CURRICULUM

FOR

SECOND SEMESTER

OF

THREE-YEAR

DIPLOMA COURSES

IN

POLYTECHNICS

OF

UNION TERRITORY

OF

JAMMU AND KASHMIR

CURRICULUM

FOR

SECOND SEMESTER

DIPLOMA

IN

1. COMPUTER ENGINEERING
2. INFORMATION TECHNOLOGY

SUBJECT STUDY SCHEME (2nd Sem: Computer Engineering/IT)

Course Code	Subjects	Time in Hours				CREDITS		
		Theory	Tutorial	Practical	Total	Theory	Practical	Total
BS201	Applied Mathematics-II	3	1	--------	4	4	--------	4
ES202	Introduction to Computers and Information Technology	---	---	4	4	----	2	2
COPC201	Programming in 'C'	4	--------	--------	4	4	--------	4
COPC202	Programming in 'C' Lab	--------	--------	2	2	--------	1	1
COPC203	Computer Workshop	--------	1	4	5	--------	3	3
ES205	Basics of Electrical and Electronics Engineering	4	1	--	5	5	---	5
ES206	Basics of Electrical and Electronics Engineering Lab	--------	--------	2	2	--------	1	1
HS211	Communication and Interpersonal Skills	----	---	4	4	----	2	2
	Total	**11**	**3**	**16**	**30**	**13**	**9**	**22**

PROGRAM: THREE YEAR DIPLOMA IN ENGINEERING AND TECHNOLOGY *	
Course Code: **BS201**	Course Title: **Applied Mathematics-II**
Semester: **2ⁿᵈ**	Credit: **4**
Periods Per Week: **4 (L: 03, T: 01, P: 0)**	

(* Common to Architecture Assistantship, Automobile, Civil, Civil(PHE), QSCM, Computer , Electrical , E&C, Medical Electronics, Food Technology, I&C, Leather Technology, Mechanical, Textile Technology, Wood Technology and IT)

COURSE OBJECTIVE:

This course is designed to develop an understanding of basic mathematical and statistical tools which include matrices, determinants, integral calculus and coordinate geometry and the applications of such tools in the field of engineering and technology

COURSE CONTENT

1. Integral Calculus

1.1 Integration as inverse operation of differentiation

1.2 Simple integration by substitution, by parts and by partial fractions (for Linear factors only)

1.3 Evaluation of definite integrals (simple problems)-

Evaluation of $\int_{0}^{\pi/2} \sin^n x \, dx$, $\int_{0}^{\pi/2} \cos^n x \, dx$, $\int_{0}^{\pi/2} \sin^m x \, \cos^n x \, dx$

Using formulae without proof (m and n being positive integers only)

2. Coordinate Geometry

2.1 Equation of straight line in various standard forms (without proof), intersection of two straight lines, angle between two lines. Parallel and perpendicular lines, perpendicular distance formula.

2.2 General equation of a circle and its characteristics. To find the equation of a circle, given: Centre and radius, three points lying on it and coordinates of end points of a diameter.

2.3 Definition of conics (Parabola, Ellipse, Hyperbola) their standard equations without proof. Basic problems on conics when their foci, directrices or vertices are given.

3. Matrices and Determinants

3.1 Definition of matrix and its types.

3.2 Addition, subtraction and multiplication of matrices.

3.3 Expansion of Determinants.

4. Statistics

4.1 Measures of Central Tendency: Mean, Median, Mode

4.2 Measures of Dispersion: Mean deviation, Standard deviation

4.3   Basic Concepts of Probability.

COURSE OUTCOME

After the completion of the course the student will be able to:

- Evaluate both indefinite and definite integrals by various methods
- Identify various points in a 2-D space along with formulation of equations and graphs for different types of lines, circles, ellipses, parabolas etc.
- Find the sum, difference and product of two or more matrices,
- Evaluate determinants and their relations to matrices
- Find the mean, median, mode and other measures of central tendency.
- Solve basic problems on probability.

