



BANGLADESH TECHNICAL EDUCATION BOARD

Agargaon, Dhaka-1207

4-YEAR DIPLOMA-IN-ENGINEERING PROGRAM
SYLLABUS (PROBIDHAN-2016)

GRAPHICS TECHNOLOGY

TECHNOLOGY CODE: 696

5th SEMESTER

DIPLOMA IN ENGINEERING
PROBIDHAN-2016

GRAPHICS TECHNOLOGY (696)

5th SEMESTER

Sl. No	Subject Code	Name of the subject	T	P	C	Marks				Total
						Theory		Practical		
						Cont. assess	Final exam	Cont. assess	Final exam	
1	69651	Advertising Design	1	3	2	20	30	25	25	100
2	69652	Fabric Design	2	3	3	40	60	25	25	150
3	69653	Design & Editing	2	6	4	40	60	50	50	200
4	69654	Packaging Design -I	1	3	2	20	30	25	25	100
5	69655	Computer Graphics Design -I	2	6	4	40	60	50	50	200
6	69656	Video & Sound Editing	1	6	3	20	30	50	50	150
7	65851	Accounting Theory & Practice	2	3	3	40	60	50	-	150
Total			11	30	21	220	330	275	225	1050

69651

Advertising Design

T P C

1 3 2

AIMS

To be able to understand –

- Basic principles of Advertising Design
- Different types of media of Advertising Design
- Color and Composition of Advertising Design
- The legal issues and copyright in Advertising Design
- The Branding and Corporate identity for Advertising Design
- The tools and material of Advertising Design

SHORT DESCRIPTION

After completing this unit, participants will be able to understand - the basic principles, different types of media, Color and Composition, the legal issues and copyright, the Branding and Corporate identity, the tools and material of Advertising Design.

DETAIL DESCRIPTION

Theory:

1. Understand Advertising and Design

- 1.1. Define the advertising
- 1.2. Explain the importance of Design in Advertising
- 1.3. Explain the career path in Advertising Design
- 1.4. Describe the purpose Advertising Design
- 1.5. Describe the context of Advertising Design (with examples)
- 1.6. Explain the impacts of good Advertising Design (with examples)
- 1.7. Explain the value of teamwork in Advertising Design
- 1.8. Explain the opportunities as a freelancer in Advertising Design sector

2. Understand the Media of Advertising Design

- 2.1. Classify the media for Advertising Design
- 2.2. Describe the difference between print media and electronic media
- 2.3. Describe the principles of digital Advertising (web media)
- 2.4. Describe the principles of printed Advertising
- 2.5. Describe the principles of Advertising Design for Newspaper-Column
- 2.6. Describe TVC

3. Understand the Color and Composition of Advertising Design

- 3.1. Explain the importance of colors for Advertising Design
- 3.2. Explain the importance of composition in Advertising Design
- 3.3. Describe the colors used for digital Advertising (web media)
- 3.4. Describe the colors used for printed Advertising
- 3.5. Explain the principles composition in Advertising Design
- 3.6. Explain the rule of thirds and the rule of space (dead space) in composition

4. Understand the legal issues and copyright in Advertising Design

- 4.1. Explain the legal issues for Advertising Design
- 4.2. Explain the importance of copyright in Advertising Design
- 4.3. Describe the ownership of the contents in Advertising Design
- 4.4. Explain the importance of Model release (Model permission)
- 4.5. Explain the issues of using pictures of children and women in Advertising
- 4.6. Explain the issues of using pictures of Monument, Government Building and recognizable Personal properties in Advertising

5. Understand the Branding and Corporate identity for Advertising Design

- 5.1. Explain the importance of branding (with example of popular brands)
- 5.2. Explain the importance of Corporate identity
- 5.3. Explain the importance of Registered Trademark and pattern
- 5.4. Describe the technique for labels and package design for Advertising
- 5.5. Describe the technique for gift items and stationeries design for Advertising

