

Chhattisgarh Swami Vivekanand Technical University, Bhilai

Scheme of teaching and examination

B.E. III Semester Information Technology

S.No	Board of Study	Subject Code	Subject Name	Periods per week			Scheme of Exam			Total Marks	Credit L+(T+P)/2
				L	T	P	Theory/Practical				
							ESE	CT	TA		
1	Appl. Mathematics	322311 (14)	Mathematics-III	4	1		80	20	20	120	5
2	Electronics & Telecom.	328313(28)	Basic Electronics	3	1		80	20	20	120	4
3	Electronics & Telecom.	328314(28)	Network Analysis and Synthesis	3	1		80	20	20	120	4
4	Info. Technology	333311(33)	Fundamentals of IT	3	1		80	20	20	120	4
5	Comp. Sc. & Engg.	322311 (22)	Problem Solving & Logic Building using C	3	1		80	20	20	120	4
6	Info. Technology	333312(33)	Digital Electronics and Logic Design	3	1		80	20	20	120	4
7	Electronics & Telecom.	328322 (28)	Basic Electronics Lab			3	40		20	60	2
8	Info. Technology	333322(33)	Problem Solving & Logic Building using C (Lab)			3	40		20	60	2
9	Info. Technology	333323(33)	Digital Electronic and Logic Design Lab			3	40		20	60	2
10	Info. Technology	333324(33)	Web Technology Lab (HTML / DHTML)			3	40		20	60	2
11	Humanities etc.	300325(46)	Value Education			2			40	40	1
12			Library			1					
			TOTAL	19	6	15	640	120	240	1000	34

L-Lecture, T- Tutorial, P- Practical, ESE- End Semester Examination, CT- Class Test,TA- Teacher's Assessment

Note : Duration of all theory papers will be of **Three Hours**.

**CHHATTISGARH SWAMI VIVEKANAD TECHNICAL UNIVERSITY
BHILAI (C.G.)**

Semester: **B.E. III Sem.**

Subject: **MATHEMATICS-III**

Total Theory Periods: **40**

Total Marks in End Semester Exam. : **80**

Minimum number of class test to be conducted: **02**

Branch: **Information Technology**

Code: 322311 (14)

Total Tutorial Periods: **10**

UNIT - 1 FOURIER SERIES

(No. of periods 8+2)

Expansion of function as Fourier series, Change of interval, Even and odd functions, Half-range Fourier series, Practical harmonic analysis.

UNIT – 2 LAPLACE TRANSFORM

(No. of periods 8+2)

Laplace transform of elementary functions, Properties of Laplace transform, Laplace transform of derivatives and integrals, multiplication by t^n and division by t , Laplace transform of periodic functions. Inverse Laplace transform, Convolution theorem, Application of Laplace transform to solutions of ordinary differential equations.

UNIT - 3 THEORY OF COMPLEX VARIABLES

(No. of periods 8+2)

Limit, Derivative and Analytic functions; Cauchy-Riemann equations and its applications to flow problems; Complex Integration: Line and Contour integral, Cauchy integral theorem and Integral formula; Taylor series, Laurent series; singularities; Poles and their orders and residues; Evaluation of real definite integrals.

UNIT - 4 PARTIAL DIFFERENTIAL EQUATION

(No. of periods 8+2)

Formation of partial differential equations, Equations solvable by direct integration, Lagrange's linear equations, Homogeneous linear differential equations with constant coefficients, Non-homogeneous linear equations, Solution of partial differential equations by the method of separation of variables.

UNIT - 5 RANDOM VARIABLES

(No. of periods 8+2)

Discrete and continuous probability distributions, Mathematical expectation, Mean and Variance, Moments, Moment generating function, probability distribution, Binomial, Poisson and Normal distributions.

TEXT BOOKS: -

1. Higher Engg. Mathematics by Dr. B.S. Grewal– Khanna Publishers.
2. Advanced Engg. Mathematics by Erwin Kreyszig – John Wiley & Sons.

REFERENCE BOOKS: -

1. Advanced Engg. Mathematics by R.K. Jain and S.R.K. Iyengar – Narosa Publishing House.
2. Applied Mathematics by P.N. Wartikar & J.N. Wartikar. Vol- II– Pune Vidyarthi Griha Prakashan, Pune.
3. Applied Mathematics for Engineers & Physicists by Louis A. Pipes- TMH.