RECOMMENDED BOOKS:

1. R.D Sharma, Applied Mathematics-II.

2. H.K Das, Applied Mathematics.

3. B.S. Grewal, Higher Engineering Mathematics, Khanna Publishers, New Delhi, 40th Edition, 2007.

4. S.S. Sabharwal, Sunita Jain, Eagle Parkashan, Applied Mathematics, Vol. I & II, Jalandhar.

5. Comprehensive Mathematics, Vol. I & II by Laxmi Publications, Delhi.

6. Reena Garg & Chandrika Prasad, Advanced Engineering Mathematics, Khanna Publishing House, New Delhi

7. Applied Mathematics-II, Eagle Publications.

UNIT WISE TIME AND MARKS DISTRIBUTION

Topic No.	Time Allotted (Hrs)	Marks Allotted (%)
1	16	35
2	10	20
3	12	25
4	10	20
Total	**48**	**100**

PROGRAM THREE YEAR DIPLOMA IN ENGINEERING AND TECHNOLOGY	
Course Code: **ES202**	Course Title: **Introduction to Computers and Information Technology**
Semester:**2ⁿᵈ**	Credit: **2**
Periods Per Week: **4 (L: 0 T: 0 P: 4)**	

(* Common to Architecture Assistantship, Automobile, Civil, Civil (PHE), QSCM, Computer , Electrical , E&C,Medical Electronics, Food Technology, Garment Technology, I&C,Leather Technology, Mechanical, Textile Design, Textile Technology, Travel and Tourism, MLT, Wood Technology and IT)

COURSE OBJECTIVE

Information technology has great influence on all aspects of our life. Primary purpose of using computer is to make the life easier. Almost all work places and living environment are being computerized. The subject introduces the fundamentals of computer system for using various hardware and software components. In order to prepare diploma holders to work in these environments, it is essential that they are exposed to various aspects of information technology such as understanding the concept of information technology and its scope; operating a computer; use of various tools of MS Office/Open Office using internet etc. form the broad competency profile of diploma holders. This exposure will enable the students to enter their professions with confidence, live in a harmonious way and contribute to the productivity.

COURSE CONTENT

1. **Basics of Information Technology**
   1.1. Its concept and scope, applications of IT, ethics and future with information technology.
   1.2. Impact of computer and IT in society.
   1.3. Computer application in office, book publishing, data analysis, accounting, investment, inventory control, graphics, air and railway ticket reservation, robotics, military, banks, Insurance financial transactions and many more.

2. **Basic Components of Computer System**
   2.1. Block diagram of a computer System and Processing of Data.
   2.2. Demonstration of computer system viz., Hardware, Software
   2.3. Concept of Memory and its various types, Primary and secondary memories (RAM, ROM, Storage Devices etc).

3. **Internet and its Applications**
   3.1. Introduction to Internet, its basic working.
   3.2. Concept of Email, Social Media, Cloud Computing.
   3.3. Basic ideas about IP Address, DNS, URL, Server, Web Browser,LAN etc.

4. **Use of Various Basic Data Processing Softwares**
   4.1. *Word Processing (Microsoft Word & Google Docs.)*
       4.1.1.   File Management:
           4.1.1.1.   Opening, creating and saving a document, locating files, copying contents in some different file(s).
       4.1.2.   Editing a document:
           4.1.2.1.   Entering text, Cut, Copy, Paste using tool- bars
       4.1.3.   Formatting a document:
           4.1.3.1.   Using different fonts, changing font size and color, changing the appearance through bold/ italic/ underlined, highlighting a text, changing case, using subscript and superscript, using different underline methods
           4.1.3.2.   Aligning of text in a document, justification of document, Inserting bullets and numbering
           4.1.3.3.   Formatting paragraph, inserting page breaks and column breaks, line spacing
           4.1.3.4.   Use of headers, footers: Inserting footnote, end note, use of comments
           4.1.3.5.   Inserting date, time, special symbols, importing graphic images, drawing tools
       4.1.4.   Tables and Borders:
           4.1.4.1.   Creating a table,
           4.1.4.2.   Formatting cells,
           4.1.4.3.   Use of different border styles, shading in tables,
           4.1.4.4.   Merging of cells, partition of cells, inserting and deleting a row in a table
       4.1.5.   Print preview, zoom, page set up, printing options
       4.1.6.   Using Find, Replace options
   4.2. **Microsoft-Excel and Google Sheets**
       4.2.1.   Introduction to Spreadsheet Application-Workbook and Worksheets
       4.2.2.   Working with data and formulas:
           4.2.2.1.   Addition, subtraction, division, multiplication, percentage and Auto sum.
           4.2.2.2.   Format data, create chart, printing chart, save worksheet, creating and formatting of charts and graphs
   4.3. **Presentation (Microsoft-PowerPoint and Google Slides)**
       4.3.1.   Introduction to PowerPoint - How to start PowerPoint - Working environment: concept of toolbars, slide layout, templates etc. - Opening a new/existing presentation - Different views for viewing slides in a presentation: normal, slide sorter etc.
       4.3.2.   Addition, deletion and saving of slides.
       4.3.3.   Insertion of multimedia elements - Adding text boxes, importing

pictures, movies and sound, tables and charts etc.
4.3.4. Formatting slides - Text formatting, changing slide layout, changing slide color scheme - Changing background, Applying design template.
4.3.5. Viewing the presentation using slide navigator

COURSE OUTCOME

After the completion of the course the student will be able to:

- Identify the different hardware components and functional units of a Computer system.
- Explain basic concepts and working of internet.
- Create and format word documents by using different word processing software.
- Prepare the spread sheets and the presentation of data in different ways.
- Prepare power point presentations.