6. Understand the tools and material of Advertising Design

- 6.1. Explain the software used in Advertising Design
- 6.2. Describe the materials used in Advertising Design
- 6.3. Describe the elements used in Advertising Design

PRACTICAL:

1. Create a Design of a Poster for a restaurant Opening event
2. Create a Design of a Flyer for an Institute offering Short course
3. Create a Design of a Festoon for observing a National/Internal Day
4. Create a Design of a Newspaper Add
5. Create a Design of a Billboard to create public awareness
6. Create a Design of a Web Banner for a New Product
7. Create a Design of a PVC/Panaflex Back-drop for a day-long workshop
8. Create a Design of a Shopping bag for a Community shop
9. Create a Design of a box for a mobile phone
10. Create a Design of a corporate brochure
11. Create a Design of a corporate desk calendar
12. Create a Design of a 4 color Magazine cover

Step-by-step working procedure for Practical Job:

1. Follow basic safety and operation procedure
2. Analyse and Interpret the job
3. Identify the required resources
4. Identify design standard
5. Collect resources
6. Create design layout
7. Review the design work and amend
8. Get client's feedback
9. Evaluate own work against client's feedback
10. finalize the design and submit the job

69652

Fabric Design

T P C

2 3 3

AIMS

- To be able to understand basic concept of design
- To be understand light and color
- To be understand printing on textile and fabrics

SHORT DESCRIPTION

Instruments and their uses, Basic concepts of design, Construction of design, Light and color phenomena, Printing on textile and fabrics, Equipment and tools use in fabric printing, finishing stage of printing products.

DETAIL DESCRIPTION

Theory :

1. Understand drawing instrument 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 its use
- 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.

2. Understand the 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.

3. Understand the basic concept of fabric design

- 3.1. State the importance of fabric design
- 3.2. Mention the classification of designs with its definitions and differences
- 3.3. Describe the principles of selecting a design for particular end product
- 3.4. Describe the general rules of drawing
- 3.5. Describe the general rules of drawing for fabric design.

4. Understand the construction of design from incomplete repeats

- 4.1. Give the quality of designer to complete a design from an incomplete design
- 4.2. List the causes of incomplete design
- 4.3. Describe the procedure to be complete from an incomplete design
- 4.4. Describe the methods of reproducing a design from a woven or printed fabric

5. Understand the light and color phenomena

- 5.1. Describe the dependence of illustration and color of fabric on light
- 5.2. State the physical characteristics of color
- 5.3. Describe about color vision
- 5.4. Discuss about absorption and transmission of visible light

6. Understand various printing process on fabrics

- 6.1. Identify various printing process on fabrics
- 6.2. Define Dyeing
- 6.3. Define & Explain the process of Bleaching.

7. Understand screen printing on textile and fabrics

- 7.1. Identify 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.

8. Understand the equipment and tools used in fabrics printing

- 8.1. Describe the roller prints
- 8.2. Explain the screen printing process
- 8.3. Describe the screen
- 8.4. Describe the automatic screen printing process on the fabric
- 8.5. Discuss the advantage of flatbed screen printing

9. Understand the fashion and design

- 9.1. Describe the trend of fashion
- 9.2. Describe the importance of design in clothing
- 9.3. Define basic clothing drawing
- 9.4. Define deference between men's wear, women's wear and kid's wear.

10. Understand the 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.

PRACTICAL

1. Draw at least 5 designs show light and shad effect (Manual and digital)
2. Draw at least 5 designs for body of a sari
3. Draw at least 4 designs for a shirt
4. Draw at least 10 geometrical designs mention the purpose
5. Enlarge a given design to the required size
6. Draw at least 5 designs for body of a Panjabi
7. Construct a graph paper design from a given fabric sample
8. Select the raw materials and chemicals required for making stencil
9. Perform color mixing using of color chart for screen printing on various surface
10. Make stencil in direct and indirect process
11. Prepare screen from given design for screen printing
12. Make the following text of printing ink
 - a) Fast used to light test
 - b) Elasticity test
 - c) Thermal conductivity test

AIMS

- To be able to understand the text and text editing
- To be able to understand the picture and picture box editing
- To be able to understand the object and object editing
- To be able to understand image editing Software

SHORT DESCRIPTION

Text and text editing, Picture box, move, copy, Resizing and Deleting object, Text Editing In-Design
Modifying imported graphics, Modifying shapes and paths, Corrective filtering, Image editing.

