Shri Acharyaratna Deshbhooshan Shikshan Prasarak Mandal, Kolhapur

Mahavir Mahavidyalaya, Kolhapur (Autonomous)

Affiliated to Shivaji University, Kolhapur



Syllabus for Choice Based Credit System (CBCS) Bachelor of Vocation (B. Voc.) Programme

Риодиана	Bachelor of Vocation in Printing &	
Programme	Publishing	
Part	I	
Semester	I	
Course Code	BV A	
Course Name		
Course Title		
Paper No.		

Under the Faculty of Interdisciplinary Studies

(To be introduced from Academic Year 2024 – 25 onwards) Subject to the revisions& modifications made from time to time

Affiliated to Shivaji University, Kolhapur

A) Primary Information:				
Programme	Bachelor of Voca	Bachelor of Vocation (B. Voc.) CBCS		
Part	I	Semester	I	
Course	Basic Printing	Course Code	BV A11	
	Techniques			
Paper No.		Course Type	Semester	
Total Marks	50 Marks	Implementation	2024 - 25	
Total Credits	03	Contact Hours	04/Week	
Course Title				

B) Co	B) Course Objectives:		
i)	Flow of printing knowledge		
ii)	Scope of Printing		
iii)	To impart the concept of printing		
iv)	To study the need of printing		

C) Course Syllabi:			
(CR = Credits / IH: Instructional Hours)			
Module	CR	IH	
Module I : Introduction			
1.1History of Printing			
1.2Need and Scope of Printing.	0.75	12	
1.3Types of Printing process, Principle of all printing	0.73	12	
Processes.			
1.4 Difference between all printing processes			
Module II : Lithographic Offset Printing			
2.1 Introduction, Advantages & Limitation,			
Applications and machine types.			
2.2 Difference between sheet feed & web feed offset their	0.75	12	
uses			
2.3 Offset lithography Sheet feed machines their units			
2.4 Image carriers – plate making material, need of			
graining, printing down frame, effect of exposure,			
Types of plate.			
Module III : Substrates & Inks	0.75	12	
3.1Introduction, Types of Substrate	0.75	12	

3.2Types of paper, International paper sizes		
3.3Types of boards		
3.4Types of ink		
Module IV : Binding		
4.1Introduction, need of binding		
4.2Types of Binding		12
4.3Side sewing, side stitching		
4.4Centre sewing, centre stitching		

D) Reference Materials		
D1) Text Books for Reading		
D2) Books for Reference		
Introduction to Printing - Herbert Simonn		
Printing Today - Surjeet Gupta - Print India Journal, Delhi		
3. A Guide to Printing Inks – Surjeet Gupta – Print India Journal,		
Delhi		
Modern Lithography – Ian Faux – Macdonad& Evans Pylnont		

E) Suggested methods of Teaching:		
i)	Offline / Online teaching	
ii)	Power Point Presentation	
iii)	Group Discussion	

F) Course Outcomes:		Blooms Taxonomy
CO1	Understand flow of printing	
CO2	Scope of Printing	
CO3	CO3 Understanding concept of printing	
CO4	Understand need of printing	

G) Scheme of Course Evaluation			
1.	1. End Semester Examination (ESE) 40		
2.	2. Continuous Internal Evaluation (CIE) 10		
3.	Total Marks	50	

H) Suggested techniques for Continuous Internal Evaluation (10 Marks)				
1.	1. Home Assignment			
2.				
3.				
4.				
5.	Total Marks	10		

I) Question Paper Pattern (40 Marks)			
Q. No.	Nature / Type of Question	Marks	
1.	MCQs	10	
2.	Short Answer	10	
3.	Long Answer	10	
4. Short Note		10	
Total Marks 40		40	

Affiliated to Shivaji University, Kolhapur

A) Primary Information:					
Programme	Bachelor of Vocation (B. Voc.) CBCS				
Part	I	I Semester I			
Course	Printing Design	Course Code	BV A12		
Paper No.		Course Type	Semester		
Total Marks	50 Marks	Implementation	2024 - 25		
Total Credits	03	Contact Hours	04/Week		
Course Title					

