BANGLADESH TECHNICAL EDUCATION BOARD

Agargaon, Dhaka-1207

4-YEAR DIPLOMA-IN-ENGINEERING PROGRAM

SYLLABUS (PROBIDHAN-2016)

GRAPHICS TECHNOLOGY

TECHNOLOGY CODE: **696**

7th SEMESTER

DIPLOMA IN ENGINEERING
PROBIDHAN-2016

GRAPHICS TECHNOLOGY (696)
7th 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	69671	Animation	1	3	2	20	30	25	25	100
2	69672	Computer Graphics Design - 3	2	6	4	40	60	50	50	200
3	69673	Visual Communication	2	3	3	40	60	25	25	150
4	69674	Packaging Design-2	2	3	3	40	60	25	25	150
5	69675	Graphic Professional Practice	0	6	2	0	0	50	50	100
6	69676	Advanced Digital Photography	2	3	3	40	60	25	25	150
7	65853	Innovation & Entrepreneurship	2	0	2	40	60	0	0	100
		Total	11	24	19	220	330	200	200	950

69671   **Animation**   **T P C**

                                                              1 3 2

Aims

- To develop the basic knowledge of 3D Graphic design.
- To develop skill in create a Model.
- To understand Materials & Maps used in 3D Animation.
- To able to animate a Model.
- To able to render a scene.

Short description

Basic of color system, Basic of animation, Object preparation, Creating Model, Materials & Maps, Broadcasting system, Various Effect, Animation creation, rendering scene.

Detail description

Theory

1. Understand the basic of 3D graphic design.
1.1 Define 3D graphic design
1.2 Describe the use of 3D graphic design.
1.3 Define color depth
1.4 Describe 16 bit color & 24 bit color system
1.5 List various 3D animation software.
1.6 List the required hardware to install the 3D graphics software.
1.7 Describe the installation process of 3D animation software.

2. Understand the interface of 3D animation.
2.1 List various view 3D animation.
2.2 Describe the tools use 3D animation.
2.3 Describe various bar, line & slider.
2.4 Define attribute editor.
2.5 Describe the use of channel box.
2.6 Describe tool setting option of 3D animation.

3. Understand the modeling of Maya.
3.1 Define modeling.
3.2 List various modeling system of 3D animation.
3.3 Describe various modeling system of 3D animation.
3.4 Discuss NURBS modeling.
3.5 Describe Polygonal modeling.
3.6 Discuss Subdivision modeling.

4. Understand the NURBS modeling.

4.1 Elaborate NURBS.

4.2 Describe the process of creating a NURBS cube.

4.3 Describe the technique of creating a NURBS cylinder.

4.4 Describe the process of creating a NURBS shapes using CV curve.

4.5 Describe the technique of editing a NURBS model.

5. Understand the Polygonal modeling.

5.1 Define vertex, edge & face.

5.2 Describe the process of creating a polygonal object.

5.3 Describe the technique of editing a polygonal model.

5.4 Define extrude.

5.5 Describe the extrude process.

6. Understand color & texturing.

6.1 Describe color mapping

6.2 Discuss about hyper shade.

6.3 Describe the process of adding color to an object.

6.4 Describe the technique of texturing a model.

6.5 Describe the technique of coloring in a specific part of a model.

7. Understand the effect of Maya.

7.1 Mention various effects used in 3D animation.

7.2 Discuss about paint effect.

7.3 Describe the process of applying paint effect.

7.4 Discuss about fire effect.

8. Understand the animation process.

8.1 Define frame & key frame.

8.2 Define graph editor.

8.3 Discuss about timeline.

8.4 Describe the process to set a key frame.

8.5 Discuss about path animation.

9. Understand the basic of rendering process.

9.1 Define render.

9.2 Elaborate IPR.

9.3 Discuss about render setting.

9.4 Describe various broadcasting system.

9.5 Describe the process of render a scene.

PRACTICAL

1. Install 3D animation software
2. Use 3D animation software interface.
3. Use tools & status line of 3D Animation software.
4. Create an object using various modeling system.
5. Create a snooker table using 3D Animation software.
6. Applying color to a snooker table using 3D Animation software.
7. Create a model of hand using 3D Animation software.
8. Create various shapes using revolve command.
9. Prepare a scene using paint effect.
10. Create a path animation.
11. Render a scene.

