CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

DIPLOMA PROGRAMME IN COMPUTER SCIENCE AND ENGINEERING / INFORMATION TECHNOLOGY

Semester – II

COURSE OF STUDY AND SCHEME OF EXAMINATION

S.No	Board of Study	Subject Code	Course	Periods/Week			Scheme of Examination						Credit L+(T+P)/2
							Theory			Practical		Total	
				L	T	P	ESE	CT	TA	ESE	TA	Marks	
1	Humanities	200211(46)	Communication skills – II	4	1	-	100	20	20	-	-	140	5
2	Basic Science	200212 (14)	Applied Maths-II	3	1	-	100	20	20	-	-	140	4
3	Mechanical Engineering	200215 (37)	Engineering Drawing	2	4	-	100	20	20	-	-	140	4
4	Elex. and Teclcom. Engg.	200216 (28)	Basic Electrical, Electronic and Measurements	4	1	-	100	20	20	-	-	140	5
5.	Computer Science & Engg.	200217 (22)	Programming in C	4	2	-	100	20	-	-	-	120	5
6.	Humanities	200224(46)	PPA	-	-	2	-	-	-		40-	40	1
7	Computer Science & Engg.	200225 (22)	Programming in C Lab	-	-	3	-	-	-	100	40	140	2
8	Elex. and Teclcom. Engg.	200226 (28)	Basics of Electrical, Electronic and Measurement Lab	-	-	5	-	-	-	100	40	140	3
TOTAL				**17**	**9**	**10**	**500**	**100**	**80**	**200**	**120**	**1000**	**29**

PPA – Proficiency in Professional Activity
L - Lecture ; **T -** Tutorial; P - Practical
ESE – End of Semester Exam.; **CT –** Class Test; **TA-** Teacher's Assessment

SEMESTER : II

COURSE TITLE : COMMUNICATION SKILLS -II

THEORY CODE : 200211 (46)

BRANCH / DISCIPLINE : ALL DISCIPLINES

Minimum number of class tests to be conducted: 2

DISTRIBUTION OF MARKS AND HOURS:

S. No.	Chapter No.	Chapter Name	No. of Hours/Periods	Marks
1	1	PASSAGES FOR COMPREHENSION	10	20
2	2	APPLIED GRAMMAR	25	25
3	3	PASSAGES IN GENERAL STUDIES	10	15
4	4	TECHNICAL WRITING	17	20
5	5	LETTER WRITING	18	20
		TOTAL	**80**	**100**

DETAILED COURSE CONTENTS:

Chapter –1 : PASSAGES FOR COMPREHENSION

- Taming the Atom
- Radar and its Uses
- A Volcano
- Precision – A Measure of Progress
- Laser

Chapter –2 : APPLIED GRAMMAR

- Basic Sentence Pattern
- Infinitives
- Narration
- Common Errors
- Modifiers
- Paragraph Writing

Chapter –3 : PASSAGES IN GENERAL STUDIES

- Salient Features of the Indian Constitution
- Structure of Government
- Functioning of an Economic System
- Production and Productivity by
- Professional Ethics

Chapter –4: TECHNICAL WRITING

- Technical Writing
    a. A Communication Skill
    b. Basic facts of Technical Writing
- Main Features of Technical Writing
    a. Features of Technical Writing
    b. Style: Literary and Technical
    c. Mechanics of Technical Writing
- Forms of Technical Writing
    a. Forms
    b. Writing Definitions
    c. Writing Technical Descriptions
    d. Writing Technical Descriptions of Processes
    e. Writing Instructions
- . Writing Technical Reports
    a. Qualities of a Good Report
    b. Forms of Reports
    c. Types of Reports

Chapter –5 : LETTER WRITING

- Introduction
- Purposes of Letters
- Characteristics of a Letter
- Mechanics and Style
- Types of Business Letters
    - Letter of Enquiry
    - Answer to an Enquiry

INSTRUCTIONAL STRATEGIES

- Regular assignments should be given on every topics.
- Arranging expert lecture on specific topics.
- Assessment of term work of conduction of minimum two progressive tests during the session.
- Use of Audio-Visual aids.
- Group Discussions.
- Paper Presentation on different topic.