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY BHILAI (C.G.)

Semester : **B.E. III Sem.**

Subject: **Basic Electronics**

Total Theory Periods: **40**

Total Marks in End Semester Examination: **80**

Minimum number of Class tests to be conducted: **Two**

Branch: **Information Technology**

Code: **328313 (28)**

Total Tutorial Periods: **10**

Unit – I

Introduction, Transport Phenomena in semiconductor, Formation of P-N Junction, Properties of P-N Junction, P-N Junction Diodes; Semiconductor Diodes, V-I Characteristics, Effect of Temperature on V-I Characteristics, Ideal Diode, Diode equation, Diode Resistance, Diode Capacitance: Transition and Diffusion Capacitance.

Unit – II

Rectifying circuits and DC Power Supplies: Load line analysis of diode circuit, Half wave rectifier: Voltage regulation, Ripple factor, ratio of rectification, Transformer Utilization factor. Full wave rectifier, Bridge rectifier. Filter circuits for power supply: Inductor filter, Capacitor filter, LC filter, Multiple LC filter, CLC or π filter. Zener diode: Break down mechanism, Characteristics, Specifications, Voltage regulator circuit using zener diode.

Unit - III

Transistor: Introduction, Construction, Types: npn and pnp, Current components. Transistor as an amplifier, Transistor Characteristics, Transistor Circuit Configuration: Common Base (CB) Configuration, Common Emitter (CE) Configuration, Common Collector Configuration (CC), Early Effect. Ebers-Moll Model, Maximum Voltage Ratings.

Unit – IV

Transistor Biasing and Thermal stabilization: The operating point, Bias stability, Stability factor, Emitter bias, Collector – to – base bias, Voltage divider bias with emitter bias, Emitter bypass capacitor. Bias compensation.

Unit – V

Field Effect Transistor (FET): Introduction, Construction, Operation, V-I Characteristics, Transfer Characteristics, Drain Characteristics, Small-Signal Model.

Metal Oxide Semiconductor Field Effect Transistor (MOSFET): Introduction, Construction, Operation and characteristics, Depletion MOSFET, Enhancement MOSFET.

Name of Text Books:

1. Integrated Electronics: Analog & Digital Circuit Systems – Jacob Millman & Halkias, TMH.
2. Electronic Devices & Circuits – Allen Mottershead, PHI.

Name of Reference Books:

1. Electronic Devices and Circuit Theory – Boylestad & Nashelsky, 8th Ed. PHI.
2. Electronic Devices & Circuit Analysis – K. Lal Kishore, BS Publications

**CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY
BHILAI (C.G.)**

Semester : **B.E. III Sem.**

Subject: **Network Analysis & Synthesis**

Total Theory Periods: **40**

Total Marks in End Semester Examination: **80**

Minimum number of Class tests to be conducted: **Two**

Branch: **Information Technology**

Code: **328314 (28)**

Total Tutorial Periods: **10**

Unit – I

Laplace Transformation & its Application in Circuit Analysis: Introduction, Laplace Transformation, Laplace Transform of a Derivative $df(t)/dt$, Laplace Transform of an Integral, Laplace Transform of Common Forcing Function, Initial And Final Value Theorem, Convolution, Application of Laplace Transformation technique in Electric Circuit Analysis, Partial Fraction Expansion Method, Step Response of RL, RC Circuits, Impulse Response of Series RC, RL Network, Response of RL Circuit with Pulse Input, Pulse Response of Series RC Circuit, Step Response of RLC Series Circuit.

Unit – II

Two Port Network Analysis: Introduction, z parameters, y- parameters, hybrid parameter, ABCD parameters, condition of reciprocity and symmetry in two port parameter presentation. Interrelationship between parameters of two port networks. Expression of input and output impedance in terms of two port parameter, ladder network, equivalent T and π section representation in parametric form.

Unit – III

Properties of Network function: Introduction, Driving Point Impedance and Admittance Transfer function, Voltage And Current Transfer Ratio. Thevenin's and Norton Theorem, Milliman Theorem, Reciprocity Theorem, Maximum Power Transfer Theorem, Superposition Theorem, Substitution Theorem.