Reference book:
   1. MAYA 3D Modeling & Animation

69672   Computer Graphic Design- 3   T   P   C
2   6   4

AIMS

- To be able to develop the knowledge and skill in graphic design suitable for printing.
- To be able to acquire knowledge in production of monochrome prints and color transparencies.
- To enable to use photography as an original medium for illustration.

SHORT DESCRIPTION

Important of Computer graphic design; Basic Design Principles, basic styles and special formats of fonts, Drawing Basic Shapes, the Color, Saving and exporting file, Work Area in Photoshop program, Layers, Image manipulation, Color Correction & Color Separation, Preparing Graphics for the Web, Text and text box editing In Adobe In-Design, Picture and picture box In Adobe In-Design

DETAIL DESCRIPTION

Theory

1. Understanding the importance of graphic design.

1.1 Define Computer graphic design.

1.2 Explain the Basic design principles: Harmony, balance, contrast, unique.

1.3 Explain the importance of Computer graphic design in printing technology.

1.4 Discuss the Career opportunity in Computer graphic design.

2. Understand the basic styles and special formats of Text in Illustrator.

2.1 Explain Character Palate.

2.2 Explain Paragraph & indent.

2.3 Explain Text Wrapping.

2.4 Explain Tab Setting.

2.5 Describe page Linking of Text.

3. Understand Fill & Gradient Color in Illustrator.

3.1 Define Color modes.

3.2 Discuss the Fill, Stroke & Gradient Color.

3.3 Explain the spot and process color types.

3.4 Explain the color using the toolbox.

3.5 Explain the Swatches palette.

3.6 Discuss Swatch Libraries.

4. Understand saving and exporting file in Illustrator.

4.1 Discuss the saving and exporting.

4.2 Discuss saving file in EPS format.

4.3 Explain the Saving file in Adobe PDF format.

4.4 Discuss the Exporting image /Object in other program.

5. Understand Work Area in Photoshop program

5.1. Describe the work area in Photoshop.

5.2. Describe Using Toolbar.

5.3. Describe Platte and option Bar.

5.4. Describe Overview toolbar.

5.5. Describe Preference setting in Photoshop.

6. Understand Layers in Photoshop program

6.1. Define layer.

6.2. Describe Layer Adjustment.

6.2. Explain Ad Layer masking.

6.4. Describe Layer Mode.

6.5. Explain Layer Style.

7. Understand Image manipulation in Photoshop Program

7.1. Describe Manipulation Image.

7.2. Describe Liquefy of filter.

7.3. Describe Retouching.

7.4. Describe Clipping Path & Multi path.

7.5. Describe Alpha mask.

7.6. Define Image Sizing & Resolution.

8. Understand Color Correction & Color Separation in Photoshop

8.1. Describe Color Correction.

8.2. Describe quick and automatic correction process.

8.3. Describe adjusting hue and colorizing image.

8.4. Describe making custom brightness adjustment.

8.5. Describe Color Curve.

8.6 Describe Color Separation.

8.7 Describe Color Channel & Mode.

9. Understand the Preparing Graphics for the Web

9.1. Define Web Design.

9.2. Explain the Dividing artwork into slices.

9.3. Discuss Web graphics with SVG.

9.4. Discuss Web photo gallery.

9.5. Explain the Raster& vector images.

9.6. Describe the Optimizing colors in GIF and PNG-8 images.

9.7. Describe the image maps for the web.

10. Understand the work area of Adobe In-Design

10.1. Describe the work area of Adobe In-Design.

10.2. Discuss the tool bar of Adobe In-Design.

10.3. Describe Platte & option bar.

10.4. Describe control bar.

10.5. Explain menu bar.

11. Understand the text format of Adobe In-Design

11.1. Define text format.

11.2. Describe text color & shading.

11.3. Describe text paragraph.

11.4. Describe line spacing.

11.5 Describe indent.

12. Understand Image setting of Adobe In-Design

12.1. Describe the process of importing image.

12.2. Describe master page layout.

12.3. Define auto number page.

12.4. Describe image link/ update.

12.5 Describe filter effect.

PRACTICAL

1. Create a colorful Business Card using adobe Illustrator program
2. Perform a poster design (Multicolor)
3. Create a Logo Design using Pen tools
4. Create a convert Raster to vector image
5. Demonstrate a Greeting card in Illustrator Program
6. Perform the Inner pages Design
7. Create a book cover design (Front & Back)
8. Create an ID card Design
9. Create a money receipt Design (Four Color)
10. Make a Folder Design
11. Create a wall calendar Design (Six Pages)
12. Create a leaflet design
13. Create a news paper Ad for consumer product
14. Make design a Letterhead Pad.

69673   Visual Communication   T   P   C
                                                                     2   3   3

AIMS

• To be able to understand the basic concept of communication and its process.

• To be enable to introduce with internet.

• To be able to acquire knowledge of multimedia.

• To be able to develop knowledge, skill and attitude of using graphic media.

• To be able to develop knowledge about basic web design.

SHORT DESCRIPTION

Concept of multimedia and internet; Digital image; concept of managing medias elements and visualization; Digital audio editing; animation; Web graphics; graphic media; role of newspaper & magazine.

DETAIL DESCRIPTION

Theory :

