Chhattisgarh Swami Vivekananda Technical University, Bhilai
Name of program: Bachelor of Technology
Branch: Electronics & Telecommunication
Semester: IV

Subject: **Analog Communication** Code: **B028411(028)**
Total Theory Periods: 40 Class Tests: Two (Minimum)
Total Tutorial Periods: 10 Assignments: Two (Minimum)
ESE duration: Three Hours Maximum Marks: 100 Minimum Marks: 35

Course Objectives:

1.To understand the signal analysis performed in communication.

2. To gain knowledge about various analog communication system.

3. To study about various Noise sources and its impact on analog communication system.

UNIT-1: Introduction to Communication System: Introduction: Overview of Communication system, Communication channels , Need for modulation, Baseband and Pass band signals .Classification of signals and study of Fourier transforms for standard signals, definition of signal bandwidth, Distortion less transmission, Parseval's Theorem. Introduction to Convolution and correlation of signals, comparison between correlation and convolution. Frequency division multiplexing.

UNIT-11: Amplitude Modulation: Amplitude Modulation: full carrier system and Suppressed carrier system . Double side band with full Carrier, Generation and Detection of Double side band without Carrier (DSB-SC), SSB-SC, VSB-SC, Single Side Band Modulation, Phasor representation, Bandwidth, Modulation Index Superposition Theorem of Spectra. Power Content in AM signal. Generation of AM using LTI circuits and Non-linear circuits. Demodulation of AM waves: Square law detectors and Envelope detectors

UNIT-III: Angle Modulation: Angle modulation, Phase & frequency modulation, Relationship between phase and frequency modulation, Phase and frequency deviation, Spectrum of an FM signal, Bandwidth and power of a sinusoidal modulated FM signal, Types of FM: Narrowband FM and Wideband FM. Phasor diagram for FM signals. FM generation: Parameter-variation method, an indirect method of frequency modulation (Armstrong system), Frequency multiplication, and Frequency multiplication applied to FM signals, FM demodulators : Slope detectors and Phase difference discriminators. Comparison of AM and FM.

UNIT-1V: Transmitters and Receivers: AM Transmitters: Generation of AM, low level and high level modulation, comparison of levels, AM transmitter block diagram, collector class C modulator, Base Modulator, DSB -SC modulator. FM transmitter: Direct Method , Armstrong Indirect Method Radio Receivers and Demodulators :Introduction, Performances characteristic of receivers: Sensitivity, Selectivity, Fidelity, Image frequency and IFRR, Tracking and Double spotting, TRF, Super heterodyne receivers AGC. PLL for FM demodulation.

UNIT-V Noises in Analog Communication: Noise Introduction, Sources of Noise, Classification of noise, Noise calculations (thermal noise), SNR, Noise figure for cascaded amplifiers, Noise Factor, Effective input Noise Temperature.

Noise calculation (SNR, FOM) of Various AM system: DSB-SC, SSB-SC, AM-FC system(Envelope detector) Threshold Effect in Envelope detector. Noise in angle modulated system: , Capture effect, Threshold effect and its improvement in Discriminators

Text Books:

1. Principles of Communication Systems, Taub and Schilling, 2nd Edition., Tata McGraw Hill.(unit-II,III,V)
2. Electronic Communication Systems, George F Kennedy, Tata McGraw Hill. (unit-IV)
3. Communication Systems, Simon Haykins, Wiley India.
4. Communication Systems, R P singh ,S D Sapre, Tata McGraw Hill, Second Edition (unit-I)

Reference Books:

1. Communication Systems Engineering, Proakis, 2 nd Edition, Pearson Education.
2. Modern Digital and Analog Communication, B.P. Lathi, Oxford University Press.

Course outcomes:

1. The student will be able to draw spectral plots and visualize signals in frequency domain.
2. Understand the amplitude modulation process and effect of noise in AM systems.
3. Understand the angle modulation process and effect of noise in FM/PM systems.
4. Get the overview of transmitters and receivers for both AM and FM systems.

