1. Course title **:** SURFACE ORNAMENTATION-I

2. Course code **:** GT/FT-201

3. Semester **:** 2nd

4. Rationale **:** Surface ornamentation adds immense beauty and enhances the look of a garment. The main idea of fabric decoration is to add an element of interest. The most common materials used for surface ornamentation are mirrors, beads, sequins, threads, wires, buttons, etc. Main reasons for surface ornamentation is to increases the value of the garment both by appearance and by price. Also it attracts the customer to buy that particular garment. In this subject different surface ornamentation technique will discuss.

5. Teaching scheme (in hours)

Lecture	Tutorial	Practical	Total
-	12	60	72

6. **Examination Scheme**

Theory				Practical			
Full Marks	Sessional Full Marks	Total Marks	Pass Marks	Practical	Practical Assessment	Total Marks	Pass Marks
-	-	**-**	-	100	100	200	60

7. Detailed Course Content:

Chapter No	Chapter Title	Content	Hours
Unit-I	Embroidery	➢ Use the following hand stitches to develop a motif (for one motif one stitch) • Run, Satin, Back, Chain, Stem, Herringbone, Bullion, Frenche, Lazy Daisy, Feather, Fly Stitch. ➢ Use the following machine stitches to develop motifs (for one motif one stitch) • Chain • Straight • Zig Zag	3 9 9 9 (3T)
Unit-II	Sequence work	➢ Prepare a motif on a fabric sample of size 8" x 6" using sequences	12 (3T)
Unit-III	Applic/Patch work	➢ Prepare a motif on fabric samples of size 8" x 6" by using applique / patch work	9 (3T)
Unit IV	Smocking, quilting, crochet works	➢ Prepare a motif (one of each) on fabric samples of size 8" x 6" by using smocking, quilting, and crochet work.	9 (3T)

1. Course Title   : FABRIC STUDIES   (THEORY)

2. Course Code   : GT/FT-202

3. Semester   : Second

4. Rationale of the course : This part of the course explains the fundamentals of Basic weave & colours which will develop basic understanding of the students.

Course Outcome; After completion of the course student will be able to
   i. Explain about the different basic weaves
   ii. Explain & construct the plain weave & its derivatives
   iii. Explain the twill weave, derivatives & construct
   iv. Explain & construct the simple towelling & curtain fabric
   v. Explain & calculate the different yarn numbering systems
   vi. Able to construct the Bed ford cord design
   vii. Able to explain the drape & its experimental derivation ,bending length , Fabric abrasions
   viii. Able to explain the different fabric finishes

6. Teaching Scheme (in hours)

Lecture	Tutorial	Practical	Total
42+3 hrs of class test	-	45	90

8.Examination Scheme :

Theory				Practical			
Examination Full Marks	Sessional Full Marks	Total Marks	Pass Marks	Practical	Practical Assessment	Total Marks	Pass Marks
70	30	100	30	25	25	50	15

9. Detailed Course Content :

Chapter no	Chapter Title	Contents	Duration (in hrs)
1	Yarns	1.1 Different types of yarn used for weaving & knitting : Spun Yarns, Filament Yarn, Textured Yarn, Stretch Yarn, Plied Yarn 1.2 Fancy yarns: Slub Yarn, Metallic Yarn, Corkscrew yarn, Chenile Yarn, Tweed Yarn etc. 1.3 Yarn count and its calculation 1.4 Conversion of yarn count from one system to other system 1.5 Fabric formation methods	8
2	Weaves	2.1 Elements of woven Design (Design, Drafting, Lifting and Peg Plan), Methods of fabric Representation. 2.2 Plain weave & its Characteristics 2.3 Derivatives of plain weave 2.4 Characteristics of Twill weave	20

		2.5 Construction of twill weave 2.6 Diamond & diaper design 2.7 Satin / Sateen weaves 2.8 Honey comb design 2.9 Mock leno & Huckaback design 2.10 Bedford cord 2.11 Welts & Pique design 2.12 Extra warp & Extra weft figuring 2.13 Double cloth design 2.14 Colour & weave effect	
3	Fabric properties	3.1 Drape 3.2 Stiffness, Abrasion 3.3 Fabric texture, cover factor 3.4 Fabric Handle 3.5 Fabric Thickness 3.6 Method of measurement of the above properties	8
4	Common Fabrics	4.1 Properties and uses of common fabrics: • Buckram Fabric • Brocade Fabric • Calico Fabric • Cambric Fabric • Canvas or Duck Fabric • Chenille Fabric • Cheese Fabric • Chiffon Fabric • Crepe Fabric • Damask Fabric • Denim Fabric • Drill Fabric • Lace Fabric • Limen Fabric • Voile Fabric	6

