E.G.S. PILLAY ENGINEERING COLLEGE

(Autonomous)

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai

Accredited by NAAC with _A' Grade | Accredited by NBA

NAGAPATTINAM – 611 002

B.E ELECTRICAL AND ELECTRONICS ENGINEERING

Full Time Curriculum and Syllabus

First Year – Second Semester

Course Code	Course Name	L	T	P	C	Maximum Marks		
						CA	ES	Total
Theory Course								
1901MA203	Engineering Mathematics – II (Linear Algebra, Transform Calculus and Numerical Methods)	3	2	0	4	40	60	100
1901CH202	Applied Chemistry	3	0	0	3	40	60	100
1901GEX03	Programming for Problem Solving	3	0	0	3	40	60	100
1901ENX01	English for Engineers	2	0	0	2	40	60	100
1901GE201	Engineering Exploration	2	0	0	2	100	0	100
Laboratory Course								
1901CHX51	Engineering Chemistry Lab	0	0	2	1	50	50	100
1901GE253	Basic Workshop Lab	0	0	2	1	50	50	100
1901GEX52	Computer Programming Lab	0	0	2	1	50	50	100
1901HSX51	Communication Skill Lab	0	0	2	1	50	50	100
1901GE252	Engineering Intelligence - II	0	0	2	1	100	0	100
	Total	13	02	10	19	560	440	1000

L – Lecture | T – Tutorial | P – Practical | CA – Continuous Assessment | ES – End Semester

| 1901MA203 | ENGINEERING MATHEMATICS – II | L | T | P | C |
| | (Linear Algebra, Transform Calculus and Numerical Methods) | 3 | 2 | 0 | 4 |

Aim of the course: This course focuses on developing a solid understanding of the methods used in the application of differentiation, Eigen values, and Eigen vectors and using the Cayley-Hamilton theorem, transformation of quadratic form into canonical form through orthogonal transformation, and familiarising students with the concepts of Laplace Transform, which are required for problems in all engineering disciplines. This course also covers several numerical and statistical approaches that are necessary for the resolution of engineering issues. Introduce the students to the solutions of linear equations, simultaneous linear equations, and ordinary differential equations in the numerical region.

COURSE OUTCOME

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

CO1 Determine the nature of the matrix using Orthogonal Transformation and Calculate the inverse and positive powers of a square matrix.

CO2 Apply Laplace Transform in solving Boundary value problems of second order ODE.

CO3 Determine the numerical solution for interpolation by Lagrange's and Newton's method and Solve the definite integral and differentiation from a set of tabulated values by Newton's, Trapezoidal and Simpson's method.

CO4 Calculate the numerical solution for first order ordinary differential equation using Euler's, Runge-Kutta and Milne's method.

CO5 Determine the numerical solution for partial differential equation using Implicit and Explicit methods

MODULE I   MATRICES   **12 Hours**

Characteristic equation - Eigen values and Eigen vectors of a real matrix – Properties - Cayley– Hamilton theorem- Diagonalization of Matrices - Reduction of a quadratic form to a canonical form by orthogonal transformation – Application of Matrices in Structural Engineering and image processing

MODULE II   TRANSFORM CALCULUS   **12 Hours**

Laplace Transform, Properties of Laplace Transform, Laplace transform of periodic functions. Finding inverse Laplace transform by different methods, convolution theorem. Evaluation of integrals by Laplace transform, solving ODEs and PDEs by Laplace Transform method.

MODULE III   SOLUTION OF ALGEBRAIC AND TRANSCENDENTAL EQUATIONS   12 Hours

Solution of algebraic and transcendental equations – Newton-Raphson method. Finite differences, Interpolation using Newton's forward and backward difference formulae. Interpolation with unequal intervals: Lagrange's formulae. Numerical Differentiation (first two derivatives) Numerical integration: Trapezoidal rule and Simpson's 1/3rd and 3/8 thrules (single integral)

MODULE IV   NUMERICAL METHODS OF ORDINARY DIFFERENTIAL   **12 Hours**
**   EQUATIONS**

Taylor's series, Euler and modified Euler's methods.RungeKutta method of fourth order for solving first order equations.Milne's and Adam's predicator-corrector methods.

MODULE V   NUMERICAL METHODS OF PARTIAL DIFFERENTIAL EQUATIONS   12 Hours

Finite difference solution two-dimensional Laplace equation and Poisson equation, Implicit and explicit methods for one dimensional heat equation (Bender-Schmidt and Crank-Nicholson methods), Finite difference explicit method for wave equation.