DETAIL DESCRIPTION**Theory :****1. Understand the text and text box editing in InDesign**

- 1.1. Define text box of InDesign program
- 1.2. Describe the editing process of text box
- 1.3. Describe the color and shadings
- 1.4. Describe the steps of align text and mirror text
- 1.5. Describe the steps to import text in text box

2. Understand the picture and picture box in InDesign

- 2.1. Describe the process to create a picture box
- 2.2. Describe the Steps to import picture in picture box
- 2.3. Describe the process of editing the image in picture box
- 2.5. Describe the function of various types of picture box
- 2.6. Describe the output Setting (Cutting Mark, Registration & Gripper Mark)

3. Understand work area & page setup in adobe in Design

- 3.1. Describe Document Properties
- 3.2. Define Master page
- 3.3. Describe the process of Master page
- 3.4. Define Link Picture
- 3.5. Describe Auto page Numbering

4. Understand text editing in Adobe InDesign

- 4.1. Describe working with text frames
- 4.2. Describe importing text files
- 4.3. Describe Editing paragraph style sheets
- 4.4. Describe adjusting columns in text frame
- 4.5. Describe working with Table formatting

5. Understand Moving, copying, resizing and deleting object of adobe in Design

- 5.1. Describe the steps to move the object
- 5.2. Describe the process of copying objects
- 5.3. Describe the steps of resizing and deletions the object
- 5.4. Define strokes and fills
- 5.5. Describe Gradient swatch

6. Understand Modifying imported graphics in In-Design

- 6.1. Describe making basic graphic modification
- 6.2. Describe scaling, Rotating, Skewing and flipping the graphic object
- 6.3. Describe modification process of bitmap graphics
- 6.4. Describe embedding import graphics
- 6.5. Describe working with imported layers

7. Understand modifying shapes and paths

- 7.1. Describe adding and modifying anchor points
- 7.2. Describe working with open and closed paths
- 7.3. Describe creating compound path
- 7.4. Describe editing compound path
- 7.5. Describe the function of scissors tool

8. Understand Layers in Design and Editing Software

- 8.1. Define layer
- 8.2. Describe the ways to make & select a layer
- 8.3. Describe the Layer Mode
- 8.4. Describe layer Style
- 8.5. Describe moving and linking layers

9. Understand corrective filtering in Photoshop Program

- 9.1. Describe corrective, Destructive and Effects filters
- 9.2. Describe use of filters
- 9.3. Describe fading a filter
- 9.4. Describe heightening focus and contract
- 9.5. Describe blurring and image

10. Understand image editing in Photoshop

- 10.1. Describe Color Curve
- 10.2. Describe quick and automatic correction process
- 10.3. Describe adjusting hues and coloring image
- 10.4. Describe making custom brightness adjustment
- 10.5. Define Selective color.

PRACTICAL:

1. Retouch a digital Image Using The Spot Healing Brush tools
2. Import image from scanner and separate Image from the background using lasso tools.
3. Separate Objects from Complex Background
4. Apply a Special Effect in Photoshop
5. Manipulate and retouch a digital image and content using an image processing application
6. Create a super-impose (Stitching) between two Images.
7. Create the Watercolor Effect in Photoshop
8. Create a Photo-frame
9. Create a picture composition in A4 Size.
10. Create a new picture. Make it 300 pixels high and 400 pixels wide. The resolution should be 72 pixels /inch.
11. Make a product brochure 3 folded.
12. Create a desk calendar for coming year.

