BANGLADESH TECHNICAL EDUCATION BOARD

Agargaon, Sher-E-Bangla Nagar

Dhaka-1207.

04-YEAR DIPLOMA IN ENGINEERING CURRICULUM

COURSE STRUCTURE & SYLLABUS

(PROBIDHAN-2022)

GRAPHIC DESIGN TECHNOLOGY

TECHNOLOGY CODE: 96

5TH SEMESTER

(Effective from 2022-2023 Academic Sessions)

DIPLOMA IN ENGINEERING CURRICULUM
COURSE STRUCTURE

(PROBIDHAN-2022)

TECHNOLOGY NAME: GRAPHIC DESIGN TECHNOLOGY (96)

(5th SEMESTER)

Sl. No.	Subject		Period Per Week		Credit	Marks Distribution							Grand Total
						Theory Assessment			Practical Assessment				
	Code	Name	Theory	Practical		Continuous	Final	Total	Continuous	Final	Total		
1	25852	Industrial Management	2	-	2	40	60	100	-	-	-		100
2	29555	Digital Design & Printing	2	3	3	40	60	100	25	25	50		150
3	29651	Advertising Design	2	3	3	40	60	100	25	25	50		150
4	29652	Fabric Design	2	3	3	40	60	100	25	25	50		150
5	29653	Design & Editing	2	6	4	40	60	100	50	50	100		200
6	29654	Packaging Design-I	2	3	3	40	60	100	25	25	50		150
7	29655	Graphic Design-III	2	3	3	40	60	100	25	25	50		150
		Total	14	21	21	280	420	700	175	175	350		1,050

Subject Code	Subject Name	Period per Week		Credit
		T	P	C
25852	**INDUSTRIAL MANAGEMENT**	2	0	2

Rationale	As mid-level manager, engineering diploma graduates are responsible for proper and most efficient interaction of 6 M`S: man, machine, material, money, method (SOP or process) and market with a focus that will depend on their position in the organization (production, planning, quality, maintenance, design, etc.). They first need to understand the type of management and organization they work in. As they work directly or indirectly with manufacturing, therefore they need to have knowledge, skills and attitudes on production, planning, productivity improvement, new systems such as lean manufacturing and understand how production integrates in the overall supply chain management. They deal with people either as a supervisor, assistant manager or by leading transversal projects, they should know their role concerning human resources management and development. In their daily work, they must use a suitable leadership style, assign and monitor work, solve problems, support motivation to change of their teams when they implement new methods and systems.
Learning Outcome (Theoretical)	**After undergoing the subject, students will be able to:** ☐ State the roles and responsibilities of a mid-level manager within the organization ☐ Differentiate various management systems and organizations ☐ Describe the manufacturing process ensuring productivity, quality, cost and safety ☐ State the types of production planning ☐ Explain productivity improvement factors while controlling cost ☐ Describe new trends of production management systems ☐ Identify mid-level manager roles in the human resources management and development ☐ Select the suitable leadership style depending on the situations and people ☐ Identify the steps of work assignment based on goals to achieve while supporting changes ☐ Describe the steps of problem solving and decision making

DETAIL DESCRIPTION (THEORY:

Unit	Topics with Contents	Class (1 Period)	Final Marks
1.	**FUNDAMENTALS OF ORGANIZATION** 1.1 Explain the purpose of an organization. 1.2 Define management organization. 1.3 Describe various types and features of organization structures. 1.4 Explain authority, responsibility, duties and delegation of authority. 1.5 Define span of supervision.	2	4
2.	**FUNDAMENTALS OF MANAGEMENT** 2.1 Explain the functions of management. 2.2 Relate administration, organization and management. 2.3 Describe different types of management and in which context they apply. 2.4 Define the specificities of industrial management.	2	4
3.	**PRODUCTION MANAGEMENT** 3.1 Define production management . 3.2 State functions of production management. 3.3 Describe "5p". 3.4 Mention applications of "5p". 3.5 Define cost control-methods. 3.6 Define inventory & inventory control. 3.7 Describe the fundamentals of maintenance management. 3.8 Explain the importance of quality system. 3.9 Explain the components of quality system	5	8
4	**PRODUCTIVITY IMPROVEMENT** 4.1 Define Productivity. 4.2 List factors affecting industrial productivity. 4.3 Describe productivity improvement techniques. 4.4 Describe the lean manufacturing approach. 4.5 Explain the concept of Just in Time.	3	6
5	**PLANNING** 5.1 Discuss importance of planning. 5.2 Explain the steps in planning. 5.3 Explain the factors affecting on planning. 5.4 State different types of production planning and control. 5.5 Describe the way to manage personal time.	4	7
6	**SUPPLY CHAIN MANAGEMENT**	3	4

Unit	Topics with Contents	Class (1 Period)	Final Marks
	6.1 Define supply chain management. 6.2 Explain the components of supply chain management. 6.3 Explain production integration into supply chain management.		
7.	**HUMAN RESOURCES MANAGEMENT AND DEVELOPMENT (HRM-HRD)** 7.1 Describe the main functions in human resources management (HRM). 7.2 Describe the main functions in human resources development (HRD). 7.3 Explain the role of manager in the recruitment process. 7.4 Explain the role of manager in the training process. 7.5 Explain the role of manager in the performance management system. 7.6 Mention the components of compensation and benefits system.	3	6
8.	**LEADING A TEAM** 8.1 Define leadership. 8.2 Identify personality traits impacting leadership style. 8.3 Discuss the types of leadership. 8.4 Define motivation and motivational cycle. 8.5 State the importance of motivation. 8.6 List motivation drivers based on Maslow, Herzberg adapted to various generations 8.7 State concepts of Theory-X, Theory-Y and Theory-Z	3	6
9.	**WORK ASSIGNMENT** 9.1 List different types of leadership styles. 9.2 Describe the leadership style adapted to the work assignment and delegation. 9.3 State SMART goal. 9.4 Set SMART goals to support work assignment. 9.5 Identify ways to reduce resistance to change during work assignment.	4	8
10.	**PROBLEM SOLVING AND DECISION MAKING** 10.1 Mention the steps of problem solving. 10.2 Explain tools used to analyze and solve problem addressing the 5M components. 10.3 Define decision making. 10.4 Discuss different types of decision-making process. 10.5 Describe the steps in decision making.	3	7
	Total	**32**	**60**

Necessary Resources (Tools, equipment and Machinery):

Sl	Item Name	Quantity (piece/s)
01	Case studies, examples, exercises related documents	One for each student
02	Project templates	One for each student

Recommended Books:

Sl	Book Name	Writer Name	Publisher Name & Edition
01.	Principles of Management	Dr. Md. Mainul Islam and Dr. Abdul Awal Dhan,	Bangladesh Open University.
02.	Personnel Management and Industrial Relation.	Mohammad Mohiuddin	NIDS Publication Co, Dhaka.
03.	Production Operations Management: The Handbook	Ronald P Bizzle Jr	Independently published (January 31, 2023)
04.	How To Implement Lean Manufacturing, Second Edition 2nd Edition	Lonnie Wilson	McGraw Hill; 2nd edition (March 22, 2015)
05.	The Toyota Way, Second Edition: 14 Management Principles from the World's Greatest Manufacturer Hardcover	Jeffrey K. Liker	McGraw Hill; 2nd edition (December 1, 2020)
06.	Faster, Better, Cheaper in the History of Manufacturing 1st Edition	Christoph Roser	Productivity Pr; 1st edition (August 5, 2016)
07.	Supply Chain Management, Inventory Control, Human Resource Management, and Customer service (Louis Bevoc Series of Educational and Informational Books)	Louis Bevoc	CreateSpace Independent Publishing Platform (September 4, 2016)
08.	Bulletproof Problem Solving: The One Skill That Changes Everything	Charles Conn	Wiley; 1st edition (March 6, 2019)
09.	The Miniature Guide to Critical Thinking Concepts and Tools	Richard Paul and Linda Elder	The Foundation for Critical Thinking; Eighth edition (September 20, 2019)
10.	Leadership and the One Minute Manager: Increasing Effectiveness Through Situational Leadership	Ken Blanchard, Patricia Zigarmi, Drea Zigarmi	William Morrow; Updated edition (October 15, 2013)
11.	Effective Delegation of Authority: A (Really) Short Book for New Managers	Hassan Osman	Independently published (May 7, 2019)
12.	The Human Element: Overcoming the Resistance That Awaits	Loran Nordgren, David Schonthal	Wiley; 1st edition (September 28, 2021)
13.	The 7 Habits of Highly Effective People	Stephen R. Covey	Free Press (1989)
14.	ব্যবস্থাপনা	মোহাম্মদ খালেকুজ্জামান	দি যমুনা পাবলিশার্স
16.	কলেজে আরও ভালো কীভাবে করা যায়	সম্পাদকমণ্ডলী	নায়েম, ঢাকা

| 17. | শিল্প প্রতিষ্ঠান উৎকর্ষ অর্জন | সম্পাদকমণ্ডলী | নায়েম, ঢাকা |

Website References:

Sl	Web Link	Remarks
01.	www.coachinforleaders	Podcast on leadership skills
02.	https://essentialcomm.com/	Podcast on coaching
03.	https://www.manager-tools.com/	Podcast on management
04.	https://www.shrm.org/	Website of the most important HR association in USA
05.	https://www.makingchips.com/	Podcast on manufacturing

SUBJECT CODE	SUBJECT NAME	PERIOD PER WEEK		CREDIT
		T	P	C
29555	**Digital Design & Printing**	2	**3**	**3**

Rationale	Printing Technology has great demand in every sphere of our life. Whatever we use in our daily life there must have some connections with printing. There are many types of printing technologies such as Letterpress printing, Screen printing, Offset printing, Gravure printing and non-major printing process. There are some advance printing technologies in non-major printing process. They have demand in garments printing industries, advertising firm, ceramic industries etc. Diploma engineers will be able to acquire knowledge on gradual development of advance printing technologies, to obtain knowledge of various digital printing presses, to know the equipment and tools used in digital printing process, to develop skill and attitude of identify problems of digital printing by this subject.
Learning Outcome (Theoretical)	**After undergoing the subject, students will be able to:** • Differentiate various types of digital printing presses. • Explain the equipment and tools used in digital printing process. • Describe digital printing ink. • Explain problems of digital printing process. • Describe digital printing stock/substrate.
Learning Outcome (Practical)	**After undergoing the subject, students will be able to:** • Capture image from various media. • Prepare a print setup for digital printing. • Create a Light box Pena, festoon, PVC etc. • Make a model using 3D printing machine. • Perform Maintenance a digital printing press.

DETAILED SYLLABUS (THEORY)

Unit	Topics with Contents	Class (1 Period)	Final Marks
1	**DIGITAL PRINTING** 1.1 Define digital printing. 1.2 Describe the characteristics of digital printing. 1.3 Discuss the various types of digital printing. 1.4 Describe the difference of digital printing from other major printing process. 1.5 Describe the advantages & disadvantages of digital printing.	03	05
2	**DIGITAL DESIGN** 2.1 Define digital design. 2.2 Describe digital design elements. 2.3 List the software used in digital design. 2.4 Describe edit, crop, resize, adjust and retouch photographic and digitally generated images. 2.5 State the separation process of image from different background using various masking technique. 2.6 Explain the creation process of digital images using layers, styles, filters and channels.	04	06
3	**DIGITAL IMAGE SOURCES** 3.1 Describe digital camera images. 3.2 Explain the image capturing process. 3.3 State different sources of images. 3.4 Discuss various file format. 3.5 State various color mode.	02	06
4	**DIGITAL PRINTING PRESS** 4.1 Define digital press. 4.2 Discuss various types of digital press. 4.3 Describe digital offset press. 4.4 Explain Radio Frequency Identification (RFID) press. 4.6 Discuss Laser Jet Printing (LJP) press. 4.6 Describe Printed Fabric Label (PFL) digital press. 4.7 Discuss Heat Transfer Label (HTL) press.	03	07
5	**RAW MATERIALS USED IN DIGITAL PRINTING** 5.1 List the raw materials. 5.2 List the media used in digital printing. 5.3 Classify the media used in digital printing. 5.4 Describe the characteristics of the media used in digital printing. 5.5 Describe the Inks used in non-Impact/ digital printing. 5.6 Classify the ink used in digital printing.	03	06
	DIGITAL PRINTING IN ADVERTISING SECTOR.		

6	6.1 Define advertisement. 6.2 Discuss the scope of digital printing in the advertisement. 6.3 Differentiate among newspaper advertisement, digital printing advertisement & online flat form. 6.4 Discuss the importance of digital printing in the advertising sector. 6.5 Describe the advantage and disadvantage of digital printed advertisement.	**03**	**06**
7	**THE PRINT FINISHING OF DIGITAL PRINTING** 7.1 Define finished goods. 7.2 State Eye-letting process. 7.3 Describe the importance of eye-let in digital printing. 7.4 Discuss various decoration in digital printed media. 7.5 Describe the festoon pocket making process. 7.6 Explain the cutting and pocketing process of finished goods. 7.7 Describe the embossing and laminating process of digital printed goods.	**03**	**06**
8	**INK JET & THERMOGRAPHIC PRINTING** 8.1 Define Ink Jet printing. 8.2 Illustrate the principle of inkjet printing. 8.3 Discuss the types of inkjet printing. 8.4 Describe the ink jet printing systems. 8.5 Discuss the principles of thermographic printing. 8.6 Explain the types of thermographic printing. 8.7 Discuss the thermal sublimation.	**04**	**07**
9	**UV AND 3D PRINTING** 9.1 Define UV printing technology. 9.2 Describe offset & digital UV printing process. 9.3 Explain UV printing raw materials and finished materials. 9.4 Define 3D printing technology. 9.5 Describe 3D printing process. 9.6 Explain 3D printing raw materials and finished materials. 9.7 Define digital printing on textile/fabric media. 9.8 Discuss UV & 3D printing machineries. 9.9 Describe wall printing process.	**03**	**06**
10	**JOB COSTING & ESTIMATING OF DIGITAL PRINTED MATTER.** 10.1 Define estimating and costing. 10.2 Describe the estimating factors. 10.3 Mention the cost of various media and raw materials. 10.4 Describe the estimating process of digital printed matter. 10.5 Explain the job costing procedure for PVC & Pena-flex printing. 10.6 Describe the job costing procedure for paper & non-paper substrates printing. 10.7 Describe the estimating process of UV & wall printing.	**04**	**05**

		Total	**32**	**60**

DETAILED SYLLABUS (PRACTICAL)

Sl.	Experiment Name	Class (3 Period)	Marks (Continuous)
1	**Capture image from various media.** 1.1 Prepare camera. 1.2 Prepare the tools & equipment's to capture the image. 1.3 Capture the image. 1.4 Maintain the record of performed task. 1.5 Practice the OSH.	1	2
2	**Prepare a print setup for digital printing.** 2.1 Prepare image for print setup. 2.2 Perform print setup according to paper size. 2.3 Maintain the record of performed task. 2.4 Practice the OSH.	1	2
3	**Create a Light box Pena.** 3.1 Prepare the machine for printing. 3.2 Perform printing. 3.3 Prepare the light box. 3.4 Attached the printed media on to the light box. 3.5 Maintain the record of performed task. 3.6 Practice the OSH.	2	3
4	**Make a festoon.** 4.1 Prepare the machine for printing. 4.2 Perform printing. 4.3 Prepare the frame. 4.4 Attached the printed media in the frame. 4.5 Maintain the record of performed task. 4.6 Practice the OSH.	1	2
5	**Print an advertisement, size 9'x4' using media PVC.** 5.1 Prepare the machine for printing. 5.2 Perform printing. 5.3 Prepare the PVC with eye letting. 5.4 Maintain the record of performed task. 5.5 Practice the OSH.	1	2
6	**Design and print X banner (size: 2'x5').** 6.1 Prepare design for print. 6.2 Make ready the machine. 6.3 Perform the printing. 6.4 Mount the banner to the roller. 6.5 Maintain the record of performed task. 6.6 Practice the OSH.	2	3

7	**Design and print a mega banner (size: 20' x 60').** 7.1 Prepare design for print. 7.2 Make ready the machine. 7.3 Perform the printing. 7.4 Eyelet / attached the banner on the board. 7.5 Maintain the record of performed task. 7.6 Practice the OSH.	2	3
8	**Make a model using 3D printing machine.** 8.1 Prepare the machine for printing. 8.2 Position printing head & others parts. 8.3 Perform the printing. 8.4 Maintain the record of performed task. 8.5 Practice the OSH.	2	3
9	**Perform Maintenance a digital printing press.** 9.1 Perform the printing. 9.2 Clean the inking & printing unit. 9.3 Position printing head & others parts. 9.4 Maintain the record of performed task. 9.5 Practice the OSH.	2	3
10	**Identify problems of digital printing machines and solve them.** 10.1 Perform the printing. 10.2 Identify the printing problems. 10.3 Solve the detected problem & test the print. 10.4 Maintain the record of performed task. 10.5 Practice the OSH.	2	2
	Total	16	25

NECESSARY RESOURCES (TOOLS, EQUIPMENT'S AND MACHINERY):

SI	Item Name	Quantity
01	Ink jet printing machine	01 set
02	Laser jet printing machine	1 set
03	3D printing machine	2 set
04	UV printing machine	1 set
05	3D wall printing machine	1 set
06	Plotter machine	
07	RFID machine	1 set
08	PFL Machine	1 set
O9	HTL machine	1 set
10	Echo solvent printing machine	1 set
11	Light Table	1 set
12	Hand gloves	25 set
13	Goggles	5 set

14	Apron, Mask	50 set
15	Pencil, Marker	05 Set
16	Geometrical measurement box	5 set
17	Scissors, Anti cutter, Scale	5 set
18	Filament	05 set
19	Cutting knife	02 set
20	Sticky glue	05 set

RECOMMENDED BOOKS:

Sl	Book Name	Writer Name	Publisher Name & Edition
01	Handbook of print media	Helmut Kipphan	Heidelberg
02	Mastering 3D Printing	Joan Horvath	Friends of
03	3D PRINTING	Stephanie Torta Jonathan Torta	MERCURY LEARNING AND INFORMATION
04	Mastering Digital Printing	Harald Johnson.	EPUB
05	Post Digital Print	Alessandro Ludovico	The Mutation of Publishing

WEBSITE REFERENCES:

Sl	Web Link	Remarks
01	http://printwiki.org	Search here
02	https://it.dru.ac.th/o-bookcs/pdfs/09.pdf	Search here
03	https://www.fellesforbundet.no/globalassets/dokumenter/grafisk/publikasjoner/ngu-digital-print-report-2016.pdf	Search here
04	https://monoskop.org/images/a/a6/Ludovico,_Alessandro_-_Post-Digital_Print._The_Mutation_of_Publishing_Since_1894.pdf	Search here

SUBJECT CODE	SUBJECT NAME	PERIOD PER WEEK			CREDIT
29651	**Advertising Design**	T	P		C
		2	3		3

Rationale	Students will gather knowledge about the advertising and design, scenarios of local or national media, legal issues and copyright, color and composition, branding and corporate identity, tools and material of advertising design, creating advertising, economic and social effects of advertising, the field of advertising, advertising appeal. As a graphic design student should have the knowledge about those topics. That's why we have added this subject in this curriculum.
Learning Outcome (Theoretical)	**After undergoing the subject, students will be able to:** 1. Describe advertising design 2. Describe local and national media 3. Explain legal issues & copyright 4. Explain color and composition 5. Describe branding and corporate identity 6. Explain tools and material of advertising 7. Describe economic and social effect of advertising 8. Explain field of advertising 9. Describe advertising appeal
Learning Outcome (Practical)	**After undergoing the subject, students will be able to:** 1. Create a design of a poster for a restaurant opening event 2. Perform a design of flyer for an institute offering short course 3. Create festoon design for observing a national/international day 4. Perform newspaper advertisement design 5. Create public awareness advertisement design 6. Create web banner for new product 7. Create PVC/ Panaflex back-drop banner design 8. Create shopping bag design for community shop 9. Create corporate brochure design 10. Perform four color magazine cover

DETAILED SYLLABUS (THEORY)

Unit	Topics with Contents	Class (1 Period)	Final Marks
1	**ADVERTISING AND DESIGN** 1.1 State the history of advertising. 1.2 Define advertising. 1.3 Describe the classification of advertising. 1.4 Mention the importance of design in advertising. 1.5 Describe the content of Advertising Design. 1.6 Explain the effects of advertising values of human life style.	**04**	**06**
2	**SCENARIOS OF LOCAL OR NATIONAL MEDIA** 2.1 Describe the principles of advertising. 2.2 Classify the media for advertising design. 2.3 Describe the print advertising & platform. 2.4 Discuss the electronic advertising. 2.5 Describe the digital advertising platform.	**03**	**06**
3	**LEGAL ISSUES AND COPYRIGHT** 3.1 State the legal issues for advertising design. 3.2 Explain the importance of copyright in advertising design. 3.3 Interpret the printing publication copyright law in Bangladesh. 3.4 Describe the ownership of the contents in advertising design. 3.5 Explain the importance of model release (model permission). 3.6 Discuss the issues of using pictures of children, man & women in advertising. 3.7 Mention the issues of using pictures of monument, government building and recognizable personal properties in advertising.	**04**	**06**
4	**COLOR AND COMPOSITION** 4.1 Illustrate the principles of composition in advertising design. 4.2 Describe the importance of colors for advertising design. 4.3 Explain the importance of composition in advertising design. 4.4 Describe the colors used for digital advertising. 4.5 Discuss the colors used for printed advertising.	**04**	**06**

5	**BRANDING AND CORPORATE IDENTITY**	**04**	**08**
	5.1 Define branding.		
	5.2 State the importance of branding.		
	5.2 Explain the corporate identity.		
	5.3 Explain the importance of registered mark & trade mark.		
	5.5 Describe the technique for gift items and stationeries design.		
6	**TOOLS AND MATERIAL**	**01**	**04**
	6.1 Explain the software used in advertising design.		
	6.2 State the elements used in advertising design.		
	6.3 Describe the materials used in advertising design.		
7	**CREATING ADVERTISING**	**02**	**04**
	7.1 Define layout.		
	7.2 Explain various types of shape.		
	7.3 Describe the text formatting.		
	7.4 Discuss image manipulation.		
8	**ECONOMIC AND SOCIAL EFFECTS OF ADVERTISING**	**04**	**08**
	8.1 Define social effects of advertising.		
	8.2 State economic effects of advertising.		
	8.3 Explain the effect of advertising in our culture.		
	8.4 State advertisements role to sell.		
	8.5 Describe sell values, images, concepts and idea.		
	8.6 Explain negative impact of advertising.		
9	**THE FIELD OF ADVERTISING**	**04**	**08**
	9.1 Define outdoor advertising.		
	9.2 Explain different types of outdoor advertising.		
	9.3 Describe advantage & disadvantage of outdoor advertising.		
	9.4 Explain the opportunities as a freelancer in advertising design sector.		
	9.5 State the carrier opportunities in advertising sector.		
10	**ADVERTISING APPEAL**	**02**	**04**
	10.1 Define appeal of advertising.		
	10.2 State the importance of a good advertising appeal.		
	10.3 Describe various types of advertising appeal.		
	Total	**32**	**60**

DETAILED SYLLABUS (PRACTICAL)

Sl.	Experiment Name with procedure	Class (3 Period)	Marks (Continuous)
1	**CREATE A POSTER DESIGN FOR A RESTAURANT OPENING**	**02**	**03**
	1.1 Follow Occupational Safety & Health (OSH) practices.		

	1.2 Create & setup document.		
	1.3 Draw layout & key drawing (offset path, margin & guideline).		
	1.4 Add text, Photos, Image & Illustration.		
	1.5 Follow basic design guideline.		
	1.6 Follow job specification and sample copy.		
	1.7 Save as appropriate file format.		
	1.8 Clean & store tools & equipment.		
	1.9 Maintain the record of perform task.		
2	**CREATE A FLYER DESIGN FOR AN INSTITUTE OFFERING SHORT COURSE** 2.1 Follow Occupational Safety & Health (OSH) practices. 2.2 Create & setup document. 2.3 Draw layout & key drawing (offset path, margin & guideline) 2.4 Add text, Image & Illustration. 2.5 Follow basic design guideline. 2.6 Follow job specification and sample copy. 2.7 Save as appropriate file format. 2.8 Clean & store tools & equipment. 2.9 Maintain the record of perform task.	**01**	**02**
3	**CREATE A FESTOON DESIGN FOR OBSERVING A NATIONAL/INTERNTIONAL DAY** 3.1 Follow Occupational Safety & Health (OSH) practices. 3.2 Create & setup document. 3.3 Draw layout & key drawing (offset path, margin & guideline). 3.4 Add text & Illustration. 3.5 Follow basic design guideline. 3.6 Follow job specification and sample copy. 3.7 Save as appropriate file format. 3.8 Clean & store tools & equipment. 3.9 Maintain the record of perform task.	**01**	**02**
4	**CREATE A NEWSPAPER ADVERTISEMENT** 4.1 Follow Occupational Safety & Health (OSH) practices. 4.2 Create & setup document. 4.3 Draw layout & key drawing (offset path, margin & guideline). 4.4 Add text, logo, Image & Illustration. 4.5 Follow basic design guideline. 4.6 Follow job specification and sample copy. 4.7 Save as appropriate file format.	**02**	**03**

	4.8 Clean & store tools & equipment.		
	4.9 Maintain the record of perform task.		
5	**CREATE AN ADVERTISEMENT TO MAKE PUBLIC AWARENESS**	**02**	**02**
	5.1 Follow Occupational Safety & Health (OSH) practices.		
	5.2 Create & setup document.		
	5.3 Draw layout & key drawing (offset path, margin & guideline).		
	5.4 Add text, logo, Image & Illustration.		
	5.5 Follow basic design guideline.		
	5.6 Follow job specification and sample copy.		
	5.7 Save as appropriate file format.		
	5.8 Clean & store tools & equipment.		
	5.9 Maintain the record of perform task.		
6	**CREATE A WEB BANNER FOR NEW PRODUCT**	**01**	**02**
	6.1 Follow Occupational Safety & Health (OSH) practices.		
	6.2 Create & setup document.		
	6.3 Draw layout & key drawing (offset path, margin & guideline).		
	6.4 Add text, logo, Image & Illustration.		
	6.5 Follow basic design guideline.		
	6.6 Follow job specification and sample copy.		
	6.7 Save as appropriate file format.		
	6.8 Clean & store tools & equipment.		
	6.9 Maintain the record of perform task.		
7	**CREATE A PVC/PANAFLEX BACK-DROP BANNER DESIGN**	**01**	**03**
	7.1 Follow Occupational Safety & Health (OSH) practices.		
	7.2 Create & setup document.		
	7.3 Draw layout & key drawing (offset path, margin & guideline).		
	7.4 Add text, logo, Image & Illustration.		
	7.5 Follow basic design guideline.		
	7.6 Follow job specification and sample copy.		
	7.7 Save as appropriate file format.		
	7.8 Clean & store tools & equipment.		
	7.9 Maintain the record of perform task.		
8	**CREATE A SHOPPING BAG DESIGN FOR A COMMUNITY SHOP**	**02**	**02**
	8.1 Follow Occupational Safety & Health (OSH) practices.		
	8.2 Create & setup document.		
	8.3 Draw layout & key drawing (offset path, margin & guideline).		
	8.4 Add text, logo & Illustration.		