RECOMMENDED BOOKS:

1. A First Course in Computer by Sanjay Saxena; Vikas Publishing House Pvt. Ltd-Jungpura, New Delhi
2. Computer Fundamentals by PK Sinha; BPB Publication, New Delhi
3. Fundamentals of Information Technology by Leon and Leon;Vikas Publishing House Pvt. Ltd., Jungpura, New Delhi
4. Basics of Information Technology, by Ishan Publications, Ambala
5. Information Technology for Management by Henery Lucas, 7th edition, Tata McGraw Hill Education Pvt Ltd, New Delhi

UNIT WISE TIME AND MARKS DISTRIBUTION

Topic No.	Time Allotted (Hrs)	Marks Allotted (%)
1	06	10
2	13	20
3	13	20
4	32	50
Total	**64**	**100**

PROGRAM: THREE YEARS DIPLOMA PROGRAM IN COMPUTER ENGINEERING/IT

Course Code: COPC201	**Course Title: PROGRAMMING IN C**
Semester:2ND	**Credits:4**
Periods per week:4(L:4 T:0P:0)	

COURSE OBJECTIVE: Computers play a vital role in present day life, more so, in the professional life of technician engineers. People working in the field of computer industry, use computers in solving problems more easily and effectively. This course offers the modern programming language C along with exposure to various applications of computers.

COURSE CONTENTS

1. Algorithm and Programming Development   (08Hrs)
   1.1   Steps in development of a program.
   1.2   Flow charts, Algorithm development.
   1.3   Debugging
   1.4   History of C.
   1.5   Introduction to Interpreter and Compiler
2. Program Structure   (12Hrs)
   2.1   Structure of a C Program.
   2.2   I/O statements, Assignment statements.
   2.3   Constants, Variables and data types.
   2.4   Operators and Expressions.
   2.5   Use of Header files & Library functions.
3. Control Structures   (12Hrs)
   3.1   Introduction to Control Statements.
   3.2   Decision making with IF – statement, IF – Else and Nested IF.
   3.3   While and do-while, for loop.
   3.4   Break and switch statements
4. Functions   (12Hrs)
   4.1   Introduction to functions.
   4.2   Function Declaration, Standard functions, Parameters and Parameter Passing.
   4.3   Call by value/reference, Global and Local Variables ,Recursion
5. Arrays and Structures   (12Hrs)
   5.1   Introduction to Arrays.
   5.2   Array Declaration and Initialization.
   5.3   Single and Multidimensional Array.
   5.4   Arrays of characters.

     5.5   Declaration of structures, Accessing structure members, Structure Initialization

6.   Pointers   (08Hrs)

     6.1   Introduction to Pointers.

     6.2   Address operator, Pointer and functions.

     6.3   Declaring and Initializing pointers.

COURSE OUTCOME:

After the completion of the course, the student will be able to:

- understand the concept of a C program and its components.
- solve programming exercises using loops
- use conditional statements to select a choice from two or more alternatives.
- use an array to store multiple pieces of homogenous data
- use a structure to store multiple pieces of heterogeneous data.
- apply the concept of Pointers in C-Programs

RECOMMENDED BOOKS

1. Programming in ANSI C by E Balaguruswami, , Tata McGraw Hill Education Pvt Ltd , New Delhi
2. Application Programming in C by RS Salaria, Khanna Book Publishing Co(P) Ltd. New Delhi
3. Programming in C by Gottfried, Schaum Series, , Tata McGraw Hill Education Pvt Ltd , New Delhi
4. Exploring C by Yashwant Kanetkar – BPB Publications, New Delhi
5. Programming in C by Stefin G. Coachin
6. Programming in C by R Subburaj, Vikas Publishing House Pvt. Ltd., Jangpura, New Delhi
7. Elements of C by M.H. Lewin, Khanna Publishers, New Delhi
8. Programming in C by Stephen G Kochan
9. Programming in C by BP Mahapatra, Khanna Publishers, New Delhi