13. Create a Vector logo using In-Design Program
14. Create a Clipping & Multipath Using the Pen tool.
15. Create the design of a Business card with 8 ups in A4 size
16. Create a 16 pages Magazine in Adobe InDesign Program
17. Create a Flyer Design in Adobe InDesign Program
18. Create a Catalogue Design
19. Create Design of final output with Cutting Mark, Registration Mark and Gripper Mark.
20. Create a simple Web page template in Photoshop

AIMS

- To be to understand the important role of packaging design.
- To be able to draw layout of packaging cartons and various types of boxes.
- To be able to make working layout of packaging.
- To be able to develop knowledge, skill and attitude of the preparation of object in relation to the packaging design in conventional & digital way.

SHORT DESCRIPTION

Design and pattern; system approach to packaging various media of packaging design; Technique of prepare packaging design; format and function; Logic behind design; Printing Process; Folding Box; Folding Carton; Raw materials in Packaging work.

DETAIL DESCRIPTION**Theory :****1. Understanding the packaging.**

- 1.1. Define Packaging.
- 1.2. Explain the role of packaging in Industrial Sector.
- 1.3. Describe the guidelines for retail packages.
- 1.4. Describe the distribution factors of packaging.
- 1.5. Describe the marketing factor of packaging.

2. Understand the technique to prepare packaging design & Illustration

- 2.1. Prepare packaging design & Illustration
- 2.2. Explain the principles of technique in packaging design.
- 2.3. Explain the past-up technique.
- 2.4. State the cropping technique.
- 2.5. Explain the past-up technique to the used text and illustration.
- 2.6. Identify the logic behind design and illustration for packaging product design.
- 2.7. Identify the specific illustration used in packaging works.

3. Understand the design and pattern of box and carton.

- 3.1. List the tools and equipment for a making packaging design.
- 3.2. Explain the method to prepare packaging design.
- 3.3. List the names of element to prepare various types of packaging design.
- 3.4. Explain various pattern in packaging design.
- 3.5. Explain the role of pattern in packaging design.
- 3.6. Describe the principle of preparing different patterns in packaging design.

4. Understand the various media & Raw Materials of packaging design.

- 4.1. Describe the various medias for packaging design.
- 4.2. Identify different types of medias of technique for design.
- 4.3. Mention the necessity of media of technique in packaging design.
- 4.4. Describe the uses of different types of media and technique & use in packaging design.
- 4.5. List the names of equipment and accessories used in media and technique.
- 4.6. Describe different types of raw materials used in packing works.
- 4.7. Mention the box making raw materials and carton manufacturing materials.

5. Understand the layout / format and function of packaging.

- 5.1. Define format/layout.
- 5.2. Describe various types of format and function for packaging.
- 5.3. Explain different sizes of format used in packaging works.
- 5.4. Mention the necessity of format for different sizes of packaging.
- 5.5. List the names of element of format to prepare packaging design.
- 5.6. Explain the technique of preparing packaging format.
- 5.7. Discuss various types of format and their functions in packaging.
- 5.8. Explain the relation between format and design.
- 5.9. Decorative packaging layout/format.

6. Understand the folding box & Carton Design.

- 6.1. Define folding box.
- 6.2. Describe the method of folding box.
- 6.3. Describe box styles.
- 6.4. Explain the uses of materials for folding box.
- 6.5. Describe the process of printing on corrugated fiber board.
- 6.6. Describe the method of making carton design.
- 6.7. Explain different factors which are used in manufacturing of folding cartons.
- 6.8. Discuss various kinds of carton.
- 6.9. Describe the method of manufacturing cartons.

PRACTICAL

1. Identify the tools and equipment for making design package design, pattern of boxes and cartons.
2. Identify the packaging Materials.
3. Prepare the layout for box and carton.
4. Prepare the design of box and carton.
5. Prepare the dummy for medicine box.
6. Prepare the laminated box design & dummy for baby food.
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.

AIMS

- To be able to develop the knowledge and skill in graphic design suitable for printing.
- To enable to use illustrator and Photoshop program.