**   TOTAL: 60 HOURS**

FURTHER READING / CONTENT BEYOND SYLLABUS / SEMINAR :

REFERENCES:
1. D. Poole, ―Linear Algebra: A Modern Introduction‖, Brooks/Cole, 2005.
2. N.P. Bali and M. Goyal, ―A text book of Engineering Mathematics‖, Laxmi Publications, 2008.
3. B.S. Grewal, ‒Higher Engineering Mathematics‖, Khanna Publishers, 2010.

1901CH202	APPLIED CHEMISTRY	L	T	P	C
		3	0	0	3

Aim of the course:

This course is a combination of the theoretical concepts and application of chemistry. It is a study of concepts and applications of Electrochemistry, Polarization, Conventional and non-conventional energy, storage device and power plant and transmission materials. This course is designed very efficiently and provides the applied knowledge of chemistry and science discipline.

COURSE OUTCOME

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

CO1   Describe the electrode potential value using electro chemical principles
CO2   Explain the polarigraphic principle and its application
CO3   Differentiate the various types of energy sources and devices
CO4   Classify the storage devices and its application
CO5   Describe the various types of power plants and transmission materials

MODULE I   ELECTROCHEMISTRY   9 Hours

Electrochemistry -Cell terminology-Electrochemical cells- Electrolytic cells- Cell reactions- Daniel cell- Difference between electrolytic cells and electrochemical cells. Reversible cells and irreversible cells - types- EMF and its applications - Nernst equation (derivation and problems).Single electrode potential - Hydrogen electrode - Calomel electrode - Glass electrode - pH measurement using glass electrode.

MODULE II   POLARISATION AND OVER POTENTIAL   9 Hours

Polarisation and Over Potential- Electrolytic polarization, Dissolution and Decomposition potential, Overvoltage – hydrogen and oxygen overvoltage, applications, Polarography – principles, diffusion layer, limiting current density, polarographic circuit, dropping mercury electrode, merits & demerits, supporting electrolyte, current maxima, polarograms, half wave potential, diffusion current, applications

MODULE III   CONVENTIONAL ENERGY RESOURCES AND NON CONVENTIONAL   9 Hours
**   ENERGY RESOURCES**

Conventional Energy Resources and Non Conventional Energy Resources- Conventional- Petroleum Oil, Coal, Natural Gas, Non Conventional -Introduction- nuclear energy- nuclear fission, nuclear fusion- nuclear chain reactions- breeder reactor- Nuclear Reactor-solar energy conversion- solar cells- wind energy.

MODULE IV   STORAGE DEVICES   9 Hours

Storage Devices- Batteries and fuel cells: Types of batteries- alkaline battery- lead storage battery nickel-cadmium battery- lithium battery- fuel cell H2 -O2 fuel cell- applications

MODULE V   POWER PLANTS AND TRANSMISSION MATERIALS   9 Hours

Power Plants and Transmission Materials- power plant- types- hydroelectric power plants thermal power plants, solar power plants, wind *power plant*, geo thermal power generation and tidal power generation, transmission materials- conducting material- low resistivity or high conductivity- high resistivity or low conductivity conducting material- materials for lamp filaments, transmission line, electrical carbon and Fuse, Transformer oil, insulators.

TOTAL: 45 HOURS

REFERENCES:

1. Dara S.S, Umare S.S, ―Engineering Chemistry‖, S. Chand & Company Ltd., New Delhi 2010.
2. Sivasankar B., ―Engineering Chemistry‖, Tata McGraw-Hill Publishing Company, Ltd., New delhi 2010
3. Gowariker V.R., Viswanathan N.V. and Jayadev Sreedhar, ―Polymer Science‖, New Age
4. Kannan P. and Ravikrishnan A., ―Engineering Chemistry‖, Sri Krishna Hi-tech Publishing Company Pvt. Ltd. Chennai, 2009
5. J.O.M.Bockris & A.K.N.Reddy, ―Modern Electrochemistry –Vol. I & II‖ , Plenum Press, New York, 2000.
6. Peter Atkins and Julio de Paula, ―Physical Chemistry‖, VII Edition, Oxford University Press, New York, 2002.
7. A.J. Bard and L.R. Faulkner, ―Electrochemical Methods – Fundamentals and applications‖ 3 rd edition John Wiley & Sons Inc, 2001.
8. https://mnre.gov.in/file-manager/UserFiles/pdf/Trainers%20Textbook_SHP.pdf
9. onlinelibrary.wiley.com/doi/10.1002/9780470661345.smc107/pdf
10. https://www.electrical4u.com/classification-of-electrical-conducting-material/