UNIT WISE TIME AND MARKS DISTRIBUTION

Sr No	Topic	Time Allotted (Hrs)	Marks Allotted (%)
1	Algorithm and Programming Development	8	12
2	Program Structure	12	16
3	Control Structures	12	20
4	Functions	12	20
5	Arrays and Structures	12	20
6	Pointers	8	12
	Total	**64**	**100**

PROGRAM:THREE YEARS DIPLOMA PROGRAM IN COMPUTER ENGINEERING/IT	
Course Code: COPC202	Course Title : PROGRAMMING IN 'C' Lab
Semester:2ND	Credits:1
Periods per week:2(L:0 T:0 P:2)	

COURSE OBJECTIVE: The knowledge of C language will be reinforced by the practical exercises.

LIST OF PRACTICALS

1. Programming exercises on executing and editing a C program.
2. Programming exercises on defining variables and assigning values to variables.
3. Programming exercises on arithmetic and relational operators.
4. Programming exercises on arithmetic expressions and their evaluation
5. Programming exercises on formatting input/output using printf and scanf
6. Programming exercises using if statement.
7. Programming exercises using if – Else.
8. Programming exercises on switch statement.
9. Programming exercises on do – while statements.
10. Programming exercises on for – statement.
11. Programs on one-dimensional array.
12. Programs on two-dimensional arrays
13. Simple programs using structures.
14. Simple programs using pointers.

PROGRAM:THREE YEARS DIPLOMA PROGRAM IN COMPUTER ENGINEERING/IT

Course Code: **COPC203**	Course Title : **COMPUTER WORKSHOP**
Semester:**2ND**	Credits:**3**
Periods per week:**5(L:0 T:1 P:4)**	

COURSE OBJECTIVE:

Students of Computer Engineering and Information Technology have to work with various hardware and software not only during academia but also in company. Thus, students should get familiar with various hardware, software, operating systems and networking. This course will provide student a much-needed knowledge of computer hardware and networking, enabling them to identify and rectify the onboard computer hardware, software and network related problems.

LIST OF PRACTICALS

1. Identify and list functions of various components and peripherals of given computer.
    Memory: primary and secondary memory: RAM, ROM, PROM etc. Input devices: keyboard, mouse, scanner, etc. output devices: VDU and Printer (Impact and non-Impact printers), Plotter etc. Primary and Secondary Storage (Auxiliary Storage), Secondary storage; magnetic disks – tracks and sectors, optical disk (CD, CD-RW and DVD Memory)

2. **Assembly of Computer:**
    Introduction to hardware peripherals like RAM, ROM, keyboard, Mouse, processors, etc. Working of SMPS. Study of various ports. Steps and precautions to assemble computer.

3. **Configuration of External Devices:**
    Printers: Installation, various types of configuration settings on printers, removing and mounting cartridges, basic troubleshooting (paper jams, print head cleaning etc.)
    Scanners: Installation, changing scan settings, scanning documents/images and saving in different formats.
    Setting up of webcams, speakers, microphones, Bluetooth devices, Memory card reader etc.

4. **Computer Network Tools:**
    Introduction to computer network. Study of various topologies. Preparing the network cable using crimping tools and connectors. Study of various network environments. Configuring the Static IP Address and DHCP to a PC in a network.

5. **Operating System and Software Installations:**
    Introduction to operating system. Types of operating system (Windows and Linux). Windows: - Introduction to software. Types of software (MS office, VLC media player, Winrar, open office, web browser, etc.) Case study of

Installations step for operating system (both Linux and Windows Based) and application Software. Creating Restore Points and Recovery.

6. **Disk Management:**
Disk Management tools (Disk Cleanup, Disk Defragmenter, Backup). Formatting drives, Partitioning, File management, file recovery and compression tools.

7. **BIOS Configuration.**
Study of BIOS Set-up- Advance set-up, Boot configuration, Boot Menu, Boot order, POST (Power on Self-Test), Identifying problems by Beep code errors,

8. **Basics of Cyber Security**
Introduction to Virus/Spyware/Worm/Trojan Horse, their detection, prevention and cure. Installation, uninstallation and use of Antivirus software.

Note: An industrial visit to computer assembling/manufacturing unit may be arranged for the students for better understanding of the course.