B) Co	B) Course Objectives:	
i)	To give the basic knowledge of printing design	
ii)	Understanding layout in printing design	
iii)	To study the CMYK & RGB colour	
iv)	Use of Operating system	

C) Course Syllabi:		
(CR = Credits / IH: Instructional Hours)		
Module	CR	IH
Module I : Type Setting		
1.1 Understanding the fundamental principles and		
concepts of typography.		
1.2 Types of strokes and serifs, House style	=	
	0.75	12
1.3 Basic units of measurement used in typography,		
Definition legibility and readability		
1.4 Study of factors governing legibility and		
readability, study of different types of proof-		
reading marks		
Module II : Preparation of layout for graphic		
reproduction		
2.1Graphic design, page layout / good layout,		
basic principles of design, fundamental of		12
graphic design, paper sizes		
2.2 Study of stages involved in preparing a good		
layout such as visualization, thumbnail and		

rough layout and final layout		
2.3 AIDA techniques in design, Introduction About		
GATF		
2.4 Importance of white space, Dummy.		
Module III : Colours in Graphic Design		
3.1 Describe colours, colour terminology,		
complementary colours, defining warm and cool		
colours		
3.2Color wheel, mixing of tertiary colours and		
make a colour wheel, important information	0.75	12
about RGB and CMYK		
3.3 Tint and shade, Subtractive and additive colour		
theory		
3.4 Colour symbolism, specification of colour and		
brushes used by designers		
Module IV : Computer Fundamental		
4.1 Parts of computer, use of mouse & keyboard		
4.2 Introduction to Microsoft word, Microsoft		
excel, Microsoft PowerPoint		
4.3 Introduction to coral draw & photoshop	0.75	12
	0.70	12
4.4 The Role of AI in the Printing Industry. Analyse		
various AI technologies and their applications in		
different printing processes.		
1 01		

D) Ref	D) Reference Materials		
	D1) Text Books for Reading		
1.			
2.			
3.			
4.			
	D2) Books for Reference		
1.	Letter Assembly in Printing - D. Wroldridge - Pitman Publication,		
	London		
2.	A handbook of typography – KailashTakale – Nirmala		
	sadanprakashan, New Delhi		
3.	PageMaker - Rebecca Bridge Altman - BPB Publication New Delhi		

4.	Composing and Typography - B. D. Mendiratta - Printek
	Publication, New Delhi

E) Suggested methods of Teaching:	
i)	Offline / Online teaching
ii)	Power Point Presentation
iii)	Group Discussion

F) Course Outcomes:		Blooms Taxonomy
CO1	Understanding of printing design	
CO2	Understanding layout in printing design	
CO3	Understanding CMYK & RGB colour	
CO4	Use of Operating system	

G) Scheme of Course Evaluation		
1.	End Semester Examination (ESE)	40
2.	Continuous Internal Evaluation (CIE)	10
3.	Total Marks	50

H) Suggested techniques for Continuous Internal Evaluation				
(10 N	(10 Marks)			
1.	1. Home Assignment			
2.				
3.				
4.	4.			
5.	Total Marks	10		

I) Question Paper Pattern (40 Marks)		
Q. No.	Nature / Type of Question	Marks
1.	MCQs	10
2.	Short Answer	10
3.	Long Answer	10
4.	Short Note	10
Total Ma	Total Marks 40	

Affiliated to Shivaji University, Kolhapur

A) Primary Information:			
Programme	Programme Bachelor of Vocation (B. Voc.) CBCS		
Part	I	Semester	I
Course	Screen Printing	Course Code	BV A13
Paper No.		Course Type	Semester
Total Marks	50 Marks	Implementation	2024 - 25
Total Credits	03	Contact Hours	04/Week
Course Title			

B) Co	B) Course Objectives:	
i)	To give the basic knowledge of Screen-Printing Process	
ii)	To study the cloth types, mesh types, mesh count.	
iii)	To give the information of Screen-printing materials	
iv)	To study the printing on various substrate	