Chhattisgarh Swami Vivekananda Technical University, Bhilai
Name of program: Bachelor of Technology
Branch: Electronics & Telecommunication
Semester: IV

Subject: **Analog Circuits** Code: **B028412(028)**
Total Theory Periods: 40 Class Tests: Two (Minimum)
Total Tutorial Periods: 10 Assignments: Two (Minimum)
ESE duration: Three Hours Maximum Marks: 100 Minimum Marks: 35

Course Objectives:

1. To understand Operating point calculations and working of BJTs at low and high frequencies.
2. To study Frequency response of BJT.
3. To study the design of multistage amplifiers.
4. To understand the working of different types of feedback amplifiers.
5. To understand the working of different types of oscillators.

UNIT- I: BJT AT LOW FREQUENCY: Transistor as a two port device and its Hybrid Model: Models for CB, CE, CC configurations and their Interrelationship, Analysis and Comparison of the three Configurations. Classification of Amplifiers, Amplitude and Frequency, Linear analysis of Transistor Circuits. Miller's Theorem and its dual. Cascading transistor Amplifiers. Simplified Models and Calculation of CE and CC Amplifiers. The Common Emitter Amplifier with an Emitter Resistance. Methods of increasing the input resistance of an Amplifier.

UNIT-II: BJT AT HIGH FREQUENCY: CE hybrid- π model, Hybrid –π Conductances and Capacitances. Validity and parameter Variation, CE Short Circuit Current Gain, Current Gain with Resistive load. Frequency response of a single stage CE Amplifier, Gain-Bandwidth product, CC stage High frequencies.

UNIT- III MULTISTAGE AMPLIFIERS: Introduction, Distortion in Amplifiers, Frequency Response, Step Response of an amplifier, Band Pass of Cascaded Stages.
Coupling of amplifiers: Coupling Types: Direct, RC and Transformer. RC Coupled Amplifier, Low Frequency response of an RC-coupled Stage, Effect of an Emitter bypass capacitor, High Frequency response of two cascaded CE Transistor stages.

UNIT-IV FEEDBACK AMPLIFIERS: Classification, Feedback concept, Transfer gain with Feedback, Characteristics of Negative Feedback Amplifiers, Analysis of Input and output Resistance. Topologies: Method of Analysis of Feedback amplifiers, Voltage series Feedback, Voltage series Feedback pair, Current series, Current shunt and Voltage shunt feedback.

UNIT-V OSCILLATOR (BJT): Concept of positive Feedback. Barkhausen criterion for oscillation, Mechanism for start of oscillation and Stabilization of amplitude. Sinusoidal oscillator: Phase shift oscillators, Wien Bridge oscillator, Resonant circuit oscillators, Colpitts and Hartley oscillator. Amplitude Frequency and Phase stability analysis of all Oscillators, Crystal oscillator.

Text Books:

1. Integrated Electronics – Millman & Halkias, Tata McGraw Hill. (Unit I to V)
2. Microelectronics – Millman and Grabel, Tata McGraw Hill.
3. Electronic Devices & Circuits – Donald A Neaman, Tata McGraw Hill.

Reference Books:

1. Electronic devices and circuits- A.K. Maini & Varsha Agrawal, 1stEdition ,Wiley Publication.
2. Electronic Devices & Circuits – David A. Bell, PHI.
3. Microelectronic Circuits- Sedra and Smith, 5th Edition, Oxford University Press.

Course outcomes:

1. Student will be able to understand ac analysis of BJT amplifier at Low and High frequencies.
2. Understand the concepts of multistage amplifier and coupling of amplifiers.
3. Understand the concepts of feedback used in amplifier .
4. Able to understand the concepts of Oscillator.

Chhattisgarh Swami Vivekananda Technical University, Bhilai
Name of program: Bachelor of Technology
Branch: Electronics & Telecommunication
Semester: IV

Subject: **Electromagnetic Field Theory** Code: **B028413(028)**
Total Theory Periods: 40 Class Tests: Two (Minimum)
Total Tutorial Periods: 10 Assignments: Two (Minimum)
ESE duration: Three Hours Maximum Marks: 100 Minimum Marks: 35

Course objective: - The students will learn and understand

1. Behavior of Electrostatic and electromagnetic field and their application in electric and electronics Engineering fields.
2. Maxwell's equations in differential and integral form their interpretation and applications.
3. Propagation of Electromagnetic wave in free space, conductors and dielectrics.

