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

6TH SEMESTER
(Effective from 2022-2023 Academic Sessions)

DIPLOMA IN ENGINEERING CURRICULUM
COURSE STRUCTURE
(PROBIDHAN-2022)
TECHNOLOGY NAME: GRAPHIC DESIGN TECHNOLOGY (96)
(6th 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	25851	Principle of Marketing	2		2	40	60	100	-	-	-	100
2	29561	Printing Costing & Estimating	2	3	3	40	60	100	25	25	50	150
3	29661	Desktop Publishing	2	6	4	40	60	100	50	50	100	200
4	29662	Web Design & Development	2	3	3	40	60	100	25	25	50	150
5	29663	Graphic Design-IV	2	3	3	40	60	100	25	25	50	150
6	29664	Image Manipulation	1	3	2	20	30	50	25	25	50	100
7	29665	Graphic Professional Practice-I		6	2	-	-	-	50	50	100	100
		Total	11	24	19	220	330	550	200	200	400	950

Subject Code	Subject Name	Period per Week		Credit
25851	**Principles of Marketing**	T	P	C
		2	**0**	**2**

Rationale	This subject scrutinizes the business function of Marketing. Textile students need to learn identifying the proper target market and decide upon appropriate products, services, and programs to serve these markets. Moreover, students need to know how marketers deliver value in satisfying customer needs and wants. This subject will cover areas include fundaments of marketing, branding, consumer behavior, marketing mixes, promotion, marketing channel, international marketing, online marketing and implementation of ethics will benefit the students to gain an elementary scenario of marketing knowledge.
Learning Outcome (Theoretical)	After undergoing the subject, students will be able to: 1. Describe marketing and marketing function. 2. Distinguish between sales and marketing 3. Interpret significance of marketing in own filed. 4. Explore opportunities of international marketing 5. Analyze marketing theories and marketing mix elements for product promotion. 6. Solve the complexity arises from market environment. 7. State classification of products marketing 8. State distribution channels 9. Explain implementation procedure of market segmentation, targeting and positioning strategies in product marketing. 10. Interpret pricing tactics to get competitive advantages. 11. Analyze branding and branding elements 12. Explain ethical marketing and its significance

Detailed Syllabus (Theory)

Unit	Topics with Contents	Class (1 Period)	Final Marks
1	**INTRODUCTION TO MARKETING** 1.1 Define marketing 1.2 Explain functions of marketing 1.3 Differentiate between sales and marketing 1.4 Describe marketing prospects on the context of 4th industrial revolution 1.5 Discuss marketing importance on apparel industry.	4	**6**
2	**MARKETING THEORIES AND STRATEGIES** 2.1. Explain core concept of marketing 2.2. Describe basic strategies and SWOT analysis of marketing 2.3. Define marketing mixes 2.4. Mention 7Ps of marketing 2.5. Compare between 4Cs and 4Ps of marketing	4	**7**
3	**MARKET ENVIORNMENT AND INTERNATIONAL MARKTING** 3.1 Describe market environment 3.2 Discuss micro environment and macro environment. 3.3 List the influential factors of market environment related with own industrial field 3.4 Define international marketing 3.5 Describe international market entry process 3.6 Classify international marketing	3	**7**
4	**PRODUCT AND SERVICE MARKETING** 4.1. Define product 4.2. Discuss good and service 4.2. Explain product life cycle 4.3. Classify product levels 4.5 Classify service marketing 4.6 Distinguish between goods and service	3	**7**
5	**DISTRIBUTION STRATEGIES** 5.1. Define distribution 5.2. State the necessity of distribution in marketing 5.3. Illustrate types of distribution channel	2	**4**
6	**SEGMENTATION, TARGETING AND POSITIONING METHODS** 6.1. Discuss market segmentation 6.2 Explain bases for consumer market segmentation	4	**7**

	6.3 Define market targeting 6.4 Describe strategies of targeting 6.5 Define positioning, repositioning and de-positioning			
7	**ESSENTIALS OF PROMOTION AND PRICING** 7.1 Define promotion 7.2 State fundaments of promotion 7.3 Relate managing customer relationships 7.4 Define price 7.5 Outline new product pricing strategies 7.6 Compare price adjustments with competitors	4	**7**
8	**FUNDAMENTALS OF BRANDING** 8.1 Define branding 8.2 List branding elements 8.3 State necessity of branding 8.4 Mention the steps of brand making process	2	**4**
9	**CONSUMER BEHAVIOUR** 9.1 Define consumer behavior 9.2 Outline stages of the buying process 9.3 Illustrate importance of studying consumer behavior 9.4 Mention the scope of consumer behavior area	2	**4**
10	**ONLINE AND ETHICAL MARKETING** 10.1 Define marketing ethics 10.2 Mention policies of marketing ethics 10.3 State the practice of ethics on virtual market. 10.4 Describe significance of the ethical practices on social media 10.4 Discuss Corporate Social Responsibility (CSR) 10.5 Discuss the consequence of green marketing	4	**7**
	Total	**32**	**60**

Recommended Books:

SL	Book Name	Writer Name	Publisher Name & Edition
1.	Principles of Marketing	Gray Armstrong/ Philip Kotler	Prentice Hall, NJ,USA 17th Edition

| 2. | Marketing Management | Rajan Saxsena | Tata McGraw-Hill Education, 1st Edition, 2005 |

SUBJECT CODE	SUBJECT NAME	PERIOD PER WEEK		CREDIT
29561	**PRINTING COSTING & ESTIMITING**	**T**	**P**	C
		2	**3**	**3**

Rationale	Students will gather knowledge about the function of costing and estimating, cost estimating method, procurement process, technical background of an estimator, stock/media/trims & accessories in printing, estimation of text works, estimation of various printing, routine work of estimating, printing ink, materials wastage allowance and print finishing work. As a printing and 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. Explain costing and estimating 2. Illustrate cost estimating method 3. Explain procurement process 4. Explain technical background of an printers estimator 5. Interpret stock/media/trims & accessories in printing 6. Explain estimation of text works 7. Examine estimation of various printing 8. Analyze routine work of estimating 9. Explain printing ink calculation 10. Elucidate materials wastage allowance and post press work
Learning Outcome (Practical)	**After undergoing the subject, students will be able to:** 1. Measure stock/ media GSM from given sample. 2. Calculate design, art and copy preparation cost. (design, positive & plate) 3. Calculate paper weight (use British & metric process). 4. Calculate number sheets/forma required for a book. (size, page & quantity according to client specification) 5. Calculate ink for particular jobs. 6. Calculate impression cost for different printing machines. 7. Determine the cutting duration of finish printed products. 8. Estimate casting off based on specimen page. 9. Calculate the consumption of paper & board in kg or pound required for speciphic job in web offset printing. (size, page & quantity according to client specification 10. Estimate the total cost required for printing calendar four colors. (size, page & quantity according to client specification)

DETAILED SYLLABUS (THEORY)

Unit	Topics with Contents	Class (1 Period)	Final Marks
1	**Costing and estimating** 1.1 Define Cost Estimation 1.2 Classify Cost. 1.3 Define Job & Marginal costing. 1.4 Describe the purposes of Estimating. 1.5 State the importance of Estimating. 1.6 Differentiate between Costing & Estimating. 1.7 Define quotation. 1.8 Describe Depreciation Cost. 1.9 Define Unit Cost. 1.10 State cost analysis and estimating using software.	02	06
2	**Cost Estimating Method** 2.1 Describe method of Costing. 2.2 Describe the procedure of Estimating. 2.3 Define budgeted hourly rates. 2.4 Describe Production Cost and Overhead Cost. 2.5 Describe considering factors of Estimating. 2.6 Define Activity based costing and Job Costing. 2.7 State Top-down & Bottom-up estimating and Vendor bid analysis. 2.8 Discuss the calculation method of the variable cost per unit. 2.9 Explain standard and market-friendly margin of profit. 2.10 Describe a price list of cost estimation.	04	06
3	**Procurement process** 3.1 Define PPR & PPA. 3.2 Describe the steps of procurement. 3.3 Explain the procurement methods as per PPR 2008. 3.4 Define Work Order Sheet & Job Sheet. 3.5 Define customer price. 3.6 Differentiate between quotation and tender. 3.7 Describe the relation of quotation and tender with cost estimating. 3.8 Explain tender bidding and quoting process. 3.9 State Bangladesh Public Procurement Authority (BPPA).	04	06
4	**Technical background of an Estimator** 4.1 Describe the Role of an Estimator. 4.2 Discuss importance of accurate estimating. 4.3 State time limitation for a particular printing job. 4.4 Describe the procedure of selection the printing press and equipment for particular printing job. 4.5 Explain the different printing process and production records. 4.6 State fixed cost, variable cost and BPIFs costing systems. 4.7 Explain the customer service system.	05	06