	8.5 Follow basic design guideline.		
	8.6 Follow job specification and sample copy.		
	8.7 Save as appropriate file format.		
	8.8 Clean & store tools & equipment.		
	8.9 Maintain the record of perform task.		
9	**CREATE A CORPORATE BROCHURE DESIGN**	**02**	**03**
	9.1 Follow Occupational Safety & Health (OSH) practices.		
	9.2 Create & setup document.		
	9.3 Draw layout & key drawing (offset path, margin & guideline).		
	9.4 Add text, logo, Image & Illustration.		
	9.5 Follow basic design guideline.		
	9.6 Follow job specification and sample copy.		
	9.7 Save as appropriate file format.		
	9.8 Clean & store tools & equipment.		
	9.9 Maintain the record of perform task.		
10	**CREATE A FOUR COLOR MAGAZINE COVER**	**02**	**03**
	10.1 Follow Occupational Safety & Health (OSH) practices.		
	10.2 Create & setup document.		
	10.3 Draw layout & key drawing (offset path, margin & guideline).		
	10.4 Add text, logo, Image & Illustration.		
	10.5 Follow basic design guideline.		
	10.6 Follow job specification and sample copy.		
	10.7 Save as appropriate file format.		
	10.8 Clean & store tools & equipment.		
	10.9 Maintain the record of perform task.		
	Total	**16**	**25**

NECESSARY RESOURCES (TOOLS, EQUIPMENT'S AND MACHINERY):

Sl	Item Name	Quantity
01	Computer	01 set
02	Scanner	01 set
03	Laser Printer	01 set
04	Color Printer	01 set
05	Digital Camera, SLR, DSLR	01 set
06	Lighting Table	01 set
07	Image setter	01 set
08	Digital Printing Press	01 set

Recommended Software:

Sl	Name	Quantity
01	Adobe Illustrator	As Necessary
02	Adobe Photoshop	As Necessary
03	Adobe In Design	As Necessary

RECOMMENDED BOOKS:

Sl	Book Name	Writer Name	Publisher Name & Edition
01	S.Y.B.A / S.Y.B.Com. ADVERTISING	Dr. R. R. Khan	Professor cum Director Institute of Distance and Open Learning, Mumbai
02	Advertising Procedure	Thomas Russel & W. Ronald Lane	Prentice Hall, 13th Edition
03	Creative Advertising	Thames & Hudson	Mario Pricken

WEBSITE REFERENCES:

Sl	Web Link	Remarks
01	https://archive.mu.ac.in/myweb_test/sybcom-avtg-eng.pdf	Search here
02	https://www.infobooks.org/pdfview/9225-introduction-an-advertising-bharathidasan-university/	Search here
03	https://www.infobooks.org/pdfview/9227-the-advertising-creative-process-access-manager/	Search here

SUBJECT CODE	SUBJECT NAME	PERIOD PER WEEK		CREDIT
29652	**Fabric Design**	T	P	C
		2	**3**	**3**

Rationale	Graphic Design Technology has great demand in every sphere of our life. Whatever we use in our daily life there must have some connections with design & printing. Fabric Design is one of the most usable area. It has demands in garments & textile industries. The subject will enable the diploma engineers to acquire knowledge on drawing instruments and their uses, basic concept of fabric, basic concept of pattern design, light and color phenomena, bleaching, dyeing & printing process on fabric, screen printing on textile and fabrics, fashion design, plain & satin weave design, regular mat design & sublimation print design and finishing stage of printed product. As a graphic design student should have the knowledge about those topics. That's why we have added this subject in this curriculum.
Learning Outcome (Theoretical)	**After undergoing the subject, students will be able to:** 1. Describe drawing instruments and their uses. 2. Explain basic concept of fabric. 3. Explain basic concept of pattern. 4. Describe the light and color phenomena. 5. Describe bleaching. 6. State dyeing & printing process on fabric. 7. Explain screen printing on textile and fabrics. 8. Describe regular mat design & sublimation print design. 9. State finishing stage of printed product.
Learning Outcome (Practical)	**After undergoing the subject, students will be able to:** 1. Draw design show light and shade effect. 2. Draw design for body of saree. 3. Draw design for a shirt . 4. Draw geometrical design mention the purpose. 5. Draw design for body of punjabi. 6. Enlarge a given design to the required size. 7. Perform color mixing using of color chart . 8. Apply block & batik on fabric . 9. Print on fabric by digital press. 10. Print on fabric by screen printing.

DETAILED SYLLABUS (THEORY)

Unit	Topics with Contents	Class (1 Period)	Final Marks
1	**DRAWING INSTRUMENTS AND THEIR USES** 1.1. List different instruments used for drawing. 1.2. Describe different instruments used for drawing. 1.3. Discuss about tracing paper with using. 1.4. State the causes of dirty drawing papers. 1.5. Explain the general rules to be obeyed during drawing. 1.6. Describe the effect of light and shade in a drawing.	**02**	**03**
2	**BASIC CONCEPT OF FABRIC** 2.1. Define Fabric. 2.2. Mention the classification of fabric manufacturing process. 2.3. Define Knitting. 2.4. Define Weaving. 2.5. Define Felting. 2.6. Define Yarn.	**01**	**03**
3	**BASIC CONCEPT OF PATTERN DESIGN** 3.1 State the importance of fabric design. 3.2 Describe design sources. 3.3 Explain the classification of fabric designs. 3.4 Define pattern design. 3.5 Mention different types of patterns. 3.6 Describe art pattern. 3.7 Discuss about Mandala Design and pattern	**02**	**03**
4	**LIGHT AND COLOR PHENOMENA** 4.1 Describe characteristics of light. 4.2 Explain the physical characteristics of color. 4.3 Describe about color vision. 4.4 Explain subtractive & additive color. 4.5 Discuss absorption and transmission of visible light.	**01**	**03**
5	**BLEACHING** 5.1 Define Bleaching. 5.2 Explain the process of Bleaching. 5.3 Describe the classification of bleaching. 5.4 Mention chemicals used in bleaching.	**02**	**02**
6	**DYEING & PRINTING PROCESS ON FABRIC** 6.1 Define Dyeing. 6.2 Mention the various printing process on fabrics. 6.3 Describe Roller Printing, Block Printing, Burnout, Batik, Inkjet Printing, Carpet Printing and Laser Jet Printing.	**01**	**02**

	6.4 Describe the drying process of the fabric printing.		

7	**SCREEN PRINTING ON TEXTILE AND FABRICS**
	7.1 List the textile and fabrics for screen printing.
	7.2 Describe the manual process of screen printing on textile
	   and fabrics.
	7.3 Explain the process of stencil making for screen printing.
	7.4 Describe the use of machine & equipment's used in Screen
	   printing.
	7.5 Describe Flat Screen Printing, Rotary screen Printing, Flock
	   printing, Glitters printing, Emboss Printing, 3D printing,
	   Crack printing, Plastic soul Printing, Reflective Printing,
	   Radium Printing, Hidensi Printing.
		02	03

8	**FASHION DESIGN, PLAIN & SATIN WEAVE DESIGN.** 8.1 Describe the trend of fashion. 8.2 Describe the importance of design in clothing. 8.3 Define basic cloth drawing. 8.4 Differentiate among men's wear, women's wear and kid's wear. 8.5 Describe the plain & satin weave design. 8.6 Explain the characteristics of plain & satin. 8.7 Describe Properties of Satin Fabric. 8.8 Discuss the advantage of satin weave.	02	02
9	**REGULAR MAT DESIGN & SUBLIMATION PRINT DESIGN** 9.1 Describe the mat design 9.2 Explain the characteristics of mat design 9.3 Describe type of mat materials. 9.4 Discuss the advantage of mat design. 9.5 Describe Sublimation Print Design. 9.6 Explain the characteristics Sublimation print design.	01	02
10	**FINISHING STAGE OF PRINTED PRODUCT** 10.1. Define the finished product. 10.2. Explain the importance of finishing product. 10.3. Describe the stiffening and sifters agent of fabric. 10.4. Describe the process of calendaring. 10.5. Explain the cloth drying system.	02	02
		16	25

DETAILED SYLLABUS (PRACTICAL)

Sl.	Experiment Name **procedure**	Class (3 Period)	Marks (Continuous)
1	**Draw at least 5 designs show light and shade effect** 1.1 Follow Occupational Safety & Health (OSH) practices. 1.2 Identify tools & equipment for free hand drawing.		