Unit I: Coordinate Systems and Transformation: Cartesian coordinate system, circular cylindrical coordinate system, Spherical coordinates, vector calculus, Differential length area and volume, line surface and volume integral, del operator, gradient of a scalar, divergence and curl of a vector, divergence and stokes theorem, Laplacian form of a scalar.

Unit II: Electrostatics: Electrostatic fields, Coulombs law and field intensity, Electric field due to charge distribution, Electric flux density, Electric Potential, Relationship between E and V, Gauss law, boundary conditions, Poisson's and Laplace equations.

Unit III : Magneto statics: Biot Savart law, amperes circuit Maxwell's equations, Applications of amperes law, Maxwell's equations for static field, Magnetic scalar and vector potential. Magnetic forces, Material and Devices: Force due to magnetic field, Magnetic Torque and moment, A magnetic dipole, magnetization in Materials, Magnetic Boundary Conditions.

Unit IV: Waves and Applications: Maxwell's equations, Faradays law, Displacement current, Maxwell's Equations in Differential and Integral Form, Electromagnetic Wave Propagation: Wave propagation in lossy dielectrics, plane wave in lossless dielectric, Plane wave in free space, plane wave in good conductor, Power and Poynting vector, Reflection of plane wave at normal and oblique incidence.

Unit V : Transmission Lines: Transmission line parameter, Transmission line equations, Lossless and distortion less Transmission line, Input impedance, Characteristics Impedance, standing wave ratio ,reflection coefficient, power, smith chart, Open circuited and short circuited transmission line, Applications of transmission Lines, introduction to wave guide.

Text Books:

1. M.N.O. Sadiku," Elements of Electromagnetic" 5th edition Oxford University Press
2. G.S.N. Raju , "Electromagnetic field theory and Transmission line" Pearson Education.

Reference Books.

1. W.H. Hayt and J A Buck," Electromagnetic field Theory" 7th Edition Tata Mcgraw Hill

Course Outcomes:

On completion of this course, the students will be able to

1. Calculate electric and magnetic field from stationary and dynamic charge and current distribution
2. Gain Knowledge of static and time varying field
3. Define electric and magnetic field and solve simple electrostatic boundary problems
4. Understand the phenomenon of wave propagation with the aid of Maxwell's equations

Chhattisgarh Swami Vivekananda Technical University, Bhilai
Name of program: Bachelor of Technology
Branch: Electronics & Telecommunication
Semester: IV

Subject: **Signals and Systems** Code: **B028414(028)**
Total Theory Periods: 40 Class Tests: Two (Minimum)
Total Tutorial Periods: 10 Assignments: Two (Minimum)
ESE duration: Three Hours Maximum Marks: 100 Minimum Marks: 35

Course Objectives:

1. To describe continuous time and discrete-time signals and systems.
2. Proficiently use various methods and approaches to solve problems with signals and systems prepared for upper-level courses in communication systems, control systems, and digital signal processing.

UNIT I: CLASSIFICATION OF SIGNALS AND SYSTEMS: Representation of signals: Graphical Representation, Functional Representation, Sequence Representation, Elementary signals: Unit Step ,Unit ramp, Unit Impulse, Sinusoidal Signal, Basic Operation on Signals: Time Shifting, Time Reversal, Time Scaling, Signal Addition , Signal Multiplication, Classification of Signals: Periodic and non-periodic, Energy and power, Causal and non-causal, Even and odd Signals, Classification of Systems: Causal and non-causal, linear and non-linear, time variant and time invariant, stable and unstable.