1. Understand the Digital Image.

1.1. Define digital image.

1.2. Explain the process of importing image from any electronics device.

1.3. Define resolution.

1.4. Explain an image resizing process.

1.5. Explain image retouching.

1.6. Describe image compressing method.

2. Understand the concept of Video.

2.1. Define video.

2.2. List various video editing software.

2.3. Define transaction.

2.4. Apply various transactions.

2.5. List various video editing software.

2.6. Explain the file extension of video file.

3. Understand the concept of Audio.

3.1. Define Audio.

3.2. List various sound editing software.

3.3. Define pitch.

3.4. Describe the process of capturing sound using sound editing software.

3.5. Explain the file extension of audio.

4. Understand the basic of networking.

4.1. Define networking.

4.2. List the tools and equipments used in networking.

4.3. Define router, media converter and switch.

4.4. Describe various types of network.

4.5. Define modem.

4.6. Explain the working process of modem.

4.7. Define fiber optics, WiFi, Bluetooth & Shareit.

4.8. Define cloud computing.

4.9. Explain the necessity of cloud computing.

5. Understand the concept of internet.

5.1. Define internet.

5.2. Explain internet browser.

5.3. Describe search engine optimization (SEO).

5.4. Explain the process of file downloading.

5.5. Explain the process of file uploading.

5.6. Explain the process of access the internet.

6. Understand the basic of e-mail.

6.1. Define e-mail.

6.2. Explain the process of create a new e-mail account.

6.3. Discuss the method of e-mail processing.

6.4. Mention the steps of file processing.

6.5. Define CC and Bcc.

7. Understand the concept of web design.

7.1. Define Web Design.

7.2. Mention the software used in web page design.

7.3. Discuss the HTML & HTTP.

7.4. Describe the basic structure of HTML

7.5. Define Tag and Attributes.

7.6. Describe the Web color.

8. Understand the importance of advertisement to communicate different product items.

8.1. Explain the meaning of advertisement.

8.2. Describe the preparing method of advertisement.

8.3. Describe the process of applying advertisement to communicate the information.

8.4. Explain the role of advertisement for communication.

9. Understand the role of newspaper for transferring message.

9.1. Explain the meaning of transferring message.

9.2. Describe the procedure of collecting messages.

9.3. Describe the method of publishing messages in the newspaper.

9.4. Describe the role of newspaper for creating communication from one area to another area.

9.5. Explain the benefit of good communication given by newspaper.

10. Understand the cyber security.

10.1. Define cyber security.

10.2. Explain the necessity of cyber security.

10.3. Describe various basic security practices. (Strong password, Firewall, Account Controls, File Privacy.)

10.4. Differentiate between various security threats and computer attacks.