5	**Stock/Media/Trims & accessories in printing**	**05**	**09**
	5.1 Explain the standard size of Stock/Media/Trims accessories in printing.		
	5.2 Explain GSM.		
	5.3 Describe denier yearn.		
	5.4 State the characteristic of international paper size.		
	5.5 Explain the factors to determine the sizes of Stock/Media/Trims & accessories.		
	5.6 State the weight measurement theory of Stock/Media/Trims & accessories.		
	5.7 Discuss imposition technique.		
	5.8 Define forma & signature.		
6	**Estimation of text works**	**02**	**06**
	6.1 Define casting off, copy fitting, casting up and operational times.		
	6.2 State the procedure to calculate character per line and page.		
	6.3 Describe page size, number of forma and sheet per book.		
	6.4 Define periodical calculation.		
	6.5 Describe the processing charge of single forma and single color.		
	6.6 Describe the printing charge of a forma per thousand and color.		
	6.7 Describe the process for calculating operational time of plate exposer & plate processor for preparing image carrier.		
7	**Estimation of Various Printing**	**03**	**06**
	7.1 State estimating process of digital print products.		
	7.2 Explain estimating process of offset printing goods.		
	7.3 Describe estimating process of screen print label & fabric.		
	7.4 Discuss estimating process of RFID & thermal printing label.		
	7.5 Describe estimating process of narrow fabric & leather patch.		
	7.6 Explain estimating process of poly packaging in flexo process.		
	7.7 Elucidate estimating process of poly packaging in gravure process.		
	7.8 Explain estimating process of woven label.		
8	**Routine work of estimating**	**03**	**05**
	8.1 Explain full job description of an estimator.		
	8.2 Describe working method of an estimator.		
	8.3 Explain half sheet work, Sheet work and Work & tumble work.		
	8.4 Differentiate between various working imposition methods.		
	8.5 List the materials used in pre-press, press & post press cost estimating.		
	8.6 Explain the query of standard market price of different raw materials.		
9	**Printing ink Calculation**	**02**	**05**
	9.1 Define ink coverage.		
	9.2 Explain ink calculation theory of different printing process.		
	9.3 State factors to determine ink coverage and ink covering power.		
	9.4 Describe color of ink with nature.		
10	**Materials wastage allowance and post press work**	**02**	**05**
	10.1 Define allowance for paper wastage.		
	10.2 Define ink wastage.		
	10.3 Define wastage of process works.		
	10.4 Define post press work.		
	10.5 Describe the manual procedure of post press work.		
	10.6 Explain the auto procedure of post press work.		
	10.7 Define commercial binding.		

	10.8 Explain the effect of binding on cost estimating.		
	Total	**32**	**60**

DETAILED SYLLABUS (PRACTICAL)

Sl.	Experiment Name	Class (3 Period)	Marks (Continuous)
1	**MEASURE STOCK/ MEDIA GSM FROM GIVEN SAMPLE.** 1.1 Follow Occupational Safety & Health (OSH) practices. 1.2 Cut the stock/ media. 1.3 Prepare the weight machine. 1.4 Measure the stock/ media. 1.5 Calculate GSM. 1.6 Clean & store tools & equipment. 1.7 Save as appropriate file format. 1.8 Maintain the record of perform task.	1	3
2	**CALCULATE DESIGN, ART AND COPY PREPARATION COST. (DESIGN, POSITIVE & PLATE)** 2.1 Follow Occupational Safety & Health (OSH) practices. 2.2 Identify size, page & color. 2.3 Calculate design, positive, negative & plate costing. 2.4 Clean & store tools & equipment. 2.5 Maintain the record of perform task.	1	2
3	**CALCULATE PAPER WEIGHT (USE BRITISH & METRIC PROCESS).** 3.1 Follow Occupational Safety & Health (OSH) practices. 3.2 Identify size, GSM & quantity. 3.3 Calculate paper weight (use British & Metric process). 3.4 Clean & store tools & equipment. 3.5 Maintain the record of perform task.	1	2
4	**CALCULATE NUMBER SHEETS/FORMA REQUIRED FOR BOOK/MAGAZINE/ BOOKLET/ PAMPHLET. (SIZE, PAGE & QUANTITY ACCORDING TO CLIENT SPECIFICATION)** 4.1 Follow Occupational Safety & Health (OSH) practices. 4.2 Identify size, page & quantity. 4.3 Find out number of pages from a sheet. 4.4 Calculate total sheet/ ream. 4.5 Clean & store tools & equipment. 4.6 Maintain the record of perform task.	2	3
5	**CALCULATE INK FOR PARTICULAR JOBS.** 5.1 Follow Occupational Safety & Health (OSH) practices. 5.2 Identify size, page, quantity & coverage. 5.3 Calculate required ink. 5.5 Clean & store tools & equipment. 5.6 Maintain the record of perform task.	1	2
6	**CALCULATE IMPRESSION COST FOR DIFFERENT PRINTING**	2	2

	MACHINES. 6.1 Follow Occupational Safety & Health (OSH) practices. 6.2 Calculate total impression. 6.3 Calculate impression cost. 6.4 Clean & store tools & equipment. 6.5 Maintain the record of perform task.		
7	**DETERMINE THE CUTTING DURATION OF FINISH PRINTED PRODUCTS.** 7.1 Follow Occupational Safety & Health (OSH) practices. 7.2 Identify paper thickness. 7.3 Calculate sheet per pile. 7.4 Calculate pile quantity. 7.5 Calculate cutting duration of paper & board. 7.6 Clean & store tools & equipment. 7.7 Maintain the record of perform task.	2	2
8	**ESTIMATE CASTING OFF BASED ON SPECIMAN PAGE.** 8.1 Follow Occupational Safety & Health (OSH) practices. 8.2 Calculate total man scripts character. 8.3 Calculate total character per line. 8.4 Calculate total line per page. 8.5 Calculate total page. 8.6 Clean & store tools & equipment. 8.7 Maintain the record of perform task.	2	3
9	**CALCULATE THE CONSUMTION OF PAPER & BOARD IN KG OR POUND REQUIRED FOR SPECIPHIC JOB IN WEB OFFSET PRINTING. (SIZE, PAGE & QUANTITY ACCORDING TO CLIENT SPECIFICATION)** 9.1 Follow Occupational Safety & Health (OSH) practices. 9.2 Calculate web width. 9.3 Calculate page per cut off. 9.4 Calculate total weight. 9.5 Clean & store tools & equipment. 9.6 Maintain the record of perform task.	2	3
10	**ESTIMATE THE TOTAL COST REQUIRED FOR PRINTING CALENDAR FOUR COLORS. (SIZE, PAGE & QUANTITY ACCORDING TO CLIENT SPECIFICATION)** 10.1 Follow Occupational Safety & Health (OSH) practices. 10.2 Calculate paper & board costing. 10.3 Calculate design, output & plate costing. 10.4 Calculate printing costing. 10.5 Calculate finishing costing. 10.6 Clean & store tools & equipment. 10.7 Maintain the record of perform task.	2	3
	Total	**16**	**25**

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

Sl	Item Name	Quantity
01	Paper cutter	5 set
02	Digital weight meter	5 set
03	Eye Glass / Magnifier	5 set
04	Light Table	1 set
05	Hand gloves	25 set
06	Goggles	5 set
07	Apron	25 set
08	Pencil, Marker	05 Set
O9	Geometrical measurement box	5 set
10	Scissors, Anti cutter, Scale	5 set

RECOMMENDED BOOKS:

Sl	Book Name	Writer Name	Publisher Name & Edition
01	Costing and Estimating-3	Md. Eqramul Majid	BTEB
02	Printing Estimating	Philip k. Ruggles	PIA/ GATF Press
03	Printer's Costing & Estimating	B.D. Mendiratta	Arihant Prakashan Pvt. Limited

WEBSITE REFERENCES:

Sl	Web Link	Remarks
01	https://www.academia.edu/33368162/Cost_Estimating_for_Commercial_Digital_Printing	Search here
02	https://openlibrary.org/books/OL23164439M/Printing_estimating	Search here

SUBJECT CODE	SUBJECT NAME	PERIOD PER WEEK			CREDIT
		T	P		C
29661	**DESKTOP PUBLISHING**	**2**	**6**		**4**

Rationale	Students will gather knowledge about fundamentals of desktop publishing, typographical design, shape, object, color management, saving and exporting image, image separation from background, transforming and retouching in image, color correction, special effect in Photoshop. 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 desktop publishing fundamentals 2. Explain typographical design 3. Describe object in illustrator 4. State color management 5. Explain saving and exporting file 6. Describe image properties 7. State image separation from background 8. Explain transforming and retouching 9. Interpret color correction 10. Explain special effects in Photoshop
Learning Outcome (Practical)	**After undergoing the subject, students will be able to:** 1. Create visiting card 2. Prepare letterhead 3. Create ID card 4. Perform logo 5. Convert raster image to vector image 6. Separate Image from background 7. Prepare book cover & inner pages 8. Perform three fold brochure 9. Create a wall calendar 10. Perform desk calendar 11. Perform flyer 12. Prepare a newspaper layout 13. Make back drop banner 14. Perform x-stand banner 15. Perform multi-color t-shirt design 16. Create a newspaper advertisement 17. Create a diary box 18. Demonstrate multicolor poster 19. Setup forma 20. Prepare a output setting