C) Course Syllabi:		
(CR = Credits / IH: Instructional Hours)		
Module	CR	IH
Module I : Introduction		
1.1 History of screen printing		
1.2 Working principle of screen printing	0.75	12
1.3 Advantages & Disadvantages, Applications,		
1.4 Comparison with other printing processes		
Module II : Materials		
2.1Raw materials physical fabric properties, polyester		
fabrics		
2.2 Geometry of screen-printing fabrics	0.75	12
2.3 Wooden or metal frame, frame size, clamp,	0.75	12
squeegee, coating solution, all screen printing		
materials		
2.4Screen printing Inks, stretching methods.		
Module III : Screen Preparation Methods		
3.1 Stencils, hand cut		
3.2 Direct emulsion	0.75	12
3.3 Indirect method		
3.4 Capillary direct		

Module IV : Machines		
4.1 Equipment and machinery for flatbed screen		
printing	0.75	12
4.2 Equipment and machinery for curved surface	0.73	12
printing		
4.3 Rotary Screen printing process		

D) Ref	D) Reference Materials	
	D1) Text Books for Reading	
1.		
2.		
3.		
4.		
	D2) Books for Reference	
1.	Handbook for Screen Printers – S. S. Thall	

E) Su	E) Suggested methods of Teaching:	
i)	Offline / Online teaching	
ii)	Power Point Presentation	
iii)	Group Discussion	

F) Co	urse Outcomes:	Blooms Taxonomy
CO1	Understanding Screen Printing Process	
CO2	Understanding the cloth types, mesh types,	
	mesh count.	
CO3	Screen printing materials	
CO4	Print various job	

G) Scheme of Course Evaluation		
1.	End Semester Examination (ESE)	40
2.	Continuous Internal Evaluation (CIE)	10
3.	Total Marks	50

,	H) Suggested techniques for Continuous Internal Evaluation (10 Marks)	
1.	Home Assignment	
2.		
3.		
4.		
5.	Total Marks	10

I) Quest	I) Question Paper Pattern (40 Marks)		
Q. No.	Nature / Type of Question	Marks	
1.	MCQs	10	
2.	Short Answer	10	
3.	Long Answer	10	
4.	Short Note	10	
Total Marks 40			

Affiliated to Shivaji University, Kolhapur (New syllabus under Autonomy to be introduced from June, 2024 onwards)

A) Primary Information:				
Programme	Bachelor of Voca	Bachelor of Vocation (B. Voc.) CBCS		
Part	I	Semester	I	
Course	Basic Printing	Course Code	BV A11	
	Techniques		Practical	
Paper No.		Course Type	Semester	
Total Marks	50 Marks	Implementation	2024 - 25	
Total Credits	05	Contact Hours	06/Week	
Course Title				

B) Co	B) Course Objectives:	
i)	To study Various printing techniques	
ii)	To learn about plate making materials.	
iii)	To study the different registration marks	
iv)	To study binding material	

C) Course Syllabi:		
(CR = Credits / IH: Instructional Hours)		
Practical's	CR	IH
Unit I : Introduction		
1. Basic overview of various printing techniques		
2. Introduction to plate making materials, equipment		
and chemicals.		
3. To making of positive & negative working P. S.	05	75
Plate		
4. Introduction to various registration marks on the		
plate		
5. Brief idea of binding materials, tools and machines		

D) Ref	erence Materials	
	D1) Text Books for Reading	
1.		
2.		
3.		
4.		
	D2) Books for Reference	

1.	Introduction to Printing – Herbert Simonn			
2.	Printing Today - Surjeet Gupta - Print India Journal, Delhi			
3.	A Guide to Printing Inks - Surjeet Gupta - Print India Journal,			
	Delhi			
4.	Modern Lithography – Ian Faux – Macdonad & Evans Pylnont			

E) Suggested methods of Teaching:		
i)	Offline / Online teaching	
ii)	Power Point Presentation	
iii)	Group Discussion	

F) Course Outcomes:		Blooms Taxonomy
CO1	Understanding Various printing techniques	
CO2	Learn about plate making materials.	
CO3	Use of registration marks	
CO4	Understanding binding material	

I) Question Paper Pattern (40 Marks)				
Q. No.	Nature / Type of Question	Marks		
1.	Practical	25		
2.	Submission Practical record book	10		
3. Viva voce 15		15		
Total Ma	arks	50		