PROGRAM:THREE YEARS DIPLOMA PROGRAM IN COMPUTER ENGINEERING/IT

CourseCode:**ES205**	Course Title : **BASICS OF ELECTRICAL AND ELECTRONICS ENGINEERING**
Semester:**2ND**	Credits:**5**
Periods per week:5**(L:4 T: 1 P:0)**	

(Common with I&C)

COURSE OBJECTIVE:

The course contents could be taught and implemented with an aim to develop different skills leading to the achievement of the competencies in measurement of basic electrical quantities/parameters and use of major electrical/electronic machines/instruments.

COURSE CONTENTS

1. **Overview of DC Circuits**
   1.1. Ohms law and its verification.
   1.2. Series and parallel combination of resistors with simple numerical problems.
   1.3. Application of Kirchhoff's current law and Kirchhoff's voltage law to simple circuits.

2. **Electro Magnetic Induction**

   2.1 Concept of electro-magnetic field produced by flow of electric current
   2.2 Concept of magneto-motive force (MMF), flux, reluctance, permeability
   2.3 Analogy between electric and magnetic circuit.
   2.4 Faraday's laws of electro-magnetic induction, principles of self and Mutual induction.
   2.5 Series and parallel combination of inductors.

3. **Batteries**
   3.1. Basic idea of primary and secondary cells
   3.2. Construction, working principle and applications of Lead-Acid Batteries
   3.3. Brief idea of Lithium-ion batteries
   3.4. Series and parallel connections of batteries
   3.5. General idea of solar cells, solar panels and their applications

4. **AC Fundamentals**
   4.1. Concept of alternating current and voltage.
   4.2. Concepts of: cycle, frequency, time period, amplitude, instantaneous value, average value, r.m.s. value, maximum value
   4.3. Difference between ac and dc

5. **Various Types of Power Plants**
   5.1. Working principle and block diagram explanation of thermal and hydro power stations and their comparative study

6. **Semiconductor physics and diode**
   6.1 Classification of materials into insulators, conductors and semiconductors on the basis of energy band concept.
   6.2 Concept of Intrinsic and Extrinsic Semi-conductors

6.3   PN junction Diode : working Mechanism and its related terms, V-I Characteristics , and its application as half wave and full wave rectifier

6.4   Working and application of special purpose diodes: LED (Light Emitting Diode), photo diode, Zener diode

6.5   Filter circuits: Brief idea about shunt capacitor filter, series inductor filter, LC and Pie filter

7. **Bipolar-transistors**

7.1   Concept of a bipolar transistor, PNP and NPN transistors, their symbols and mechanism of current flow; Current relations in a transistor; concept of leakage current.

7.2   CB, CE, CC configurations of a transistor; Input and output characteristics in CB and CE configurations; Current amplification factors. Comparison of CB, CE and CC Configurations

7.3   Transistor as an amplifier in CE Configuration.

8. **Unipolar Transistors**

8.1   Construction, operation and characteristics of MOSFET/JFET and its applications.

8.2   Brief introduction of CMOS and its application.

COURSE OUTCOME

After completion of the course the student will be able to

- explain the basic terminology used in electricity like charge, current, voltage , resistance etc.
- solve various electric circuits for current, voltage or resistance.
- state the laws of electromagnetic induction and describe the effect on a current-carrying conductor when placed in a magnetic field.
- explain the concept of batteries , their construction and their applications.
- Describe the various concepts associated with AC and will be also able to distinguish it with DC.
- apply the knowledge of diodes in rectifiers, power adapters and various electronic circuits.
- apply the knowledge of semiconductors in various technical gadgets like mobile phones, Computers, LED, photocells, solar lights etc.
- explain the working and applications of FET and MOSFET

RECOMMENDEDBOOKS

1. Electrical Technology by B.LTheraja, S.Chand and Company, New Delhi
2. Electrical and Electronics Engineering by S.K Bhattacharya,Pearson Education, New Delhi
3. Basic Electrical Engineering by PS Dhogal, Tata McGraw-Hill Education Pvt Ltd, New Delhi
4. Basic Electrical and Electronics Engineering by Kumar K M, Vikas Publication House Pvt Ltd, New Delhi
5. Basic Electronics and Linear Circuits by N N Bhargawa and S C Gupta, Tata McGraw-Hill Education Pvt Ltd, New Delhi
6. Principles of Electrical and Electronics Engineering by V.K. Mehta, S. Chand and Co, New Delhi

7. Basic Electronics by J B Gupta, S K Kataria and Sons, New Delhi
8. Basic Electronics- Problems and solutions by Albert Molvino and David J Bates, Tata McGraw-Hill Education Pvt Ltd, New Delhi