DETAILED SYLLABUS (THEORY)

Unit	Topics with Contents	Class (1 Period)	Final Marks
1	**Fundamentals of desktop publishing** 1.1 Define desktop publishing 1.2 Mention software requirement for desktop publishing 1.3 Mention hardware requirement for desktop publishing 1.4 Discuss job market of desktop publishing 1.5 Explain the carrier opportunity of DTP sector	3	8
2	**Typographical design in Illustrator** 2.1 Define typographical design 2.2 Classify type attributes 2.3 Explain the importance of using of type face 2.4 Explain text wrapping 2.5 Describe the type paragraph indent 2.6 Discuss the type alignment. 2.7 Discuss the type tab setting. 2.8 Discuss serif, sans serif, true type and post script font	4	8
3	**Object in illustrator** 3.1 Define shape 3.2 Explain various shapes in object 3.3 Define symbol 3.4 Explain frame on border 3.5 Describe brush 3.6 Explain object alignment and distribution 3.7 State pathfinder & shape builders 3.8 Explain flatten transparency 3.9 Describe create outline & expand 3.10 Define image embed 3.11 Explain image tracing	3	5
4	**Color management in illustrator** 4.1 Define fill color 4.2 Define stroke color 4.3 State various types of color 4.4 Explain gradient color 4.5 Describe swatch color 4.6 Describe pantone color 4.7 Explain spot color 4.8 Explain black over print	3	4
5	**Saving and Exporting file in Illustrator** 5.1 State saving and exporting file in illustrator. 5.2 Discuss the file format 5.3 Describe Saving file in EPS format 5.4 Explain the saving file in PDF format 5.5 Illustrate Exporting image /object in other program	3	6
6	**Image in Photoshop** 6.1 Define an image 6.2 Explain an image resolution 6.3 Describe canvas size and image size 6.4 Define an image crop 6.5 Explain an image selection	3	4

	6.6 State resize of image		
7	**Image separation from background in Photoshop** 7.1 Define lasso tool 7.2 Explain magic wand tool 7.3 Describe pen tool 7.4 Explain path option 7.5 Describe clipping path 7.6 State various types of path 7.7 Describe background eraser tool	3	8
8	**Transforming and Retouching in Photoshop Program** 8.1 Describe changing the size of the work canvas 8.2 Describe ruler/measure tool 8.3 Describe transforming objects 8.4 Explain image restoration 8.5 Define healing brush, clone stamp and patch tools 8.6 Describe repairing missing images 8.7 Describe using brush and similar tools	4	8
9	**Color correction in Photoshop Program** 9.1 Define color 9.2 Explain color mode 9.3 State color correction tools 9.4 Explain tonal balance 9.5 Describe color adjustment 9.6 Explain selective color 9.7 Describe color curve 9.8 Describe hue and saturation	3	5
10	**Special effect in Photoshop** 10.1 Define special effect 10.2 List different type of special effect 10.3 Define redeye effect 10.4 State various types of color filter 10.5 Explain plugins 10.6 Explain texture 10.7 Define pattern 10.8 Explain filter noise 10.9 Define unsharp mask 10.10 Explain GFPGAN (resolution increase) 10.11 Explain blur effect	3	4
	Total	**32**	**60**

DETAILED SYLLABUS (PRACTICAL)

Sl.	Experiment Name	Class (3 Period)	Marks (Continuous)
1	**Create visiting card** 1.1 Follow Occupational Health and safety (OSH) 1.2 Create & setup document 1.3 Draw key drawing and layout 1.4 Save as appropriate file format 1.5 Follow basic design guideline	1	2

	1.6 Follow job specification and sample copy 1.7 Apply add text logo and color 1.8 Review & finalize the visiting card 1.9 Maintain the record of perform task		
2	**Make Letterhead** 2.1 Follow Occupational Health and safety (OSH) 2.2 Create & setup document 2.3 Draw key drawing and layout 2.4 Save as appropriate file format 2.5 Follow basic design guideline. 2.6 Follow job specification and sample copy 2.7 Apply add text logo and color 2.8 Review & finalize the letterhead 2.9 Maintain the record of perform task	1	2
3	**Create ID Card** 3.1 Follow Occupational Health and safety (OSH) 3.2 Create & setup document 3.3 Draw key drawing and layout 3.4 Save as appropriate file format 3.5 Follow basic design guideline 3.6 Follow job specification and sample copy 3.7 Apply add text logo, color, object and image 3.8 Review & finalize the ID Card 3.9 Maintain the record of perform task	1	2
4	**Create Logo** 4.1 Follow Occupational Health and safety (OSH) 4.2 Create & setup document 4.3 Draw key drawing and layout 4.4 Save as appropriate file format 4.5 Follow basic design guideline 4.6 Follow job specification and sample copy 4.7 Apply add text logo, color and object 4.8 Review & finalize the Logo 4.9 Maintain the record of perform task	2	3
5	**Convert raster image to vector image** 5.1 Follow Occupational Health and safety (OSH) 5.2 Create & setup document 5.3 Place image and trace 5.4 Save as appropriate file format 5.5 Follow basic design guideline 5.6 Follow job specification and sample copy 5.8 Review & finalize the vector 5.9 Maintain the record of perform task	1	2
6	**Separate Image from background**	1	3

	6.1 Follow Occupational Health and safety (OSH)		
	6.2 Create & setup document		
	6.3 Save as appropriate file format		
	6.4 Place an image		
	6.5 Use pen tool, lasso tool, magic wand tool		
	6.6 Follow job specification and sample copy		
	6.7 Review & finalize task		
	6.8 Maintain the record of perform task		
7	**Prepare book cover & inner pages**		
	7.1 Follow Occupational Health and safety (OSH)		
	7.2 Create & setup document		
	7.3 Add text, logo, Image & Illustration		
	7.4 Follow basic design guideline	2	3
	7.5 Follow job specification and sample copy		
	7.6 Save as appropriate file format		
	7.7 Review & finalize book cover & inner pages		
	7.8 Maintain the record of perform task		
8	**Make three fold brochure**		
	8.1 Follow Occupational Health and safety (OSH)		
	8.2 Create & setup document		
	8.3 Add text, logo, Image & Illustration		
	8.4 Follow basic design guideline	2	3
	8.5 Follow job specification and sample copy		
	8.6 Save as appropriate file format		
	8.7 Review & finalize brochure		
	8.8 Maintain the record of perform task		
9	**Create a wall calendar**		
	9.1 Follow Occupational Health and safety (OSH)		
	9.2 Create & setup document		
	9.3 Add text, logo, Image & Illustration		
	9.4 Follow basic design guideline	2	3
	9.5 Follow job specification and sample copy		
	9.6 Save as appropriate file format		
	9.7 Review & finalize wall calendar		
	9.8 Maintain the record of perform task		
10	**Create desk calendar**		
	10.1 Follow Occupational Health and safety (OSH)		
	10.2 Create & setup document		
	10.3 Add text, logo, Image & Illustration		
	10.4 Follow basic design guideline	2	2
	10.5 Follow job specification and sample copy		
	10.6 Save as appropriate file format		
	10.7 Review & finalize desk calendar		
	10.8 Maintain the record of perform task		

11	**Make flyer** 11.1 Follow Occupational Health and safety (OSH) 11.2 Create & setup document 11.3 Add text, logo, Image & Illustration 11.4 Follow basic design guideline 11.5 Follow job specification and sample copy 11.6 Save as appropriate file format 11.7 Review & finalize flyer 11.8 Maintain the record of perform task	2	3
12	**Setup forma** 12.1 Follow Occupational Health and safety (OSH) 12.2 Create & setup document 12.3 Draw key drawing and layout 12.4 Save as appropriate file format 12.5 Follow basic design guideline 12.6 Follow job specification and sample copy 12.7 Apply add cutting, gripper and registration mark 12.8 Review & finalize forma 12.9 Maintain the record of perform task	2	3
13	**Prepare a dummy newspaper** 13.1 Follow Occupational Health and safety (OSH) 13.2 Create & setup document 13.3 Add text, logo, Image & Illustration 13.4 Follow basic design guideline 13.5 Follow job specification and sample copy 13.6 Save as appropriate file format 13.7 Review & finalize newspaper layout 13.8 Maintain the record of perform task	1	2
14	**Make a back drop banner** 14.1 Follow Occupational Health and safety (OSH) 14.2 Create & setup document 14.3 Apply banner size 14.4 Add text, logo, Image & Illustration 14.5 Follow basic design guideline 14.6 Follow job specification and sample copy 14.7 Save as appropriate file format 14.8 Review & finalize back drop banner 14.9 Maintain the record of perform task	2	3
15	**Make x-stand banner** 15.1 Follow Occupational Health and safety (OSH) 15.2 Create & setup document 15.3 Apply banner size 15.4 Draw key drawing and layout 15.5 Save as appropriate file format	1	2

