CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY,

BHILAI

Courses of Study and Scheme of Examination of Diploma First Semester (2005-2006) in (i) Computer Science & Engineering And (ii) Information Technology

SEMESTER - I

S. No	Subject Code	Board of Study	Subject	Periods Per Week			Scheme of Examination					Total Marks	Credit [L+[T+P]] 2
				L	T	P	Theory			Practical			
							ESE	CT	TA	ESE	TA		
1	**200111 (46)**	Humanities	Communication Skill-I	3	1	-	100	20	20	-	-	140	4
2	**200112 (14)**	Basic Science	Applied Mathematics-I	3	2	-	100	20	20	-	-	140	4
3	**200113 (15)**	Basic Science	Applied Physics	3	1	-	100	20	20	-	-	140	4
4	**200114 (11)**	Basic Science	Applied Chemistry	3	1	-	100	20	20	-	-	140	4
5	**222115 (22)**	Computer Science	Computer Fundamentals and its Applications	4	1	-	100	20	20	-	-	140	5
6	**222121 (22)**	Computer Science	Computer Fundamentals and its Applications Lab	-	-	6	-	-	-	100	20	120	3
7	**200121 (15)**	Basic Science	Applied Physics Lab	-	-	3	-	-	-	50	20	70	2
8	**200122 (11)**	Basic Science	Applied Chemistry Lab	-	-	3	-	-	-	50	20	70	2
9	**200125 (46)**	Humanities	Group Discussion	-	-	2	-	-	-	-	40	40	1
			Total	16	6	14	500	100	100	200	100	1000	29

L – Lecturer,   T – Tutorial,   P – Practical,
ESE – End Semester Exam,   CT – Class Test,   TA – Teachers Assessment

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

Semester – 1st Semester

SUBJECT - COMMUNICATION SKILL-I   **Code 200111(46)**

Branch / Discipline -   Computer Science & Engineering   / Electronics & Telecommunication / Information Technology / Civil / Mechanical / Electrical / Metallurgy/ Costume Design & Dress Making / Modern Office Management / Architecture/ Interior Decoration & Design / Instrumentation / Mining & Mine Surveying
Minimum Number of class tests to be conducted -2

SCHEME OF STUDY

S.No.	Topic	No. of Hours / Period of Study	Marks Allotted
		Theory	
1.	Passages for comprehension	16	30
2.	Short Stories	08	15
3.	Applied Grammar	16	25
4.	Letter Writing	08	20
5.	Report Writing	08	10
	TOTAL	**56**	**100**

Note: For spoken English integrated approach may be adopted.

COURSE CONTENTS

S.No.	Topics	Sub Topic
	Section -A	
1.	Passage for Comprehension	(1)Language of Science (2) Robotic Revolution (3) Designing a Car (4)New Wonders of camera (5)Non-conventional sources of Energy (6)Our Environment (7)Enterpreneurship (8)Safety practices
2.	Short-Stories	(1)Selfish Giant-Oscar Wilde (2)A Letter to God-Gregario Lapex Y-Fuentes An astrologer's Day –R.K. Naragyan

3.	Applied Grammar	(1)Determiners (2)Auxiliaries (3)Tenses (4)Conditional (5)Passive (6)Prepositions (7)Subject-verb Agreement (8)Clauses & Connectors
	ISECTION-B	
4.	Letter Writing	(1)Application (For Job/Leave) (2)Letter of Enquiry and replies (3)Letter for Order Placement (4)Letter of Complaints (To Editor/ Appropriate Authorities)
5.	Report Writing	(1)Writing Progress – Report of a job (2)General outline for preparing A Project Report.

LIST OF REFERENCE BOOKS

1. Communication Skill for Teaching Students Book-I. M/s Somaiya Publications. Pvt. Ltd., Bhopal.

2. Living English Structure –W.S. Allen

3. Practical English Grammar (Exercises I by Thomson & Martinet)

4. English conversation practice by Grant Taylor.

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

Semester – 1st Semester

SUBJECT - APPLIED MATHEMATICS-I   Code - 200112(14)

Branch / Discipline - Computer Science and Engineering / Electronic & Telecommunication / Information Technology / Civil /Mechanical / Electrical / Metallurgy / Mining and Mine Surveying / Instrumentation.