SHORT DESCRIPTION

Important of the image fundamental; color management, painting, retouching and repairing; masking and contraction, corrective filter, working with layer; shapes and styles, text editing and image manipulation; Working with jpg and GIF formats,

DETAIL DESCRIPTION**Theory:****1. Understanding the fundamentals of Computer Graphic**

- 1.1 Define resolution and pixel
- 1.2 Discuss importance of using Layers in Graphic Design
- 1.3 Discuss file format
- 1.4 Discuss Image Color Mode
- 1.5 1.3 Discuss different types of graphics and their use
- 1.6 Describe open, duplicate and save file

2. Understand the working with layer

- 2.1 Discuss working with layers.
- 2.2 Describe selecting the contrast of layer.
- 2.3 Discuss moving, linking, aligning layers.
- 2.4 Discuss applying transformations.
- 2.5 Discuss masking layers.

3. Understand the color & Tonal balance

- 3.1 Describe color selection and editing.
- 3.2 Discuss different color modes.
- 3.3 Describe color correction methods.
- 3.4 Describe color channels.
- 3.5 Discuss color channel effects.

4. Understand different types of Brushes

- 4.1 Explain basics options of brushes.
- 4.2 Describe brush shape and opacity.
- 4.3 Explain brush modes.
- 4.4 Describe brush dynamics.
- 4.5 Describe use of different brush.

5. Understand the retouching & repairing

- 5.1 Describe cloning image element.
- 5.2 Discuss repeating patterns.
- 5.3 Describe stepping back through time.
- 5.4 Describe the necessity of color retouching.

6. Understand the mask & contraction

- 6.1 Describe selecting via mask.
- 6.2 Discuss painting and editing inside selection.
- 6.3 Describe working in quick mask mode.
- 6.4 Explain generating mask automatically.
- 6.5 Discuss creating independent mask channel.
- 6.6 Describe building a mask from an image.

7. Understand the corrective filtering

- 7.1 Discuss filter basics.
- 7.2 Discuss heightening focus and contrast.
- 7.3 Describe blurring and image
- 7.4 Discuss noise factors

8. Understand the shapes & styles

- 8.1 Discuss drawing shapes
- 8.2 Discuss the bold new layers styles.
- 8.3 Describe modifying and saving effects.

9. Understand the text editing and manipulation

- 9.1 Explain the necessity of text editing and manipulation.
- 9.2 Discuss text as an art.
- 9.3 Describe vertical and horizontal type arrangement.
- 9.4 Describe text form aligns.
- 9.5 Discuss the process to edit type as shape.

10. Understand the graphics for the web

- 10.1 Describe the rules of graphics design for web.
- 10.2 Explain saving JPG images.
- 10.3 Discuss preparing and saving GIF images

PRACTICAL

1. Perform simple Image retouching using Photoshop.
2. Perform complex Image retouching using Photoshop.
3. Apply filter effect using Photoshop.
4. Perform color correction using Photoshop.
5. Create a 3D effect designs using Photoshop.
6. Design a wall calendar using graphic software.
7. Create a mobile phone design using graphic software.
8. Create a briefcase design using graphic software.
9. Create a gold watch design using adobe software.
10. Create a magazine cover design for a corporate body.
11. Create an inner page design for annual report.
12. Resize & retouch an image
13. Separate image from background using magic-wand tools.
14. Separate image from background using lasso tool.
15. Separate image from background using pen tool.
16. Apply effects on text using Photoshop.
17. Apply effects on image using Photoshop.
18. Retouch an image using clone stamp tool in Photoshop
19. Retouch an image using clone healing tool in Photoshop
20. Convert a black & white image into true color image & apply color.

AIM

- To be able to Capture Video
- To be able to edit video footage
- To be able to edit sound
- To be able to Render & Output

Short Description

Fundamental grammar of video and sound editing, technique and language, video recording, sound take & voice over, Capture video, video editing, sound editing, rendering and output.