	1.3 Create layout & drawing. 1.4 Clean & store tools & equipment. 1.5 Maintain the record of perform task.	1	2
2	**Draw at least 5 designs for body of a saree** 2.1 Follow Occupational Safety & Health (OSH) practices. 2.2 Identify tools & equipment for free hand drawing. 2.3 Create free hand drawing. 2.4 Add color. 2.5 Clean & store tools & equipment. 2.6 Maintain the record of perform task.	1	2
3	**Draw at least 4 designs for a shirt** 3.1 Follow Occupational Safety & Health (OSH) practices. 3.2 Identify tools & equipment for free hand drawing. 3.3 Create free hand drawing. 3.4 Add color. 3.5 Clean & store tools & equipment. 3.6 Maintain the record of perform task.	2	3
4	**Draw at least 10 geometrical designs mention the purpose** 4.1 Follow Occupational Safety & Health (OSH) practices. 4.2 Identify tools & equipment for free hand drawing. 4.3 Create free hand drawing. 4.4 Add color. 4.5 Clean & store tools & equipment. 4.6 Maintain the record of perform task.	1	2
5	**Draw at least 5 designs for body of a Punjabi** 5.1 Follow Occupational Safety & Health (OSH) practices. 5.2 Identify tools & equipment for free hand drawing. 5.3 Create free hand drawing. 5.4 Add color. 5.5 Clean & store tools & equipment. 5.6 Maintain the record of perform task.	1	2
6	**Enlarge a given design to the required size** 6.1 Follow Occupational Safety & Health (OSH) practices. 6.2 Identify tools & equipment for free hand drawing. 6.3 Enlarge design by free hand. 6.4 Add color. 6.5 Clean & store tools & equipment.	2	3

	6.6 Maintain the record of perform task.		
7	**Perform color mixing using of color chart** 7.1 Follow Occupational Safety & Health (OSH) practices. 7.2 Identify tools & equipment for free hand drawing. 7.3 Draw circle. 7.4 Add color. 7.5 Clean & store tools & equipment. 7.6 Maintain the record of perform task.	2	3
8	**Apply Block & Batik on fabric** 8.1 Follow Occupational Safety & Health (OSH) practices. 8.2 Identify tools & equipment. 8.3 Prepare bed, fabric and color. 8.4 Apply color to the fabric. 8.5 Clean & store tools & equipment. 8.6 Maintain the record of perform task.	2	3
9	**Print on fabric by digital press** 9.1 Follow Occupational Safety & Health (OSH) practices. 9.2 Identify tools & equipment. 9.3 Prepare machine and fabric. 9.4 Perform print. 9.5 Clean & store tools & equipment. 9.6 Maintain the record of perform task.	2	3
10	**Print on fabric by screen printing** 10.1 Follow Occupational Safety & Health (OSH) practices. 10.2 Identify tools & equipment. 10.3 Prepare stencil. 10.4 Perform print. 10.5 Clean & store tools & equipment. 10.6 Maintain the record of perform task.	2	2
	Total	16	25

NECESSARY RESOURCES (TOOLS, EQUIPMENT'S AND MACHINERY):

Sl	Item Name	Quantity
01	Block	05 set
02	Digital fabric printing press	1 set
03	Sublimation press	1 set
04	Eye Glass / Magnifier	5 set

05	Brush (.2", .5" etc.)	5 set
06	Light Table	1 set
07	Hand gloves	25 set
08	Goggles	5 set
O9	Apron	25 set
10	Pencil, Marker	05 Set
11	Geometrical measurement box	5 set
12	Scissors, Anti cutter, Scale	5 set

RECOMMENDED BOOKS:

Sl	Book Name	Writer Name	Publisher Name & Edition
01	Handbook of print media	Helmut Kipphan	Heidelberg
02	Textile printing	Miles, Leslie W C	Society of dryers & colorest
03	Screen Printing (Complete Water Base Process.)	Robert Adam & Carol Robertson	Thames & Hudson ltd.
04	Layout	Abdul Mannan	BTEB

WEBSITE REFERENCES:

Sl	Web Link	Remarks
01	http://printwiki.org	Search here
02	"https://www.slideshare.net/search?utf8=%E2%9C%93&searchfrom=header&q=screen+printing"q=screen+printing	Search here
03	https://www.screenprinting.com/blogs/news/how-to-start-water-based-printing	

SUBJECT CODE	SUBJECT NAME	PERIOD PER WEEK		CREDIT
29653	**Design & Editing**	T	P	C
		2	**6**	**4**

Rationale	Students will gather knowledge about symbol & swatch, image trace & link, flatten transparency & create outline , preference, graph, color correction, channels, gradient color, modify selection, image resizing. As a graphic design student should have the knowledge about those topics. That's why we have added this subject in this curriculum.
Learning Outcome (Theoretical)	**After undergoing the subject, students will be able to:** 1. Describe symbol & swatch. 2. Discuss image trace & link. 3. Explain flatten transparency & create outline. 4. Explain preference. 5. State graph. 6. Describe color correction. 7. Discuss channels. 8. Explain gradient color. 9. State modify selection. 10. Describe image resizing.
Learning Outcome (Practical)	**After undergoing the subject, students will be able to:** 1. Create 3d logo. 2. Perform flyer design 3. Create typographical design. 4. Perform a design with pie & column chart. 5. Design booklet. 6. Create annual report design. 7. Design diary inner pages. 8. Perform diary cover design. 9. Design desk calendar. 10. Design wall calendar. 11. Resize image. 12. Create backdrop banner design. 13. Design web template. 14. Create social media banner design. 15. Perform color correction. 16. Perform color combination. 17. Perform superimpose design.

DETAILED SYLLABUS (THEORY)

Unit	Topics with Contents	Class (1 Period)	Final Marks
1	**SYMBOL & SWATCH** 1.1. Define symbol. 1.2. Discuss new symbol. 1.3. Describe symbol libraries. 1.4. Explain unlink process. 1.5. Define swatch. 1.6. Discuss process & spot color. 1.7. State swatch libraries.	03	07
2	**IMAGE TRACE & LINK** 2.1. Define image trace. 2.2. Describe image trace classification. 2.3. Explain outline image. 2.5. Define embed image. 2.6. State link, relink & update link.	03	07
3	**FLATTEN TRANSPARENCY & CREATE OUTLINE** 3.1. Define flatten transparency. 3.2. Define anti alias raster's. 3.3. Describe overprint. 3.4. Explain text create outline. 3.5. Describe raster & vector.	04	08
4	**PREFERENCE** 4.1. Describe preference. 4.2. Discuss keyboard increment. 4.3. State measurement units. 4.4. Explain undo & redo option. 4.5. Describe guide & grid color. 4.6. Discuss auto save option.	05	08
5	**GRAPH** 5.1. Define graph. 5.2. Explain types of graph. 5.3. State data sheet. 5.4. Describe graph style. 5.5. Discussgraph option. 5.6. Describe value axis.	05	07
6	**COLOR CORRECTION** 6.1 Define color correction. 6.2 Describe color correction processes. 6.3 Explain color curve. 6.4 Discuss selective color. 6.5 State hue & saturation.	03	04
7	**CHANNEL** 7.1 Define channel. 7.2 Describe tonal balance. 7.3 Explain spilt channel. 7.4 Discuss two/three color combination. 7.5 State duotone color. 7.6 Describe greyscale.	02	06

8	**GRADIENT COLOR** 8.1 Define gradient color. 8.2 Describe gradient editor. 8.3 Explain gradient types. 8.4 Discuss gradient mode. 8.5 State gradient opacity. 8.6 Describe new gradient color.	**03**	**05**
9	**MODIFY SELECTION** 9.1 Define feather. 9.2 Describe selection method of Image. 9.3 Explain grow & similar. 9.4 Discuss transform selection. 9.5 State expand & contract selection 9.6 Describe quick selection.	**02**	**04**
10	**IMAGE RESIZING** 10.1 Define resizing. 10.2 Describe canvas & image size. 10.3 Explain crop tools. 10.4 Discuss new Document. 10.5 State transformation. 10.6 Describe warp & perspective.	**02**	**04**
	Total	**32**	**60**

DETAILED SYLLABUS (PRACTICAL)

Sl.	Experiment Name with procedure	Class (3 Period)	Marks (Continuous)
1	**CREATE 3D LOGO** 1.1 Follow Occupational Safety & Health (OSH) practices. 1.2 Open illustrator software & setup document. 1.3 Create layout & drawing. 1.4 Insert elements. 1.5 Convert elements to 3D. 1.6 Follow specification & sample copy. 1.7 Save in appropriate file format. 1.8 Maintain the record of perform task.	2	3
2	**DESIGN A FLYER** 2.1 Follow Occupational Safety & Health (OSH) practices. 2.2 Open illustrator software & setup document. 2.3 Create layout & drawing. 2.4 Add line, shapes, illustration, text & color. 2.5 Follow design principles. 2.6 Follow specification & sample copy. 2.7 Save in appropriate file format. 2.8 Clean & store tools & equipment. 2.9 Maintain the record of perform task.	2	3
3	**CREATE TYPOGRAPHICAL DESIGN** 3.1Follow Occupational Safety & Health (OSH) practices. 3.2 Open illustrator software & setup document. 3.3 Create layout & drawing. 3.4 Add text.	2	3