Minimum number of class tests to be conducted - 2

SCHEME OF STUDY

S. No.	Unit	Topic	No. of Hours/ Periods	Marks Allotted
1.	Unit -01	Algebra	06	10
2.	Unit -02	Trigonometry	08	10
3.	Unit -03	Coordinate Geometry	08	10
4.	Unit -04	Conic Section	08	10
5.	Unit –05	Differential Calculus	06	10
6.	Unit –06	Methods of Differentiation	08	10
7.	Unit -07	Vector Algebra	08	10
8.	Unit 08	Multiplication of Vector	07	10
9.	Unit -09	Statistics	06	10
10.	Unit -10	Dispersions & Deviation	07	10
TOTAL			**70**	**100**

COURSE CONTENTS

S. No.	Topic	Topic/ Sub Topic	Contents
1.	**Topic**-01	**Algebra-** Determents Mean and R.M.S. VALUE quadratic Equation Partial Fraction	Concept and principles of determents. Properties of determents Computation of Mean and R.M.S. Value General equation of second degree, Nature of roots, Formation of Equation Class- I, II,III, IV
2.	**Topic**-02	**Trigonometry** Trigonometrically ratios of multiple and submultiples	Half angles, Double Angles, Triple angles General solution of Trigonometrically equation

		angles Trigonometrically Equations	
3.	**Topic**-03	Coordinate Geometry Coordinate S/systems Distance Division	Cartesian and Polar coordinates distance between two points, Division of a line segment
		Standard form of the equation of a straight line Change of Axes	Locus standard forms. General equation of a straight line and its rotation to the structural forms, Straight line through one and two point Transformation of coordinates when the origin is shifted or the axes are rotated
4.	**Topic**-04	**Conic Section** Circle Conic Section	Definition, Standard forms, General equation, Center and radius. Parabola Ellipse
5.	**Topic**–05	**Differential Calculus** Functions Limit	Independent and dependent variables, different type of functions, Concept of limit and its valuation
6.	**Topic**-06	**Method of Differentiation** Differentiation by first principle	Differentiation by first principle of Algebra, Trigonometrical, Exponential and Logarithmic functions. Differentiation of sum, Product and quotient of two functions and functions of a function
7.	**Topic**–07	**Vector Algebra** Introductions Vector Addition of Vector Component of Vector	Concept of Vector and Scalar Quantities Understand the Principle of addition, subtraction of Vector C0omponet of Vector, Standard unit Vectors ijk
8.	**Topic**-08	**Multiplication of Vector**	Scalar product and its applications, Vector products and application
9.	**Topic**-09	**Statistics** Frequency Distribution central Tendency	Introduction , Graphical representation , Histogram, France polygon, Frequency , Curve, Central Tendency Mean, Median , Mode

10	**Topic**-10	**Dispersions & Deviation**	Measure of dispersion Range Quartile deviation Standard, Deviation Rood Mean square deviation

LIST OF REFERENCE BOOKS

- Mathematics for Polytechnic Volume I, TTTI Publication
- Applied Mathematics, EEB Publication , Bhopal
- Differential Calculus, By Gorakh Prasad
- Integral Calculus, By Gorakh Prasad
- Coordinate Geometry, By. S.L. Loney

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

Semester – 1st Semester

SUBJECT - APPLIED PHYSICS   Theory Code – 200113(15)

Branch / Discipline- Computer Science and Engineering / Electronics and Telecommunication/ Information Technology / Civil / Mechanical/ Electrical / Metallurgy / Mining and Mine surveying / Instrumentation

Minimum number of class tests to be conducted - 2

SCHEME OF STUDY

S.No.	Unit	Topic/ Sub Topic	No. of Hours/Periods		Marks Allotted
			Theory	**Practical**	
	General Properties of Matter				
1.	Unit -01	Unit , Measurement & Vector	05		10
2.	Unit –02	Force, Motion & Gravitation	08		10
3.	Unit -03	Elasticity, Surface Tension & Viscosity	07		10
	Sound				
4.	Unit –04	Periodic Motion & Waves, Ultrasonic	05		10
	Heat				
5.	Unit –05	High Temperature Measurement , Kinetic theory of Gases	06		10
6.	Unit -06	Thermodynamics	03		10
	Light				
7.	Unit –07	Reflection, Refraction & Dispersion of Light	05		10
8.	Unit -08	Optical Instruments	05	42	10
	Electricity & Magnetism				
9.	Unit -09	Magnetism	05		10
	Modern Physics				
10.	Unit –10	Photoelectric effect, x-rays, laser, fiber optics, Microwaves, Electron Microscope	07		10
	TOTAL		**56**	**42**	**100**

COURSE CONTENTS -

GENERAL PROPERTIES OF MATTER :-

1.Units, Measurement & Vectors :-

Fundamental units, Derived units, unit system, S.I. units – Their impotence & notation, Base, S.I. units system & Abbreviations, Principle of vernier calipers, screw gauge & Speedometer.