10.5. Explain the types of malware.

PRACTICAL

1. Create a graphic in computer and applied it to multimedia.
2. Scan color image into the computer and apply it for making special effects for professional result
3. Create new sound with the digital audio editing.
4. Create 3D models and animate them by applying appropriate textures.
5. Create high quality movies with non linear video editing software.
6. Design a WEB with the help of graphic software and apply animation.
7. Draw illustration work with the help of illustration program.
8. Draw different Models of advertisement.
9. Draw a dummy of a daily newspaper.
10. Draw a dummy of a magazine.

69674 **PACKAGING DESIGN-2** **T P C**
2 3 3

<u>**AIMS**</u>

• To be able to understand the packaging materials and packaging products
• To be able to understand surface design and sells appeal
• To be able to understand various types of packaging

<u>**SHORT DESCRIPTION**</u>

System approach to packaging; layout/format, media & technique to prepare packaging design; packaging Materials and packaging products; Surface design and sales appeal, Specialty papers for packaging; Adhesive and tapes; Packaging of dairy products; Packaging for food products; Labels and labeling; flexible packaging.

<u>**Detail Description**</u>

<u>**Theory :**</u>

1. Understand the system approach to packaging
1.1. Define the packaging.
1.2. Explain the function of a package.
1.3. Describe the guidelines for retail packages
1.4. Describe the factors influencing design selection of package
1.5. Describe the Marketing factors of packaging design
1.6. Describe the cost factors of packaging design

2. Understand the layout/format, media & technique to prepare packaging design.
2.1. Define format/layout, media and technique.
2.2. Discuss various types of format and their functions in packaging.
2.3. Describe various types design.
2.4. Describe dummy for packaging.
2.5. Discuss the shading and paste-up technique.
2.6. Describe various types of tint.
2.7. List the names of equipment and accessories used in media and technique.

3. Understand the packaging Materials and packaging products
3.1. Describe the various materials used in packaging design
3.2. Describe the rigidity, Stiffness and softness of packaging design's materials
3.3. Describe the following materials of packaging design
    (i) Corrugated Board (ii) Multi wall paper sacks (iii) Films
    (iv) Folding Board   (v) Foils
3.4. Describe the storing method of finished goods materials of packaging design.

4. Understand the surface design and sales appeal
4.1. Describe the surface design and sales appeal
4.2. Explain the scope and prospect of a package
4.3. Describe the objectives and recent trends of package designing
4.4. Describe the hanging package design with advertising
4.5. Describe the impact of sales & marketing .

5. Understand the specialty papers for packaging
5.1. Describe the specialty of packaging paper.
5.2. Describe the necessity of lamination.

