print and Finish by Gavin Ambrose and Paul Harris, Bloomsbury Publishing
- Graphic Design: The New Basics by Ellen Lupton, Chronicle Books
- Corel Draw Graphics Suite X8 by Bill Stonehem, First Rank Publishing 2016
- Graphic Design (CorelDraw X8) Level 1 by AMC The School of Business, Advanced Micro Systems
- COREL DRAW TRAINING GUIDE by Satish Jain and M. Geetha, BPB Publications

PT-224: Printing Workshop - II

Practical No.	Name of Practical	No. of Hours
01	Introduction to detailed technical specification of some important machines	08
02	Preparation of plate	12
03	Mounting and adjustment of plate and blanket on cylinder	08
04	Preparation of fountain solution	08
05	Setting of inking and dampening rollers	08
06	Lubrication of machine	08
07	Make-ready and printing of single colour job	20
08	Make-ready and multicolour job on multicolour machine	20
09	Ink rollers wash up, dampers cleaning and storage of plates	12
10	Design and print 2 X 2 feet banner by using flex machine	16

Recommended Books:

- Hand Book of Offset Printing Technology by Engineers India Research Institute
- Sheetfed Offset Press Operating by Lloyd P. Dejidas, Thomas M. Destree, PIA/GATF Press
- Offset Printing - Controlled Process by Rolf Hansson, Optirep, 2012
- Handbook of Print Media: Technologies and Production Methods by Helmut Kipphan, Springer

PT-225: Screen Printing Lab

Practical No.	Name of Practical	No. of Hours
01	Introduction of different machinery, equipments, raw materials used in screen printing	04
02	Demonstration of various screen making materials such as frame, fabric, squeegee, etc.	04
03	Prepare screen stencil of different sizes and at different angles by manually stretching of fabric	08
04	Prepare screen stencil for line original using different screen making methods	08
05	Prepare screen stencil for tone original using different screen making methods	12
06	Print visiting card in single color line and tone form on different substrates	12
07	Print visiting card in multicolor color line and tone form on different substrates	12
08	Print letterhead in single color line and tone form on different substrates	12
09	Print letterhead in multicolor color line and tone form on different substrates	12
10	Print invitation card in single color line and tone form on different substrates	12
11	Print invitation card in multicolor color line and tone form on different substrates	12
12	Print signboards, cloth, backlit board, and electronic circuit with screen printing technology	12

Recommended Books:

- Screenprinting by Jane Sampson, The Crowood Press
- Screen Printing: A Contemporary Approach by Samuel Hoff Delmar, 1997
- The Complete Guide to Screenprinting by Brad Faine, North Light Books
- Screen Printing Primer by Samuel T. Ingram, GATF Press

PT-226: Graphics Design Lab - II

Practical No.	Name of Practical	No. of Hours
01	Introduction to CorelDraw (Tool bar, Menu bar, Property bar, Colour palette, Standard bar and workspace)	04
02	Create logos	12
03	Create visiting cards	08
04	Create letterhead designs	08
05	Create envelop designs	08
06	Create label designs	08
07	Create worksheet designs	12
08	Create text effects with blending effects	08
09	Create book cover page designs	08
10	Create pamphlet and flyer	04
11	Create receipt book	04
12	Create pattern designs	12
13	Prepare seasonal greeting cards	12
14	Create album designs	12

Recommended Books:

- CorelDRAW X8: The Official Guide by Gary David Bouton, McGraw Hill 2017
- Basics Design: Print and Finish by Gavin Ambrose and Paul Harris, Bloomsbury Publishing
- Graphic Design: The New Basics by Ellen Lupton, Chronicle Books
- Corel Draw Graphics Suite X8 by Bill Stonehem, First Rank Publishing 2016
- Graphic Design (CorelDraw X8) Level 1 by AMC The School of Business, Advanced Micro Systems
- COREL DRAW TRAINING GUIDE by Satish Jain and M. Geetha, BPB Publications