Scalar & Vector quantities, Representation of Vectors, kinds of Vectors, addition & Subtraction of vectors, multiplication of a vector by a scalar, linear combination of vectors, Resolution of vector, position vector, scalar products & vector product.

2.Force, Motion & Gravitation

2.1 **Classification of motion**– Characteristic of different types of motion, Newton's laws of motion, Conservative & non-conservative force, speed & Velocity , Acceleration, equation of motion, concept of mass, weight & weightlessness, Friction, limiting friction, Angle of friction and coefficient of friction, Static & dynamic friction, Friction-a necessity and an evil.

2.2 **Circular motion**Motion of a particle on the circle with constant speed, Related Physical quantities, Relation between linear & angular velocities, centripetal & centrifugal forces, Banking of Road and bending of cyclist.

2.3 **Rotatory motion**Axis of motion, moment of inertia, Radius of gyration , Kinetic energy of rotation, derivation of equation of kinetic energy of a rotating body. Torque acting on a particle, angular momentum, relation between torque and angular acceleration.

Newton's law of Gravitation, Basic forces in nature, Gravitational field, Potential, Relation between "g" & "G" , factors influencing "g" escape velocity, kepler's Laws of planetary motion, satellites, Time period of satellites , simple pendulum.

3.Elasticity, Surface Tension & Viscosity :-

Concept of elasticity , Deformation, Stress, Strain- its kinds and units, Hooke's law, elastic unit , elastic fatigue, Modulii of elasticity's, Young's Modulus and its determination by Searl's method.
Molecular forces, cohesive and adhesive forces, surface tension & surface energy, Reason for spherical shape of Rain Drops, Angle of contact, pressure difference a liquid surface excess pressure inside a liquid drop &soap bubble, shape of liquid surface In a capillary tube, Rise of liquids in a capillary tube, Determination of surface tension by capillary rise method. 'Effect of temperature on surface tension, examples of surface tension.

Concept of viscosity & coefficient of viscosity, streamline and Turbulent flow, Reynolds number, Poiseuille's equation for the flow of liquid through a tube, Stoke's law & Terminal velocity, Determination of "n" by falling sphere method.

Sound

4.   Periodic motion & waves, Ultrasonic :-

Necessary conditions for the appearance & pursuance of periodic motion, classification of periodic motion based on forces acting on the source, necessary condition for the motion to be simple harmonic, characteristics of simple harmonic motion, Energy of a particle executing simple harmonic motion, Types of wave motion, equation of a plane progressive wave, Particle velocity & wave velocity.

Ultrasonic waves, production of Ultrasonic waves, applications of Ultrasonic waves.

Heat

5. High Temperature Measurement, Kinetic theory of Gases :-

Principle of Resistance Thermometer, Platinum resistance Thermometer, See back Effect and Thermoelectric Thermometer, Thermocouple, Temperature of inversion and neutral temperature, Relate Thermos e.m.f. with temperature, Optical pyrometer, Comparative study for range and accuracy of above Thermometers.

Concepts of a perfect gas, Postulates of kinetic Theory of gases, Pressure exerted by a perfect gas (no derivation of formula) Kinetic interpretation of temperature and Absolute Zero, deduction of gas laws.

6.Thermodynamics :-

First law of Thermodynamics, Mechanical equivalent of heat, specific heat of gases, Relation $Cp-Cv = R/J$, Isothermal & Adiabatic changes, concept of Latent heat of fusion of ice and vaporization of water.

Light

7. Reflection, Refraction & Dispersion of light: -

Laws of reflection at plane & spherical surface. Definition of center of curvature, radius of curvature, principle axis, principal focus and focal length, engineering application of laws of reflection.

Refraction at a plane surface, laws of refraction, Absolute and relative refractive index, critical angle and total internal reflection of light, refraction through lens (no

derivation of formula), Magnification combination of Lenses and power of lens.