	3.5 Follow design principles. 3.6 Follow specification & sample copy. 3.7 Save in appropriate file format. 3.8 Clean & store tools & equipment. 3.9 Maintain the record of perform task.		
4	**PERFORM A DESIGN WITH PIE & COLUMN CHART** 4.1 Follow Occupational Safety & Health (OSH) practices 4.2 Open illustrator software & setup document. 4.3 Create layout & drawing. 4.4 Add pie & column chart. 4.5 Follow design principles. 4.6 Follow specification & sample copy. 4.7 Save in appropriate file format. 4.8 Clean & store tools & equipment. 4.9 Maintain the record of perform task.	2	3
5	**DESIGN BOOKLET** 5.1 Follow Occupational Safety & Health (OSH) practices. 5.2 Open illustrator software & setup document. 5.3 Create layout & drawing. 5.4 Add text, image, logo, shapes & color. 5.5 Follow design principles. 5.6 Follow specification & sample copy. 5.7 Save in appropriate file format. 5.8 Clean & store tools & equipment. 5.9 Maintain the record of perform task.	2	3
6	**CREATE ANNUAL REPORT DESIGN** 6.1 Follow Occupational Safety & Health (OSH) practices. 6.2 Open illustrator software & setup document. 6.3 Create layout & drawing. 6.4 Add text, image, logo, illustration, shapes & color. 6.5 Maintain margin & setup page number. 6.6 Follow design principles. 6.7 Follow specification & sample copy. 6.8 Save in appropriate file format. 6.9 Clean & store tools & equipment. 6.10 Maintain the record of perform task.	2	3
7	**DESIGN DIARY INNER PAGES** 7.1 Follow Occupational Safety & Health (OSH) practices. 7.2 Open illustrator software & setup document. 7.3 Create layout & drawing. 7.4 Add text, illustration, shapes & color. 7.5 Follow design principles. 7.6 Follow specification & sample copy. 7.7 Save in appropriate file format. 7.8 Clean & store tools & equipment. 7.9 Maintain the record of perform task.	2	3
8	**PERFORM DIARY COVER DESIGN** 8.1 Follow Occupational Safety & Health (OSH) practices. 8.2 Open illustrator software & setup document. 8.3 Create layout & drawing. 8.4 Add text, image, logo, illustration, shapes & color. 8.5 Follow design principles. 8.6 Follow specification & sample copy.	2	3

	8.7 Save in appropriate file format.		
	8.8 Clean & store tools & equipment.		
	8.9 Maintain the record of perform task.		
9	**DESIGN DESK CALENDAR**	2	3
	9.1 Follow Occupational Safety & Health (OSH) practices.		
	9.2 Open illustrator software & setup document.		
	9.3 Create layout & drawing.		
	9.4 Add text, text wrap, image, logo, illustration, shapes & color.		
	9.5 Follow design principles.		
	9.6 Follow specification & sample copy.		
	9.7 Save in appropriate file format.		
	9.8 Clean & store tools & equipment.		
	9.9 Maintain the record of perform task.		
10	**DESIGN WALL CALENDAR**	2	3
	10.1 Follow Occupational Safety & Health (OSH) practices.		
	10.2 Open illustrator software & setup document.		
	10.3 Create layout & drawing.		
	10.4 Add text, image, logo, illustration, shapes & color.		
	10.5 Follow design principles.		
	10.6 Follow specification & sample copy.		
	10.7 Save in appropriate file format.		
	10.8 Clean & store tools & equipment.		
	10.9 Maintain the record of perform task.		
11	**RESIZE IMAGE**	2	3
	11.1 Follow Occupational Safety & Health (OSH) practices.		
	11.2 Open Photoshop software & setup document.		
	11.3 Open Image.		
	11.4 Use crop tool, new document, image size etc.		
	11.5 Maintain resolution.		
	11.6 Follow design principles.		
	11.7 Follow specification & sample copy.		
	11.8 Save in appropriate file format.		
12	**CREATE BACKDROP BANNER DESIGN**	2	3
	12.1 Follow Occupational Safety & Health (OSH) practices.		
	12.2 Open software & setup document.		
	12.3 Create layout & drawing.		
	12.4 Add text, image, logo, illustration, shapes & color.		
	12.5 Follow design principles.		
	12.6 Follow specification & sample copy.		
	12.7 Save in appropriate file format.		
	12.8 Clean & store tools & equipment.		
	12.9 Maintain the record of perform task.		
13	**DESIGN WEB TEMPLATE**	2	3
	13.1 Follow Occupational Safety & Health (OSH) practices.		
	13.2 Open Photoshop software & setup document.		
	13.3 Create layout & drawing.		
	13.4 Add text, image, signature & color.		
	13.5 Follow design principles.		
	13.6 Follow specification & sample copy.		
	13.7 Save in appropriate file format.		
	13.8 Clean & store tools & equipment.		
	13.9 Maintain the record of perform task.		

14	**CREATE SOCIAL MEDIA BANNER DESIGN** 14.1 Follow Occupational Safety & Health (OSH) practices 14.2 Open Photoshop software & setup document. 14.3 Create layout & drawing. 14.4 Add line, shapes, illustration, image, text & color. 14.5 Follow design principles. 14.6 Follow specification & sample copy. 14.7 Save in appropriate file format. 14.8 Clean & store tools & equipment. 14.9 Maintain the record of perform task.	2	3
15	**PERFORM COLOR CORRECTION** 15.1 Follow Occupational Safety & Health (OSH) practices. 15.2 Open Photoshop software & setup document. 15.3 Open Image. 15.4 Use color correction options. 15.5 Follow design principles. 15.6 Follow specification & sample copy. 15.7 Save in appropriate file format. 15.8 Clean & store tools & equipment. 15.9 Maintain the record of perform task.	2	3
16	**PERFORM COLOR COMBINATION** 16.1 Follow Occupational Safety & Health (OSH) practices. 16.2 Open Photoshop software & setup document. 16.3 Open Image. 16.4 Use color combination options. 16.5 Follow design principles. 16.6 Follow specification & sample copy. 16.7 Save in appropriate file format. 16.8 Clean & store tools & equipment. 16.9 Maintain the record of perform task.	1	2
17	**PERFORM SUPERIMPOSE DESIGN** 17.1 Follow Occupational Safety & Health (OSH) practices. 17.2 Open Photoshop software & setup document. 17.3 Open two or more Images. 17.4 Use masking options. 17.5 Maintain layer. 17.6 Follow design principles. 17.7 Follow specification & sample copy. 17.8 Save in appropriate file format. 17.9 Clean & store tools & equipment. 17.10 Maintain the record of perform task.	1	3
	Total	**32**	**50**

NECESSARY RESOURCES (TOOLS, EQUIPMENT'S AND MACHINERY):

SI	Item Name	Quantity
01	Computer	25 no's
02	Scanner	1 no's
03	Digital Camera	1 no's
04	Printer	1 no's

Recommended Software:

Sl	Name	Quantity
01	Adobe Illustrator	As Necessary
02	Adobe Photoshop	As Necessary
03	Adobe Acrobat	As Necessary
04	Bijoy	As Necessary
05	Avro	As Necessary

RECOMMENDED BOOKS:

Sl	Book Name	Writer Name	Publisher Name & Edition
01	Adobe Illustrator	Bappi Ashraf	GankoshPublication
02	Basic Graphic Design-1	Md. Arifur Rahman	Saba Publication (2019)
03	Adobe Manual		Adobe Inc.
04	Adobe Photoshop	Bappi Ashraf	GankoshPublication
05	Adobe Photoshop Classroom in a Book	Conrad Cavez	Adobe Press.

WEBSITE REFERENCES:

Sl	Web Link	Remarks
01	https://www.adobe.com/products/illustrator.html	Search here
02	https://en.wikipedia.org/wiki/Adobe_Illustrator	Search here
03	https://www.adobe.com/products/photoshop.html	Search here
04	https://en.wikipedia.org/wiki/Adobe_ Photoshop	Search here

Subject Code	Subject Name	Period per Week		Credit
		T	P	C
29654	Packaging Design -I	2	3	3

Rationale	Students will gather knowledge about packaging, layout of packaging design , design & illustration for packaging, marks, media & technique of packaging design, tools, equipment & machineries for packaging, wrapper & cartoon decorative materials, corrugation packaging, folding box & cartoon design, imposition technique, packaging and finishing. As a graphic design student should have the knowledge about those topics. That's why we have added this subject in this curriculum.
Learning Outcome (Theoretical)	**After undergoing the subject, students will be able to:** 1. Describe packaging. 2. Discuss layout of packaging design. 3. Explain design & illustration for packaging. 4. Describe marks, media & technique of packaging design. 5. State tools, equipment & machineries for packaging. 6. Describe wrapper & cartoon decorative materials. 7. Discuss corrugation packaging. 8. State folding box & cartoon design. 9. Explain imposition technique.
Learning Outcome (Practical)	**After undergoing the subject, students will be able to:** 1. Identify the tools and equipment for packaging design. 2. Identify the packaging Materials. 3. Prepare the layout for box and carton. 4. Perform layout for box and carton. 5. Prepare manual design for box and carton. 6. Prepare manual dummy for medicine box. 7. Prepare a design and carton for garments products. 8. Operate the laminating, glue and pasting machine. 9. Crease and cut the board with die cutting machine. 10. Prepare a design for various handling marks.