1901GEX03	PROGRAMMING FOR PROBLEM SOLVING	L	T	P	C
		3	0	0	3

COURSE OBJECTIVES:

1. To understand the basics of C Programming
2. To understand Arrays, Strings and file processing

COURSE OUTCOMES:

After completion of the course, Student will be able to

CO1 Understand the basics of programming
CO2 Understand the basics of C programming
CO3 Explain the Arrays and Strings
CO4 Explain the Functions and Pointers use in programming
CO5 Discus about Structures & File Processing

MODULE I   INTODUCTION TO PROGRAMMING   9 Hours

Components of Computers and its Classifications- Generations of Computers- Number System- Problem Solving Techniques – Algorithm Design– Flowchart–Pseudocode-Algorithm to program, Compilation and Execution.

MODULE II   BASICS OF C PROGRAMMING   9 Hours

Structure of C program - C programming: Data Types – Storage classes - Constants – Enumeration Constants - Keywords – Operators: Precedence and Associativity - Expressions - Input/output statements, Assignment statements – Decision making statements - Switch statement - Looping statements – Pre-processor directives

MODULE III   ARRAYS AND STRINGS   9 Hours

Introduction to Arrays: Declaration, Initialization – One dimensional array – Example Program: Computing Mean, Median and Mode - Two dimensional arrays – Example Program: Matrix Operations (Addition, Scaling, Determinant and Transpose) - String operations: length, compare, concatenate, copy – Selection sort, linear and binary search.

MODULE IV   FUNCTIONS AND POINTERS   9 Hours

Introduction to functions: Function prototype, function definition, function call, Built-in functions (string functions, math functions) – Recursion – Example Program: Computation of Sine series, Scientific calculator using built-in functions, Binary Search using recursive functions – Pointers – Pointer operators – Pointer arithmetic – Arrays and pointers – Array of pointers – Example Program: Sorting of names – Parameter passing: Pass by value, Pass by reference – Example Program: Swapping of two numbers and changing the value of a variable using pass by reference

MODULE V   STRUCTURES & FILE PROCESSING   9 Hours

Structure - Nested structures – Pointer and Structures – Array of structures – Example Program using structures and pointers – Dynamic memory allocation - Singly linked list -Files – Types of file processing: Sequential access, Random access – Sequential access file - Example Program: Finding average of numbers stored in sequential access file - Random access file - Example Program: Transaction processing using random access files – Command line arguments.

TOTAL: 45 Hours

REFERENCES:

1. Paul Deitel and Harvey Deitel, ―C How to Program‖, Seventh edition, Pearson Publication

2. Juneja, B. L and Anita Seth, ―Programming in C‖, CENGAGE Learning India pvt. Ltd., 2011

3. Pradip Dey, Manas Ghosh, ―Fundamentals of Computing and Programming in C‖, First Edition, Oxford University Press, 2009.

4. Anita Goel and Ajay Mittal, ―Computer Fundamentals and Programming in C‖, Dorling Kindersley (India) Pvt. Ltd., Pearson Education in South Asia, 2011.

5. Byron S. Gottfried, "Schaum's Outline of Theory and Problems of Programming with C",McGraw-Hill Education, 1996.

1901ENX01	ENGLISH FOR ENGINEERS	L	T	P	C
	(Common for all B.E./B.Tech. Programme)	3	0	0	3

MODULE I   FOCUS ON LANGUAGE (Vocabulary and Grammar)   **9 Hours**

Vocabulary -The Concept of Word Formation - Prefixes- Suffixes- Synonyms – Antonyms - Grammar - Articles- Preposition- Adjective-Adverb-Connectives -Tenses (present, past & future) - Conditional Clauses - Active voice –passive voice and Impersonal passive voice - Wh- Questions.

MODULE II   LISTENING SKILLS   **9 Hours**

Listening-Types of Listening -listening to short or longer texts- listening and Note taking- -formal and informal conversations- telephonic etiquettes- narratives from different sources. - Correlative verbal and nonverbal communication - listening to panel members (how to response to panel members after listening panel members) – listening to facing online interviews (or) interviews on video conferencing mode - listening webinars.