	15.6 Follow basic design guideline 15.7 Follow job specification and sample copy 15.8 Apply add text logo, color, object and size 15.9 Review & finalize the x-stand banner 15.10 Maintain the record of perform task		
16	**Design multi-color t-shirt** 16.1 Follow Occupational Health and safety (OSH) 16.2 Create & setup document 16.3 Draw key drawing and layout 16.4 Save as appropriate file format 16.5 Follow basic design guideline 16.6 Follow job specification and sample copy 16.7 Apply add text logo, color and object 16.8 Review & finalize multi-color t-shirt 16.9 Maintain the record of perform task	2	2
17	**Create a newspaper advertisement** 17.1 Follow Occupational Health and safety (OSH) 17.2 Create & setup document 17.3 Draw key drawing and layout 17.4 Save as appropriate file format 17.5 Follow basic design guideline 17.6 Follow job specification and sample copy 17.7 Apply add text logo, color, object and image 17.8 Review & finalize advertisement 17.9 Maintain the record of perform task	1	2
18	**Create a diary box** 18.1 Follow Occupational Health and safety (OSH) 18.2 Create & setup document 18.3 Draw key drawing and layout 18.4 Save as appropriate file format 18.5 Follow basic design guideline 18.6 Follow job specification and sample copy 18.7 Apply die cutting mark 18.8 Review & finalize diary box 18.9 Maintain the record of perform task	2	2
19	**Make multicolor poster** 19.1 Follow Occupational Health and safety (OSH) 19.2 Create & setup document 19.3 Draw key drawing and layout 19.4 Save as appropriate file format 19.5 Follow basic design guideline 19.6 Follow job specification and sample copy 19.7 Apply add text logo, color, objects, image 19.8 Review & finalize poster 19.9 Maintain the record of perform task	2	3

20	**Prepare a output setting** 20.1 Follow Occupational Health and safety (OSH) 20.2 Create & setup document 20.3 Draw key drawing and layout 20.4 Save as appropriate file format 20.5 Follow basic design guideline 20.6 Follow job specification and sample copy 20.7 Apply add cutting, gripper and registration mark 20.8 Review & finalize the setting of output 20.9 Maintain the record of perform task	2	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 (Color)	1 no's
05	CTP Machine	1 No's

Recommended Software:

Sl	Name	Quantity
01	Adobe Illustrator Version 22	As Necessary
02	Adobe Photoshop Version 22	As Necessary
03	Adobe Acrobat Version 22	As Necessary
04	Bijoy 52	As Necessary
05	Avro/Unicode	As Necessary

RECOMMENDED BOOKS:

Sl	Book Name	Writer Name	Publisher Name & Edition
01	Adobe Illustrator CS6	Bappi Ashraf	Gankosh Publication
02	Adobe Photoshop CS6	Bappi Ashraf	Gankosh Publication
03	Basic Graphic Design	Mohammad Arifur Raman	Saba Publication
04	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
03	https://www.gd.durangohighschool.net/Adobe%202019%20Books/Adobe%20InDesign%20CC%20Classroom%20in%20a%20Book%20(2019%20Release)%20Edit.pdf	Search here

04	https://ptgmedia.pearsoncmg.com/images/97801368055 33/samplepages/9780136805533_Sample.pdf	Search here
05	https://www.youtube.com/watch?v=YqQx75OPRa0	Search here
06	https://www.youtube.com/@GFXMentor/playlists	Search here
07	https://www.youtube.com/@SatoriGraphics	Search here

SUBJECT CODE	SUBJECT NAME	PERIOD PER WEEK		CREDIT
		T	P	C
29662	**WEB DESIGN & DEVELOPMENT**	2	3	3

Rationale	A graphic designer has to work with web designing, image manipulating, online advertising etc. That's why students have to know about web designing & development. This subject includes design and front-end development of web pages, using XHTML/XML/CSS along with graphics software; physical and logical character effects in XHTML/XML pages; use of ordered and unordered list, table, forms, radio button, submit button and checkbox in web pages; use of validation check, managing document spacing, linking image, adding sound and video to a page or other pages and multimedia objects and use of cascading style sheet in web page.
Learning Outcome (Theoretical)	**After undergoing the subject, students will be able to:** 1. Interpret basics of website design 2. Explain hypertext markup language (html) 3. Elucidate HTML Tags and attributes & text formatting 4. Interpret cascading style sheet (CSS) 5. Explain web-based image manipulation 6. Illustrate HTML5, Navigation, HTML forms, Web storage & Geolocation 7. Explain Java script & JQuery library 8. Analyze bootstrap framework. 9. Interpret presentation & portfolio creation 10. Illustrate freelancing marketplaces
Learning Outcome (Practical)	**After undergoing the subject, students will be able to:** 1. Prepare HTML document 2. Create HTML form 3. Prepare Navigation 4. Create conversion Figma, XD, PSD to HTML and CSS. 5. Create webpage design 6. Insert jQuery library with webpage. 7. Create webpage design for online marketing. 8. Create mobile application UI (Social App). 9. Make a responsive web page design. 10. Create a complete webpage design with the front-end development

DETAILED SYLLABUS (THEORY)

Unit	Topics with Contents	Class (1 Period)	Final Marks
1	**INTRODUCTION TO WEBSITE DESIGN** 1.1 State the history of World Wide Web-WWW. 1.2 Describe web media, web site and web page. 1.3 Explain the importance of a web site. 1.4 Illustrate the importance of data presentation. 1.5 State the principle of website design. 1.6 Explain web browsers to access the web. 1.7 Explain the process of a domain & hosting. 1.8 State the renew process of a domain. 1.9 Explain the maintenance of website hosting.	3	8
2	**HYPER TEXT MARKUP LANGUAGE (HTML)** 2.1 Define HTML. 2.2 List different types of HTML Editors. 2.3 List the web browser. 2.4 Illustrate URL, IP, DNS & HTTP. 2.5 State Notepad, Notepad++, Dreamweaver and Visual studio. 2.6 Explain Photoshop, XD and Figma interface. 2.7 Discuss the designing measurement unit. 2.8 Explain the process of creating a new html page. 2.9 Describe the grid system. 2.10 Explain mobile application design.	4	8
3	**HTML TAGS , ATTRIBUTES & TEXT FORMATTING** 3.1 Explain HTML tag list. 3.2 Describe HTML elements and attributes. 3.3 State style, formatting link, image and table. 3.4 Explain the class and ID. 3.5 Discuss form tags with attributes. 3.6 State the web color.	3	5
4	**CASCADING STYLE SHEET (CSS)** 4.1 Define cascading style sheet (CSS). 4.2 Explain the application process of Inline, Internal and external CSS in HTML document. 4.3 Discuss CSS syntax. 4.4 Mention the properties of CSS. 4.5 Describe color, background, position, borders, margin, padding, height and width. 4.6 Discuss CSS modules. 4.7 Explain 2D/3D Transform, Shadows, Transition, Animation and Flexible Box.	3	4
5	**WEB BASED IMAGE EDITTING** 5.1 Define image editing. 5.2 Explain logo generate by using different sources. 5.2 State the software used for image editing. 5.3 Discuss the process of adding owl carousel / nivo slider. 5.4 Explain the process of applying hyper reference link, hero	3	6

SI.		Class	Marks
6	**HTML5 NAVIGATION, FORMS, WEB STORAGE & GEOLOCATION** 6.1 Discuss HTML5 navigation bar. 6.2 Explain HTML5 forms. 6.3 State the web storage system. 6.4 Discuss contact & signup form. 6.5 Explain web geolocation system.	3	4
7	**JAVASCRIPT & JQUERY LIBRARY** 7.1 State the fundamental of JavaScript & jQuery library 7.2 Explain Loops & arrays. 7.3 Discuss the Operators & statements. 7.4 Explain the Functions of Javascript. 7.5 State the objects of Javascript. 7.6 Explain the applying process of jQuery library.	3	8
8	**BOOTSTRAP FRAMEWORK** 8.1 Define Bootstrap. 8.2 Explain Bootstrap features. 8.3 Differentiate between Bootstrap 4 and Bootstrap 5. 8.4 State plugins alert, button, carousel, collapse, dropdown, model, tab and tooltip. 8.5 Explain mobile devices viewport meta for responsive design. 8.6 State the box-sizing & reboot.	4	8
9	**WORDPRESS THEME CUSTOMIZATION** 9.1 Define wordpress. 9.2 Explain WordPress features. 9.3 Describe the advantages & disadvantages of wordpress. 9.4 Explain WordPress references. 9.5 Describe the templates in WordPress. 9.6 Illustrate the process of wordpress login & customization.	3	5
10	**OUTSOURCING (CODING) MARKETPLACES** 10.1 Define freelancing & outsourcing. 10.2 Describe the financial benefits of freelancing and outsourcing. 10.3 Explain the advantages & disadvantages of freelancing. 10.4 Explain the importance of English language proficiency in freelancing and outsourcing. 10.5 State the process of creating account in freelancing market. 10.6 Describe the code uploading process in the marketplace.	3	4
	Total	**32**	**60**

Note: row 5 partial at top:
image in image tag.
5.5 State web-based image file formatting.