LIST OF TUTORIALS

- Group discussion and seminar

- Small report writing
- Translation works
- Practice of various letter writing / precise writing / essay writing

LEARNING RESOURCES

(a) Reference Books:

Sl.No.	**Title**	**Author, Publisher, Edition & Year**
1	Business Communication	Asha Kaul,Prentice Hall of India Pvt.Ltd, New Delhi
2	A Course in Technical English, Book-I	Somaiya Publication Pvt. Ltd. Bombay
3	A Course in Technical English, Book-II	Somaiya Publication Pvt. Ltd. Bombay
4	Living English Structure	W.S Allen
5	Practical English Grammar	Thomos and Martinet
6.	Essentials of English & Business Communication.	Rajendra Pal,J.S Korlahalli S.Chand & Sons, New Delhi.
7.	Grammar & Composition	P R Sarkar, Anand Marg Publication, Easter, Matropolition Calcutta
8.	How To Write Correct English	R P Sinha, Bharti Bhavan Publication, Patna
9	English Errors of Indian Students	Oxford University Publication, By TLH Smith Pearse
10	Passages in General Studies	Vikas Publication, Bhopal

(b) Others:

- VCD
- OHP Transparencies
- Computer Aided Instructional Packages
- Video/Audio Cassettes

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CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

SEMESTER : II

COURSE TITLE : APPLIED MATHEMATICS-II

THEORY CODE : 200212 (14)

BRANCH/DISCIPLINE : CIVIL/MECH./ELECTRICAL/ METALLURGY/COMPUTER SCIENCE & ENGINEERING/INFORMATION TECHNOLOGY/INSTRUMENTATION/ELEX. & TELCOMMUNICATION

Minimum number of class tests to be conducted: 2

DISTRIBUTION OF MARKS AND HOURS:

Chapter No.	Chapter Name	No. of Hours/ Periods	Marks
1.	NUMERICAL ANALYSIS	02	4
2.	FINITE DIFFERENCES	04	6
3.	NUMERICAL DIFFERENTIATION & INTEGRATION	06	10
4.	DIFFERENCE EQUATION	08	10
5.	MATRICS	12	20
6.	SIMPLE INTEGRATION	12	20
7.	FORMATION OF DIFFERENTIAL EQUATION	15	20
8.	LAPLACE TRANSFORMATION	05	10
TOTAL		**64**	**100**

DETAILED CONTENT

Chapter – 1 : NUMERICAL ANALYSIS

- Bisection Method
- False Position Method
- Newton-Raphson Method

Chapter – 2 FINITE DIFFERENCES

- Interpolation forward differences
- Backward differences
- Factorial Polynomial
- Newton's Forward interpolation, formula for equal intervals
- Sterling Formula (Central Difference)
- Newton's Backward Formula
- Lagrange's interpolation formula for unequal intervals.

Chapter – 3 : NUMERICAL DIFFERENTIATION & INTEGRATION

- Numerical Differentiation (Forward & Backward Difference formula)
- Numerical Integration by Trapezoidal & Simpon's Rule

Chapter – 4 : DIFFERENCE EQUATION

- Order of a difference equation
- Solution of Difference equation
- Complementary Section
- Particular Integral.

Chapter – 5 : MATRICS

- Introduction
- Definition
- Special Matrices
- Addition and Subtraction of Matrices
- Multiplication of Matrices
- Transpose of a Matrix
- Symmetric & Skew Symmetric Matrix
- Ad-joint of a Square Matrix
- Inverse of Matrix
- Solution of simultaneous Linear equations
- Rank of Matrix
- Consistency of Linear System of Equations

Chapter – 6 : SIMPLE INTEGRATION

- Introduction, Definition
- Method of substitution
- Integration by parts
- Integration by Partial Fraction Method
- Integration of the form and Reduction Formula.
- Definite Integral – Introduction
- Theorems Definite Integrals

- Gamma function

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Chapter – 7 : FORMATION OF DIFFERENTIAL EQUATION

- Differential Equations
- Definition
- Order and Degree of Differential Equations
- Formation of Differential Equations
- Solution of a Differential Equation
- Differential Equation of the first order and first degree
- Variable Separable
- Homogeneous Differential Equations
- Equations Reducible to Homogeneous form
- Linear Differential Equations
- Equations Reducible to the Linear Form
- Exact Differential Equations
- Equation Reducible to the Exact Equations
- Second order Linear Differential Equation with constant coefficient – Complementary function particular integral

Chapter – 8 : LAP LACE TRANSFORMATION

- Definition, Transforms of Elementary functions
- Properties of Lap lace transforms
- Transform of Derivatives
- Transform of Integral

INSTRUCTIONAL STRATEGIES:

- Chalk and talk method to explain various laws, theorems etc.
- Expert Lecture
- Demonstration and use of log tables
- Classroom practices for different typical exercises
- Use of derivation and formulas.