MODULE III   SPEAKING SKILL   **9 Hours**

Speaking - Stress and intonation –Communication skills- Role of ICT in Communication, -Process of communication- oral presentation skills- verbal and non verbal communication-individual and group presentations- impromptu presentation- public speaking- Group discussion- speaking to the panel members (online interviews , video conferencing, online meeting and webinars.

MODULE IV   READING SKILLS   **9 Hours**

Reading– Intensive Reading –Predicting the content -Comprehending general and technical articles -Cloze reading - Inductive reading- Short narrative and descriptions from newspapers – Skimming and scanning-reading and interpretation-critical reading interpreting and transferring graphical information- sequencing of sentences- analytical reading on various Projects.

MODULE V   WRITING SKILLS   **9 Hours**

Writing- Precise writing –Summarizing- Interpreting visual texts (pie chart, bar chart, picture, advertisements etc., - Proposal writing (launching new units or department in a institution or industry & to get loan from bank) -Report writing (accident, progress, project, survey, Industrial visit)- job application- e- mail drafting- letter writing (permission, accepting and decaling)- e.mail drafting instructions – recommendations –checklist- uses of Print and electronic media (internet, fax, mobile, interactive video and teleconferencing, computer) e-governance.

                                                                    TOTAL: 45 HOURS

REFERENCES:
1. Raman, Meenakshi and Sangeetha Sharma, "Technical Communication: Principles and Practice", Oxford University Press, New Delhi, 2011.
2. Rizvi and Ashraf M., "Effective Technical Communication", Tata McGraw-Hill, New Delhi, 2005.
3. G. Radhakrishna Pillai, "English for Success", Central Institute of English and Foreign Languages", Emerald Publishers ,Hyderabad, 2003
4. Jones, D, "The Pronunciation of English", CUP, . Cambridge,2002.

1901GE201	ENGINEERING EXPLORATION	L	T	P	C
		2	0	0	2

COURSE OBJECTIVE

1.To get more knowledge in Engineering Design

2.To evaluate product design and submission of projects

3.To understand wide knowledge in multidisciplinary engineering field

COURSE OUTCOME

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

CO1 – Understand Engineering disciplines, Engineering advancements.

CO2 – Make use of engineering thoughts into various project through brainstorming and researching

CO3 – Test the final output of the engineering exploration

CO4 – understand about Civil, Mechanical Engineering field

CO5 – understand about Electrical and computer Engineering field

What is Engineering? Engineering Requirement, Knowledge within Engineering disciplines, Engineering advancements.

Engineering Design: Problem definition, idea generation through brainstorming and researching, solution creation through evaluating and communicating, text/analysis, final solution and design improvement.

Defining problems and Brainstorming: Researching design, sketching problem solving.

Communicating solution: Dimensioning orthographic drawing, perspective drawing.

Modeling and Testing final output: Product evaluation, reverse engineering, final project report.

Civil Engineering: Structural forces structural analysis, bridge design components, structural design.

Mechanical Engineering: Types of motion, mechanical power system, mechanical power formula, mechanical design.

Electrical Engineering: Reading analog multimeter, measuring current, voltage and resistance, electricity from chemicals, solar cells, magnets, Ohms law and watts law, circuit identification and circuit calculation, resistor color code, continuity.

Computer Engineering: Logic gates, algorithms, computer architecture, binary code.

TOTAL: 30 Hours

REFERENCES:

1. Ryan A.Brown, Joshua W.Brown and Michael Berkihiser: ―Engineering Fundamentals: Design, Principles, and Careers‖, Goodheart-Willcox Publisher, Second Edition, 2014.
2. Saeed Moaveni ,―Engineering Fundamentals: An Introduction to Engineering‖, Cengage learning, Fourth Edition, 2011.

1901CHX51 **ENGINEERING CHEMISTRY LABORATORY** **L** **T** **P** **C**

                                                    0 **0** **2** **1**

Aim of the course:

Engineering Chemistry laboratory course is designed to provide basic chemistry and its application to the first year engineering students. The course includes the study of applications of water quality chemistry, identification of acidic and alkaline nature of water, molecular weight determination and explaining the principles behind each experiments.