UNIT II : FOURIER REPRESENTATION OF PERIODIC SIGNALS: Representation of Continuous time Fourier series (CTFS): Trigonometric form and Exponential form, Existence of Fourier series, Fourier spectrum, Power, Properties of CTFS: linearity, Time Shifting, Time Reversal, Time Scaling, Time Differentiation, Time Integration and Convolution Property

UNIT III: FOURIER REPRESENTATION OF APERIODIC SIGNALS: Fourier transform of non-periodic functions, Magnitude and phase representation of Fourier transform, Existence of Fourier transform, Fourier transform of standard signals: Impulse Function, Double Sided Real Exponential Function, Complex Exponential function, Signum Function, Unit Step, Rectangular Pulse and Triangular Pulse, Properties of continuous time Fourier transform: Linearity ,Time Shifting ,Frequency Shifting, Time Reversal, Time Scaling, Differentiation in time domain and Frequency Domain, Time Integration and Convolution Property.

UNIT IV: Z-TRANSFORM: Introduction, Z transform of some common sequences: Unit Impulse , Unit Step, Unit Ramp, Exponential Sequence and Sinusoidal Sequence, Z transform and region of convergence of finite duration sequences, Properties of region of convergence, Properties of Z transform: Linearity, Time Shifting, Time Reversal, Time Expansion, Multiplication by an Exponential Sequence ,Multiplication by n ,Conjugation and Convolution Property, Initial and Final Value Theorem, Inverse Z transform: Long Division Method, Partial Fraction Expansion Method.

UNIT V: LINEAR TIME INVARIANT SYSTEMS: Response of a continuous time LTI System and Convolution integral using graphical method, Properties of continuous time LTI systems, System described by Differential Equation, Response of a Discrete time LTI System and Convolution sum, Properties of discrete time LTI system, Systems described by difference equations.

Text Books:

1. Signals &Systems: A. Anand Kumar, 2nd Edition,PHI.(Unit–I, II , III and IV)
2. Signals & Systems: H. P. Hsu, McGraw-Hill Publication. (Unit- V)
3. Signals & Systems: Alan Oppenheim & Alan Wilsky, S Nawab, PHI. (Unit-V)

Reference Books:

1. Simon Haykin, Signals and Systems, 2nd Edition, Wiley India.
2. Signals, Systems and Communications: B.P. Lathi, BS Publications.

Course outcomes:

1. The student will be able to understand the classification of signals and systems.
2. Gain knowledge about the frequency domain analysis of continuous time and discrete time signals.
3. Use the Z-transform techniques to solve the system equations.

Chhattisgarh Swami Vivekananda Technical University, Bhilai
Name of program: Bachelor of Technology
Branch: Electronics & Telecommunication
Semester: IV

Subject: **Probability Theory and Stochastic Processes** Code: **B028415(028)**
Total Theory Periods: 40 Class Tests: Two (Minimum)
Total Tutorial Periods: 10 Assignments: Two (Minimum)
ESE duration: Three Hours Maximum Marks: 100 Minimum Marks: 35

Course Objectives:

1. To study basics of probability theory.
2. To understand the basic concepts of random variables & processes

UNIT-I: PROBABILITY: Sets and set operations; Probability introduced through Sets and Relative Frequency, Joint and conditional probability, Bayes' theorem, Independent events, combined experiments, Bernoulli Trials.

UNIT-II RANDOM VARIABLES: Random variable concepts, probability mass function, probability distribution function, Example random variables and distributions: Uniform, Gaussian, Poisson, Rayleigh, Exponential, Conditional distribution and density, Joint cumulative distribution and probability density functions and their properties.

UNIT-III EXPECTATION AND MOMENTS OF RANDOM VARIABLES: Average value of a random variable, Variance of a random variable, moments of random variables, Distribution and density of sum of random variables, Mean and variance of the sum of random variables, Correlation of random variables.

UNIT-IV RANDOM PROCESSES - TEMPORAL CHARACTERISTICS: The random process concept, Stationarity and independence, Mean and covariance functions, Ergodicity, Correlation functions, Gaussian random process, Poisson random process.