Unit – IV

Network Graph Theory: Introduction, Concept of Network Graph, Terminology Used in Network Graph, Properties of Tree in a Graph, Formation of Incidence Matrix, Properties of Incidence Matrix, Number of Tree in a Graph, Cut Set Matrix, Tieset Matrix, Fundamental Tieset Matrix, Fundamental Cutset Matrix.

Unit – V

Synthesis of Passive Networks: Concept of Stability of a System from Pole Zero Concept, Necessary condition of Stability of a Network Function, Hurwitz Polynomial, Properties of Hurwitz Polynomials, Positive Real Function, Concept of Network Synthesis, Reactive Network, Driving Point Immitance of LC Network, LC Network Synthesis, Foster and Caurr form, RC and RL Network Synthesis By Foster and Caurr form.

Name of Text Books:

1. Network Analysis by M.E. Van Valkenbarg, PHI
2. Circuit Theory Analysis & Synthesis by A Chakraborty (Dhanpat Rai & Co. Pvt. Ltd, New Delhi)

Name of Reference Books:

1. Network Theory: Analysis & Synthesis – Smarjit Ghosh, PHI
2. Network Synthesis – T. Lapatra, TMH.
3. Circuits and Networks: Analysis and Synthesis – A. Sudhakar & Shyam Mohan S. Palli, TMH

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI (C.G.)

Semester: B.E. III Sem.

Branch: Information Technology

Subject: Fundamentals of IT

Code: 333311 (33)

Total Theory Periods: 40

Total Tut Periods:10

Total Marks in End Semester Exam: 80

Maximum number of Class Tests to be conducted: 2

Unit I Computer Fundamentals : Brief History of Computers, Technical Evolution of Computers, Computer Pioneers, Categories/Types of Computers, Computer Hardware, Computer Software, CPU and its components; Mother board, Microprocessor, Expansion slots, Input/Output Ports, Memory; Types of Computer Memory, Memory modules viz. SIMM, DIMM, EDO, RDRAM, SDRAM, DDRAM, etc. Communication Pathways, Computer Registers; Data representation : Decimal System, Binary system, Octal system, Hexadecimal system; How does a Computer store data ? (Bit...Database); Encoding systems : BCD, ASCII, and EBCDIC; Binary calculations, Conversion of - decimal system to other systems, Binary system to other systems.

(8 + 2) Periods

Unit II Input, Hard/Soft copy Devices, Storage Devices : Input Concepts, Input Devices viz. Keyboard, Mouse, Joystick, Track Ball, Touch Screen, Light pen, MICR, OMR, OBR, OCR, Voice Input, Smart Cards, Bar Code readers, Digitizer, Scanner, etc. Graphic Display Devices : DVST, Graphical input devices, Three dimensional input devices; Voice output systems. Hard copy Devices viz. Printer, Types of printers, Features of printers; Plotter, Types of plotters, Features of plotters; Soft copy devices viz VDU and it's types, Types of Cards (brief) viz. CGA, MGA/MDA, EGA, VGA, SVGA, etc. Storage devices viz. Fixed Disk or Hard Disk, Floppy Diskette, Data Retrieval and Characteristics; Optical Technology; CD-ROM, CD-ROM operation, CD-ROM standards, Origins of CD-ROM; Hard Disk Drive, Floppy disk drive, CD-Drive, DVD-Drive, Tape drive, Zip drive, Jaz Drive, Pen drive, etc.

(8 + 2) Periods

Unit III Operating Systems and MS-DOS : Custom made software, Pre-written software, Computer processing techniques, Functions of operating system (only list), Compiler, Assembler, Interpreter, Debugger, Loader, and Linker; Machine language, Assembly language, High level languages, Fourth generation languages; Booting process(with BIOS & POST), Auto executing programs, Setting parameters of config.sys; Internal and External commands of MS-DOS along with their syntax and different options.

(8 + 2) Periods

Unit IV Windows Operating System and Internet : Advantages, Logging on and Shutting down Windows, Start button and Task bar, Starting and Quitting a program, Opening a document, Getting help, Finding files or folders, Changing system settings, Run command, What's on your computer, Organizing files and folders, Working within documents, Saving work, Setting up a printer, Installing Software and Hardware, Copying and moving files quickly, Putting a shortcut on the Desktop, Starting programs automatically, Network neighborhood, Configuring computer to a Network, Sharing folders or printers, Using resources located on other computers, Using dial-up networking, Connecting to the Internet, Having fun, Optimizing computer, Communicating with the world, Paint, Wordpad, Internet Explorer, TV viewer, Frontpad, System Information utility, System file checker, Windows Tuneup Wizard.