10. Distribution of Marks

Chapter no	Chapter Title	Objective type(compulsory)	Short questions	Descriptive type	Total Marks
1.	Yarn	5	5	7	17
2.	Weaves	8	8	8	24
3.	Fabric properties	6	4	5	15
4.	Common Fabrics	6	4	4	14
Total		25	21	24	70

11. TABLE OF SPECIFICATIONS FOR THEORY

Sr. No	Topic (a)	Time allotted in hours (b)	Percentage Weightage (c)	K	C	A	HA
1	Yarn	8	18	5	3	8	
2	Weaves	20	52	6	4	8	
3	Fabric properties	8	18	6	4	8	
4	Common Fabrics	6	12	6	4	6	
	Total	42	100	24	16	30	

K = Knowledge   C = Comprehension   A = Application   HA = Higher Than Application

12. DETAILED TABLE OF SPECIFICATIONS FOR THEORY

Sr. No	Topic	OBJECTIVE TYPE				SHORT ANSWER TYPE					ESSAY TYPE				
		K	C	A	T	K	C	A	HA	T	K	C	A	HA	T
1	Yarn	2	1		3	3	2			5			8		8
2	Weaves	3	2		5	3	2			5			8		8
3	Fabric properties	3	2		5	3	2			5			8		8
4	Common Fabrics	3	2		5	3	2			5			6		6

K = Knowledge   C = Comprehension A = Application   HA = Higher Than Application T = Total

13. Suggested learning Resources:

Sl. No.	Title	Author
1	Watsons Textile Design & Colour	Watson
2	Principles of Fabric Structure	AM Banerjee
3	Woven Cloth Construction	Marks & Robinsons
4	Textile Testing	Angapan

1. **Course Title**   **:** FABRIC STUDIES (PRACTICAL)
2. **Course Code**   **:** GT/FT-202
3. **Semester**   **:** 2nd
4. **Objectives**   **:** The Main objectives are:
   - To find out design, draft and peg plan of given fabric samples.
   - To calculate / find out fabric particulars.
   - To calculate the cost / unit area of the fabric.

5. **Teaching Scheme(In hours)**

Lecture	Tutorial	Practical	Total
-	-	45	45

6.

Examination Scheme

Theory				Practical			
Examination Full Marks	Sessional Full Marks	Total Marks	Pass Marks	Practical	Practical Assessment	Total Marks	Pass Marks
-	-	**-**	-	25	25	50	15

7. **Detailed Practical List:**
   1. Determination of relative humidity by Hygrometer.
   2. Analyze the given piece of cloth for the following:
      - Weave, draft and peg plan
      - Ends and picks per unit length
      - Count of warp and weft
      - Estimation of crimp percentage in warp and weft
      - Twist of warp and weft yarn
      - Reed count
      - Cloth cover factor
      - Weight of warp and weft per sq.mtr. / sq. yard
      - Warp and weft Pattern.
      - Costing per sq. unit length

      The samples should include: plain (grey, cambric, poplin, voile), twill, drill, sateen, diamond, honey comb, mock leno, Extra warp & extra weft.

1. Course title   **:** SKETCHING AND MODEL DRAWING

2. Course code   **:** GT/FT-203

3. Semester   **:** Second

4. Rationale of the course: A sketch is a rapidly executed freehand drawing that is not usually intended as a finished work. A sketch may serve a number of purposes. Sketches can be made in any drawing medium. A figure drawing is a drawing of the human form in of its various shapes and which will develop basic understanding and skill of the students.