5.3. Describe the used of parchment paper in packaging.

5.4. Explain the function of following paper

    (i) Proof paper   (ii) Waxed paper   (iii) Water proof paper

    (iv) Wet strength paper (v) Mold resistant paper (vi) VPI paper

6. Understand the adhesive and tapes

6.1. Describe the classification of tapes and adhesive.

6.2. Describe the application of adhesive and tapes in the packaging design.

6.3. Explain the properties of adhesive and tapes.

6.4. Describe the important terms in pressure sensitive tapes.

7. Understand the packaging of dairy food products

7.1. Describe the requirements of diary food products of packaging.

7.2. Describe the design of diary pack.

7.3. Describe the packaging materials used in dairy industry.

7.4. Describe the present scenario of dairy packaging products.

8. Understand the packaging for food products

8.1. Describe the objectives of food processing.

8.2. Describe the preservation and stabilization of food products packets.

8.3. Describe the method of food packaging.

8.4. Describe the caution marks and other marks in food packaging cartoon and boxes.

8.5. Describe the thermal processing of food in the packaging.

9. Understand the labels and labeling

9.1. Define the labels and labeling.

9.2. Describe the type of labels.

9.3. Describe the purpose of labeling.

9.4. Describe the pre-gummed paper labels.

9.5. Describe the labeling machine.

10. Understand the flexible packaging

10.1. Describe the flexible packaging.

10.2. Describe the converting characteristics of flexible cartons and bags.

10.3. Describe the pouches and its advantages.

10.4. Describe the atmosphere for packaging.

10.5. Describe the snack & fast food packaging.

PRACTICAL

1. Identify the tools and instruments used in packaging design
2. Prepare a layout for medicine cartoon
3. Prepare a design and dummy for medicine cartoon
4. Prepare a layout of a biscuit packet
5. Prepare a design and dummy of a biscuit packet
6. Prepare a design and dummy of a dairy product packet
7. Prepare a layout of a fruit juice packet
8. Prepare a design and dummy of a fruit juice packet
9. Prepare a layout of readymade food packets
10. Prepare a design and dummy of readymade food packets
11. Prepare a layout of a soap packet
12. Prepare a design and dummy of a soap packet

Reference :

1)The Printing Industry- by Victor Strauss. (English version)

2)Hand Book of Print Media-by H. Kipphan. (English version)

69675	**Graphic Professional Practice**	**T P C**
		0 6 2

1. Develop a 3D logo.

1.1. Prepare the document.

1.2. Create basic shapes for logo.

1.3. Draw edge.

1.4. Make the Magic of gradients & transparency.

1.5. Reflection & transparency.

1.6. Final the project.

1.7. Conclusion.

2. Create a realistic light bulb design

2.1. Create new document.

2.2. Create the background.

2.3. Create the lighting.

2.4. Make the light bulb design.

3. Create a realistic vector painting

3.1. Getting started.

3.2. Drawing the first layer.

3.3. Add halftone & shadow.

3.4 Final the project.

4. Create a set of security icons

4.1. Setup a new document.

4.2. Setup the layers.

4.3. Create the reference grid.

4.4. Create the visibility toggle icon.

4.5. Create the finger print icon.

4.6. Create the incognito mode icon.

4.7. Create the security lock icon.

4.8. Final the project.

5. Create realistic grape.

5.1. Create new document.

5.2. Create grape cluster.

5.3. Apply & adjust the gradient.

5.4. Create water drops.

5.5. Create leaf.

5.6. Create stalk shape & fill it with gradient.

5.7. Add soft gradient to the background.

6. Create a realistic gold watch.

6.1. Create new document.

6.2. Create the dial.

6.2. Create the center of the dial.

6.4. Create hour minute and second hands.

6.5. Decorate the watch.

6.6. Draw the chain.

6.7. Join the chain.

6.8. Finish the work.

7. Create a 6 page wall calendar design.

7.1. Create new document.

7.2. Prepare date panel.

7.3. Import image.

7.4. Add text.

7.5. Add logo.

7.6. Final the project.

8. Create a 6 page desk calendar design.

8.1. Create new document.

8.2. Prepare date panel.

8.3. Import image.

8.4. Add text.

8.5. Add logo.

8.6. Final the project.

9. Create a diary design.

9.1. Create new document.

9.2. Prepare inner page.

9.3. Import image for 1st forma.

9.4. Add text.

9.5. Add logo.

9.6. Final the project.

10. Create annual report design

10.1. Create new document.

10.2. Create background.

10.3. Import image.

10.4. Add text.

10.5. Create cover page design.

10.6. Add registration marks.

10.7. Final the project.

69676   Advanced Digital Photography   T P C

2 3 3

AIMS

• To understand the important role of digital photography.

• To be able to color correction by a digital camera.

• To be able to take a high resolution picture.