(8 + 2) Periods

Unit V Software Packages : Electronic Spreadsheet, Word processing software, Other pre-written software packages, Data communication packages, Desktop publishing.

(8 + 2) Periods

Text Books :

- 1) Information Technology Today, S. Jaiswal, Revised Edition , Galgotia.
- 2) Computers Today, S. K. Basandra, Updated Edition, Galgotia.

Reference Books:

- 1) ISTE Learning Material, Computer Installation and Trouble Shooting, M. Radhakrishnan, D.Balasubramaniyam
- 2) CHIP Special, Basics in Computing, www.chip-india.com
- 3) Microsoft MS-DOS User's guide(manual), Version 6.2 or above.
Getting started Microsoft Windows(manual), 98 or higher version.

**CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY,
BHILAI (C.G.)**

Semester: B.E. III Sem. **Branch:** Information Technology
Subject: Problem Solving and Logic **Code:** 322311(22)
Building using C

Total Theory Periods: 40 **Total Tut. Periods: 10**

Total Marks in End Semester Exam: 80

Minimum number of class tests to be conducted : 02

Unit-I Elements of C Language

Origin of C, Features & Characteristic of C, C Compiler, Character Set, Keywords, Identifiers, Constants, Variables, Input/ Output Statements, Basic Data Types, Operators and Expressions, Tools for Problem Solving: Problem Analysis, Flowchart, Algorithm Development. Top-Down Program Design, Structured Design Approach, Basic structure of C programs, A simple C Program.

Unit-2 Control Flow Construction

Decision making and branching: Simple if statement, if else statement, Nesting of if.. else statement, else.. if Ladder, switch statement, ?: operator, goto statement.

Decision making and looping: while statement, do .. while statement, for statement, jumps in loops, break and continue statement.

Unit-3 Defining and Manipulating Arrays

One- Dimensional Arrays: Declaration of Arrays, Initialization of Arrays, Reading and Writing of integer, real and character arrays, Sorting and Searching in Arrays, Multi-Dimensional Arrays, Handling of Character Strings.

Unit-4 User Defined Functions

Syntax of Function, Calling functions, Actual & Formal Arguments, Categories of Functions, Function prototype, Scope Rules: Local & Global variables, Recursion, Recursion vs. iteration, Passing Arguments: call by values & call by reference, Passing array to function.

Structures: Declaration and initialization of structures, Array of structures, Array within structure, structure within structure, Structures and functions, Introduction to unions.

Unit-5 Pointer Data type and its Application

Pointer Operator, Pointer Expression, Initializing pointers, Pointer Arithmetic, Pointer and Function Arguments, Pointer to function, Pointer and Arrays, Pointers and String, Arrays of Pointers, Pointers to Pointers.

Files in C : Defining and opening a file, closing a file, input/ Output operations on files, error handling during I/O operations, random access to files.

Name of Text Books:

1. Programming in C by Byron Gottfrid.(Schoum's series outline TMH)
2. Programming in C By E. Balagurusamy (TMH)

Name of Reference Books:

1. The C programming Language by Dennis M Ritchie and Kernighan (PHI)
2. Let us C by Yashwant Kanetkar (BPB Publication)
3. C for all by S. Thamarai Selvin & R. Murugesan (Anuradha Agencies)
4. Programming in C by Ghosh (PHI)
5. Computer Programming in C by V. Rajaraman (PHI)

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI (C.G.)

Semster : B.E. III Sem.

Branch : Information Technology

Subject : Digital Electronics and Logic Design

Code : 333312(33)

Total Theory Periods : 40

Total Tutorial Periods : 10

Total Marks in end semester examination : 80

Minimum number of class tests to be conducted : 02

UNIT-I

Overview of Boolean Algebra AND Logic Gates : Number Systems and Codes, Binary Arithmetic, Boolean Algebra, Minimisation of Switching Function, Demorgan's Theorem, Karnaugh's Map Method (limited up to 4-variables), Quine McCluskey's Method, Cases with Don't care conditions and multiple output switching functions.

UNIT-II

Combinational Circuits : NAND / NOR gates, Realisation of switching functions, Half/full adders, Half / full subtractors, Series and parallel additions, BCD adders, Look ahead carry generators, Decoders and encoders, BCD to 7 segment decoders, Multiplexers and Demultiplexers, Parity bit generator and detector, Error detection.