Refraction through prism, angle of minimum deviation and their relation, Dispersion and Dispersive power, pure and impure spectrum, Electromagnetic spectrum and its visible range.

8 Optical Instruments :-

Simple microscope, compound microscope, Astronomical telescope , Terrestrial telescope , Kaleidoscope.

Electricity & Magnetism

Electrostatics :-

Electric Charge, Coulomb's Law , Electric Field & Potential, Potential Difference Between Two Points, Equipotential Surfaces, dielectric Strength, Capacity, Units, Principle of Capacitor, Factors Affecting Capacity, Type of Capacitors.

Magnetism:-

Magnetic lines of force, lines of induction, Magnetic induction, magnetic field around a current carrying conductor, direction of magnetic field and current, magnetic field due to a circular loop, Biot Savarts law field due to a long linear conductor, force experienced by a current carring conductor in a magnetic field, definition of unit current, force between two long parallel conductors.

Magnetic materials, molecular theory & magnetism, Di. Para and ferromagnetic substances. Flaming's Right hand & Left Hand Thumb Rule, Maxwell's Screw Rule, Hysterisis Loop, Electromagnetic Induction, Introduction, faraday's law of Electromagnetic Induction, Induced E.M.F., Lenz's law , Self & Mutual Induction.

9 Modern Physics :-
Photoelectric effect : Photoelectron, laws of photoelectric emission, Planck's quantum law , Einstein's photoelectric equation, Threshold frequency , Photo cell.

X-rays : production properties & uses.

Laser : Spontaneous an stimulated emission, population inversion, pumping and active system , method of production, ruby and semi conductor laser, uses.
Fiber optics : Principle, application & uses.
Electron microscope its principle & construction .

(PRACT. CODE – 200121(15)

LIST OF EXPERIMENTS

1.To measure radius of curvature of given curved surface using .
2.To determine the value of "g" using simple pendulum.
3.To determine Young's modulus of elasticity of the material of given wire using
    Searl's apparatus.
4.To determine surface tension of water by capillary rise method.
5.To determine coefficient of viscosity of a fluid by Poisioullo's method.
6.To determine refractive index of the material of prism using graph.
7.To determine focal length of concave mirror & convex lens.
8.To determine focal length of combination of two lenses.
9.To determine mechanical equivalent of heat by using Joules colorimeter.
10.To plot magnetic lines of force in N-N and N-S condition.

REFERENCE BOOKS -

1.Applied Physics Vol. I&II H.C. Saxena & Prabhakar Singh
2.Applied Physics Vol. I&II D.Halliday & R.Rasnick
3.Engineering Physics – BVN Rao
4.Principles of Physics – K.K. Mohindroo
5.Basic Principles of Physics – Brij Lal Subramanyam .

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

Semester – 1st Semester

SUBJECT - APPLIED CHEMISTRY   **Theory Code – 200114(11)**

Branch / Discipline - Computer Science and Engineering /Electronics & Telecommunication /Information Technology/Civil/ Mechanical / Electrical /Metallurgy/Mining and Mine surveying/Instrumentation.

Minimum number of class tests to be conducted – 2

SCHEME OF STUDY

S. No.	Chapter	Topics	No. of Theory hours / Periods	No. of Practical Hours/ Periods	Marks Allotted
1.	Chapter -1	(a)Atomic structure (b)Nuclear Chemistry	08		10
2.	Chapter – 2	(a)Periodic Table and periodic properties. (b)Chemical Bonding	07		10
3	Chapter – 3	(a)Electrochemistry (b)Colloids	07		10
4	Chapter – 4	Metals and metallurgy	04		10
5	Chapter – 5	(a)Metal alloys (b)Corrosion and protection	07	42	10
6	Chapter – 6	Polymers and Polymerisation	05		10
7	Chapter – 7	Fuels & Explosives	05		10
8	Chapter – 8	Lubricants paints and varnishes	04		10
9	Chapter – 9	Water Treatment	04		10
10	Chapter – 10	Pollution	05		10
		Total	**56**	**42**	**100**