DETAILED SYLLABUS (PRACTICAL)

SI.	Experiment Name	Class (3 Period)	Marks (Continuous)

1	**PREPARE HTML DOCUMENT** 1.1 Follow and maintain OSH practices. 1.2 Select a text editor for e.g., Notepad, Visual Studio Code etc. 1.3 Identify essential HTML elements. 1.4 Write the fundamental structure of an HTML document with <! DOCTYPE html>, <html>, <head>, and <body> tags on the document. 1.5 Make your document responsive; add a <meta> tag for the viewport. 1.6 Maintain the record of perform task.	1	2
2	**CREATE HTML FORM** 2.1 Follow and maintain OSH practices. 2.2 Open visual studio code. 2.3 Create new html file. 2.4 Use the <form> tag to define the start and end of the form. 2.5 Include various form controls within the <form> tags such as <input>, <select>, <textarea>. 2.6 Use labels, buttons, attributes to improve accessibility and user experience. 2.8 Apply CSS styles to enhance the visual appearance of the form. 2.9 Maintain the record of performing tasks.	2	3
3	**PREPARE A NAVIGATION** 3.1 Follow and maintain OSH practices. 3.2 Open software and create new file. 3.3 Prepare text editor, web browser, HTML basics. 3.4 Create structure navigation using lists (or), list items ( ), and link items using anchor tags (<a>). 3.5 Apply style to enhance your navigation's appearance using CSS. 3.6 Complete the job. 3.7 Maintain the record of perform task.	2	2
4	**CREATE CONVERSION IN FIGMA, XD, PSD TO HTML AND CSS** 4.1 Follow and maintain OSH practices. 4.2 Create design with adobe photoshop/figma/adobe XD 4.3 Obtain PSD file for the design and choose a coding tool like Visual Studio Code for conversion. 4.4 Apply solid HTML/CSS knowledge for structuring and styling. 4.5 Maintain the record of perform task.	2	3
5	**CREATE A WEB PAGE DESIGN** 5.1 Follow and maintain OSH practices. 5.2 Open visual studio code. 5.3 Create a new HTML file. 5.4 Make structure with HTML, style with CSS for layout.	1	2

	5.5 Design images and logos with tools like adobe photoshop, sketch, canva/figma. 5.6 Make a webpage using the text, images & logos. 5.7 Maintain the record of performing tasks.		
6	**INSERT JQUERY LIBRARY WITH WEBPAGE USING FREE SOURCE CODE (NAVIGATION, GALLERY, SLIDESHOW, ETC.)** 6.1 Follow and maintain OSH practices. 6.2 Download jQuery from its official website and ensure a solid understanding of HTML and CSS for content structure and styling. 6.3 Seek free source code or templates on GitHub or CodePen with desired features, if needs use a version control repository, ensure Git is installed for cloning or downloading. 6.4 Prepare any web browser for testing and assure internet connection for jQuery library. 6.5 Set up a local server environment using tools like Live Server. 6.6 Maintain the record of perform task.	2	3
7	**CREATE WEB PAGE DESIGN FOR ONLINE MARKETING** 7.1 Follow and maintain OSH practices. 7.2 Open visual studio code and create new HTML file. 7.3 Make structure with HTML, style with CSS for layout. 7.4 Create header section, hero section, product showcase. 7.5 Prepare call-to-action (CTA), contact section, footer. 7.6 Make webpage design responsive to various screen sizes by using CSS media queries, adjusting styles for larger screens and for smaller screens. 7.7 Optimize and include relevant images and media files. 7.8 Maintain the record of perform task.	2	3
8	**CREATE A MOBILE APPLICATION UI (SOCIAL APP)** 8.1 Follow and maintain OSH practices. 8.2 Open software and create new file. 8.3 Create a header, user profile, news feed, message input. 8.4 Choose a color scheme that matches the app's branding and purpose. 8.5 Create clear, readable typography and an intuitive navigation system for easy app section access. 8.6 Construct user profiles with essential info, a dynamic news feed for posts, and a user-friendly messaging interface for seamless communication. 8.7 Add notifications center for updates, enable media uploads for sharing photos, videos, and multimedia content. 8.8 Apply search feature for connecting, design user preferences in settings, guide users with onboarding and	1	2

	repeat UI based on feedback. 8.9 Maintain the record of performing tasks.		
9	**MAKE A RESPONSIVE WEB PAGE DESIGN** 9.1 Follow and maintain OSH practices. 9.2 Open an existing HTML document. 9.3 Include the viewport meta tag & use a fluid grid layout with relative units. 9.4 Use media queries in CSS to apply different styles depending on the screen size, allowing the design to adapt to various devices. 9.5 Make use of flexible images and media, responsive typography, CSS flexbox or grid. 9.6 Test the responsive design on different devices and browsers for consistent user experience and compatibility. 9.7 Maintain the record of perform task.	2	2
10	**CREATE A WEBPAGE DESIGN WITH THE FRONT-END DEVELOPMENT** 10.1 Follow and maintain OSH practices. 10.2 Choose an appropriate text editor. 10.3 Create layout with CSS, HTML. 10.4 Use graphic design tools like adobe photoshop, sketch, figma or adobe XD for creating visual. 10.5 Make responsive design for diverse devices and use browser developer tools for testing and debugging during development. 10.6 Apply code with W3C markup and CSS validation with web standards. 10.7 Make optimizing webpage (minify CSS/JS, optimize images), document code for teamwork and scalability; prioritize accessibility for users with disabilities. 10.8 Maintain the record of perform task.	1	3
	Total	**16**	**25**

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

Recommended Software:

SI	Name	Quantity
01	Notepad	As Necessary
02	Notepad++	As Necessary
03	Dreamviewer	As Necessary
04	Visual studio code	As Necessary

RECOMMENDED BOOKS:

Sl	Book Name	Writer Name	Publisher Name & Edition
01	Beginning HTML, XHTML, CSS, and JavaScript	Jon Duckett	ABPA
02	Learning Web Design: A Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics	Jennifer Robbins	O'REILLY

WEBSITE REFERENCES:

Sl	Web Link	Remarks
01	http://www.w3schools.com/html/default.asp	Search here
02	www.w3.org/TR/xhtml11	Search here
03	www.xhtml.org	Search here
04	validator.w3.org	Search here
05	https://getbootstrap.com	Search here

SUBJECT CODE	SUBJECT NAME	PERIOD PER WEEK		CREDIT
		T	**P**	**C**
29663	**GRAPHIC DESIGN-IV**	**2**	**3**	**3**

Rationale	Graphic design technology is in great demand in every aspect of our life. Everything we use in our daily life must have connection with printing. InDesign is a software for publication print formatting. This subject is covered entirely in InDesign. Here, students will know how to create text, text box, picture box, text attribute, move, resizing, color modification, imported graphics, object modification, table creation, auto page numbering, master page creation and output setting. Here are the professional practice requirements in design: color management, prepress procedures, printing technology materials and inks, environmental responsibility, budget and cost management, post-press and finishing, health and safety, technology integration.
Learning Outcome (Theoretical)	After undergoing the subject, students will be able to: 1. Explain text box editing in InDesign 2. Interpret Picture and picture box in InDesign 3. Analyze Text attribute in Adobe InDesign 4. Explain Moving, copying, resizing & color modification 5. Illustrate Imported graphics 6. Explain Object and paths 7. Illustrate Table and Format 8. State Page numbering 9. Explain Master page 10. Analyze Output setup
Learning Outcome (Practical)	**After undergoing the subject, students will be able to:** 1. Identify the interface of InDesign 2. Prepare master page 3. Create paragraph style 4. Perform composition text, picture & objects 5. Demonstrate annual report inner page design 6. Create newsletter 7. Create magazine 8. Make brochure 9. Create auto page number 10. Prepare diary inner page

DETAILED SYLLABUS (THEORY)