Affiliated to Shivaji University, Kolhapur

A) Primary Information:				
Programme	Bachelor of Vocation (B. Voc.) CBCS			
Part	I Semester I			
Course	Printing Design	Course Code	BV A12	
			Practical	
Paper No.		Course Type	Semester	
Total Marks	50 Marks	Implementation	2024 - 25	
Total Credits	05	Contact Hours	06/Week	
Course Title				

B) Co	B) Course Objectives:		
i)	To study various typeface, serif and strokes		
ii)	To study rough layout and final layout.		
iii)	Knowledge of Colour wheel		
iv)	Use of Word, PowerPoint, Excel		
v)	Use of Coral Draw, Photoshop		

C) Course Syllabi:			
(CR = Credits / IH: Instructional Hours)			
Practical	CR	IH	
 Drawing various typeface along with their dimensional attributes such as X - height, Ascender & descender lines, serif and strokes. Preparation of thumbnail, rough layout & final layout for a given graphic product such as - visiting card Preparation of different type of colour wheel and scheme and symbol for a given graphic product - the complementary colour, warm colour & cool colour, primary colour & secondary colour, draw a colour wheel Use of Microsoft Word, Excel and Power point Tools used in Corel Draw, Photoshop 	Use 05	75	
6. To study various AI (Artificial Intelligence) technologies and their applications.			

D) Reference Materials				
	D1) Text Books for Reading			
1.				
2.				
3.				
4.				
	D2) Books for Reference			
1.	Letter Assembly in Printing - D. Wroldridge - Pitman Publication,			
	London			
2.	A handbook of typography – Kailash Takale – Nirmala			
	sadanprakashan, New Delhi			
3.	3. PageMaker - Rebecca Bridge Altman - BPB Publication New			
	Delhi			
4.	Composing and Typography – B. D. Mendiratta – Printek			
	Publication, New Delhi			

E) Suggested methods of Teaching:		
i)	Offline / Online teaching	
ii)	Power Point Presentation	
iii)	Group Discussion	

F) Course Outcomes:		Blooms Taxonomy
CO1	Understanding various typeface, serif and	
	strokes	
CO2	Learn about rough layout and final layout.	
CO3	Understanding Colour wheel	
CO4	Understanding Use of Word, PowerPoint,	
	Excel	

I) Question Paper Pattern (40 Marks)				
Q. No.	Nature / Type of Question	Marks		
1.	Practical	25		
2.	Submission Practical record book	10		
3. Viva voce		15		
Total Marks 50				

Affiliated to Shivaji University, Kolhapur

A) Primary Information:				
Programme	Bachelor of Vocation (B. Voc.) CBCS			
Part	I Semester I			
Course	Screen	Course Code	BV A13	
	Printing		Practical	
Paper No.		Course Type	Semester	
Total Marks	50 Marks	Implementation	2024 - 25	
Total Credits	05	Contact Hours	06/Week	
Course Title				

B) Co	B) Course Objectives:		
i)	To study screen printing materials		
ii)	To study different screen printing methods.		
iii)	iii) To give knowledge different screen printing machines.		
iv)	Printing various job		

C) Course Syllabi:		
(CR = Credits / IH: Instructional Hours)		
Practical's	CR	IH
1. To study the different types of screen printing		
materials.		
2. To prepare stencil by direct graphic method		
3. To prepare stencil by indirect photographic method		
4. To prepare stencil by direct-indirect photographic		
method	05	75
5. Hand drawing method for screen preparation		
method		
6. To know about modern screen printing & Machine		
configuration		
7. Screen Printing Troubles & Troubleshooting		

D) Reference Materials		
D1) Text Books for Reading		
1.		
2.		
3.		
4.		
D2) Books for Reference		
1.	Handbook for Screen Printers - S. S. Thall	

E) Su	E) Suggested methods of Teaching:	
i)	Offline / Online teaching	
ii)	Power Point Presentation	
iii)	Group Discussion	

F) Course Outcomes:		Blooms Taxonomy
CO1	Understanding screen printing materials	
CO2	Different screen printing methods.	
CO3	CO3 Use of different screen printing machines.	
CO4	Printing various job	

I) Question Paper Pattern (40 Marks)		
Q. No.	Nature / Type of Question	Marks
1.	Practical	25
2.	Submission Practical record book	10
3.	Viva voce	15
Total Ma	Total Marks 50	

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Syllabus for Choice Based Credit System (CBCS) Bachelor of Vocation (B. Voc.) Programme

Drogramma	Bachelor of Vocation in Printing &
Programme	Publishing
Part	I
Semester	II
Course Code	BV A
Course Name	
Course Title	
Paper No.	