COURSE OUTCOMES

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

CO1: Measure the hardness and alkalinity of given water sample

CO2: Find the amount and percentage of iron in unknown sample using EMF and photometric methods

CO3: Determine the amount of strong acid present in the given sample using PH metric and conductometric methods

CO4: Determine the amount of dissolved oxygen and heavy metal present in the given sample

CO5: Determine the molecular weight of the given polymer

List of Experiments

1. Determination of total, temporary & permanent hardness of water by EDTA method
2. Determination of strength of given hydrochloric acid using pH meter
3. Estimation of iron content of the given solution using potentiometer
4. Estimation of sodium present in water using flame photometer
5. Corrosion experiment – weight loss method
6. Determination of molecular weight of a polymer by viscometer method
7. Conductometric titration of strong acid Vs strong Base
8. Estimation of dissolved oxygen in a water sample/sewage by Winkler's method.
9. Comparison of alkalinities of the given water samples
10. Determination of concentration of unknown colored solution using spectrophotometer
11. Determination of percentage of copper in alloy
12. Determination of ferrous iron in cement by spectrophotometry method
13. Adsorption of acetic acid on charcoal
14. Determination the flash point and fire point of a given oil using pen skyMartine closed cup apparatus
15. Determination the calorific value of solid fuels
16. Determination the structural of the compound using chemo software.

                                        Total: **30 Hours**

References:
1. Furniss B.S. Hannaford A.J, Smith P.W.G and Tatchel A.R., ‒Vogel‴s Textbook of practical organic chemistry‖, LBS Singapore (1994).
2. Jeffery G.H., Bassett J., Mendham J.and Denny vogel‴s R.C, ‒Text book of quantitative analysis chemical analysis‖, ELBS 5th Edn. Longman, Singapore publishers, Singapore, 1996.
3. Daniel R. Palleros, ‒Experimental organic chemistry‖ John Wiley & Sons, Inc., New Yor (2001).
4. Kolthoff I.M., Sandell E.B. et al. ―Quantitative chemical analysis‖, Mcmillan, Madras 1980.

1901GE253	BASIC WORKSHOP LABORATORY	L	T	P	C
		0	0	2	1

COURSE OBJECTIVE

    1.To prepare different objects using sheet metal, welding and carpentry

    2.To construct household pipe line

COURSE OUTCOMES

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

CO1 – prepare different object and shapes by using sheet metal

CO2 – Apply arc and gas welding to prepare simple components

CO3 - Make a simple component using carpentry power tool

CO4 - Construct a household pipe line connections using pipes

CO5 – Make use of rapid prototyping in engineering field

List of Experiments

1. Forming of simple object in sheet metal using suitable tools (Example: Dust Pan, Soap Box, Aluminum Cup, etc).
2. Prepare V (or) Half round (or) Square (or) Dovetail joint from the given mild Steel flat.
3. Prepare simple components using arc and gas weldings
4. Making a simple component using carpentry power tools. (Example: Electrical switch Box/Tool box/ Letterbox.
5. Construct a household pipe line connections using pipes, Tee joint, Four way joint, elbow, union, bend, Gate way and Taps (or) Construct a pipe connections of house application centrifugal pump using pipes, bend, gate valve, flanges and foot valve.
6. Rapid Prototyping

REFERENCES: Lab manual

TOTAL: 30 Hours

1901GEX52	COMPUTER PROGRAMMING LABORATORY	L	T	P	C
		0	0	2	1

COURSE OBJECTIVES:

1. To make the student learn a C program for solving problems.
2. To make the students to improve the skill in programming

COURSE OUTCOME

CO1 - Develop program to illustrate basic concept OF C Language
CO2 - Implement the program using looping statements and arrays
CO3 - Develop the program using strings, pointers and structures
CO4 - Implement Decision Making and Branching statements in C program
CO5 – Make use of program working with files in C

List of Experiments

1. Working with word and style sheets
2. Write a C program to implement basic concepts
3. Write a C program to implement Decision Making and Branching statements
4. Write a C program to implement looping statements
5. Write a C program to implement Arrays
6. Write a C program to implement Strings
7. Write a C program to implement pointers
8. Write a C program to implement Structures
9. Write a C program to work with files in C

Total: 30 Hours

References:

1. Paul Deitel and Harvey Deitel, ―C How to Program‖, Seventh edition, Pearson Publication
2. Juneja, B. L and Anita Seth, ―Programming in C‖, CENGAGE Learning India pvt. Ltd., 2011
3. Pradip Dey, Manas Ghosh, ―Fundamentals of Computing and Programming in C‖, First Edition, Oxford University Press, 2009.
4. Anita Goel and Ajay Mittal, ―Computer Fundamentals and Programming in C‖, Dorling Kindersley (India) Pvt. Ltd., Pearson Education in South Asia, 2011.
5. Byron S. Gottfried, "Schaum's Outline of Theory and Problems of Programming with C" ,Mc Graw-Hill Education, 1996.