5. Teaching scheme (in hours)

Lecture	Tutorial	Practical	Total
-	-	80	80

6. Examination Scheme

Theory				Practical				Total Marks
Examination		Sessional		Practical		Sessional		
Full Marks	Pass Marks	Full Marks	Pass Marks	Full Marks	Pass Marks	Full Marks	Pass Marks	
-	-	-	-	100	-	50	45	150

7. Detailed Course Content:

Chapter No	Chapter Title	Content	Hours
Unit-I	Fundamentals of Sketching	• Importance and creative use of sketching • Use of tools to produce technical drawing • Flat drawing techniques • Transfer Flat Drawing Techniques to freehand drawings • Illustrate style information • Use different techniques to create new illustrations	
Unit-II	Visual study & Basic media techniques	• Pencil Shading • Crayon rendering • Steadler rendering • Water colour rendering • Waterproof inks • Transparency sheets	
Unit-III	Drawing Female Figures	• Creation an editorial style of illustration • Fashion block figure • Fashion flesh figure • Head placement of features (Eyes, nose, lips, hair etc.) • Different postures of Arms, Hands & Legs. • Balance movement • Composition of female figure------ i) Story postures ii) Matching pose and garments	

		• Female different Hairstyles • Dressing of Female figure by draping different garments. Use of water and Steadler colour for--- i) Western casual wear ii) Formal wear iii) Any state Traditional wear	
Unit-IV	Drawing Male figures	• Creation an editorial style of illustration • Fashion block figure • Male Tilted figure • Head placement of features (Eyes, nose, lips, hair etc.) • Different postures of Arms, Hands & Legs. • Balance movement • Composition of Male figure------ i) Story postures ii) Matching pose and garments • Male different Hairstyles • Dressing of Male figure by draping different garments. Use of water and Steadler colour for--- i) Western casual wear ii) Formal wear iii) Any state Traditional wear	
Unit-V	Flat sketches of Basic Garments	• Necklines • Plackets • Cuffs • Collars • Pockets • Sleeves • Skirts • Tops • Dresses • Trousers	
Unit-VI	Flat sketches of Basic Accessories	• Shoes • Bags • Scarves • Belts • Headgear	

9. Suggested Implementation Strategies: The syllabus can be completed by regular classes, special classes using audio –visual aids, tutorial classes and providing writing materials. Practical classes in the laboratory helps students to understand the subject.

10. Suggested learning Resource:
- i) Advance Fashion sketch book Bina Abling
- ii) Fashion Illustration Colin Barnes / Steven Stipelman
- iii) The Fashion guide Haurent Hartung
- iv) The Snap Fashion sketch book Bill Giazer
- v) Figures Drawing for Fashion I & II Isao Yajima
- vi) Fashion Illustration Today Nicholas Drake
- vii) Fashion Illustration Now Laird Borrelli
- viii) Fashion Art for the Fashion Industry Rita Gersten
- ix) Fashion Design in Vogue William Packer

1. **Course Title** **:** ELEMENTS OF DESIGN
2. **Course Code** **:** GT/FT-204
3. **Semester** **:** 2nd
4. **Rationale of Subject:** Now a days design is a very important part of our life. Design concept starts from the basic requirements of our life like accommodation, furniture, house hold goods etc. In our daily life garment is also share a big percentage. Design of fabric play a big role when concern aesthetic point of view. Basic concept of design like line, shape, colour concept, design etc. have been incorporated which will help student to make customised design to satisfy customers.

5. **Objective: Students will able**
   - To analyse colour wheel and identify Primary, Secondary and Tertiary colour.
   - To understand philosophy of colours.
   - To understand the concept of Tints, Tones and Shade.
   - To create different Shapes / forms/ Checks such as straight and diagonal.
   - To identify different motifs, abstract, floral print, nursery print, geometrical design- Triangle, rectangle and squares.
   - To make different colour harmonies.
   - Brief idea about Polka dots, Lines their development, arrangement and composition.
   - To showcase variety of textile designs for enrichment of their personality and for other variety of uses in society as per people need.

6. **Teaching Scheme(In hours)**

Lecture	Tutorial	Practical	Total
42+3 Hrs of class test	-	-	45

7. **Examination Scheme**

Theory				Practical			
Examination Full Marks	Sessional Full Marks	Total Marks	Pass Marks	Practical	Practical Assessment	Total Marks	Pass Marks
70	30	100	30	-	-	-	-

8. **Details course content**

Chapter No.	Chapter Title	Content	Duration (In hours)
I	ELEMENTS OF DESIGN : LINE	• Directing • Dividing • Psychological • Effects of line • Optical Illusion	5