COURSE CONTENTS -

S. No.	Chapter	Topics	Contents Details
1	Chapter – 1	(a) Atomic Structure	Electronic structure of atoms, Discovery of electrons, protons and neutrons. Rutherford, model and Bohr's, Bohr's – Burry scheme of distributions of electrons. Dual nature of matter and Radiations, De-Broglie's Equation, Heisenber's uncertainty principle, quantum numbers, sub energy level and distribution of electrons in sub-shells and concept of Electronic configuration of atoms, Auffbaus's rule, Pauli's exclusion principle. Hund's rule of maximum multiplicity.
		(b) Nuclear Chemistry	Nuclear rays, method of Detection, properties, disintegration theory of radio activity Nuclear reactions, Mass defect and Binding energy, Nuclear Fission, Nuclear Fussion
2	Chapter – 2	(a) Periodic Table and Periodic properties	Introduction, modern Periodic law classification of elements In to s-, p, d & f- block elements Periodic properties of elements, Periodicity atomic and ionic radii, ionization potential, electron affinity, Electronegativity.
		(b) Chemical Bonding	Theory of Chemical Bonding, Types of Bonds, Ionic or electrovalent bonds, Covalent bond, coordination bond, Hydrogen bonding concept of resonance.
3	Chapter – 3	(a) Electro Chemistry	Electrolytes and conductors, strong and weak electrolyte, conductivity, Arrhinius theory of electrolysis, Kohlrausch law, Ostwald dilution laws, Transport no. Faraday's Law of Electrolysis

			Electrochemical equivalent, Definition of pH, Law of mass action, Buffer solutions, calculation of Ph. Value of a Buffer solution, Acid Base Concept.
		(b) Colloids	Types of colloidal solution, preparation of colloids, properties of colloidal solutions, Origin of change on colloidal particles, precipitation of Coagulation of colloidal solution. Protective colloids and Gold number, Emulsions cleansing action of soaps, Detergents, Gels.
4	Chapter – 4	Metal and metallurgy	Occurrence, extraction, properties and engineering uses of heavy metals with special reference to Cu, Fe, Zn, Al, Si, Ge, C Electro magnetic properties of Fe, Ni, Co, Cr.
5	Chapter – 5	(a) Metal & Its Alloys	Properties, constitution and Engineering uses of common alloys like Brass, Bronze, German Silver, Duralumin, Solder, stainless steel pressure and die casting alloy, Bearing alloys.
		(b) corrosion and protection	Corrosion of metals, Types of corrosion, Galvanic Series, corrosion control, protective coatings. Coating processes with special emphasis on electroplating and electro typing .
06.	Chapter -06	Polymers & Polymerization	Physical properties of the polymers condensation and addition polymerization. Copolymers, effect of structure of polymer on properties, classification of polymers, Rubber –Vulcanization and compounding reclaimed rubber , Bunas SBR Neoprene ,Polyurethanes silicons, Fibers- Nylon, Dacron, orlon, polyester, Plastics and Resins – Thermoplastics and Thermosetting resins, Thermo cole and glass wool. Adhesives
07.	Chapter -07	Fuels and Explosives	Classification of fuels, solid fuels, liquid fuels, gaseous fuels, characteristics of a good fuel, calorific value, Determination of calorific value by Bomb calorimeter, Explosives- classification and application.

08.	Chapter -08	Lubricants , Paints and Varnishes	Lubricant- meaning types, theory of lubrication, properties of a good lubricants with special emphasis on Flash, Fire point, pour paint and cloud point. Specification number and viscosity, Paints and Varnish – Constituents, properties and uses. 05
09.	Chapter –09	Water Treatment	Water hardness, types and units, Determination of hardness of water by E.D.T.A. method and O Hehners method. Softening of hard water , lime soda process and Permutit process.
10	Chapter –10	Pollution	Pollution – meaning, causes of Pollution, air pollution, pollutants, causes of depletion of ozone layer, influence of ozone layer depletion. Acid rain, Water pollution, sources of Water pollution BOD, COD, Soil pollution, Green house effect, Radioactive Pollution, Effects and preventive measures of pollution.

PRACT. CODE – 200122(11)

PRACTICALS/EXPERIMENTS

1. Identification of two cations and two anions in a given sample of ore/powder/mixture.
2. To determine percentage of copper in a given sample by Brass titration.
3. To determine percentage of Iron in a iron salt by redox titration.
4. Calorimetric estimation of metals in a given sample of a alloy.
5. Measurement of Ph of different solutions.
6. To find out the hardness of water by EDTA method.
7. Proximate analysis of a sample of coal.
8. To find out the Flash point/Fire point of dry/non drying oils.
9. Determination of Viscosity by Red wood Viscometer.
10. Determination of Calorific value (C.V.) of solid fuel by Bomb Calorimeter.