Under the Faculty of Interdisciplinary Studies

(To be introduced from Academic Year 2024 – 25 onwards) Subject to the revisions& modifications made from time to time

Affiliated to Shivaji University, Kolhapur

A) Primary Information:			
Programme	Bachelor of Vocation (B. Voc.) CBCS		
Part	I	Semester	II
Course	Advance	Course Code	BV A21
	Printing		
	Techniques		
Paper No.		Course Type	Semester
Total Marks	50 Marks	Implementation	2024 - 25
Total Credits	03	Contact Hours	04/Week
Course Title			

B) Co	B) Course Objectives:		
i)	To give information of flexography printing process		
ii)	To study of gravure printing process		
iii)	To Learn Digital printing process		
iv)	To give knowledge of packaging technology		

C) Course Syllabi:		
(CR = Credits / IH: Instructional Hours)		
Module	CR	IH
Module I : Flexography Printing		
1.1Introduction & working principle	0.75	12
1.2Advantages, limitation & application	0.75	
1.3Machine parts & their working		
Module II : Gravure Printing		
2.1Introduction & working principle	0.75	12
2.2Advantages, limitation & application 0.75		12
2.3 Machine parts & their working		
Module III : Digital Printing		
3.1Introduction	0.75	12
3.2Application, advantages & disadvantages		
3.3 Types of process – Inkjet & xerography		
Module IV : Basic Packaging Technology		
4.1Introduction		12
4.2Types of Packaging		
4.3Functions of packaging		

D) Reference Materials			
	D1) Text Books for Reading		
1.			
2.			
3.			
4.			
	D2) Books for Reference		
1.	Introduction to Printing – Herbert Simonn		
2.	Printing Today - Surjeet Gupta - Print India Journal, Delhi		
3.	3. A Guide to Printing Inks – Surjeet Gupta – Print India Journal,		
	Delhi		
4.	Wiley -VCH, 2006 - Herbert Holik - Wiley-VCH, 2006		

E) Su	E) Suggested methods of Teaching:		
i)	Offline / Online teaching		
ii)	Power Point Presentation		
iii)	Group Discussion		
iv)			

F) Course Outcomes:		Blooms Taxonomy
CO1	Understand flexography printing process	
CO2	Understand gravure printing process	
CO3	Learn Digital printing process	
CO4	Understand functions of packaging	
	technology	

G) Sc	G) Scheme of Course Evaluation		
1.	End Semester Examination (ESE)	40	
2.	Continuous Internal Evaluation (CIE)	10	
3.	Total Marks	50	

H) Suggested techniques for Continuous Internal Evaluation (10 Marks)		
1.	Home Assignment	
2.		
3.		
4.		
5.	Total Marks	10

I) Question Paper Pattern (40 Marks)			
Q. No.	Nature / Type of Question	Marks	
1.	MCQs	10	
2.	Short Answer	10	
3.	Long Answer	10	
4.	Short Note	10	
Total Marks		40	

Affiliated to Shivaji University, Kolhapur

A) Primary Information:			
Programme	Bachelor of Vocation (B. Voc.) CBCS		
Part	I	Semester	II
Course	Reproduction	Course Code	BV A22
	Photography		
Paper No.		Course Type	Semester
Total Marks	50 Marks	Implementation	2024 - 25
Total Credits	03	Contact Hours	04/Week
Course Title			

B) Course Objectives:		
i)	To give information of Halftone	
ii)	To study of densitometer, spectrophotometer	
iii)	To study about different light sources	