Theory**1. Understand Capturing video**

- 1.1. Define Capture card and its working capability.
- 1.2. Describe necessity of capture card.
- 1.3. Define VTR.
- 1.4. Describe relation between VTR & Capture card.
- 1.5. Define TC, Capturing, Batch Capture, Logging, Sketch disk, Device Controller

2. Understand Grammar of video editing.

- 2.1. Define Sense of editing.
- 2.2. Describe types of Cut.
- 2.3. Describe Short division.
- 2.4. Explain Match cutting.
- 2.5. Describe Continuous Editing.

3. Understand different types of editing.

- 3.1. Describe different types of editing.
- 3.2. Describe Difference among drama editing, TVC editing, Music video, Documentary, Feature film etc.
- 3.3. Explain relation among drama editing, TVC editing, Music video, Documentary, Feature film etc.

4. Understand Title.

- 4.1. Describe how to add a title in timeline.
- 4.2. Describe how can we edit title.
- 4.3. Explain what is the difference between crawl and scroll
- 4.4. Describe how to use another GFX file.

5. Understand work with effect.

- 5.1. Define Effect.
- 5.2. Explain Filter and Transition.
- 5.3. Explain making preset and using templet.
- 5.4. Describe making chroma.

6. Understand sound analysis.

- 6.1. Define Sample rate.
- 6.2. Explain DB.
- 6.3. Discuss about proper balance of sound.
- 6.4. Explain difference between analogue and digital sound.

7. Understand Device of sound recording.

- 7.1. Define Microphone.
- 7.2. Describe difference among different microphone.
- 7.3. Explain how much device need for sound recording.
- 7.4. Define acoustic of sound proof.

8. Understand file format and compression.

- 8.1. Define video file format.
- 8.2. Describe proper file extension.
- 8.3. Explain how to convert video file.
- 8.4. Define compression.

PRACTICAL:

1. Prepare a project script and import video clip and image.
2. Input raw video image in computer using capture card.
3. Create motion with still image.
4. Make an analysis report of different sound.
5. Prepare a project with Sound taking.
6. Prepare a project with Voice over.
7. Apply different sound effect.
8. Apply different video effect.
9. Make opening title, end title and running caption.
10. Rendering and output in different format.
11. Prepare a silent movie project.
12. Prepare lyric video project.
13. Prepare lip dub project.
14. Prepare a project with import GFX.
15. Prepare public service announcement project by using text and still image motion.
16. Prepare a news package project.
17. Prepare a documentary pre-Production process.
18. Prepare a documentary Production process.
19. Prepare a documentary post-Production process.
20. Make portfolio review.

AIMS

- To be able to understand the principles and practices of book keeping and accounting.
- To be able to understand the procedures of general accounting, financial accounting and their applications.
- To be able to understand the concept of income tax , VAT & Public works accounts.

Course Outlines

Concept of book keeping and accounting; Transactions; Entry systems; Accounts; Journal; Ledger; Cash book; Trial balance; Final accounts; Cost account & financial accounting; Income Tax; Public works accounts.

DESCRIPTION**Theory****1. Concept of book keeping and accounting.**

- 1.1 Define book keeping and accountancy.
- 1.2 State the objectives & of book keeping.
- 1.3 State the advantages of book keeping.
- 1.4 Differentiate between book keeping and accounting.
- 1.5 State the necessity and scope of book keeping and accounting.

2. Transactions Analysis.

- 2.1 Define transactions and business transaction.
- 2.2 Describe the characteristics of transaction.
- 2.3 Discuss the classification of transaction.

3. Entry system of Accounting.

- 3.1 State the aspects of transactions.
- 3.2 Define single & double entry system.
- 3.3 Discuss the principles of double entry system.
- 3.4 Distinguish between single entry and double entry system of book keeping.
- 3.5 Justify whether double entry system is an improvement over the single entry system.