Detailed Syllabus (Theory)

Unit	Topics with Contents	Class (1 Period)	Final Marks
1	**PACKAGING** 1.1 Define Packaging. 1.2. Explain the role of packaging in Industrial Sector. 1.3 Describe the importance of packaging for goods marketing. 1.4. Explain the guidelines for retail packages. 1.5. Describe classification of packaging. 1.6. Explain the marketing factor of packaging. 1.8 Discuss brand perception of packaging.	3	6
2	**LAYOUT OF PACKAGING DESIGN** 2.1 Define layout. 2.2 Describe various stages of layout for packaging. 2.3 Discuss measurement units for drawing layout. 2.4 Describe different types of line in layout drawing. 2.5 List the element of layout to prepare packaging design. 2.6 Mention the necessity of layout for different sizes of packaging. 2.7 Relate between layout and design. 2.8 List the tools, equipment & raw material to make a packaging dummy.		
3	**DESIGN & ILLUSTRATION FOR PACKAGING** 3.1 Define packaging design. 3.2 Differentiate between packaging design & graphic design. 3.3 Explain the principles of packaging design. 3.4 Define illustration. 3.5 Describe the element of design. 3.6 Discuss the key elements of product packaging design. 3.7 Explain the importance of illustration in packaging. 3.8 Describe the software used in packaging design & illustration. 3.9 Explain various pattern & texture in packaging design. 3.10 Describe the principle of preparing different patterns in packaging design.	2	4
4	**MARKS, MEDIA & TECHNIQUE OF PACKAGING DESIGN** 4.1 Describe the various media for packaging design. 4.2 Explain different technique of packaging design. 4.3 List the name of equipment and accessories used in media and technique. 4.4 Describe the basic marks required for product shipment. 4.5 Define marks in packaging. 4.6 List the packaging symbol. 4.7 Explain hidden technical marks for print packaging.		
5	**TOOLS, EQUIPMENT & MACHINERIES FOR PACKAGING** 5.1 List the tools & equipment for hard packaging. 5.2 Mention the tools & equipment for soft packaging. 5.3 List the machineries used in packaging industry. 5.4 Describe about corrugation machine.		

	5.5 Explain gluing & sealing machine for packaging. 5.6 Explain lamination machine. 5.7 Explain pouch making machine. 5.8 Discuss about die cutting machine.			
6	**WRAPPER & CARTOON DECORATIVE MATERIALS** 6.1 Define film. 6.2 Discuss different types of film. 6.3 Define glitters. 6.4 Discuss about foil in print packaging. 6.6 Describe different types of lamination materials. 6.7 Explain various varnishing materials.		
7	**CORRUGATION PACKAGING** 7.1 Define corrugation board. 7.2 Classify the corrugation board. 7.3 Describe different types of liner. 7.4 Describe liner pasting process. 7.4 Define flute count. 7.5 Explain importance of flute count of corrugation board. 7.6 Describe the corrugation board making process.		
8	**FOLDING BOX & CARTOON DESIGN** 8.1 Define folding box. 8.2 Describe the folding box making process. 8.3 Describe box styles. 8.4 Describe different part of a hard packet or carton. 8.5 Explain different factors which are used in manufacturing of folding cartons. 8.6 Discuss various kinds of carton.	3	4
9	**IMPOSITION TECHNIQUE** 9.1 Define imposition. 9.2 Describe different types of imposition process. 9.3 Explain the paste-up technique. 9.4 State the cropping technique. 9.5 Define ups.	3	6
10	**PACKAGING AND FINISHING** 10.1 Define die cut. 10.2 Describe cutting & creasing process. 10.3 Explain texture varnishing process. 10.4 Define eyelet. 10.5 Describe the eyeleting process. 10.6 Describe the hot stamping process. 10.7 Explain the distribution or delivery factors of packaging.	3	6
	Total	32	60

Detailed Syllabus (Practical)

Sl.	Experiment name with procedure	Class (3 Period)	Continuous Marks
1	**IDENTIFY TOOLS AND EQUIPMENT FOR PACKAGING DESIGN** 1.1 Practice the OSH measures. 1.2 List the tools and equipment used in packaging design. 1.3 Recognize the specific materials. 1.4 Maintain and record the job.	2	3
2	**IDENTIFY THE PACKAGING MATERIALS** 2.1 Practice the OSH measures. 2.2 List the packaging raw materials. 2.3 Recognize the specific materials. 2.4 Maintain and record the job.	2	3
3	**PERFORM LAYOUT FOR BOX AND CARTON** 3.1 Practice the OSH measures. 3.2 Arrange the materials to draw the layout. 3.3 Draw the layout on the flat sheet. 3.4 Maintain and record the job.	2	3
4	**PREPARE MANUAL DESIGN FOR BOX AND CARTON** 4.1 Practice the OSH measures. 4.2 Make a design using computer. 4.3 Finalize the using the hidden marks. 4.4 Maintain and record the job.	2	3
5	**PREPARE MANUAL DUMMY FOR MEDICINE BOX** 5.1 Practice the OSH measures. 5.2 Print on the sheet. 5.3 Cut the design. 5.4 Maintain and record the job.	2	2
6	**PREPARE THE DUMMY FOR BABY FOOD PACKAGING** 6.1 Practice the OSH measures. 6.2 Print on the sheet using edible ink. 6.3 Cut the design. 6.4 Maintain and record the job.	1	2
7	**PREPARE A DESIGN AND CARTOON FOR GARMENTS PRODUCTS** 7.1 Practice the OSH measures. 7.2 Arrange necessary tools. 7.3 Draw the design for garment product packaging. 7.4 Make the carton according to design. 7.5 Maintain and record the job.	2	3

8	**OPERATE THE LAMINATING, GLUE AND PASTING MACHINE**	1	2
	8.1 Practice the OSH measures.		
	8.2 Clean and prepare the machine.		
	8.3 Make ready the machine.		
	8.4 Operate the machine.		
	8.5 Maintain and record the job.		
9	**CREASE AND CUT THE BOARD WITH DIE CUTTING MACHINE**	1	2
	9.1 Practice the OSH measures.		
	9.2 Make the die according to the design.		
	9.3 Lock the die onto the machine according to measurement.		
	9.4 Feed the board to crease and cut as per requirement.		
	9.5 Maintain and record the job.		
10	**PREPARE A DESIGN FOR VARIOUS HANDLING MARKS**	1	2
	10.1 Practice the OSH measures.		
	10.2 Make the design		
	10.3 Maintain and record the job.		
		16	25

Necessary Resources (materials, tools & equipments):

Sl.	Item Name	Quantity
01	Packaging Films	2 roll
02	Packaging foils (multi color)	5 roll
03	Eye Glass / Magnifier	5 set
04	Brush (.2", .5" etc.)	5 set
05	Light Table	1 set
06	Pencil, Marker	05 Set
07	Geometrical measurement box	5 set
08	Scissors, Anti cutter, Scale	5 set
09	Paper (Offset, Newsprint, Art)	10 Ream (Demy)
10	Board (Art, Ivory, Duplex)	10 Ream (Demy)
11	Various types of binding materials	5 set
12	Various types of packaging materials	5 set
13	Pen	10 pc
14	Pencil	10 pc
15	Shading sheet	5 packet
16	Airbrush	10 pc
17	Poster color	5 set
18	Water color	5 set
19	Oil paint	5 set

Recommended Books:

Sl	Book Name	Writer Name	Publisher Name & Edition
01	The packaging Designers book.	George Wybenga	John Wily & sons, Inc., Forth Edition
02	Principal of packaging design	Matthias Noback	Lean Publishing

Website References:

Sl	Web Link	Remarks
01	http://printwiki.org	
02	https://ssg.stage.exozet.com/wp-content/uploads/2016/08/principles-of-package-design.pdf	
03	https://www.diva-portal.org/smash/get/diva2:1258080/FULLTEXT01.pdf	