UNIT-III

Logic Families and Flip Flops : RTL, DTL, all types of TTL circuits, ECL, Basics & Features of I^2L and PMOS, NMOS and CMOS logic etc., Flip-Flops and their conversion, Excitation Tables.

UNIT-IV

Sequential Circuits : Introduction to registers and Counters: Synchronous and Asynchronous counters and Designing of sequential circuits: code converter and counters. Mod-k and divide by K Counters, Counter Applications.

UNIT-V

Memories and Converters : Introduction to various semiconductor memories and designing of ROM and PLA, Introduction to analog to digital and digital to analog converters and their types (R-2R ladder network and successive approximation converters)

Name of Text Books

1. R. P. Jain : "Modern Digital electronics", TMH
2. B. Somanathan Nair, "Digital Electronics & Logic Design", Prentice-Hall of India

Name of Reference Books :

1. R J Tocci, " Digital System principles and Applications"
2. W H Gothman, " Digital Electronics" PHI
3. M.M. Mano : " Digital design", PHI.
4. Millman Taub, " Pulse, Digital and Switching Waveforms " TMH
5. M.M. Mano : "Digital logic and computer design", PHI.
6. Floyd : "Digital fundamentals", UBS.

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY BHILAI (C.G.)

Semester : **III B.E. III Sem.**

Subject: **Basic Electronics Lab**

Total Practical Periods: **36**

Total Marks in End Semester Examination: **40**

Branch: **Information Technology**

Code: **328322 (28)**

Experiments to be performed (Minimum 10 experiments)

1. To draw the characteristics of a semi conductor diode and to find cut-in voltage, reverse resistance, static resistance and dynamic resistance.
2. To draw the characteristics of a zener diode
3. To design a half wave rectifier and to determine its efficiency and ripple factor.
4. To design a- full wave rectifier and determine the ripple factor and efficiency with filter.
5. To design a- full wave rectifier and determine the ripple factor and efficiency without filter.
6. To draw the characteristics of FET using BFW – 10
7. To draw the characteristics of CE configuration of a transistor amplifier.
8. To draw the characteristics of CB configuration of a transistor amplifier.
9. To draw the characteristics of CC configuration of a transistor amplifier.
10. To design a Zener regulator circuit and to find the regulation characteristics.
11. To draw the load line of a transistor amplifier under CE configuration.
12. To design and verify the self bias circuit operation.
13. To design and verify the voltage divider biasing circuit.
14. To verify the effect of emitter bypass capacitor.
15. To design a regulator circuit using Zener diode.

List of Equipments/Machine Required:

Circuit components, Breadboard, Hook-up wire, Power supply, CRO, Function generator

Recommended Books:

1. Laboratory Manual for Electronic Devices and Circuits, 4th Ed., David A. Bell, PHI

**CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY,
BHILAI (C.G.)**

Semester: B.E. III Sem.
Subject: Problem Solving & Logic Building
Using C Lab
Total practical Periods: 36
Total Marks in End Semester Exam: 40

Branch: Information Technology
Practical Code : 333322(33)

List of programmes to be executed (but should not be limited to):

1. Write a program to take the radius of a sphere as input and print the volume and surface and surface area of that sphere.
2. Write a program to take a 5-digit number as input and calculate the sum of its digits.
3. Write a program to take three sides of a triangle as input and verify whether the triangle is an isosceles, scalene or an equilateral triangle.
4. Write a program that will take 3 positive integers as input and verify whether or not they form a Pythagorean triplet or not.
5. Write a program to print all the Prime numbers between a given range.
6. Write a program to define a function that will take an integer as argument and return the sum of digits of that integer
7. Write a program to define a macro that can calculate the greater of two of its arguments. Use this macro to calculate the greatest of 4 integers.
8. Write a program to define a recursive function that will print the reverse of its integer argument.
9. Write a program to print the sum of first N even numbers using recursive function.
10. Write a program to sort an array using Bubble sort technique.
11. Write a program that will take the elements of two integer arrays of 5 element each, and insert the common elements of both the array into a third array (Set intersection)
12. Write a program to take 5 names as input and print the longest name.
13. Write a program to define a structure Student that will contain the roll number, name and total marks of a student. The program will ask the user to input the details of 5 students and print the details of all the students whose total marks is greater than a given value.
14. Write a program to define a union Contact that will contain the members Mobile no and E-mail id. Now define a structure Employee that will contain name, roll number, mode of contact (mob/e-mail) and a variable of type Contact as members. The program will ask the user to give the details of two Employees including mode of contact and the contact num/ E-mail. Print the details of both the Employees.
15. Write a program that will ask the user to input a file name and copy the contents of that file into another file.
16. Write a program that will take any number of integers from the command line as argument and print the sum of all those integers.
17. Write a program to process sequential file for payroll data.
18. Write a program to process random file of library data.