UNIT-V SPECTRAL CHARACTERISTICS OF RANDOM PROCESSES: Power density spectrum and its properties, Relationship between power spectrum and autocorrelation function, White and colored noise, Response of a product device for random signal input, Transmission of random process through LTI system, autocorrelation and spectral density of response.

Text Books:

1. Principles of Communication Systems by Taub and Schilling, Tata McGraw Hill.
2. Probability, Random Variables and Random Signal Principles, P. Z. Peebles, Tata McGraw Hill.

Reference Books:

1. H. Stark and J. Woods, ``Probability and Random Processes with Applications to Signal Processing,'' Third Edition, Pearson Education

2. A. Papoulis and S. Unnikrishnan Pillai, ``Probability, Random Variables and Stochastic Processes," Fourth Edition, McGraw Hill.

3. K. L. Chung, Introduction to Probability Theory with Stochastic Processes, Springer International

Course Outcomes:

At the end of this course students will be able to

1. Define probability and interpret probability by modeling sample spaces.

2. Formulate fundamental probability distribution and density functions

3. Determine various moments of one and multiple random variables.

4. Investigate temporal and spectral characteristics of random processes

5. Understand propagation of random signals in LTI systems.

Chhattisgarh Swami Vivekananda Technical University, Bhilai
Name of program: Bachelor of Technology
Branch: Electronics & Telecommunication
Semester: IV

Subject: **Analog Communication Laboratory** Code: **B028421(028)**
Total Lab Periods: 36 Batch Size: 30
Maximum Marks: 40 Minimum Marks: 20

List of Experiments: (At least Ten experiments are to be performed by each student)

1.To study Amplitude Modulation on trainer kit.

2. To study Amplitude Demodulation on trainer kit.

3. To study Frequency Modulation and to trace the frequency modulated waveform on CRO using trainer kits.

4. To study Frequency Demodulation using trainer kits.

5. Design of a Frequency Demodulator Using PLL

6. To study a radio receiver having medium frequency reception.

7. To plot amplitude modulated signal and to calculate modulation index

8. To design and obtain characteristics of a mixer Circuit.

9. To generate SSB-SC signal and to study its characteristics.

10. To generate DSB-SC signal using Balanced Modulator and to study its characteristics.

11. To design a Ring Modulator and to study its characteristics.

12. To design a Square Law Detector using diode and to study its V-I characteristics.

13. To design and study an Envelope Detector.

14. To study the Time division multiplexing and de-multiplexing.

15. To study the Frequency division multiplexing and de-multiplexing.

16. To observe the effect of pre-emphasis and de-emphasis on a given input signal.

(Along with the above experiments, Simulators may be used to give idea about various communication techniques.)

List of Equipments/Machine Required:

Discrete Components, Function Generator, Power Supply, CRO, Communication trainer kits, Modulated Signal Generator, Transmission Line, related software like COMMSIM etc..

Reference Books: 1.Radio Communication by G.K Mithal, Khanna Publishers.

Chhattisgarh Swami Vivekananda Technical University, Bhilai
Name of program: Bachelor of Technology
Branch: Electronics & Telecommunication
Semester: IV

Subject: **Analog Circuits Laboratory** Code:B028422(028)
Total Lab Periods: 36 Batch Size: 30
Maximum Marks: 40 Minimum Marks: 20

List of Experiments: (At least Ten experiments are to be performed by each student)

1. To draw Static input characteristics curves of CE transistor and determine its h-parameter values.
2. To draw Static output characteristic curve CE transistor and determine its h-parameter values.
3. To draw Static input characteristic curve of CB transistor and determine its h-parameter values.
4. To draw Static output characteristic curve of CB transistor and determine its h-parameter values.
5. To design and study the frequency response of single stage CE transistor amplifier and determine its Bandwidth.(with and without bypass capacitor).
6. To find input and Output impedances of single stage CE amplifier.
7. To study the frequency response of RC coupled double stage CE transistor amplifier and determine its Bandwidth.
8. To study the frequency response of RC coupled double stage CE transistor amplifier with voltage feedback and determine its Bandwidth.
9. To study the frequency response of RC coupled double stage CE transistor amplifier with current feedback and determine its Bandwidth.
10. To Design Wein Bridge Oscillator and determine the frequency of Oscillation.
11. To Design RC phase shift oscillator and determine the frequency of Oscillation.
12. Study of various topologies of feedback amplifier.
13. Experiment with Darlington pair amplifier.