II	ELEMENTS OF DESIGN : SHAPE	• Natural Motif and abstract motif • Non - objective • Geometrical Design- Triangle, rectangle • Silhouettes	8
III	ELEMENTS OF DESIGN : COLOUR	• Colour wheel, primary, secondary and Tertiary colour, Vibgyor. • Monochromatic, Polychromatic, Complimentary, Neutral and achromatic colour scheme. • Analogous colour, Transparent and opaque • Concept of Tint, Tone and Shade. • Psychology of colour	8
IV	ELEMENTS OF DESIGN : TEXTURE	• Visual • Tactile • Audible	2
V	ELEMENTS OF DESIGN : SPACE	• Positive & Negative space	2
VI	PRINCIPLES OF DESIGN	• Rhythm • Balance • Emphasis • Harmony • Scale • Proportion • Variety	8
VII	DOTS, LAYOUT AND PRINTS	• Polka dots, floral prints, other motifs, nursery, prints- their development, arrangement and composition. • Different types of layout and texture	8
VIII	GOLDEN RATIO	• What is Golden Ratio? • Golden Ratio in Nature. • Golden Ratio in design.	6

9. Distribution of Marks

Chapter No.	Chapter Title	Type of Question			Total Marks
		Objective Type (Compulsory)	Short Questions	Descriptive Question	
I	Line	4	3	5	12
II	SHAPE	4	4	4	12
III	Introduction and need for	3	4	4	11

	colour				
IV	Texture	3	4	4	11
V	Space	1	2	0	3
VI	Principles of Design	3	0	3	7
VII	Dots, layout and prints	4	3	4	11
VIII	Golden Ratio	3	-	4	7
	Total	25	20	25	70

10. Learning Resources:

Sl No.	Author	Title	Publisher
1.	Sumathi G.J.	Elements of fashion and apparel Design	New Age International Publishers
2.	Puja Khurana & Monika Sethi	Introduction to Fashion Technology	FIREWALL MEDIA
3	Albert W. Porter	Elements of Design – Space & Form Elements of Design –Line	
4	Manfred Maier	Basic Principles of Design (Vol. 1-4)	
5	Sansmarg	Basic Design: The Dynamics of visual form	
6	Birren & Fabersvan	Principles of Color Birren & Fabersvan	
7	Hannelore Eberle Hermann Hermeling Marianne Horaberger Dieter Menzer Warner Ribng	Clothing Technology	

1.Course title : FABRIC MANUFACTURING PROCESS

2.Course code : GT/FT-205

3.Semester : Second

4.Rationale of the course : Garment Manufacturing students should have a brief overview of the industry that supplies them the raw materials for their production. Also being in Assam the largest sector that employs students in the Garment & Textile sector, therefore students should be cross-functionally trained to be able to adapt and gain any advantage available.

5   Course Outcome : **At the end of the course, students should be able to:**
- Illustrate parts of handloom and power loom
- Describe primary, secondary, and auxiliary motion
- Illustrate different yarn package
- Describe Process for conversion of yarn into fabric.
  a) winding b) warping c) sizing d) drawing in.
- Explain different terms of knitting
- Explain different types of needle of knitting

6. Teaching scheme (in hours)

Lecture	Tutorial	Practical	Total
45 (including 3 class test)	-	45	90

7. Examination Scheme

Theory				Practical			
Examination Full Marks	Sessional Full Marks	Total Marks	Pass Marks	Practical	Practical Assessment	Total Marks	Pass Marks
70	30	100	30	50	50	100	30

8. Detailed Course Content :

Chapter No	Chapter Title	Content	Hours
Unit-I	Outline of Weaving Process	1.1. Definition of Weaving and common weaving terms: Warp, Weft & Pick, Ends. 1.2. Primary, Secondary and auxiliary weaving motions. 1.3. Functions and importance of various parts.	6
Unit-II	Types of Looms	1.4. Handloom 1.5. Primitive handloom, pit loom, Fly Shuttle frame Looms. 1.6. Dobby Loom 1.7. Draw-Boy Loom 1.8. Power loom : Non Automatic	10

Unit-III	Weaving preparatory processes	1. Various Yarn packages for weaving. 2. Process for conversion of yarn into fabric. a) Winding b) warping c) sizing d) drawing in.	10
Unit-IV	Motions of Weaving	1. Primary Motions • Shedding • Picking • Beat-up 2. Secondary Motions • Take-up Motions • Let-off Motions 3. Auxiliary Motions	11
Unit-V	Knitting	1. Overview 2. Terms & Definitions used in Knitting 3. Properties of knits compared to wovens 4. Types of Knitting	5