LIST OF REFERENCE BOOKS

1. Engineering Chemistry by O. P. Agrawal.
2. Engineeraing Chemistry by Jain and Jain.
3. Physical Chemistry by Glosstone.
4. Organic Chemistry by Sarkar and Rakshit.
5. Engineering Chemistry by M. M. Uppal Revised by S. C. Bhatia.
6. Modern Text Book of Applied Chemistry by P.C. Jain, Dr. G. C. Saxena and Dr.A. K. Goswami.

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL

UNIVERSITY, BHILAI

Semester – 1st Semester

Subject –Computer Fundamentals and Its Application

        Theory Code – 222115(22)

Branch / Discipline – Computer Science and Engineering / Information Technology

Minimum number of class tests to be conducted – 2

SCHEME OF STUDY

Chapter No.	Name of The Chapter	No. of Hours/ Periods Theory	No. of Hours /Periods Practical	Marks Allotted
1	Introduction to	6		10
2	Microcomputer	7		10
3	Data Representation	6		10
4	Number System	8		10
5	Computer Language	7	84	10
6	Introduction to DOS Operating system	8		10
7	Introduction to WINDOWS Operating	8		10
8	Computer Application Software	8		10
9	Internet Applications	6		10
10	Internet Connectivity	6		10
	Total	**70**	**84**	**100**

COURSE CONTENT

Chapter – 1 INTRODUCTION TO COMPUTERS

- GENERATIONS OF COMPUTER
  -First, Second, Third and Fourth generation.

- CLASSIFICATION & APPLICATIONS OF COMPUTERS
  -Micro, Mini, Mainframes and Super-Computers.
  -Applications of computers.
  -

Chapter – 2 MICROCOMPUTER

- STRUCTURE & WORKING OF MICRO COMPUTERS
  -Central Processing Unit.
  -Memory Unit.
  -Input & Output devices.

- EVOLUTION OF MICRO-COMPUTERS
  -Comparative study w.r.t. Micro-processor, clock speed, data bus, Register size, storage capacity, peripheral interface of PC to Pentium-IV computer systems.

Chapter – 3 DATA REPRESENTATION

- DATA REPRESENTATION
  -Bit, byte, Nibble, Word, Double word Codes: ASCII, Binary Coded Decimal (BCD) EBCDIC, GREY and EXCESS 3 code.

Chapter – 4 NUMBER SYSTEMS

- NUMBER SYSTEMS
  -Types of number systems-Binary, Octal, Decimal, Hexadecimal

- CONVERSIONS OF NUMBER SYSTEMS AND ITS OPERATIONS
  -Binary addition, subtraction.
  -BCD addition, subtraction.
  -1's complement and 2's complement methods of subtraction Floating point arithmetic.

Chapter – 5 COMPUTER LANGUAGES

- CLASSIFICATION AND CHARACTERISTICS OF LANGUAGES
  -Machine language.
  -Assembly language.
  -High level language.

- HARDWARE, SOFTWARE AND FIRMWARE COMPUTER HARDWARE CLASSIFICATION OF SOFTWARE

Chapter – 6 INTRODUCTION TO DOS OPERATING SYSTEMS

- MICRO-SOFT DISK OPERATING SYSTEM (MS-DOS)
  -System files: BIOS, COMMAND.COM, CONFIG.SYS, Autoexec.bat file.

- MS-DOS COMMANDS
  -Internal Commands – dir, cd, md, rd, del, ren, date, time, vol. And copy External commands – attrib, format, edit, find, diskcopy, backup & restore

Chapter – 7 INTRODUCTION TO WINDOWS OPERATING SYSTEMS

- WINDOWS OPERATING SYSTEM
    -Concept of Windows-Arranging, Moving, Resizing, Opening, and Closing of windows.
    -Folder/File Management-Search, copy, delete and rename files and folders Windows Accessories: Notepad, Word Pad, Pad.