LEARNING RESOURCES

(a) Reference Books :

Sl. No.	Title	Author, Publisher, Edition & Year
1	Introductory Method of Numerical Analysis	Sastry S. S. (, PHI)
2	Mathematical Statistics	Ray and Sharma
3	Discrete Mathematics	Liu CL (Tata Mc Graw Hill)
4	Linear Programming	Srinath L.S. (East-West Press)
5	Set Theory and Related Topics Schum's Out Line Series	Tata Mc Graw Hill, New Delhi.
6	Finite Differences and Numerical Analysis	Saxena H.C.
7	Modern Algebra	Sharma and Seth (Ram Prasad and Sons)
8	Computer Oriented Numerical Methods, PHI	Raja Raman V. (PHI)

(b) Others:

- Practice sheets
- Learning Packages
- Work book

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CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI,

SEMESTER : II

COURSE TITLE : ENGINEERING DRAWING

THEORY CODE : 200215 (37)

BRANCH/DESCIPLINE : CIVIL/MECHANICAL/ELECTRICAL/METALLURGY/ INSTRUMENTATION/MINING/COMPUTER SCIENCE & ENGINEERING/ INFORMATION TECHNOLOGY

Minimum number of class tests to be conducted: 2

DISTRIBUTION OF HOURS & MARKS

Chapter No.	Chapter Name	Hours	Marks
1.	INTRODUCTION	6	8
2.	DIMENSIONING TECHNIQUES & STANDARD CONVENTIONS	8	8
3.	ENGINEERING CURVES AND SCALES	8	8
4.	ORTHOGRAPHIC PROJECTIONS OF POINTS, LINES AND PLANES	8	10
5.	PROJECTION OF SIMPLE MACHINE PARTS AND COMPONENTS.	8	10
6.	**PROJECTION OF SOLIDS**	10	12
7.	**SECTION OF SOLIDS**	10	12
8.	**DEVELOPMENT OF SURFACES**	10	12
9.	**ISOMETRIC PROJECTIONS**	10	10
10.	**BASICS OF CAD**	18	10
	Total	**96**	**100**

DETAILED COURSE CONTENTS

Chapter –1: Introduction

- **Introduction to drawing equipments, instruments and their uses**
- **Planning of drawing sheet as per I.S. 696 – 1972**
- **Indian standard practices of laying out and folding of drawing**
- **Different types of lines used in engineering drawing**
- **Standard practice for writing single stroke vertical and inclined capital and lower cases letters (practice to be done on sketch book)**
- **Standard practice of writing numerals (practice to be done on sketch book)**

Chapter –2: Dimensioning techniques and standard conventions

- **Identification and representation of various symbols used in Mechanical and Electrical Drawing**
- **Drawing Identification and representation of various symbols of building elements, materials and sanitary fittings**
- **Principles, system and arrangement of dimensioning**
- **Practice problems of current method of dimensioning**

Chapter –3: Engineering curves and scales

- **Form associated with engineering curves**
- **Types of engineering curves**
- **Method of construction of Engineering Curves**
- **Practice problems of drawing various Engineering Curves.**
- **Importance of scale in Engineering drawing**
- **Types of scales- plain, diagonal etc.**
- **Practical problems for constructing various types of scale.**

Chapter –4: Orthographic projection of points, lines and planes

- **Definitions of various terms associated with orthographic projections.**
- **Planes of projections**
- **Concept of Quadrants**
- **First and third angle method of projection**
- **Projection of line in different positions with respects to H.P. V.P. and X-Y line**
- **Projection of planes in different position with respect to reference planes**
- **Practice problems on projection of points, lines and planes.**

Chapter –5: Projections of simple machine parts and components

- **Procedure for drawing projections and sectional views of simple machine components**
- **Practice problems of sketching and drawing the projections and sections of simple machine components.**

Chapter –6: Projections of solids

- **Types of solids and associated terminology**
- **Position of solid with respect to reference planes**
- **Drawing projections of solid in different position with respect to reference planes**
- **Practice problems to draw projections of solid in different positions.**

Chapter –7: Section of solids

- **Concept of sectioning planes**
- **Auxiliary planes and true shape of section**
- **Practice problems for drawing projections and section of solids.**