• To be able to take step a digital image processing.

SHORT DESCRIPTION

Prepping the Camera, Camera setting, Exposure setting; setting up a point-and-shoot camera; Focal length, various types of image effect; Camera power system; aperture and shutter; zone focusing; various types of light and image processing.

DETAIL DESCRIPTION

Theory :

1. Understand the basic Camera operation.

1.1. Explain about the digital camera.

1.2. Describe the camera setting.

1.3. Describe about the exposure setting.

1.4. List the useful accessories for photography.

1.5. Describe the tripod.

2. Understand the taking Interesting photographs.

2.1. Describe about the rule of thirds.

2.2. Explain about framing.

2.3. Describe about landscape photography.

2.4. Describe about portrait photography.

2.5. Explain the depth of field.

2.6. Describe under expose, normal expose and over expose.

2.7. Explain exposure latitude.

3. Understand the magic with the right lens.

3.1. Describe the focal length option.

3.2. Explain wide angle lens.

3.3. Describe the telephoto lens.

3.4. Describe focal lens creativity.

3.5. Describe about tele-lens.

4. Understand the aperture and shutter.

4.1. Describe speeding up cameras response time.

4.2. Describe the right time shutter time speed.

4.3. Describe aperture selection.

4.4. Describe about zone focusing.

4.5. Describe lighting for macro photography.

4.6. Describe close-up photography tools

4.7. Explain aperture selection

5. Understand about the light.

5.1. Describe about light quality to perform photograph.

5.2. Describe the high contrast lighting.

5.3. Explain about light direction.

5.4. Describe the lighting in photographs.

5.5. Describe about built in Flash.

5.6. Describe about supplementary in Flash.

6. Understand the digital darkroom

6.1. Describe a photo transferring method.

6.2. Describe a photo transferring Camera to PC.

6.3. Describe a photo transferring PC to Camera.

6.4. Describe the raw formats advantages & disadvantages.

7. Understand the image management and archiving.

7.1. Describe the image management.

7.2. Explain setting up a photo drive and master catalog.

7.3. Describe setting up a Photoshop action.

7.4. Describe a realistic look at some archiving methods.

8. Understand the image processing.

8.1. Describe photo manipulation.

8.2. Describe about exposure correction.

8.3. Describe the curves, brightness, color balance setting.

8.4. Describe dodge, masking, burning.

8.5. Describe about color filters.

PRACTICAL

1. Creating dreamy photography.
2. Coloring a black & white image.
3. Changing hair coloring photos.
4. Take a sunset photography.
5. Perform a night photography.
6. Perform a bird photography.
7. Perform a food photography.
8. Perform photography for pets.
9. Manipulate a digital photograph.
10. Apply effect in digital photography.
11. Perform portrait photography.
12. Perform modeling photography.

AIMS
• To be able to understand the concept of entrepreneurship & entrepreneur.
• To be able to understand the concept of environment for entrepreneurship.
• To be able to understand the sources of venture ideas in Bangladesh.
• To be able to understand the project selection.
• To be able to understand business planning.
• To be able to understand the insurance and premium.
• To be able to understand the MDG & SDG.

SHORT DESCRIPTION
Concepts of entrepreneurship & entrepreneur; Entrepreneurship & economic development; Environment for entrepreneurship; Entrepreneurship in the theories of economic growth; Sources of ventures ideas in Bangladesh; Evaluation of venture ideas; Financial planning; Project selection; Self employment; Entrepreneurial motivation; Business plan; Sources of assistance & industrial sanctioning procedure; Concept of SDG; SDG 4,8 .

DETAIL DESCRIPTION

Theory :

1. Understand the basic concept of entrepreneurship & entrepreneur.
1.1 Define entrepreneurship & entrepreneur.
1.2 Discuss the characteristics and qualities of an entrepreneur.
1.3 Mention the classification of entrepreneur.
1.4 Discuss the necessity of entrepreneurship as a career.
1.5 Discuss the prospect of entrepreneurship development in Bangladesh.