Unit	Topics with Contents	Class (1 Period)	Final Marks
1	**Text and text box editing in InDesign** 1.1 Define text box of InDesign program 1.2 State the editing process of text box 1.3 Explain the color and shade 1.4 Describe text align and mirror text 1.5 Define import text in text box	3	6
2	**Picture and picture box in InDesign** 2.1 Define picture box 2.2 Describe the steps to import picture in picture box 2.3 State the process of editing the image in picture box 2.4 Define link and relink picture 2.5 Explain editing process of picture	3	6
3	**Text attribute in Adobe InDesign** 3.1 Describe working with type character 3.2 Describe text paragraph 3.3 Explain indent and tab setting 3.4 Describe editing paragraph style sheet 3.5 Define text wrapping 3.6 Describe working with formatting table	3	6
4	**Moving, copying, resizing & color modification** 4.1 Define steps to move object 4.2 Describe the process of copying object 4.3 State the steps of resizing and deletion the object 4.4 Explain color modification process 4.5 Describe gradient 4.6 State swatch color 4.7 Define spot and pantone color	3	6
5	**Imported graphics** 5.1 State imported options 5.2 Define replace selected item 5.3 Define fit content proportionally 5.4 State fill frame proportionally 5.5 Define clear frame 5.6 Explain fit alignment	3	6
6	**Object and paths** 6.1 Define shape & object 6.2 List various types of path 6.3 State the process to add and delete anchor point on path 6.4 Describe stroke, fill, color and shading style of path 6.5 Discuss functions of object	3	6

7	**Table and Format** 7.1 Define table 7.2 Describe row and column 7.3 Define merge cell 7.4 Describe cell color and shade 7.5 Define split cell horizontal and vertical 7.6 Explain insert row and column 7.7 Explain header and footer	3	6
8	**Page numbering** 8.1 Define page numbering 8.2 Define special character 8.3 Describe selection numbering 8.4 Explain symbol numbering 8.5 Interpret bullets and numbering 8.6 Define single line and double line paragraph 8.7 Define hyphenate	3	6
9	**Master page** 9.1 Sate master page 9.2 Explain the converting process of master to pages 9.3 State the overwriting process of all master pages item 9.4 Describe add page and delete page 9.5 State insert page after & before 9.6 Define go to page	4	6
10	**Output setup** 10.1 Define output setup 10.2 Define gripper mark 10.3 Describe registration mark 10.4 State cutting and folding mark 10.5 Discuss the converting process of PDF for press setting 10.6 State the Output setting activities of CTP	4	6
	Total	**32**	**60**

DETAILED SYLLABUS (PRACTICAL)

Sl.	Experiment Name	Class (3 Period)	Marks (Continuous)
1	**Identify the interface** 1.1 Follow Occupational Health and safety (OSH) 1.2 Install Adobe InDesign software 1.3 Create document & setup 1.4 Identify the Interface 1.5 Clean and store tools & equipment 1.6 Maintain the record of perform task	1	2

2	**Prepare master page** 2.1 Follow Occupational Health and safety (OSH) 2.2 Identify software 2.3 Create document & setup 2.4 Save as appropriate file format 2.5 Follow basic design guideline 2.6 Follow job specification 2.7 Add text, Image & Object 2.8 Review & finalize the master page 2.9 Maintain the record of performed job	**2**	**3**
3	**Create paragraph style** 3.1 Follow Occupational Health and safety (OSH) 3.2 Identify software 3.3 Create document & setup 3.4 Save as appropriate file format 3.5 Follow basic design guideline 3.6 Follow job specification 3.7 Add text 3.8 Review & finalize paragraph style 3.9 Maintain the record of performed job	**1**	**2**
4	**Perform Composition text and picture** 4.1 Follow Occupational Health and safety (OSH) 4.2 Identify software 4.3 Create document & setup 4.4 Add text 4.5 Follow basic design guideline 4.6 Follow job specification 4.7 Review & finalize composition text and picture 4.8 Maintain the record of performed job	**1**	**2**
5	**Demonstrate annual report inner page design** 5.1 Follow Occupational Health and safety (OSH) 5.2 Identify Software 5.3 Create document & setup 5.4 Add text, shape and logo 5.5 Follow basic design guideline 5.6 Follow job specification 5.7 Review & finalize annual report inner page design 5.8 Maintain the record of performed job	**1**	**3**
6	**Create newsletter** 6.1 Follow Occupational Health and safety (OSH) 6.2 Identify software 6.3 Create document & setup 6.4 Add text, shape, image, logo, objects 6.5 Follow basic design guideline 6.6 Follow job specification 6.7 Review & finalize the newsletter design	**2**	**2**

	6.8 Maintain the record of performed job		
7	**Create magazine** 7.1 Follow Occupational Health and safety (OSH) 7.2 Identify software 7.3 Create document & setup 7.4 Add text, shape, image, logo, objects 7.5 Follow basic design guideline 7.6 Follow job specification 7.7 Review & finalize the magazine design 7.8 Maintain the record of performed job	**2**	**3**
8	**Prepare brochure** 8.1 Follow Occupational Health and safety (OSH) 8.2 Identify software 8.3 Create document & setup 8.4 Add text, shape, image, logo, objects 8.5 Follow basic design guideline 8.6 Follow job specification 8.7 Review & finalize the brochure design 8.8 Maintain the record of performed job	**2**	**3**
9	**Create auto page number** 9.1 Follow Occupational Health and safety (OSH) 9.2 Identify software 9.3 Create document & setup 9.4 Add text to master page 9.5 Follow basic design guideline 9.6 Follow job specification 9.7 Review & finalize auto page number 9.8 Maintain the record of performed job.	**2**	**2**
10	**Prepare diary inner page** 10.1 Follow Occupational Health and safety (OSH) 10.2 Identify software 10.3 Create document & setup 10.4 Add text, shape, image, logo, objects 10.5 Follow basic design guideline 10.6 Follow job specification 10.7 Review & finalize diary inner page design 10.8 Maintain the record of performed job	**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 (Color)	1 no's
05	CTP Machine	1 No's

Recommended Software:

Sl	Name	Quantity	Sl
01	Adobe InDesign Version 22	As Necessary	01
02	Adobe Photoshop_Version 22	As Necessary	02
03	Adobe Acrobat Version 22	As Necessary	03
04	Bijoy 52	As Necessary	04
05	Avro/Unicode	As Necessary	05

RECOMMENDED BOOKS:

Sl	Name	Quantity	Sl
01	Adobe InDesign CS6	Bappi Ashraf	Gankosh Publication
02	Adobe InDesign CS6	Bappi Ashraf	Gankosh Publication

WEBSITE REFERENCES:

Sl	Web Link	Remarks
01	https://www.youtube.com/watch?v=YqQx75OPRa0	Search here
02	https://www.youtube.com/@GFXMentor/playlists	Search here
03	https://www.youtube.com/@SatoriGraphics	Search here

SUBJECT CODE	SUBJECT NAME	PERIOD PER WEEK		CREDIT
		T	P	C
29664	Image Manipulation	1	3	2

Rationale	Image manipulation is an essential skill that allows for creative expression, visual storytelling, and effective communication in various fields, adjusting colors, refining details, image manipulation, good photography, image correcting, achieving the desired artistic effect, web design, image manipulation contributes to creating visually appealing and user-friendly interfaces. E-commerce, it is crucial in presenting products in their best light. In summary, image manipulation is a versatile and indispensable tool for enhancing visual communication across diverse professional domains.
Learning Outcome (Theoretical)	**After undergoing the subject, students will be able to** 1. Describe Image manipulation. 2. State layers & selection. 3. Interpret retouch & restoration techniques. 4. Explain text & typography in images. 5. State 3D & perspective in image manipulation.
Learning Outcome (Practical)	**After undergoing the subject, students will be able to:** 1. Make layers & Selections. 2. Perform image retouch. 3. Perform image restoration. 4. Create editable text effect. 5. Perform YouTube thumbnail image manipulation. 6. Perform complex product image manipulation. 7. Perform product advertisement image manipulation. 8. Perform soft drinks image manipulation. 9. Prepare a presentation using google slides. 10. Create mockup portfolio for behance, flickr, dribbble with 20 designs.