UNIT WISE TIME AND MARKS DISTRIBUTION

S No	Unit	Time Allotted (Hrs)	Marks Allotted (%)
1.	Overview of DC Circuits	08	12
2.	Electro Magnetic Induction	08	12
3.	Batteries	05	10
4.	AC Fundamentals	12	18
5.	Various Types of Power Plants	05	08
6.	Semiconductor Physics and Diode	13	20
7.	Bipolar Transistors	08	12
8	Unipolar Transistors	05	08
	Total	**64**	**100**

PROGRAM:THREE YEARS DIPLOMA PROGRAM IN COMPUTER ENGINEERING/IT	
Course Code: **ES206**	**Course Title**: **BASIC ELECTRICAL AND ELECTRONICS ENGINEERING LAB**
Semester: 2nd	**Credits:** 1
Periods Per Week :2 (L: 0, T:0, P: 2)	

COURSE OBJECTIVE:

This subject is a lab course to be supplemented by theory subject and aims to develop proficiency and understanding of practical outcomes of the subject taught in theory.

LIST OF PRACTICALS

Measurement of resistance of an ammeter and a voltmeter .

1. Verification of Ohms law.
2. Verification of Kirchhoff's Current and Voltage Laws in a dc circuit
3. Charging and testing of a lead - acid storage battery.
4. Plotting of V-I characteristics of a PN junction diode
5. Observation of the wave shapes for the following rectifier circuit
    i.   Half-wave rectifier
    ii. Full-wave rectifier

6. Observation of wave shape of full wave rectifier with
    i.   Shunt capacitor filter
    ii. Series inductor filter

7. Plotting of input and output characteristics of transistors in CE and CB configuration.

8. Plotting of V-I characteristics of MOSFET/JFET.

PROGRAM : THREE YEARS DIPLOMA PROGRAM IN COMPUTER ENGINEERING/IT	
Course Code : **HS 211**	Course Title : **Communications and Inter Personal Skills**
Semester : **2ND**	Credits: **2**
Periods per week: **4(L: 0 T: 0 P: 4)**	

COURSE OBJECTIVE: Soft skills, unlike hard skills that are technical, tangible, measurable, quantifiable and assessable, are practical, imperceptible and subtle qualitative traits that determine the efficacy of human communication at professional and personal levels. While hard skills acquisition can be correlated with one's intelligence quotient (IQ), soft skills development are intricately linked with one's emotional quotient (EQ) and spiritual quotient (SQ). Hard skills can aid an individual secure a position, yet soft skills help the person retain it, achieve excellence and fulfil self-actualization needs. Using academic as well as popular books, the course offers soft skills by integrating them at personal, professional, interpersonal and management levels.

LIST OF PRACTICALS
1. Self Assessment with regard to Strengths and Weaknesses (SWOT Analysis). Practice different ways to develop Self Confidence
2. Collect the list of different habits, hobbies, aims and goals of your class mates and frame different reports and charts (bar graphs and histograms, pie charts).
3. Seminar and group discussions on Motivation, Goal Setting, Life and Career Planning, self confidence, Attitudes and Personality Types, Managing Time, leadership and team management.
4. Different observation on thinking Skills Correcting Common Errors in day to day conversation
5. Making short stories, news, pictures, reports, advertisement and videos, etc. and present them in effective way (English only)
6. Vocabulary building
7. Indexing, Footnotes and bibliographic procedure
8. Managing Stress and Maintaining Positive Outlook, Managing Health. Practice and prepare different ways and exercise.
9. Practice on Conducting Meetings, Writing Minutes, Sending Memos and Notices.
10. Practice decision-making on different problems on available options.
11. Develop Professional Skills (Communicating Clearly: Understanding and Overcoming barriers)
12. Speaking from observation and reading.
13. Greetings -Apologies, request, social and professional Etiquette-Telephone etiquettes, Email Etiquettes
14. Learning to Appreciate and Give Praise; Presenting Bad News
15. Humour, Jokes and Anecdotes in Effective Communication Comprehensions.

REFERENCES

1. Personality Development and Soft Skills, Barun k. Mitra, Oxford Press
2. Business Communication, Shalini Kalia, Shailja Agarwal, Wiley India
3. Cornerstone Developing Soft Skills, Sheffield, Pearson
4. Managing Soft Skills for Personality Development -edited by B.N Ghosh, McGraw Hill India
5. Soft Skills An Integrated Approach to Maximize Personality, Gajendra S.Chauchan, Sangeeta Sharma, Wiley In