List of Equipments/Machine Required:

PCs, C-Compiler

Recommended Books:

Programming in ANSI C – E. Balaguruswamy Tata Mc-Graw Hill

**CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY,
BHILAI (C.G.)**

Semster : B.E. III Sem.

Branch : Information Technology

Subject : Digital Electronics and Logic Design Lab

Code : 333323(33)

Total Lab : 36

Total Marks in end sem examinations : 40

Experiments To Be Performed : (Minimum 10 experiments)

- 1) To study the characteristics and operations of TTL Inverters , OR, AND,NOR and NAND gate using ICs.
- 2) To study NAND and NOR gates as a universal logic.
- 3) To study and prove Demorgan's Theorem .
- 4) To design Half and Full adder circuits using logic gates.
- 5) To design Half and full subtractor circuits using logic gates.
- 6) To study the binary parallel adder.
- 7) To design 4 bit magnitude comparator ckts.
- 8) To study the 7 segment decoder .
- 9) To design 4:16 decoder using two 3:8 decoder and four 2:4 decoder
- 10) To design 16: 1 Multiplexer using 4:1 Multiplexer.
- 11) To study various types of flip flops using logic gates and ICs.
- 12) To design Mode-N and divide by K counter.
- 13) To construct a 4 bit binary to gray converter and vice versa using IC 7486 .
- 14) To study Up-Down counter .
- 15) To study programmable shift registers.

List of Equipments /Machine Required:

- 1) Logic gate trainer
- 2) Digital ICs Trainer
- 3) Various ICs 7400,7402,7404,7408,7432,7486,74138,74151,74155 etc.

Recommended Books:

- 1) .M. Mano : "Digital logic and computer design", PHL.
- 2) Floyd : "Digital fundamentals",UBS.

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI (C.G.)

Semester: **B.E. III Sem.**

Branch: **Information Technology**

Subject: **Web Technology Lab (HTML/DHTML)**

Code: **333324 (33)**

Total practical Periods : **36**

Total Marks in End Semester Exam : **40**

EXPERIMENTS TO BE PERFORMED(Minimum 10 experiments)

1. Design a HTML page describing your profile in one paragraph. Design in such a way that it has a heading, a horizontal rule, three links and your photo also write three HTML documents for the links
2. Design HTML page describing your academic career. The page will tell about the degrees, Institutions and your hobbies. Add some lists too
3. Design HTML page demonstrating Concept Of Internal Hyper-link
4. Design HTML page which gives the list of grocery Items by using Ordered List , List consist of Roman no, A,B.... and so on
5. Design HTML page which gives the list of grocery Items by using Unordered List bullets are of form disc, square and circle
6. Design a HTML page for partitioning browser window in frames display the different pages in partitioned windows
7. Design HTML page to partition window, Design in such a way that link clicked in on page can display the corresponding pages in other window
8. Design a HTML page on your native place
9. Design a HTML page on your friends. List your friends; each friends name is a link. Prepare separate HTML document on each friend and call them in appropriate link
10. Design HTML page listing popular car companies. For each company prepare a sub list showing various brands of cars it offers
11. Design a HTML page for reserving a room in a Hotel
12. Design a HTML form to reserve a Railway ticket
13. Design a HTML form to see the result for a candidate when the results are published on the web
14. Design a HTML form to find the railway fare from one place to another
15. Design a HTML form to find out the balance for a mobile phone customer as on today

List of equipments/Machine required:

Pentium 3 (min)
Windows 98 (min) with Internet Explorer
Netscape Navigator
Web Browser

Recommended Books:

1. HTML Complete Reference- Tata McGraw hill
2. HTML and XML: An Introduction NIIT, Prentice-Hall of India
3. Building Enhanced HTML Help with DHTML and CSS by Jeannine M.E.Klien. Pearson Education
4. HTML for the World Wide Web, Fifth Edition, with XHTML and CSS
5. Visual QuickStart Guide 5th Edition Elizabeth Castro, Pearson Education
Sams Teach Yourself HTML & XHTML in 24 Hours 6th Edition Dick Oliver, Michael Morrison, Pearson Education

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI (C.G.)