C) Course Syllabi:		
(CR = Credits / IH: Instructional Hours)		
Module	CR	IH
Module I: Graphic Reproduction		
1.1. Concept of originals – line, photograph, continuous		
tone, quarter tone, positive, negative.		
1.2. Classification of Original: - Monochrome, high key,		
low key, multi colour- transparency,	01	15
1.3. Reflection, digital, evaluation & desirable		
characteristics of original		
1.4. Sizing & Scaling of original - Conventional and		
digital		
Module II : Optics & Illuminate		
2.1Definition of lenses, focal length, depth of focus,		
depth of field		
2.2Lateral reversal – prism mirror, roof mirror,		15
2.3 Light sources- i) Sunlight, ii) Laser – LED, IR.		
2.4Application related to - Colour temperature, Inverse		
square law, spectral distribution		
Module III : Halftone reproduction	01	15
3.1Basic density range screen ruling, Screen angle,	UI	15

Moiré pattern, halftone	
3.2 Dot shapes, Dot gain, Dot loss, Dot reproduction	
3.3 AM Screening, F.M. Screening, hybrid Screening	
3.4 UCR, GCR, Densitometer, spectrophotometer	

D) Ref	D) Reference Materials		
	D1) Text Books for Reading		
1.			
2.			
3.			
4.			
	D2) Books for Reference		
1.	J. W. Burden Graphic Reproduction photography focal press LTD.		
	London		
2.	John Cogoli, Graphic Arts Photography B & W GAFT		
3.	Fred Wentrel, Ray Blair and Tom Destre Graphic Arts		
	Photography Color, GAFT		
4.	HaraldKuppers, Basic Laws of Color Theory. RIT BkstBarrane&		
	Tools		

E) Su	E) Suggested methods of Teaching:		
i)	Offline / Online teaching		
ii)	Power Point Presentation		
iii)	Group Discussion		
iv)			

F) Co	urse Outcomes:	Blooms Taxonomy
CO1	Learn of Halftone	
CO2	Understanding densitometer,	
	spectrophotometer	
CO3	Understanding different light sources	
CO4	Apply the knowledge of Screen angle	

G) Scheme of Course Evaluation		
1.	End Semester Examination (ESE)	40
2.	Continuous Internal Evaluation (CIE)	10
3.	Total Marks	50

H) Suggested techniques for Continuous Internal Evaluation (10 Marks)		
1.	Home Assignment	
2.		
3.		
4.		
5.	Total Marks	10

I) Question Paper Pattern (40 Marks)			
Q. No.	Nature / Type of Question	Marks	
1.	MCQs	10	
2.	Short Answer	10	
3.	Long Answer	10	
4.	Short Note	10	
Total Marks		40	

Affiliated to Shivaji University, Kolhapur

A) Primary Information:				
Programme	Bachelor of Vocation (B. Voc.) CBCS			
Part	I	Semester	II	
Course	Materials of	Course Code	BV A23	
	Printing			
Paper No.		Course Type	Semester	
Total Marks	50 Marks	Implementation	2024 - 25	
Total Credits	03	Contact Hours	04/Week	
Course Title				

B) Co	B) Course Objectives:		
i)	To study of printing materials		
ii)	To give knowledge of polymers.		
iii)	To study paper pulping process		
iv)	To develop knowledge of Printing inks		

C) Course Syllabi:				
(CR	(CR = Credits / IH: Instructional Hours)			
	Module	CR	IH	
M	odule I: Polymers used in Printing and Packaging			
1.1	Introduction to polymer, thermoset &			
	thermoplastic polymer			
1.2	Natural and synthetic polymer			
1.3	Application of polymers in printing industry as	0.75	12	
	Printing paper- substrates			
1.4	Image carrier emulsion, rollers for application of			
	various coatings, Concept of packaging and their			
	making process.			
Mod	dule II : Compositions of paper and pulping process			
2.1Composition of paper, and their types			12	
2.2F	2.2Fibrous materials manufacture of paper		12	
2.3 Paper after treatment process.				
Mo	dule III : Paper, Board - types, sizes and properties			
	of paper	0.75	12	
3.1 Classification of paper for printing			12	
3.2P	aper and board sizes			