2. Understand the concept of entrepreneurship and economic development.
2.1 Define economic development.
2.2 Discuss the economic development process.
2.3 Discuss the capital accumulation or rate of savings.
2.4 Discuss the role of entrepreneur in the technological development and their introduction into production Process.
2.5 Discuss the entrepreneur in the discovery of new product.
2.6 Discuss the discovery of new markets.

3. Environment for entrepreneurship development:
3.1 Define the micro environment.
3.2 Discuss individual income, savings and consumption.
3.3 Define macro environment.
3.4 Discuss political, socio-cultural, economical, legal and technological environment.
3.5 Difference between micro and macro environment .

4. Understand the concept of entrepreneurship in the theories of economic growth.
4.1 Define entrepreneurship in the theories of economic growth.
4.2 Discuss the Malthusian theory of population and economic growth.
4.3 Discuss the stage theory of growth.
4.4 Discuss the Schumpeterian theory of economic development.
4.5 Discuss the entrepreneurship motive in economic development.

5. Understand the sources and evaluation of venture ideas in Bangladesh.
5.1 Define sources of venture ideas in Bangladesh.
5.2 Discuss different types of sources of venture ideas in Bangladesh.
5.3 Define evaluation of venture ideas.
5.4 Discuss the factors that influence the selection of venture idea.

6. Understand the concept of project selection and financial planning.
6.1 Define project.
6.2 Discuss the idea of project.
6.3 Describe the guide lines for project ideas.
6.4 Discuss the sources of project ideas.
6.5 Discuss the evaluation of project ideas.
6.6 Describe the technical aspect of project.
6.7 Define financial planning.
6.8 Discuss the long term financial plan.
6.9 Discuss the short term financial plan.

7. Understand the concept of self employment.
7.1 Define self employment.
7.2 Describe different types of employment.
7.3 Describe the importance of business as a profession.
7.4 Discuss the reasons for success and failure in business.

8. Understand the business plan and the concept of the environment for entrepreneurship.
8.1 Define business plan.
8.2 Describe the importance of business plan.
8.3 Discuss the contents of business plan.
8.4 Define environment of business.
8.5 Describe the factors which effect environment on entrepreneurship

9. Understand the concept of sources of assistance & industrial sanctioning procedure.
9.1 Define sources of assistance.
9.2 Describe different types of sources of assistance.
9.3 Discuss the aid of sources.
9.4 Discuss the industrial policy.
9.5 Define foreign aid.

10. Understand the insurance and premium.
10.1 Define insurance and premium
10.2 Describe the essential conditions of insurance contract.
10.3 Discuss various types of insurance.
10.4 Distinguish between life insurance and general insurance.

11. Understand the concept of Sustainable Development Goals (SDG)
11.1 Define Sustainable development

11.2 State UN targets of MDG

11.3 State UN targets of SDG

11.4 Describe the importance of SDG

11.5 Explain the objectives of SDG

11.6 State the Challenges to achieve SDGs

11.7 Explain the actions to face the challenges of SDGs

11.8 State the of 7th 5 years plan

11.9 Mention the link of 7th 5 years plan with SDGs

11.10   Write down the 5 ps of sustainable development goals

12. Understand SDG 4,8 and 17

    12.1   Describe SDG 4 and its targets

    12.2   State the elements of Quality education for TVET

    12.3   Describe the gender equality and equal access of TVET for economic growth

    12.4   Describe SDG 8 and its targets

    12.5   Explain Green development, Green Economy, Green TVET & Green Jobs

    12.6   Explain the role an entrepreneur for achieving SDG

Reference book :

1. A hand book of new entrepreneur-by p.c jain.

2.A manual on business opportunity Identification and selection-by j.B patel and S S modi.

3.Uddokta unnoyan Nirdeshika -Md.Sabur khan.

4.Entrepreneurship- bashu and mollik.

5.Business Entrepreneurship-kage faruke.

6. Website, Youtube and Google