9. Distribution of Marks:

Chapter No	Chapter Title	Type of Question			Total Marks
		Objective Type	Short Questions	Descriptive Questions	
Unit I	Outline of Weaving Process	5	4	-	9
Unit II	Types of Looms	3	4	10	17
Unit III	Weaving preparatory processes	8	5	10	23
Unit IV	Motions of Weaving	6	4	5	15
Unit V	Knitting	3	3	-	6
	Total	25	20	25	70

TABLE OF SPECIFICATIONS FOR THEORY

Sr. No	Topic (a)	Time allotted in hours (b)	Percentage Weightage (c)	K	C	A	HA
1	Outline of Weaving Process	6	14	9	-	-	-
2	Types of Looms	10	24	3	4	10	-
3	Weaving preparatory processes	10	23	8	5	10	-
4	Motions of Weaving	11	25	6	4	5	

5	Knitting	6	14	3	3	-	-
	Total	42	100	29	16	25	

K = Knowledge   C = Comprehension   A = Application   HA = Higher Than Application (Analysis,

DETAILED TABLE OF SPECIFICATIONS FOR THEORY

Sr. No	Topic	OBJECTIVE TYPE					SHORT ANSWER TYPE					ESSAY TYPE				
		K	C	A	HA	T	K	C	A	HA	T	K	C	A	HA	G.T.
1	Outline of Weaving Process	2	3			5	-	-	4	--	4	-	-	-	-	9
2	Types of Looms	3	-			3	-	-	4	-	4	-	5	5	-	17
3	Weaving preparatory processes	2	-	-		8		2	3	-	5	-	5	5		23
4	Motions of Weaving	2	4	6		6		-	4	-	4	-	5	-	-	15
5	Knitting	3	-	-		3	3	-	-		3	-	-	-	-	6
	Total			-		25					20					70

K = Knowledge   C = Comprehension   A = Application   HA = Higher Than Application   T = Total

10. Suggested Implementation Strategies: The syllabus can be completed by regular classes, special classes using audio –visual aids, tutorial classes and providing writing materials. Practical classes in the laboratory helps students to understand the subject.

1.Course title   :FABRIC MANUFACTURING PROCESS (PRACTICAL)
2.Course code   :GT/FT-205
3.Semester   : Second
4.Rationale of the course : Garment Manufacturing students should have a brief overview of the industry that supplies them the raw materials for their production. Also being in Assam the largest sector that employs students in the Garment & Textile sector, therefore students should be cross-functionally trained to be able to adapt and gain any advantage available. The students must be trained in the techniques of fabric production so that they are well versed in design development and production, if necessary.

5. Teaching scheme (in hours)

Lecture	Tutorial	Practical	Total
-	-	45	45

6. Examination Scheme

Theory				Practical			
Examination Full Marks	Sessional Full Marks	Total Marks	Pass Marks	Practical	Practical Assessment	Total Marks	Pass Marks
-	-	**-**	-	50	50	100	30

7.Detailed Course Content :

Chapter No	Chapter Title	Content	Hours
Unit-I	Introduction to Weaving	1. Classification of looms. 2. Primary, Secondary and tertiary weaving motions. 3. Functions and importance of various parts and accessories.	10
Unit-II	Warp & weft Winding, Practice Warping, Denting & Drafting	1. Basic Process of bobbin winding/Pirn winding 2. Practice of Warping, Beaming, Denting, Drafting & looming.	12
Unit-III	Practice Weaving on Plain Loom	1. Practice of handloom weaving in fly shuttle frame looms, draw boy	20
Unit-IV	Knitting Machine	1. Study the different parts and accessories of a circular and flat knitting machine. 2. Practice the knitting machine & produce the following- i.) Plain structure	8

1.Course Title   : INTRODUCTION TO COMPUTER
2.Course code   : GT/FT-206
3.Semester   : 2nd

4.Rationale of the course : Since early 21st Century the use of Computer has been so rapidly that it is difficult to think of an area where computers are not being used. It is very desirable that everyone should have good knowledge of computer.

      Main purpose of this subject is give a details knowledge of computer, its characteristics, components, History and Classification, number system conversion, Computer memory, peripheral devices, Parogramming language and OS, about the computer viruses and internet browsing etc. It is a gateway to wonderful world of information and part of various applications.