Semester : B.E. 3rd Sem.

Subject : **Value Education**

No. of Periods : 2 pds/week

Total Marks in End Semester Exam. : NIL

Minimum number of class test to be conducted : Two

Branch : Common to all Branches

Code : 300325 (46)

Tutorial Periods : NIL

Teacher's Assessment : 40 Mks

Unit – I

- **STUDY OF BASIC HUMAN OBJECTIVES** : Everlasting solution $\frac{1}{4}lek/kku\frac{1}{2}$ prosperity $\frac{1}{4}e`f)\frac{1}{2}$ trust in self and others $\frac{1}{4}vHk;\frac{1}{2}$ and coexistence $\frac{1}{4}lgvfLrRo\frac{1}{2}$ for balance in nature. Need and importance of aforesaid basic human objectives and how to achieve these.

Unit – II

- **CONCEPT AND UNDERSTANDING OF HUMAN HAPPINESS**
Meaning and concept of "happiness", incessant happiness, its relationship with guarantee of physical needs, comforts, physical and sensory pleasures with its transient nature, misery; The only method to minimize incessant happiness : gaining right understanding about oneself, one's body, one's relationship with other human beings, Nature and total existence.

Unit – III

- **PROPER UNDERSTANDING** about the order in Nature $\frac{1}{4}O;oLFkk\frac{1}{2}$ and co-existence $\frac{1}{4}lgvfLrRo\frac{1}{2}$ at various levels, such as, I and my body, family, society, Nature and existence.
- **UNDERSTANDING THE SELF** : Understanding human reality – I and my body, present understanding of the self, physical needs, relation with others and with Nature, gaining proper understanding of the self, discrimination between 'I' and my 'body', characteristics and the needs of 'I', of my 'body' and 'body' & 'I'.

Unit – IV

- **SYNERGATIC ORDER $\frac{1}{4}O;oLFkk\frac{1}{2}$ and COEXISTENCE $\frac{1}{4}lgvfLrRo\frac{1}{2}$ among HUMANS, IN NATURE & IN EXISTENCE** :
 - Conceptual understanding of natural relations and consequent values, of family and relation therein, of society and role of engineers therein, overall excellence: concept, its universal parameters and total human behaviour
 - Inanimate $\frac{1}{4}tM+\frac{1}{2}$ and consciousness $\frac{1}{4}pSrU;\frac{1}{2}$ aspects of Nature, Four distinct synergetic orders in Nature - Padaarth Awastha $\frac{1}{4}inkFkZ voLFkk\frac{1}{2}$ Pran Awastha $\frac{1}{4}izk.k voLFkk\frac{1}{2}$ Jiv Awastha $\frac{1}{4}tho voLFkk\frac{1}{2}$ and Gyan Awastha $\frac{1}{4}Kku voLFkk\frac{1}{2}$ complementary supplementary evolutionary connection amongst above orders, identifying and implementing "Appropriate Technology".
 - Synergetic order among interacting entities of Nature operating in all pervading changeless Shunya or Satta, Indivisible interconnectedness of Satta and Prakriti and its implications.
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Unit – V

- **IMPLICATIONS OF PROPER UNDERSTANDING**
 - Awakening $\frac{1}{4}tkx`fr\frac{1}{2}$ the common goal of all human beings,
 - promotion and perseverance of synergetic order and co-existence at all levels leading to incessant happiness.
 - Natural manifestation of universal human values and thereby incessant happiness
 - Undivided Society $\frac{1}{4}vfoHkkT; lekt\frac{1}{2}$ and Universal Organised System $\frac{1}{4}lkoZHkkSe O;oLFkk\frac{1}{2}$
 - Transition from synergetic disorder $\frac{1}{4}vO;oLFkk\frac{1}{2}$ to synergetic order $\frac{1}{4}O;oLFkk\frac{1}{2}$
 - Evaluation of Understanding, work and behaviour.

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