Chapter –8: Development of surfaces

- **Concept and importance of surface development in engineering field**
- **Development of surfaces for the following**
  - **Cube**
  - **Cylinder**
  - **Prism**
  - **Cone and Frustum cone**
- **Practice problems.**

Chapter –9: Isometric projections

- **Limitations of orthographic projections**
- **Definitions of the terms axonometric, oblique, Isometric and diametric projections**
- **Procedure for preparing isometric oblique**
- **Isometric view of geometrical solids and simple machine parts**
- **Practice problems.**

Chapter –10: Basics of CAD

- **Computer hardware and software requirement for CAD**
- **Co-ordinate systems**
- **Set up for a CAD drawing**
- **Drawing objects like- Line, Circle, Arc, Ellipse, Regular Polygons, Polylines, Donuts etc.**

- **Editing Commands like- Move, Copy, Rotate, Scale, Fillet, Chamfer, Trim, Extend, Array, Mirror etc.**
- **Basic dimensioning, geometric dimensioning and tolerance**
- **Use CAD commands for simple orthographic and isometric drawings**

INSTRUCTIONAL STRATEGIES

- Lecture Method
- Demonstration and use of instrument used in drawing.
- Classroom practices for different typical exercises.
- Use of computer for developing drawing
- OHP Transparencies for complicated drawing objects

LIST OF TUTORIAL WORK

- Problems on Scales and Letterings (One sheet)
- Problems on Curves (One sheet)
- Simple Orthographic Projections- One for First Angle and One for Third Angle Projection (Two sheets)
- Orthographic projections with sections (One sheet)
- Isometric projection for two objects (One sheet)
- Projection of Points and Lines (One sheet)
- Projection of Planes (One sheet)
- Projection of Solids (Two sheets)
- Section of Solids (Two sheets)
- Development of surface (Two sheets)
- Use CAD for orthographic projection (Five problems)
- Use CAD for isometric projection (Three problems)

LEARNING RESOURCES

a) Reference Books

S.No.	Title	Author/Publisher
1.	I.S. 696. (Latest revision).	BIS, India
2.	Engineering Drawing	N.D. Bhatt, Charoter Publisher,Anand
3.	Engineering Drawing & Machine Drawing	R. K. Dhawan, Kumar
4.	Engineering Drawing	R.B. Gupta, Satya Prakashan, Delhi
5.	Geometrical Drawing	P.S. Gill , ketson & Sons
6.	Machine Drawing	By P.S. Gill, ketson & Sons
7.	Engineering Drawing	Gujral & Shende, Khanna Pub. N.Delhi

8.	Work Book in Mechanical Drafting	TTTI, Bhopal
9.	Engineering Drawing & Graphics Using AutoCAD 2000	T. Jeyapoovan, Vikas Publishing House Pvt. Ltd, New Delhi.

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CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI CHHATTISGARH STATE

SEMESTER : II

COURSE TITLE : BASIC ELECTRICAL, ELECTRONICS & MEASUREMENTS

THEORY CODE : 200216 (28)

BRANCH/DISCIPLINE : COMPUTER SCIENCE & ENGINEERING/INFORMATION TECHNOLOGY

Minimum number of class test to be conducted: 2

DISTRIBUTION OF MARKS AND HOURS

Chapter No.	**Chapter Name**	**No. of Hours/ Periods**	**Marks**
1.	Review of general Topics	5	20
2.	Electromagnetism	7	05
3.	A.C. Theory	5	12
4.	General electrical machines	7	08
5.	Introduction to Electronics	4	02
6.	Semi conductor Physics	12	08
7.	Semi conductor Diodes	14	12
8.	Transistors	12	12
9.	Regulated Power Supply	06	06
10.	Measuring Instruments	08	15
	Total	**80**	**100**

DETAILED COURSE CONTENT

CHAPTER - 1 REVIEW OF GENERAL TOPICS

- Atomic Structure of Conducting and Semi-Conducting materials.
- Behavior of materials with electricity.
- Concept of unit of Electric current and Voltage
- Ohm's Law, Concept of Resistance, Conductance, Resistivity and Conductivity. Their units and dependence on temperature.
- Power & Energy, heating effect of electric current and conversion of units (Mechanical to Electrical)
- Kirchoff's Voltage and current Laws & their applications in simple DC Circuits.
- Series & Parallel combination of resistance and wattage, Consideration with Simple Problems.