Course Outcome: After completion of this course student will be able to-
CO1: State the basic concept of computer, functions, characteristics, various units, block diagram, hardware & software.
CO2: Explain history of computing, computer generation and classification of computers.
CO3: Define various number system, conversion, binary arithmetic and reason for using binary system in the design of computer.
CO4: Illustrate data representation in computer architecture, BCD, ASCII and EBCDIC form.
CO5: write need of memory, memory devices and storage hierarchy.
CO6: Describe the peripheral device and uses.

5. Teaching Scheme (in hours)

Lecture	Tutorial	Practical	Total
45 (including 3 class test)	-	60	105

6. Examination Scheme

Theory				Practical			
Examination Full Marks	Sessional Full Marks	Total Marks	Pass Marks	Practical	Practical Assessment	Total Marks	Pass Marks
70	30	100	30	25	25	50	15

8. Detailed Course Content :

Chapter No	Chapter Title	Content	Hours

Unit-I	Introduction to Computer	**Definition, uses of computer**
		  i) Data, Information and Data Processing
		  ii) Basic components of a Computer System.
		  iii) Central Processing unit
		  iv) Input unit
		  v) Out put unit
		  vi) Types of Computer: Digital, Analog,
			4

		Hybrid Computer vii) Hardware and software	
Unit-II	History, Generations and Classification of Computers	**History of Computing** a) Mechanical Calculators b) Charles Babbage - His difference engine c) Punched card d) First Digital Computer e) First Electronic Computer etc. **Computer Generat**ion a) First Generation b) Second Generation c) Third Generation d) Fourth Generation e) Fifth Generation **Micro, Mini, Mainframe, Super computers**	3

Unit-III	Binary Number System	**Decimal, Binary System, Octal, Hexadecimal System**
		        - Conversion between number systems
		        - Binary Arithmetic
		        i) Addition
		        ii) Subtraction
		        iii) Multiplication
		        iv) Division
			7

Unit-IV	Data Representation	Representation of Positive and Negative Integers
		- i) Binary Coded Decimal (BCD)
		Representation of Characters
		        i) EBCDIC
		        ii) ASCII
			2

Unit-V	Computer Memory	**Definition of Memory devices** **Need for Memory** **Types of Memory-** i) Memory access ii) Volatile & non volatile Memory iii) Destructive & Non destructive Memory iv) Access Time, Random and Serial Access Memories v) ROM, PROM, EPROM and EEPROM vi) Magnetic Core storage & Semiconductor Storage- vii) Secondary Memory viii) Magnetic Tape ix) Magnetic Disk x) Floppy Disk xi) Optical Disk xii) Hard Disk **A note on Storage Hierarchy**	10
Unit-VI	Input/ Output Units	**Input Units** i) Paper Media, Magnetic Media, Optical Media ii) Magnetic Ink Character Reader iii) Direct Data Entry Devices iv) Pointing Devices **Output Units** i) Printers ii) Other forms of output Devices	4
Unit-VII	Classification of Programming Languages	i) Machine, Assembly & High Level Languages ii) Translator (Compiler, Interpreter and Assembler) iii) Debugging	4
Unit-VIII	Operating system	**Definition & functions of OS** i) Batch Processing ii) Multiprocessing iii) Time-sharing iv) Multiprocessing v) Real Time Processing vi) Network Operating System **Popular Operating System** i) MS-DOS, UNIX, Windows	5
Unit-IX	Computer Virus	**What is Computer Virus** i) Symptoms of a computer virus ii) Types of Computer virus iii) How to protect computer against viruses	1
Unit-X	Internet, email, E-commerce etc.	History of Internet, browsers, email, ecommerce etc.	2

8. Distribution of Marks :

Chapter No	Chapter Title	Objective Type	Sort Questions	Descriptive Questions	Total Marks
Unit- I	Introduction to Computer	1+1	2	6	10
Unit -II	History, Generations and Classification of Computers	1+1 +1	0	5	8
Unit III	Binary Number System	1+1+1	2+2+2	0	9
Unit- IV	Data Representation	1+1	0	0	2
Unit- V	Computer Memory	1+1+1		5	8
Unit -VI	Input/ Output Units	1+1	2	4	8
Unit -VII	Classification of Programming Languages	1+1		4	6
Unit -VIII	Operating system	1+1	2	5	9
Unit –IX	Computer Virus	1	0	4	5
Unit -X	Internet, email, E-commerce etc.	0	0	5	5
Total		20	12	38	70