SUBJECT CODE	SUBJECT NAME	PERIOD PER WEEK			CREDIT
		T	P		C
29655	**Graphic Design- III**	2	3		3

Rationale	Students will gather knowledge about image fundamental, layer, separate image from background, color management, painting, retouching & repairing, mask & contraction, corrective filtering, text & shapes, graphics for the web. As a graphic design student should have the knowledge about those topics. That's why we have added this subject in this curriculum.
Learning Outcome (Theoretical)	**After undergoing the subject, students will be able to:** 1. Describe image fundamental 2. Describe layer 3. State separate image from background 4. Describe color management 5. Explain painting 6. Explain retouching & repairing 7. Describe mask & contraction 8. Explain corrective filtering 9. Describe text & shapes 10. Describe graphics for the web
Learning Outcome (Practical)	**After undergoing the subject, students will be able to:** 1. Install adobe Photoshop software & Identify the Interface 2. Perform layer related task 3. Separate Image from Background 4. Perform channel related task 5. Perform customization of Layer Mask 6. Perform color correction 7. Apply filter 8. Retouch & restoration Image 9. Create a clipping Path 10. Create a hair Mask

DETAILED SYLLABUS (THEORY)

Unit	Topics with Contents	Class (1 Period)	Final Marks
1	**IMAGE FUNDAMENTAL** 1.1 Define digital Image, resolution, pixel & mega pixel 1.2 Explain the resolution of screen images. 1.3 Discuss file format. 1.4 Discuss resampling and cropping. 1.5 Describe open, duplicate and save images.	3	6
2	**LAYER** 2.1 Discuss layers. 2.2 Describe selecting layer. 2.3 Explain creating layer. 2.3 State moving, linking, aligning layers. 2.4 Discuss applying transformations. 2.5 Explain layer masking. 2.6 Describe layer style.	3	6
3	**SEPARATE IMAGE FROM BACKGROUND** 3.1 Discuss background. 3.2 State magic wand tools. 3.3 State lasso tools. 3.4 Describe pen tools & path. 3.5 Describe save path, work path & Clipping path.	3	6
4	**COLOR MANAGEMENT** 4.1 Describe color selection and editing. 4.2 Discuss different color mode. 4.3 State methods of color correction. 4.4 Describe color channels. 4.5 Discuss color channel effects.	3	8
5	**PAINTING** 5.1 Explain paint and edit tools. 5.2 Describe brush shape and opacity. 5.3 Explain brush modes. 5.4 Describe brush dynamics. 5.5 Describe uses of different brush. 5.6 Describe the procedure to make a new brush.	3	6
6	**RETOUCHING & REPAIRING** 6.1 Describe cloning image element. 6.2 Discuss repeating patterns brush. 6.3 Explain history palate. 6.4 State healing & spot healing brush. 6.5 Explain patch tools.	3	4

7	**MASK & CONTRACTION** 7.1 Describe selection using mask. 7.2 Discuss painting and editing inside selection. 7.3 Describe working in quick mask mode. 7.4 Explain generating mask automatically. 7.5 Discuss creating independent mask channel. 7.6 Describe building a mask from an image.	3	7
8	**FILTER EFFECT** 8.1 Discuss filter. 8.2 Interpret heightening focus and contrast. 8.3 Describe blurring and image. 8.4 Explain color noise factors. 8.5 Discuss spot & scratches. 8.6 Explain filter gallery. 8.7 Discuss unsharp mask. 8.8 Describe 3D text and object.	5	8
9	**TEXT & SHAPES** 9.1 Explain the necessity of text editing and manipulation. 9.2 Describe vertical and horizontal type arrangement. 9.3 Describe text form aligns. 9.4 Discuss the process to edit type as shape. 9.5 Discuss text as an art. 9.6 State drawing shapes and shape attributes. 9.7 Describe adding, modifying and saving effects.	3	4
10	**GRAPHICS FOR THE WEB** 10.1 Describe the rules of web imagery. 10.2 Explain export image. 10.3 Describe the Slice tools. 10.4 Explain saving JPG, PNG, GIF and SVG images. 10.5 Discuss preparing and saving GIF and SVG images.	3	5
	Total	**32**	**60**

DETAILED SYLLABUS (PRACTICAL)

Sl.	Experiment Name with procedure	Class (3 Period)	Marks (Continuous)
1	**IDENTIFY THE INTERFACE OF PHOTOSHOP** 1.1 Follow Occupational Safety & Health (OSH) practices. 1.2 Install Adobe Photoshop software. 1.3 Create & Setup Document. 1.4 Identify the Interface. 1.5 Clean & store tools & equipment. 1.6 Maintain the record of perform task.	1	2
2	**WORK WITH LAYER**	2	3

	2.1 Follow Occupational Safety & Health (OSH) practices. 2.2 Create & Select Layer. 2.3 Create New & Duplicate layer. 2.4 Apply Link /Unlink. 2.5 Apply active /inactive. 2.6 Marge layer. 2.4 Flatten Image. 2.5 Apply layer style. 2.6 Apply blending option. 2.7 Save as appropriate file format. 2.8 Clean & store tools & equipment. 2.9 Maintain the record of perform task.		
3	**SEPARATE IMAGE FROM BACKGROUND** 3.1 Follow Occupational Safety & Health (OSH) practices. 3.2 Create a path using pen tool. 3.3 Identify edge & Pixel. 3.4 Select save & Clipping Path. 3.5 Copy & paste selected image. 3.6 Follow job specification and sample copy. 3.7 Save as appropriate file format. 3.8 Clean & store tools & equipment. 3.9 Maintain the record of perform task.	2	2
4	**WORK WITH CHANNEL** 4.1 Follow Occupational Safety & Health (OSH) practices. 4.2 Create & setup document. 4.3 Apply color channel. 4.4 Separate color & adjust color tonal balance. 4.5 Convert Multi Color to duotone/ mono color. 4.6 Follow job specification and sample copy. 4.7 Save as appropriate file format. 4.8 Clean & store tools & equipment. 4.9 Maintain the record of perform task.	1	2
5	**PREPARE LAYER MASK** 5.1 Follow Occupational Safety & Health (OSH) practices. 5.2 Create & setup document. 5.3 Apply add layer mask. 5.4 Create superimpose between one/ more layers. 5.5 Follow basic design guideline. 5.6 Follow job specification and sample copy. 5.7 Save as appropriate file format. 5.8 Clean & store tools & equipment. 5.9 Maintain the record of perform task.	2	3
6	**PERFORM COLOR CORRECTION** 6.1 Follow Occupational Safety & Health (OSH) practices. 6.2 Create & setup document. 6.4 Add image & Illustration. 6.4 Apply curve, level, selective, color, hue & saturation, auto	2	3

	tone color correction process.		
	6.5 Follow basic design guideline.		
	6.6 Follow job specification and sample copy.		
	6.7 Save as appropriate file format.		
	6.8 Clean, store tools & equipment.		
	6.9 Maintain the record of perform task.		
7	**APPLY FILTER** 7.1 Follow Occupational Safety & Health (OSH) practices. 7.2 Create & setup document. 7.3 Add text, logo, Image & Illustration. 7.4 Follow basic design guideline. 7.5 Follow job specification and sample copy. 7.6 Save as appropriate file format. 7.7 Clean & store tools & equipment. 7.8 Maintain the record of perform task.	1	2
8	**RETOUCH & RESTORATION IMAGE** 8.1 Follow Occupational Safety & Health (OSH) practices. 8.2 Open an old Image. 8.3 Use various retouch tools. 8.4 Follow basic design guideline. 8.5 Save as appropriate file format. 8.6 Clean & store tools & equipment. 8.7 Maintain the record of perform task.	2	2
9	**CREATE A CLIPPING PATH** 9.1 Follow Occupational Safety & Health (OSH) practices. 9.2 Open an image. 9.3 Use pen tool. 9.4 Create path & save path. 9.5 Identify path selection, Stroke Path & clipping path. 9.6 Follow basic design guideline. 9.7 Save as appropriate file format. 9.8 Clean & store tools & equipment. 9.9 Maintain the record of perform task.	1	3
10	**CREATE A HAIR MASK** 10.1 Follow Occupational Safety & Health (OSH) practices. 10.2 Import a digital model image. 10.3 Use refine edge process. 10.4 Apply background eraser tools. 10.5 Follow basic design guideline. 10.6 Follow job specification and sample copy. 10.7 Save as appropriate file format. 10.8 Clean & store tools & equipment. 10.9 Maintain the record of perform task.	2	3
	Total	**16**	**25**

NECESSARY RESOURCES (TOOLS, EQUIPMENT'S AND MACHINERY):

Sl	Item Name	Quantity
01	Computer	25 no's
02	Scanner	1 no's
03	Digital Camera	1 no's
04	Printer	1 no's

Recommended Software:

Sl	Name	Quantity
01	Adobe Photoshop	As Necessary
02	Adobe Acrobat	As Necessary
03	Bijoy	As Necessary
04	Avro	As Necessary

RECOMMENDED BOOKS:

Sl	Book Name	Writer Name	Publisher Name & Edition
01	Adobe Photoshop	Bappi Ashraf	Gankosh Publication
02	Adobe Photoshop Classroom in a Book	Conrad cavez	Adobe Press.

WEBSITE REFERENCES:

Sl	Web Link	Remarks
01	https://www.adobe.com/products/photoshop.html	Search here
02	https://en.wikipedia.org/wiki/Adobe_ Photoshop	Search here