CHAPTER - 2 ELECTROMAGNETISM

- Concept of magnetic field production by flow of current, concept of m m f, flux, reluctance, permeability, Analogy between electrical & magnetic circuits.
- Faraday's Laws of electromagnetic induction, self and mutually induced e m fs, simple numerical problems.

CHAPTER - 3 A.C. THEORY

- Concept of alternating voltage and current, difference between AC and DC.
- Concept of cycle, frequency, period, amplitude, instantaneous value, average value, r.m.s. value and peak value, form factor (definitions only.)
- Concept of impedance, phase angle, numerical problems, RL & RLC series circuits.

CHAPTER – 4 GENERAL ELECTRICAL MACHINES

- Introduction, definition of motor & generator and common features of static &.rotating electrical machines.
- Transformer- Construction- core type, shell type, transformation ratio and e.m.f equation

CHAPTER – 5 INTRODUCTION TO ELECTRONICS

- Voltage and current sources, Constant voltage and current sources and their graphical representation. Conversion of voltage source into current source and vice-versa.

CHAPTER – 6 SEMI-CONDUCTOR PHYSICS

- Conducting materials, effect of temperature conductivity in Germanium and Silicon.
- Extrinsic Semi-Conductors, doping, P-N type Semi-Conductor, majority and minority carriers, effects of temperature.

- P-N junction, drift and diffusion currents, depletion layer, potential barrier , effects of forward and reverse biasing of P-N junction. Energy band diagrams, breakdown mechanism.

CHAPTER – 7 SEMI CONDUCTOR DIODES

- Use of diode as half wave and full wave (Centre tapped and bridge type) rectifiers. Relation between d.c. output and a.c. input voltage.
- Concept of ripples, filter circuits, Shunt capacitor, Series inductor &filters and their applications.
- ZenL-r-diode and its.V-1 Characteristics.

CHAPTER – 8 TRANSISTORS

Construction of bi-polar junction transistor with respect to :-

- Working-principle of transistor, forward and reverse biasing.
- Transistor Configuration-Common Base (CB), Common Emitter (CE) and Common Collector (CC), their Comparison of configuration and applications. General introduction of UJT, FET and SCR.

CHAPTER – 9 REGULATED POWER SUPPLY

- Need of regulated power supply, regulation, stabilisation of voltage by Zener-diode, its limitations.
- Block diagram of regulated power supply, transistorised regulated power supply and short circuit protection

CHAPTER – 10 ELECTRICAL & ELECTRONIC MEASUREMENT

- Working principle and Construction of Ammeters and Voltmeter, difference between them, extension of range and simple numerical problems.
- Principle and working of Watt meter (dynamometer type) and Energy meter (Induction type)
- Digital measuring instruments, Seven-segment display and its applications
- Basics concepts of CRO.

IMPLEMENTATION STRATEGIES

According to the theory and practical schedules the subject teacher will complete the session.

PRACTICAL

Practical Code: 200226 (28)
No. of Hours/Periods: 80

LIST OF EXPERIMENTS/ DEMONSTRATIONS

- Verification of Ohm's law
- Verification of Kirchoff's law
- Find out the value of capacitance of corrector
- Plotting V-I Characteristics of semi-conductor diode.
- Plotting V-I characteristics of Zoner diod and finding its reverse breakdown voltage.
- Observation of output wave shapes and input wave shapes of Full wave/Half wave rectifier.
- Plotting input/output characteristics of CE configuration of transistor.
- Measure voltage, current, power and energy in single phase AC circuit.
- Colour coding of resistance and units of capacitance.
- Study of AC/DC Voltmeter
- Study of AC/DC Ammeter
- Study of AC/DC Wattmeter
- Study of Digital Instruments and Displays
- Study of Regulated Power Supply

LEARNING RESOURCES

a). Reference Books/Journals/ Manuals

S.No.	Title	Author, Publisher & Address, Edition, Year
1.	Electronic Technology	E.admirality
2.	Electrical Engineering basic technology	Hubscher, Klaue pfloger,Appelt, Willey Eastern Ltd, New Delhi
3.	Electrical Engineering	J.B. Gupta
4.	Experiments in basic electrical Engineering	S.K. Bhattacharya, S.K. Rastogi, K.M., New Age International , New Delhi
5.	Problems in Electrical Engineering	Smith P., 1st ,1996,
6.	A Text book of Applied Electronics	R.S. Sedha, S. Chand & Co.New Delhi
7.	Principals of Electronics	Latest ,V.K.Mehta , S.Chand Publication
8.	Electronics Principles	Malvino TMH
9	Electrical Technology	B.L.Thereja ,Chand Rai