DETAILED TABLE OF SPECIFICATIONS FOR THEORY INTODUCTION TO COMPUTER

Sr. No	Topic	OBJECTIVE TYPE				SHORT ANSWER TYPE					ESSAY TYPE				
		K	C	A	T	K	C	A	HA	T	K	C	A	HA	T
1	Introduction of Computer	1	1		2		1	1		2			6		6
2	History, Generations and Classification of Computers	1	1	1	3					0			5		5
3	Number System	2	1		3	2		4		6					0
4	Data Representation	1		1	2					0					0
5	Computer Memory	1	1	1	3					0			5		5
6	Input/ Output Units	1	1		2	1		1		2			4		4
7	Classification of Programming Languages	2			2					0			4		4
8	Operating system	1	1		2	1	1			2			5		5
9	Computer Virus	1			1					0			4		4
10	Internet, email, E-commerce etc.				0					0			5		5

K = Knowledge   C = Comprehension   A = Application   HA = Higher Than Application, T = Total

TABLE OF SPECIFICATIONS

Sr. No	Topic (a)	Time allotted in hours (b)	Percentage Weightage (c)	K	*C*	A	HA
1	Introduction of Computer	4	9.5	1	2	7	
2	History, Generations and Classification of Computers	3	7.1	1	1	6	
3	Binary Number System	7	16.7	4	1	4	
4	Data Representation	2	4.8	1		1	
5	Computer Memory	10	23.8	1	1	6	
6	Input/ Output Units	4	9.5	2	1	5	
7	Classification of Programming Languages	4	9.5	2	1	5	
8	Operating system	5	11.9	2	2	5	
9	Computer Virus	1	2.4	1		4	
10	Internet, email, E-commerce etc.	2	4.8			5	
Total		42	100				

K = Knowledge   C = Comprehension   A = Application

HA = Higher Than Application (Analysis,

9. Suggested Implementation Strategies : The syllabus can be completed by regular classes, special classes using audio –visual aids, tutorial classes and providing writing materials. Practical classes in the laboratory helps students to understand the subject.

10. Suggested learning Resource :
  i.   Elements of Computer Science by S.K. Sarkar, Pub- S. Chand & Company Ltd.
 ii.   Fundamentals of Computers by V. Rajaraman, Pub- Prentice Hall of India Pvt. Ltd.
iii.   A text book on Computer for beginners by- Dhanpat Rai & Sons, Pub- J.C. Capur for Dhanpat Rai & Sons, Delhi-6

1 **Course Title**   **:** INTRODUCTION TO COMPUTER (PRACTICAL)
2 **Course Code**   : GT/FT-206
3 **Semester**   **:** Second
4 **Objectives**   : Main purpose of this subject is how to use a computer for basic needs. This subject covers application software like MS-Word for report writing, Project Preparation etc. MS-Excel to generate work sheet, data manipulation, graphs, for decision support system,, MS-PowerPoint to prepare presentation, Internet for browsing data, communicate through email etc.

5. Examination Scheme :

Theory				Practical				Total Marks	Pass Marks
Examination		Sessional		Practical		Sessional			
Full Marks	Pass Marks	Full Marks	Pass Marks	Full Marks	Pass Marks	Full Marks	Pass Marks		
-	-	-	-	25	-	25	-	50	15

Content	**Hours**
1. Introduction Windows OS	12
(GUI, Mouse operation, Folder Creation, Microsoft Paint etc)	
2. MS-OFFICE (MS WORD)	10
(Creating Document, Save, Save as, Copy, Paste, Search and Replace,Page setup etc. Table, Mailing Labels and Mail Merge)	
3. MS Excel	8
(spread sheets, Formula, Auto Sum, Formatting the table, formulae, functions, Charts etc.)	
4. MS Power Point	5
(Presentation, Creating slides, Editing and arranging the slides, Built in effect, Sound Clips, Transition effect, Running the slides continuously)	
5. Internet (Browsing, email etc.)	8

Books :

i. Learning Computer Fundamentals MS Office and Internet & Web Technology by- Dinesh Maidasani, Pub-Firewell Media
ii. MS-Office by- Dr. S.S. Shrivastava, Pub-Firewell Media