1901HSX51	COMMUNICATION SKILLS LAB	L	T	P	C
	(Common to all B.E./B.Tech. Programme)	0	0	2	1

List of Experiments:

1. Activities on Fundamentals of Listening and Inter-personal Communication (6)

Listening to conversation, listening to technical presentation- listening to online video conferencing ,interviews and webinars -starting a conversation - responding appropriately and relevantly - using appropriate body language - Role Play in different situations & Discourse Skills- using visuals.

2. Activities on Reading Comprehension (6)

General Vs Local comprehension- reading for facts- guessing meanings from context-Scanning- skimming and inferring meaning- critical reading & effective googling- TOFEL,IELTS-reading online journals.

3. Activities on Writing Skills (6)

Structure and presentation of different types of writing - letter writing - Resume writing-e- correspondence - Proposal writing - Technical report writing - Portfolio writing - planning for writing - improving one's writing.

4. Activities on Presentation Skills (6)

Oral presentations (individual and group) through JAM sessions – presentation on online platform (webinars, online meeting) - seminars -PPTs and written presentations through posters- projects- report- e-mails- assignments etc.- creative and critical thinking.

5. Activities on Soft Skills (6)

Dynamics of group discussion, intervention, summarizing, modulation of voice, body language, relevance, fluency and organization of ideas and rubrics for evaluation-Concept and process, pre- interview planning, opening strategies, answering strategies, interview through tele-conference & video-conferencing and Mock Interviews-Time management-stress management –paralinguistic features- Multiple intelligences – emotional intelligence – spiritual quotient (ethics) – intercultural communication – creative and critical.

Total: 30 Hours

References:
1. Raman, Meenakshi and Sangeetha Sharma, "Technical Communication: Principles and Practice", Oxford University Press, New Delhi, 2011.
2. Sudha Rani, D , "Advanced Communication Skills Laboratory Manual" , Pearson Education 2011.
3. Paul V. Anderson ,"Technical Communication",. Cengage Learning pvt. Ltd. New Delhi, 2007.
4. "English Vocabulary in Use series", Cambridge University Press 2008.
5. "Management Shapers Series" ,Universities Press (India) Pvt Ltd., Himayatnagar, Hyderabad 2008.
6. Rizvi and Ashraf M., "Effective Technical Communication", Tata McGrawHill, New Delhi, 2005.
   Jones, D, "The Pronunciation of English", CUP, . Cambridge,2002.

1901GE252	ENGINEERING INTELLIGENCE II	L	T	P	C
		0	0	2	1

COURSE OBJECTIVE

1. To enhance the ability of interpersonal skills and vocabulary
2. To uplift the quality of Leadership& Employability Skills

COURSE OUTCOME

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

CO1 To understand the parts of the grammer with word building activities

CO2 Attend more communication workshops

CO3 Develop Interpersonal Skills

CO4 quality of Leadership& Employability Skills

CO5 Cultivate the quality of Leadership& Employability Skills

MODULE I   VOCABULARY BULIDING   6 hours

Parts of Grammar- SVA- Art of Writing- word building activities

MODULE II   COMMUNICATION WORKSHOP   6 Hours

Story Telling- Newspaper Reading-Extempore

MODULE III   INTERPERSONAL SKILLS   6 Hours

Personality Development - Creativity and innovation –Critical Thinking and Problem Solving – Work Ethics-Technical Skill Vs Interpersonal Skills

MODULE IV   LEADERSHIP& EMPLOYABILITY SKILLS   6 Hours

Levels of Leadership-Making of a leader-Type of leadership-Transactions Vs Transformational Leadership –Exercises - Industry Expectations & Career Opportunities- Recruitment patterns.

MODULE V   RESUME BUILDING   6 Hours

Importance of Resume- Resume Preparation - introducing onself

TOTAL: 30 Hours

REFERENCES:

1. Barun K. Mitra; (2011), ―Personality Development & Soft Skills‖, First Edition; Oxford Publishers.
2. Raymond Murphy, Essential English Grammar in Use, Cambridge University press, New Delhi, Third Edition , 2007
3. Arun Sharma and Meenakshi Upadhyav, How to Prepare for Verbal Ability and Reading Comprehension for CAT, McGrawHill Publication, Seventh Edition 2017