3.3 Run ability properties, printability properties		
3.4 Choice of appropriate quality of paper for different		
printing process		
Module IV : Printing inks - composition and		
manufacturing		
4.1 Basic Introduction of printing inks and types.		
Ingredients of printing inks - pigment, vehicles, solvents,		
additives etc.		12
4.2 Raw materials used for manufacturing of printing		
inks		
4.3 General characteristics and requirements of		
printing inks		
4.4 Inks for different printing process, ink properties,	·	
ink types		

D) Reference Materials			
	D1) Text Books for Reading		
1.			
2.			
3.			
4.			
	D2) Books for Reference		
1.	What printer should know about Paper - Lawrence A. Wilson		
2.	Materials in Printing Processes – L.C. Young – Focal Press Publication		
3.	Printing Ink Manual - Leach and Pierce - Springer Publication		
4.	What Printers Should Know About Ink - Dr. Nelson R. Eldred - GAFT Press		

E) Su	E) Suggested methods of Teaching:		
i)	Offline / Online teaching		
ii)	Power Point Presentation		
iii)	Group Discussion		

F) Course Outcomes:		Blooms Taxonomy
CO1	Learn use of printing materials	
CO2	Understanding of polymers.	

CO3	Paper pulping process	
CO4	Understanding of Printing inks	

G) Scheme of Course Evaluation		
1.	End Semester Examination (ESE)	40
2.	Continuous Internal Evaluation (CIE)	10
3.	Total Marks	50

H) Suggested techniques for Continuous Internal Evaluation		
(10 Marks)		
1.	Home Assignment	
2.		
3.		
4.		
5.	Total Marks	10

I) Question Paper Pattern (40 Marks)			
Q. No.	Nature / Type of Question	Marks	
1.	MCQs	10	
2.	Short Answer	10	
3.	Long Answer	10	
4.	Short Note	10	
Total Marks		40	

Affiliated to Shivaji University, Kolhapur

A) Primary Information:				
Programme	Bachelor of Vocation (B. Voc.) CBCS			
Part	I Semester II			
Course	Advance	Course Code	BV A21	
	Printing		Practical	
	Techniques			
Paper No.		Course Type	Semester	
Total Marks	50 Marks	Implementation	2024 - 25	
Total Credits	05	Contact Hours	06/Week	
Course Title				

B) Co	B) Course Objectives:		
i)	To give information of flexography printing process		
ii)	To study of gravure printing process		
iii)	To Learn Inkjet & xerography process		
iv)	To give knowledge of Cartons		

C) Course Syllabi:		
(CR = Credits / IH: Instructional Hours)		
Practical	CR	IH
1. Introduction to single colour flexo machine, various		
parts & take a print out.		
2. Introduction to single colour gravure machine		
various parts & take a print out.		
3. Introduction & working of ink jet printer & take a	05	75
print out.		
4. Introduction & working of Xerography printer &		
take a print out		
5. Types of Cartons		

D) Reference Materials			
	D1) Text Books for Reading		
1.			
2.			
3.			
4.			
D2) Books for Reference			

1.	Introduction to Printing - Herbert Simonn
2.	Printing Today - Surjeet Gupta - Print India Journal, Delhi
3.	A Guide to Printing Inks - Surjeet Gupta - Print India Journal,
	Delhi
4.	Wiley -VCH, 2006 - Herbert Holik - Wiley-VCH, 2006

E) Su	E) Suggested methods of Teaching:		
i)	Offline / Online teaching		
ii)	Power Point Presentation		
iii)	Group Discussion		
iv)			

F) Co	urse Outcomes:	Blooms Taxonomy
CO1	Understanding flexography printing	
	process	
CO2	Learn gravure printing process	
CO3	Learn Inkjet & xerography process	
CO4	Understanding types of Cartons	

I) Question Paper Pattern (40 Marks)			
Q. No.	Nature / Type of Question	Marks	
1.	Practical	25	
2.	Submission Practical record book	10	
3.	Viva voce	15	
Total Marks		50	