4. Classification of accounts.

- 4.1 Define accounts.
- 4.2 State the objectives of accounts.
- 4.3 Illustrate different type of accounts with example.
- 4.4 Define "Golden rules of Book keeping".
- 4.5 State the rules for "Debit" and "Credit" in each class of accounts.
- 4.6 Define accounting cycle.

5. Journal .

- 5.1 Define Journal.
- 5.2 State the functions of Journal.
- 5.3 Mention the various names of Journal.
- 5.4 Interpret the form of Journal.

6. Ledger.

- 6.1 Define ledger.
- 6.2 Interpret the form of ledger.
- 6.3 State the functions of ledger.
- 6.4 Distinguish between Journal and Ledger.
- 6.5 Explain why ledger is called the king of all books of accounts.
- 6.6 Explain the following terms: Balance, Balancing; Debit balance; credit balance.

7. Cash book & Its Classification.

- 7.1 Define cash book.
- 7.2 Classification of cash book.
- 7.3 Explain cash book as both Journal and Ledger.
- 7.4 Define discount.
- 7.5 Explain the different types of discount.

8. Trial balance.

- 8.1 Define trial balance.
- 8.2 State the object of a trial balance.
- 8.3 Discuss the methods of preparation of a trial balance.
- 8.4 Explain the limitations of a trial balance.
- 8.5 Prepare trial balance from given ledger balance. (practical)

9. Final accounts.

- 9.1 State the components of final account.
- 9.2 Distinguish between trial balance and balance sheet.
- 9.3 Select the items to be posted in the trading account, profit & loss account and the balance sheet.
- 9.4 State the adjustment to be made from the given information below or above the trial balance.
- 9.5 Explain the following terms: revenue expenditure; capital expenditure; depreciation; annuity method demnishing balance method, machine hour method

10. Cost and financial accounting.

- 10.1 Define financial accounting.
- 10.2 State the objectives of financial accounting.
- 10.3 Define cost accounting.
- 10.4 State the elements of direct cost and indirect cost.
- 10.5 Discuss the capital budgeting
- 10.6 Explain the following terms:
 - a. Fixed cost
 - b. Variable cost
 - c. Factory cost
 - d. Overhead cost
 - e. Process cost
 - f. Direct cost
 - g. Operating cost
 - h. Standard cost

11. Income Tax

- 11.1 Define Income Tax.
- 11.2 State the objects of Income Tax.
- 11.3 Classification of assesses.
- 11.4 Taxable income of assesses.
- 11.5 Tax rebate.
- 11.6 Explain the following terms: Income tax year; assessment year, NBR.

12. Public works accounts.

- 12.1 State the important aspects of public works accounts.
- 12.2 Describe the main features of public works accounts.
- 12.3 Define Value Added Tax (VAT)
- 12.4 State the merits and demerits of VAT.
- 12.5 Explain the following terms :Revenue ; Grant ; Bill; Voucher.

PRACTICAL

1. Identify the transaction from given statements stating reasons.
2. Determine Debtor (Dr) and Creditor (Cr.) from given transactions applying golden rules.
3. Journalize from given transactions.
4. Prepare ledger from given transactions.
5. Prepare double column cash book from given transactions showing balances.
6. Prepare triple column cash book from given transaction and find out the balances.
7. Prepare analytical and imprest system of cash book.
8. Prepare trial balance from the given ledger balance.
9. Prepare trading account, profit & loss account and balance sheet from the given trial balance & other information.
10. Prepare cost sheet showing prime cost, factory cost, cost of production, total cost and selling price.

REFERENCE BOOKS

1. Book-keeping & Accounting - Prof. Gazi Abdus Salam
2. Principles of Accounting - Hafiz uddin
3. Cost Accounting - Prof. Asimuddin Mondol
৪. হিসাবরক্ষণ ও হিসাববিজ্ঞান - পরেশ মন্ডল
৫. উচ্চ মাধ্যমিক হিসাববিজ্ঞান - হক ও হোসাইন
৬. আয়কর - ড. মনজুর মোরশেদ