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CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI CHHATTISGARH

SEMESTER : II

COURSE : PROGRAMMING IN 'C'

THEORY CODE : 200217 (22)

BRANCH/DISCIPLINE : COMPUTER SCIENCE & ENGINEERING/

INFORMATION TECHNOLOGY

Minimum number of class tests to be conducted: 2

DISTRIBUTION OF MARKS AND HOURS

Chapter No.	Chapter Name	No. of Hours/ Periods	Marks
11.	Introduction To `C' Programming	3	9
12.	Operations & Expression	6	13
13.	Input & Output Statements	6	12
14.	Control Statements	10	11
15.	Control Loop Statements	12	10
16.	Arrays & Strings	12	13
17.	Functions & Micro	16	13
18.	Structure, Union and Enumerations	15	10
19.	Pointers	16	9
	Total	96	100

DETAILED COURSE CONTENT

CHAPTER - 1 **INTRODUCTION TO `C' PROGRAMMING**

- Introduction
  - History and features of C, Algorithms, Flowcharts, structured programming Concepts

CHAPTER – 2 **OPERATIONS & EXPRESSION**

- Character set of C
- Operators and Expressions
  - Arithmetic, Relational, Logical assignment operators, variables, onstants, data types, expressions, data type conversion, key words, hierarchy of operators.

CHAPTER – 3 **INPUT & OUTPUT STATEMENTS**

- `C' Programme structure, Type declaration, Input and Output, (printf, scanf, getchar, putchar, getch, putch), Conversion specifiers in format control string, Library functions (Math functions)

CHAPTER – 4 **CONTROL STATEMENTS**

- Unconditional branching: goto statement
- Conditional branching statements: if statement,
- if- else, Nested `if'
- Multiple branching statements: switch case statement.

CHAPTER – 5 **CONTROL LOOP STATEMENTS**

- Loop Statements: `for' statement, while statement, `do-while' statement, `break-continue' statement.

CHAPTER – 6 **ARRAYS & STRINGS**

- Arrays:
  - Concept of one dimensional, two dimensional and
  - Multi-dimensional array, array declaration, Array and initialization, operations on one and two-dimensional arrays.
- String Manipulations
  - Strings, get, puts, string operations, string function

    (concatenation, comparison, length of a string).

CHAPTER – 7 **FUNCTIONS AND MACROS**

- Library and User-Defined Functions
  - Concepts of library functions, user-defined
  - Functions, local and global variables, storage class,
  - Parameter passing mechanisms
  - simples and Conditional Macros and Its exapansions

CHAPTER - 8 **STRUCTURE ,UNION AND ENUMERATIONS**

Definition, Declaration and Implementations

CHAPTER- 9 **POINTERS**

Definition, Declaration and Implementations

IMPLEMENTATION STRATEGIES

The teachers are expected to give assignments to develop programs to the students soon after the completion of the concerned topic. The number of assignment will depend upon the availability of time. Sample question on the topic covered can be given to the students to make the teaching/learning process more effective. The programs that the teachers give to the students either in the classroom or as a take home assignment can be problems related to the other Courses taught in the discipline, like from mathematics/physics/mechanics/fundamental of electrical engineering etc.

The program that will be developed by the students should be general, interactive and structured. At the completion of this course the students are expected to understand the syntax and semantic of `C' Language and develop proficiency in programming skills.

PRACTICAL

Practical Code : 200225 (22)
No. of Hours/Periods: 48

LIST OF EXPERIMENTS/ DEMONSTRATIONS

- Assignment to prepare general algorithms and flow chart.
- Assignment to write character, operators symbols of C Language
- Assignment tSo identify valid and invalid variables, constants and expressions
- Programme based on Input/Output statements
- Program based on Arithmetic expression
- Program based on Library functions
- A Program based on goto statement
- Two Programs based on `if' and `Nested if"
- Program based on `switch case' statement.
- At least one program based on each:
  - `for' statement
  - `while' statement
  - `do-while' statement
  - break continue statement
- One program based on one dimensional array
- One program based on two dimensional array
- Three programs based on string operations
- Two programs based on functions**.**