List of Equipment's/Machine Required:

Circuit components, Power supply, CRO, Function generator, Multimeter, Breadboard.

Reference Books:

1. Lab Manual Of Electronic Devices by Paul B Zbar.
2. Lab Manual of Basic Electronics by David Bell.
3. Electronic Devices Systems and Applications by Robert Diffenderfer, Cengage learning.

Chhattisgarh Swami Vivekananda Technical University, Bhilai
Name of program: Bachelor of Technology
Branch: Electronics & Telecommunication
Semester: IV

Subject: **Programming using Python** Code:B028423(028)
Total Lab Periods: 36 Batch Size: 30
Maximum Marks: 40 Minimum Marks: 20

List of Experiments: (At least Ten experiments are to be performed by each student)

1. Write a program to demonstrate basic data type in python.
2. Write a program to takes 2 numbers as command line arguments and perform their arithmetic operation (addition, subtraction, multiplication, division).
3. Write a program for checking whether the given number is an even number or not.
4. Write a program to calculate the Simple Interest and Compound Interest.
5. Write a program to find the largest of three numbers. (Without MAX or MIN function call).
6. Write a Python program to convert binary to decimal and decimal to binary.
7. Write a program to compute the exponential series.
8. Write a program for checking whether a given string is palindrome or not.
9. Write a program to Compute a sine series and plot the same using matplotlib module.
10. Write a program to Compute a cosine series and plot the same using matplotlib module.
11. Write a program to find a factorial of a number.
12. Write a program to generate a Fibonacci series.
13. Write a program to calculate the GCD of two numbers.
14. Write a program to demonstrate while loop and While loop with else in python.
15. Write a program to construct a pyramid of digits.
16. Write a program to illustrate the function with no arguments and no return value.
17. Write a program to illustrate the function with arguments and no return value.
18. Write a program to illustrate the function with arguments and return value.
19. Write a program to illustrate the function to compute the standard deviation of a list of numbers.
20. Write a program to print all the odd, even and prime numbers up to 100 in a table like format.
21. Write a program to open a website.
22. Write a program to count the numbers of characters in the string and store them in a dictionary data structure.
23. Write a program to compute the number of characters, words and lines in a file.
24. Write a program to count frequency of characters in a given file, Can you use character frequency to tell whether the given file is a Python program file, C program file or a text file?
25. Write a function nearly equal to test whether two strings are nearly equal. Two strings a and b are nearly equal when a can be generated by a single mutation.
26. Write a program to implement Merge sort.

List of Equipment's/Machine/Software Required:

- **Software Tools:** Anaconda**,** Python(x,y),
- **Online Compiler**
    1. **https://www.w3schools.com/python/python_compiler.asp**
    2. **https://www.programiz.com/python-programming/online-compiler/**

Reference Books:

1. Beginning Python, by Peter Norton, Alex Samuel, David Aitel, Eric Foster-Johnson,

   Leonard Richardson, Jason Diamond, Aleatha Parker, Michael Roberts

   Publisher: Wiley Publishing, Inc

2. Python For Beginners: A Crash Course Guide To Learn Python in 1 Week, by Timothy C. Needham
   Publisher: White flower publishing

Online Resources:

https://docs.python.org/3/tutorial/

Chhattisgarh Swami Vivekananda Technical University, Bhilai
Name of program: Bachelor of Technology
Branch: Electronics & Telecommunication
Semester: IV

Subject: **Virtual Laboratory** Code:B028424(028)
Total Lab Periods: 36 Batch Size: 30
Maximum Marks: 40 Minimum Marks: 20

List of Experiments: (At least Ten experiments are to be performed by each student)