Chapter – 8 COMPUTER APPLICATIONS SOFTWARE

- WORD PROCESSING SOFTWARE
    -MS-WORD

- DATA ANALYSIS SOFTWARE
    -MS-EXCEL Introduction to electronic spreadsheet
- PRESENTATION SOFTWARE
    -MS-POWER POINT

Chapter – 9 INTERNET APPLICATIONS

- INTRODUCTION TO INTERNET

- DIFFERENT SERVICES OF INTERNET
    -www
    -Email
    -Chat (textual/voice)
    -Bulletin Boards
    -Video conferencing
    -FTP (uploading and downloading files)

- WEB-SITE ACCESS AND INFORMATION SEARCH
    -Browsers and search engines

Chapter – 10 INTERNET CONNECTIVITY

- INTERNET CONNECTIVITY
    -Internet Service Provider (ISP)
    -Internet accounts : Shell account, TCP/IP ISDN and Leased Line
    -Account and its features

- HARDWARE REQUIRED
    -MODEM and Terminal Adapters.
    -System software: O.S. Loader, Linker, Interpreter, Compiler and Assembler Application Software.

PRACTICAL CODE -222121 (22)

LIST OF EXPERIMENTS/DEMONSTRATIONS/TUTORIALS

- STUDY OF INPUT AND OUTPUT DEVICES

- STUDY OF STORAGE DEVICES

- PRACTICE ON INTERNAL AND EXTERNAL MS-DOS COMMANDS
- PRACTICE ON WINDOWS 95/98/2000
    - Starting Windows, Exploring the desktop, Arranging windows, My Computer, The start button, Creating Shortcuts, Practice on moving and sizing of windows.
    - Study of file organization: creating, copying, moving, renaming and deleting.
    - Practice on Windows Accessories – Notepad, Word Pad and Paint.
    - Editing document & formatting text, Previewing and printing document/Image file.
    - Practice on Windows Explorer.
    - Recycle bin.
    - Shutting down windows.

- PRACTICE ON MS-WORD
    - Create and format document
    - Edit and Modify text-changing font size type and style.
    - Auto Text, AutoComplete, AutoCorrect, grammar and spellchecker, Find and replace of text.
    - Open save and print a document.
    - Insert, modify table.

- PRACTICE ON MICROSOFT EXCEL
    - Create, save & format worksheet
    - Open and save worksheet file.
    - Edit & modify data.
    - Use formula and functions.
    - Split windows and freeze pans.
    - Create, edit, modify, print worksheet/charts.

- PRACTICE ON POWERPOINT
    - Create, edit, insert, move, slides.
    - Open and save presentation.
    - Insert picture, slide layout, action button.
    - Present slide show.

- PRACTICE ON
    - Identification of type of Account.
    - Connecting to internet.
- Dial up access
- Web browsing
- Searching websites

- Information searching
- Email services
- Creating email accounts & Receiving and sending mails

REFERENCE BOOKS

S. No.	Title	Edition Year of Publication	Author Publisher & Address
1	Introduction to Computers	IInd Edition 1998	Peter Norton's Tata McGraw Hills Publishing
2	The ABCs of Ms-Office 97	Ist Edition	Gay Hart Davis
3	Computer Organization and architecture	IVth – Edition 1996	William Stalling
4	Structured computer Organization	III rd – Edition 1997	Andrews Tanenbaum Prentice Hall of India Pvt. Ltd, N. Delhi
5	Teach yourself…… windows 95	I st – Edition 1995	A L Stevens Comer BPB Publication, N. Delhi
6	The Internet Book	II – Edition 200	Douglas E. Prentice Hall of India Pvt. Ltd, N. Delhi

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

Semester – Ist Semester

Subject – Group Discussion   **Code – 200125 (46)**

Branch /Discipline – Electronics and Tele communication / Computer Science and Engineering /Information Technology

Total Practical Periods - 28

Topics to be covered in tutorial:

- Myths connected with GD
- How to deal with GD topics
- Interpersonal Skills
- Problem Solving Skills
- Individual Behaviour and Personality
- Group Behaviour
- Functional and Dysfunctinal Behaviour
- Leadership & Display of Leadership Qualities
- Effective Intervention
- Do's and Don'ts
- Common Mistakes in GD
- Practical Tips

Suggested References:

- Krishna Mohan & Meera Banerjee-"Developing Communication Skills", Mac Millan India Ltd. New Delhi, 2001.
- Rajendra Pal and JS Korlahalli – "Essentials of Business Communication", Sultan Chand and Sons, 1997.