LEARNING RESOURCES

a) Reference Books

S. No.	Title	Author, Publisher & Address, Edition,Year of Publication,
1.	The Spirit of C	Mullish Cooper, Jaico Publishing House, 121, N.G. Road, Mumbai, 2000
2.	Programming in C	Balagurusamy ,Tata Mc-Graw hill Publishing Company Ltd., New Delhi, IInd Edition 2000.
3.	Let us Learn ‘C’	Yashwant Kanetkar ,BPB Publications, B-14, Connaught Place, New Delhi, IIIrd - Edition,2000.
4.	Programming with C	ata Mc-Graw hill Publishing Company Ltd., New Delhi, IInd- Edition, 2000.
5.	Programming with C++	D.Ravichandran ,Tata Mc-Graw hill Publishing Company Ltd., New Delhi, Latest Edition.

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CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

SEMESTER : II

SUBJECT TITLE : PROFICIENCY IN PROFESSIONAL ACTIVITY (PPA)

CODE : 200224 (46)

BRANCH/DISCIPLINE : ALL DISCIPLINES

DISTRIBUTION OF MARKS AND HOURS:

Chapter No.	Chapter Name	No. of Hours/ Periods	Marks
1	Presentation Skills	8	9
2	Learning To Learn Skills	3	5
3	Study Skills	3	5
4	Information Search	5	5
5	Time Management	3	5
6	Personality	5	5
7	Personal Grooming	5	6
TOTAL		**32**	**40**

In this particular subject though it has been classified as practical, it maybe essential to take up certain theory classes and assignments this may include expert lectures, group discussion, plenary session etc.

DETAILED COURSE CONTENTS:

Chapter – 1 : PRESENTATION SKILLS :

Oral Presentation :

- Need of effective oral presentation.
- Characteristics of good oral presentation.
- Ways of Oral Presentation (Seminar, Viva-voce, Interview, Group Discussion, Lecturing, Power Point etc.)
- Gestures/Mannerism during oral presentation Media, methods used for effective oral presentation.
- Assessment of oral presentation.

Written Presentation :

- Need of written presentation.
- Characteristics of written presentation.

- Ways of written presentation (Report writing, manual, handout, notes etc.).
- Grammar, Punctuation, referencing paragraphing during written presentation.

Chapter – 2 : LEARNING TO LEARN SKILLS :

- Need of Learning to Learn Skills.
- Type of Learning Skills (Learning face to face, Individualized learning, Distance learning, Self-learning).
- Developing Learning to Learn Skills.

Chapter - 3 : STUDY SKILLS :

- Methods of Good Study Habits
- Note Taking
- Developing Reading Skills

Chapter – 4 : INFORMATION SEARCH :

- Objectives of information search.
- Ways of information search (Internet surfing, Library search, Abstracts, Journals, books etc.)
- Assimilation and presentation of information.

Chapter – 5 : TIME MANAGEMENT :

- Principles of Time Management.
- Time Management matrix.
- Criteria governing Time Management.
- Possible time waster

Chapter- 6 : PERSONALITY :

- Concept and meaning of personality
- Characteristics of good personality
- Factors influencing personality
- Types of personality.
- .Need for desirable personality for success
- Qualities of complete personality.

Chapter - 7 PERSONAL GROOMING:

- Posture and Health.
- Types of posture.
- Importance of posture.
- Factors affecting good health-diet, exercise personal cleanliness, sleep and rest.

- Use of cosmetics.
- Dress Code
- Physical Fitness and Inner Strength

INSTRUCTIONAL STRATEGIES:

- Lecture Method.
- Industrial visits.
- Expert Lecture.
- Demonstration
- Assignments-Individual and Group
- Group Discussions
- Presentation

LIST OF PRACTICALS

- Seminar Presentation on Specific topic for fixed time duration
- Information Collection on a particular topic followed by presentation in specified time duration.
- Visit to multinational outlet for observing personality traits of officials and preparing detailed report
- Demonstration exercise by personality experts
- Guest lectures by well known personality

LEARNING RESOURCES:

(b) Reference Books

Sl. No.	Title	Author, Publisher, Edition & Year
1	How to achieve success and happiness	Sultan Chand and Sons,New Delhi
2	How to develop effective personality	Dr Mittal and Agarwal CS
3	The Art of Public Speaking	Stephen E Lucas
4	Public Speaking and Influencing Business	Dale Carnegie

(b) Others:

- Video Programs.
- Learning Packages.
- Computer with internet facilities
- Television
- Charts.

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