1. Washing machine control using basic AND and NOT gates
2. Basics of OR gate and its application in industrial control
3. Basics of NOT gate and its application in an eight bit ones complement circuit
4. Basic NOT gate and its application in fuel level indicator
5. Seat belt warning system using basic AND and NOT gates
6. Basics of AND gate and its application in car wiper control
7. Water level control using basic AND and NOT gates
8. Electronic lock using basic logic gates
9. Universal NAND gate and its application in level monitoring in chemical plant
10. Universal NOR gate and its application in automobile alarm system
11. XOR gate and its application in staircase light control
12. Majority circuit using basic logic gates
13. Cockpit warning light control using basic logic gates
14. DIY Build your own combinational logic circuit using generalized simulator

Chhattisgarh Swami Vivekananda Technical University, Bhilai

Name of program: **Bachelor of Technology**

Branch: **Common to All Branches** Semester: **IV**

Subject: **Indian Culture and Constitution of India** Code: B000406(046)

Total Theory Periods: **2/Week** Total Tutorial Periods: **NIL**

Assignments: **Two (Minimum)** Total Marks in ESE: **NIL** Marks in TA: **10**

Objective: The Constitution is the supreme law and it helps to maintain **integrity** in the society and to promote unity among the citizens to build a great nation. The main objective of the Indian Constitution is to promote harmony throughout the nation.

Course Objectives

Upon completion of this course, the student shall be able

- To understand Meaning and concepts of Traditional and Modern of Culture
- To understand Sources of the Study of Indian Culture
- To Enable the student to understand the history and importance of constitution
- To understand philosophy of fundamental rights and duties
- To understand the powers and functions of executive, legislature and judiciary
- To understand the powers and functions of state government
- To understand the recent trends in Indian constitutional and election commission of India.

To understand the central and state relation, financial and administrative.

UNIT-I

Meaning and concepts of Culture: Traditional and Modern concepts of Culture-Notions of Culture in textual tradition, anthropological, archaeological and sociological understanding of the term culture. Elements of Culture, concept of Indianness and value system. Relation between culture and civilization. Historiography and approaches to the study of Indian Culture– Stereotypes, Objectivity and Bias, Imperialist, Nationalist, Marxist and Subaltern. Heritage of India and world's debt to Indian Culture.

UNIT–II

Sources of the Study of Indian Culture: Archaeological: cultural remains, Monuments, Numismatics, Epigraphy; Literary sources and Oral traditions; Foreign Accounts; Archival sources.

UNIT–III

History of Indian Constitution Constitutional History, Preamble salient features, citizenship, Method of Amendment and Recent Amendments. **Rights and Duties** Fundamental Rights and Directive Principles of State Policy. Fundamental Duties. Difference between Fundamental Rights and Directive Principles of State Policy

Union Government a) President-powers and functions. Vice president powers and functions, Prime Minister and council of ministers powers and functions. b) Parliament- Loksabha, Rajyasabha- composition powers and functions.

c) Judiciary (Supreme Court) composition powers and functions Judicial Activism

UNIT–IV

State Government a) Governor: powers and functions b) Chief minister: powers and functions c) State Legislative Assembly and Legislative Council- composition powers and functions. d) High Court : composition powers and functions

UNIT–V

Recent Trends in Indian Constitutional a) Basic structure of Indian Constitution. b) Electoral Reforms c) Panchayati Raj system in India.

Books of Reference

1. Dr. P. K. Agrawal **Indian Culture, Art and Heritage,**

2. P. Raghunadha Rao **Indian Heritage and Culture**

3. M.V.Pylee, An Introduction to the Constitution of India,NewDelhi,Vikas,2005.

4. Subhash C.Kashyap, Our Constitution: An Introduction to India's Constitution and constitutional Law, New Delhi, National Book Trust, 2000.

5. Durga Das Basu, Introduction to the Constitution of India ,NewDelhi,Prentice Hall of India,2001.

6. D.C.Gupta, Indian Government and Politics,VIII Edition,New Delhi, Vikas, 1994.

7. V.D.Mahajan, Constitutional Development and National Movement inIndia, New Delhi, S. Chand and Co., latest edition.