1. **Course Title**   **:-** DEVELOPMENT OF LIFE SKILL- II
2. **Course Code**   **:-** LS-210
3. **Semester**   **:-** 2nd
4. **Aim :-This subject is kept to**

- Conduct different session to develop students interpersonal skills
- Conduct different session to improve problem solving skills
- Conduct different session to improve communication and presentation skills

Objective: - This course will enable the students to:

- Develop interpersonal skill
- Develop problem solving skill.
- Develop presentation skill
- Enhance creativity skills.
- Develop communication skills.
- Prepare for interviews

5. Teaching Scheme (in hours)

Lecture	Tutorial	Practical	Total
-	-	50	50

6. Examination Scheme

Theory				Practical			
Examination Full Marks	Sessional Full Marks	Total Marks	Pass Marks	Practical	Practical Assessment	Total Marks	Pass Marks
-	-	**-**	-	25	25	50	15

7. DETAILED COURSE CONTENT

UNITS	CONTENTS	Hours
Unit1	**Inter personal Relation** Importance, Interpersonal conflicts, Resolution of conflicts, Developing effective interpersonal skills communication and conversational skills, Human Relation Skills (People Skills)	**1**
Unit 2	**Problem Solving** **I)Steps in Problem Solving(Who?What?Where?When?Why?How?How much?)** 1.Identify,understand and clarify the problem 2.Information gathering related to problems 3.Evaluate the evidence	**2**

	4.Consider feasible options and their implications 5.Choose and implement the best alternative 6.Review **II)Problem Solving Technique** 1.Trial and Error,2.Brain Storming3.Thinking outside the Box	
Unit 3	**Presentation Skills** Concept ,Purpose of effective presentations, *Components of Effective Presentations*: Understanding the topic, selecting the right information, organizing the process interestingly, Good attractive beginning, Summarising and concluding, adding impact to the ending, *Use of audio visual aids* OHP, LCD projector, White board, *Non verbal communication*: Posture, Gestures ,Eye contact and facial expression, Voice and Language Volume, pitch, Inflection, Speed, Pause, Pronunciation, Articulation, Language Handling questions Respond, Answer, Check, Encourage, Return to presentation *Evaluating the presentation* Before the presentation, During the presentation, After the presentation	**4**
Unit 4	**Looking for a Job** Identifying different sources announcing Job vacancies, Skim, scan and read advertisements in detail, write efficacious CVs, write covering letters to a company CVs, write Job Application Letters in response to advertisements and self-applications	2
Unit 5	**Job Interviews** *Prepare for Interviews*: Intelligently anticipating possible questions and framing appropriate answers, Do's and don'ts of an interview(both verbal and non verbal), *Group Discussion:* Use of Non verbalbehavior in Group Discussion, Appropriate use of language in group interaction, Do's and don'ts for a successful Group Discussion	4
Unit 6	**Non verbal graphic communication** Nonverbal codes: A .Kinesics ,.B .Proxemics,.C.Haptics.,D.Vocalics,.E.Physical appearance.,F..Chronemics,.G. Artifacts Aspects of Body Language	1
Unit 7	**Formal Written Skills:**	1
	Total	15
Practical Total Periods : 30		

	Periods : 2 P/W	
Unit 1 Interpersonal Relation	Case Studies: 1.from books 2.from real life situations 3.from students' experiences Group discussions on the above and step by step write of any one or more of these in the sessional copies	2
Unit II Problem Solving	Case Studies: 1.from books 2.from real life situations 3.from students' experiences Group discussions on the above and step by step write of any one or more of these in the sessional copies	4
Unit III Presentation Skills	Prepare a Presentation (with the help of a Power point) on a Particular topic. The students may refer to the Sessional activity (sl.No.8) of the Computer Fundamental syllabus of Semester1. For engineering subject oriented technical topics the cooperation of a subject teacher may be sought. Attach hand out of PPT in the sessional copy	8
Unit IV Looking for a job	Write an effective CV and covering letter for it. Write a Job Application letter in response to an advertisement and a Self-Application Letter for a job.	4
Unit V Job Interviews &Group Discussions	Write down the anticipated possible questions for personal interview (HR)along with their appropriate responses Face mock interviews.The cooperation of HR personnels of industries may be sought if possible Videos of Mock Group Discussions and Interviews may be shown	8
Unit VII Formal Written Skills	Write a memo, Write an effective official e-mail, write a letter of enquiry, letter of placing orders, letter of complaint	4
	Total	30