Affiliated to Shivaji University, Kolhapur

A) Primary Information:					
Programme	Bachelor of Voca	Bachelor of Vocation (B. Voc.) CBCS			
Part	I	Semester	II		
Course	Reproduction	Course Code	BV A22		
	Techniques		Practical		
Paper No.		Course Type	Semester		
Total Marks	50 Marks	Implementation	2024 - 25		
Total Credits	05	Contact Hours	06/Week		
Course Title					

B) Co	B) Course Objectives:		
i)	To give information of Densitometer		
ii)	To study the halftone structure		
iii)	To Learn AM & FM screening		
iv)	To give knowledge of Digital camera		
v)	To give information of Raster and vector images		

C) Course Syllabi:		
(CR = Credits / IH: Instructional Hours)		
Practical	CR	IH
1. To study various types of conventional originals,		
digital Originals and resolution.		
2. To study working of densitometer measurement of		
ink and paper densities, dot area, dot gain,		
contrast, trapping.	5	<i>7</i> 5
3. To study halftone dot structures, AM & FM.		_
4. To study digital camera Operations.		
5. To study Raster image and vector image.		

D) Reference Materials		
D1) Text Books for Reading		
1.		
2.		
3.		
4.		

D2) Books for Reference			
1.	J. W. Burden Graphic Reproduction photography focal press LTD.		
	London		
2.	John Cogoli, Graphic Arts Photography B & W GAFT		
3.	Fred Wentrel, Ray Blair and Tom Destre Graphic Arts		
	Photography Color, GAFT		
4.	HaraldKuppers, Basic Laws of Color Theory. RIT BkstBarrane&		
	Tools		

E) Su	E) Suggested methods of Teaching:		
i)	Offline / Online teaching		
ii)	Power Point Presentation		
iii)	Group Discussion		
iv)			

F) Course Outcomes:		Blooms Taxonomy
CO1	Information of Densitometer	
CO2	Understanding halftone structure	
CO3	Learn AM & FM screening	
CO4	Digital camera	

I) Question Paper Pattern (40 Marks)		
Q. No.	Nature / Type of Question	Marks
1.	Practical	25
2.	Submission Practical record book	10
3.	Viva voce	15
Total M	arks	50

Affiliated to Shivaji University, Kolhapur

A) Primary Information:			
Programme	Bachelor of Vocation (B. Voc.) CBCS		
Part	I	Semester	II
Course	Material Of	Course Code	BV A23
	Printing		Practical
Paper No.		Course Type	Semester
Total Marks	50 Marks	Implementation	2024- 25
Total Credits	05	Contact Hours	06/Week
Course Title			

B) Course Objectives:		
i)	To give knowledge GSM	
ii)	To study the calliper	
iii)	To lean different types of paper	
iv)	To give information of bursting strength & tensile strength	

C) Course Syllabi:		
(CR = Credits / IH: Instructional Hours)		
Practical	CR	IH
1. How to calculate GSM of substrate.		
2. To find calliper thickness of substrate.		
3. To identify various types of paper	5	<i>7</i> 5
4. To identify various types of plastic and film		70
5. How to calculate bursting strength		
6. How to calculate tensile strength		

D) Reference Materials		
D1) Text Books for Reading		
1.		
2.		
3.		
4.		

	D2) Books for Reference		
1.	What printer should know about paper – Lawrence A. Wilson – GAFT Press		
2.	Materials in Printing Processes – L. C. Young – Focal Press Publication		
3.	Printing Ink Manual – Leach and Pierce – Springer Publication		
4.	What Printer Should Know About Ink - Dr. Nelson R. Eldred - GAFT Press		

E) Su	E) Suggested methods of Teaching:		
i)	Offline / Online teaching		
ii)	Power Point Presentation		
iii)	Group Discussion		
iv)			

F) Course Outcomes:		Blooms Taxonomy
CO1	Learn GSM	
CO2	calliper	
CO3	Understanding types of paper	
CO4	Understanding bursting strength & tensile	
	strength	

I) Question Paper Pattern (40 Marks)		
Q. No.	Nature / Type of Question	Marks
1.	Practical	25
2.	Submission Practical record book	10
3.	Viva voce	15
Total Marks		50