DETAILED SYLLABUS (THEORY)

Unit	Topics with Contents	Class (1 Period)	Final Marks
1	**IMAGE MANIPULATION** 1.1 Define Manipulation. 1.2 Describe importance of image manipulation. 1.3 List the common image file formats. 1.4 Explain JPEG, PNG and GIF. 1.5 State the chosen software/tool interface for image manipulation. 1.6 Mention the basic image edition tools. 1.7 Interpret cropping, resizing and rotating. 1.8 Describe different ways of image manipulation.	04	06
2	**LAYER & SELECTION** 2.1 Define layer. 2.2 Explain layer with importance. 2.3 Define selection. 2.4 List different types of selection tools. 2.5 Explain marquee, lasso and magic wand tools. 2.6 Describe layer masks. 2.7 Explain blending modes.	03	06
3	**RETOUCHING & RESTORATION** 3.1 Define retouching. 3.2 Explain spot healing, clone stamp tools and liquefy. 3.3 Explain Red-eye removal and blemish retouching. 3.4 Describe advanced retouching. 3.5 Define restoration. 3.6 Describe the process of repairing damaged or old photos.	03	08
4	**TEXT & TYPOGRAPHY IN IMAGES** 4.1 Describe adding and formatting text. 4.2 Describe the text effects and layer styles. 4.3 Explain incorporating typography into images.	03	04
5	**3D & PERSPECTIVE IN IMAGE MANIPULATION** 5.1 Define depth and perspective to images. 5.2 Describe the 3D text and objects. 5.3 Explain lighting, shadows & blending modes. 5.4 State fine tuning and rendering.	03	06
	Total	16	30

DETAILED SYLLABUS (PRACTICAL)

Sl.	Experiment Name	Class (3 Period)	Marks (Continuous)
1	**MAKE LAYER & SELECTION** 1.1 Follow and maintain OSH practices. 1.2 Install adobe Photoshop software.	1	2

	1.3 Create a document & open existing image from system. 1.4 Identify marquee, lasso and magic wand tools. 1.5 Delete a small part from the image using selection tools. 1.6 Maintain the record of performing tasks.		
2	**PERFORM IMAGE RETOUCH** 2.1 Follow and maintain OSH practices. 2.2 Download an appropriate image from google & open in adobe Photoshop 2.3 Remove the unwanted spots from the image using – spot healing brush, 2.4 Perform healing brush & patch tool. 2.5 Maintain the record of performing tasks.	2	3
3	**PERFORM IMAGE RESTORATION** 3.1 Follow and maintain OSH practices. 3.2 Download an appropriate image from google & open in adobe Photoshop. 3.3 Restore the damaged area using spot healing brush tool, clone stamp tool, healing brush tool & content aware scale tool. 3.4 Change the black & white color to appropriate skin tone colors. 3.5 Maintain the record of performing tasks.	2	2
4	**CREATE EDITABLE TEXT EFFECT** 4.1 Follow and maintain OSH practices. 4.2 Create document. 4.3 Write any text using type tool. 4.4 Create the layer styles- bevel & emboss, contour, texture, stroke, inner shadow, inner glow. 4.5 Apply satin, color overlay, gradient overlay, pattern overlay, outer glow, drop shadow. 4.6 Maintain the record of perform task.	1	2
5	**PERFORM YOUTUBE THUMBNAIL MANIPULATION** 5.1 Follow and maintain OSH practices. 5.2 Create document as per YouTube thumbnail size as per client specification. 5.3 Download gradient, texture, brush actions from google /freepik/ behance/ brusheezy. 5.4 Apply text effects. 5.5 Customize & arrange subjects, correction the color for the effect. 5.6 Maintain the record of perform task.	2	3
6	**PERFORM COMPLEX PRODUCT IMAGE MANIPULATION** 6.1 Follow and maintain OSH practices. 6.2 Create document as per client specification. 6.3 Apply path, multi path, work path, clipping path etc. 6.4 Customize & arrange subjects, correction the color & retouch. 6.5 Maintain the record of perform task.	2	3

7	**PERFORM PRODUCT ADVERTISEMENT IMAGE MANIPULATION** 7.1 Follow and maintain OSH practices. 7.2 Create document as per client specification. 7.3 Download/create gradient, texture effect from google 7.4 Customize & arrange subjects, correction the color of the effect. 7.5 Maintain the record of perform task.	1	2
8	**PERFORM SOFT DRINKS IMAGE MANIPULATION** 8.1 Follow and maintain OSH practices. 8.2 Create document as per client specification. 8.3 Download/create gradient, texture, splash effect from google 8.4 Customize & arrange subjects, correction the color of the effect. 8.5 Maintain the record of perform task.	2	2
9	**PREPARE A PRESENTATION USING GOOGLE SLIDES** 9.1 Follow and maintain OSH practices. 9.2 Prepare a presentation using google slides. 9.3 Present the presentation. 9.4 Maintain the record of perform task.	1	3
10	**CREATE MOCKUP PORTFOLIO FOR BEHANCE,FLICKR, DRIBBBLE (AT LEAST 20 MANIPULATIONS)** 10.1 Follow and maintain OSH practices. 10.2 Create account on Behance. Flickr, Dribbble. 10.3 Set up the user profile & upload your files. 10.4 Identify goals and objectives of each showcased project. 10.5 Maintain the record of perform task.	2	3
	Total	**16**	**25**

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

Sl	Item Name	Quantity
01	Computer	01 set
02	Scanner	5 set
03	Digital Camera	5 set

RECOMMENDED BOOKS:

Sl	Book Name	Writer Name	Publisher Name & Edition
01	Adobe Photoshop guide for beginners	Adobe	Adobe Website
02	Image Manipulation	Gregory Anderson	City University of New York John Jay College of Criminal Justice.

WEBSITE REFERENCES:

Sl	Web Link	Remarks

01	https://shorturl.at/klt46	Search here
02	https://shorturl.at/ciuS2	Search here
03	https://shorturl.at/hyQRW	Search here
04	https://shorturl.at/mtFR6	Search here

SUBJECT CODE	SUBJECT NAME	PERIOD PER WEEK		CREDIT
		T	P	C
29665	GRAPHIC PROFESSIONAL PRACTICE-1	0	6	2

Rationale	Graphic designer has to work with different types of designing. After completion of this course, students will achieve knowledge about business card designing, folding business card designing, performing cash memo/bill design, money receipt designing, unique logo designing, performing vectorization, identity card designing, invitation card designing, certificate designing, book cover designing, flyer designing, folder designing, dairy designing, inner page designing, poster designing, wall calendar designing, desk calendar designing, envelop designing, motive designing etc. As a graphic designer student should have the knowledge about those topics. That's why we have added this subject in this curriculum.
Learning Outcome (Practical)	**After undergoing the subject, students will be able to:** 1. Design business card 2. Make folding business card 3. Prepare cash memo/bill 4. Create money receipt 5. Create unique logo 6. Perform vectorization 7. Create identity card 8. Make invitation card 9. Create certificate 10. Make book cover 11. Create flyer 12. Design folder 13. Create banner 14. Perform dairy 15. Create inner page of diary 16. Create poster 17. Create wall calendar 18. Create desk calendar 19. Make envelop 20. Prepare motive

DETAILED SYLLABUS (PRACTICAL)

SI.	Experiment Name	Class (3 Period)	Marks (Continuous)
1	**DESIGN BUSINESS CARD** 1.1 Follow occupational health & safety (OSH). 1.2 Create a new document with required setup. 1.3 Create key drawing & layout. 1.4 Save the file as appropriate file format. 1.5 Insert text, logo and image following basic design principles. 1.6. Follow job specification/sample copy /relevant design/internet/client sharing. 1.7 Review and finalize the design. 1.8 Setup the file to output. 1.9 Clean and store the tools & equipment. 1.10 Maintain the record of perform task.	1	2
2	**DESIGN FOLDING BUSINESS CARD** 2.1 Follow occupational health & safety (OSH). 2.2 Create a new document with required setup. 2.3 Create key drawing & layout. 2.4 Save the file as appropriate file format. 2.5 Insert text, logo and image following basic design principles. 2.6 Follow job specification/sample copy /relevant design/internet/client sharing. 2.7 Review and finalize the design. 2.8 Setup the file to output. 2.9 Clean and store the tools & equipment. 2.10 Maintain the record of perform task.	1	2
3	**DESIGN CASH MEMO/BILL** 3.1 Follow occupational health & safety (OSH). 3.2 Create a new document with required setup. 3.3 Create key drawing & layout. 3.4 Save the file as appropriate file format. 3.5 Insert text & logo following basic design principles. 3.6 Follow job specification/sample copy /relevant design/internet/client sharing. 3.7 Review and finalize the design. 3.8 Setup the file to output. 3.9 Clean and store the tools & equipment. 3.10 Maintain the record of perform task.	1	2
4	**DESIGN MONEY RECEIPT** 4.1 Follow occupational health & safety (OSH). 4.2 Create a new document with required setup. 4.3 Create key drawing & layout. 4.4 Save the file as appropriate file format. 4.5 Insert text & logo following basic design principles. 4.6 Follow job specification/sample copy /relevant	1	2

	design/internet/client sharing. 4.7 Review and finalize the design. 4.8 Setup the file to output. 4.9 Clean and store the tools & equipment. 4.10 Maintain the record of perform task.		
5	**CREATE UNIQUE LOGO** 5.1 Follow occupational health & safety (OSH). 5.2 Create a new document with required setup. 5.4 Save the file as appropriate file format. 5.5 Insert text, shape & color following basic design principles. 5.6 Follow job specification/sample copy /relevant design/internet/client sharing. 5.7 Review and finalize the design. 5.8 Clean and store the tools & equipment. 5.9 Maintain the record of perform task.	2	3
6	**PERFORM VECTORIZATION** 6.1 Follow occupational health & safety (OSH). 6.2 Create a new document with required setup. 6.4 Save the file as appropriate file format. 6.5 Insert raster image following basic design principles. 6.6 Follow job specification/sample copy /relevant design/internet/client sharing. 6.7 Review and finalize the design. 6.8 Clean and store the tools & equipment. 6.9 Maintain the record of perform task.	2	3
7	**DESIGN ID CARD** 7.1 Follow occupational health & safety (OSH). 7.2 Create a new document with required setup. 7.3 Create key drawing & layout 7.4 Save the file as appropriate file format 7.5. Insert text, logo & image following basic design principles. 7.6 Follow job specification/sample copy /relevant design/internet/client sharing. 7.7 Review and finalize the design. 7.8 Setup the file to output. 7.9 Clean and store the tools & equipment. 7.10 Maintain the record of perform task.	1	2
8	**DESIGN INVITATION CARD** 8.1 Follow occupational health & safety (OSH). 8.2 Create a new document with required setup. 8.3 Create key drawing & layout 8.4 Save the file as appropriate file format. 8.5 Insert text, logo & image following basic design principles. 8.6 Follow job specification/sample copy /relevant design/internet/client sharing. 8.7 Review and finalize the design. 8.8 Setup the file to output.	2	2

	8.9. Clean and store the tools & equipment. 8.10 Maintain the record of perform task.	1	2
9	**DESIGN CERTIFICATE** 9.1 Follow occupational health & safety (OSH). 9.2 Create a new document with required setup. 9.3 Create key drawing & layout. 9.4 Save the file as appropriate file format. 9.5 Insert text & logo following basic design principles. 9.6 Follow job specification/sample copy /relevant design/internet/client sharing. 9.7 Review and finalize the design. 9.8 Setup the file to output. 9.9 Clean and store the tools & equipment. 9.10 Maintain the record of perform task.	2	3
10	**DESIGN BOOKCOVER** 10.1 Follow occupational health & safety (OSH). 10.2 Create a new document with required setup. 10.3 Create key drawing & layout. 10.4 Save the file as appropriate file format 10.5 Insert text, logo & image following basic design principles. 10.6 Follow job specification/sample copy /relevant design/internet/client sharing. 10.7 Review and finalize the design. 10.8 Setup the file to output. 10.9 Clean and store the tools & equipment. 10.10 Maintain the record of perform task.	2	3
11	**DESIGN FLYER** 11.1 Follow occupational health & safety (OSH). 11.2 Create a new document with required setup. 11.3 Create key drawing & layout. 11.4 Save the file as appropriate file format 11.5 Insert text, logo & image following basic design principles. 11.6 Follow job specification/sample copy /relevant design/internet/client sharing. 11.7 Review and finalize the design. 11.8 Setup the file to output. 11.9 Clean and store the tools & equipment. 11.10 Maintain the record of perform task.	2	3
12	**DESIGN FOLDER** 12.1 Follow occupational health & safety (OSH). 12.2 Create a new document with required setup. 12.3 Create key drawing & layout. 12.4 Save the file as appropriate file format. 12.5 Insert text, logo & image following basic design principles. 12.6 Follow job specification/sample copy /relevant design/internet/client sharing. 12.7 Review and finalize the design. 12.8 Setup the file to output. 12.9 Clean and store the tools & equipment. 12.10 Maintain the record of perform task.	2	2
13	**DESIGN BANNER** 13.1 Follow occupational health & safety (OSH).	1	2

	13.2 Create a new document with required setup. 13.3 Create key drawing & layout 13.4 Save the file as appropriate file format 13.5 Insert text, logo & image following basic design principles. 13.6 Follow job specification/sample copy /relevant design/internet/client sharing. 13.7 Review and finalize the design. 13.8 Setup the file to output. 13.9 Clean and store the tools & equipment. 13.10 Maintain the record of perform task.		
14	**DESIGN DAIRY** 14.1 Follow occupational health & safety (OSH). 14.2 Create a new document with required setup. 14.3 Create key drawing & layout 14.4 Save the file as appropriate file format 14.5 Insert text, logo & image following basic design principles. 14.6 Follow job specification/sample copy /relevant design/internet/client sharing. 14.7 Review and finalize the design. 14.8. Setup the file to output. 14.9. Clean and store the tools & equipment. 14.10 Maintain the record of perform task.	1	3
15	**DESIGN INNER PAGE** 15.1 Follow occupational health & safety (OSH). 15.2 Create a new document with required setup. 15.3 Create key drawing & layout. 15.4 Save the file as appropriate file format. 15.5 Insert content (text, shape & image) following basic design principles. 15.6 Follow job specification/sample copy /relevant design/internet/client sharing. 15.7 Review and finalize the design. 15.8 Setup the file to output. 15.9 Clean and store the tools & equipment. 15.10 Maintain the record of perform task.	1	2
16	**DESIGN POSTER** 16.1 Follow occupational health & safety (OSH). 16.2 Create a new document with required setup. 16.3 Create key drawing & layout. 16.4 Save the file as appropriate file format. 16.5 Insert text, logo & image following basic design principles. 16.6 Follow job specification/sample copy /relevant design/internet/client sharing. 16.7 Review and finalize the design. 16.8 Setup the file to output. 16.9 Clean and store the tools & equipment. 16.10 Maintain the record of perform task.	2	3
17	**DESIGN WALL CALENDER** 17.1 Follow occupational health & safety (OSH). 17.2 Create a new document with required setup. 17.3 Create key drawing & layout. 17.4 Save the file as appropriate file format.	2	3

	17.5 Insert text, logo and image following basic design principles. 17.6 Follow job specification/sample copy /relevant design/internet/client sharing. 17.7 Review and finalize the design. 17.8 Setup the file to output. 17.9 Clean and store the tools & equipment. 17.10 Maintain the record of perform task.			
18	**DESIGN DESK CALENDER** 18.1 Follow occupational health & safety (OSH). 18.2 Create a new document with required setup. 18.3 Create key drawing & layout. 18.4 Save the file as appropriate file format. 18.5 Insert text, logo & image following basic design principles. 18.6 Follow job specification/sample copy /relevant design/internet/client sharing. 18.7 Review and finalize the design. 18.8 Setup the file to output. 18.9 Clean and store the tools & equipment. 18.10 Maintain the record of perform task.	2	3
19	**DESIGN ENVELOP** 19.1 Follow occupational health & safety (OSH). 19.2 Create a new document with required setup. 19.3 Create key drawing & layout. 19.4 Save the file as appropriate file format. 19.5 Insert text, logo & image following basic design principles. 19.6 Follow job specification/sample copy /relevant design/internet/client sharing. 19.7 Review and finalize the design. 19.8 Setup the file to output. 19.9 Clean and store the tools & equipment. 19.10 Maintain the record of perform task.	2	2
20	**PERFORM MOTIVE DESIGN** 20.1 Follow occupational health & safety (OSH). 20.2 Create a new document with required setup. 20.3 Create key drawing & layout. 20.4 Save the file as appropriate file format. 20.5 Insert image & drawing following basic design principles. 20.6 Follow job specification/sample copy /relevant design/internet/client sharing. 20.7 Review and finalize the design. 20.8 Setup the file to output. 20.9 Clean and store the tools & equipment. 20.10 Maintain the record of perform task.	2	3
	Total	**32**	**50**

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 (Color)	1 no's

05	CTP Machine	1 No's

Recommended Software:

Sl	Name	Quantity
01	Adobe Illustrator (Updated Version)	As Necessary
02	Adobe Photoshop (Updated Version)	As Necessary
03	Adobe Acrobat (Updated Version)	As Necessary
04	Bijoy 52	As Necessary
05	Avro/Unicode	As Necessary

RECOMMENDED BOOKS:

Sl	Book Name	Writer Name	Publisher Name & Edition
01	Adobe Illustrator CS6	Bappi Ashraf	Gankosh Publication
02	Adobe Photoshop CS6	Bappi Ashraf	Gankosh Publication
03	Basic Graphic Design	Mohammad Arifur Raman	Saba Publication
03	Adobe Photoshop Classroom in a Book	Conrad cavez	Adobe Press.

WEBSITE REFERENCES:

Sl	Web Link	Remarks
01	https://www.youtube.com/watch?v=YqQx75OPRa0	Search here
02	https://www.youtube.com/@GFXMentor/playlists	Search here
03	https://www.youtube.com/@SatoriGraphics	Search here