Course Name : Diploma in Textile Manufactures
Course Code : DTM
Semester : Second
Subject Title : Mathematics II
Subject Code : 136MA21

Teaching scheme and Examination scheme:

Teaching Scheme			Paper Hours	Examination Scheme											Total Marks
L	T	P		Theory		Test	Total		Practical		Oral		Termwork		
				Max	Min		Max	Min	Max	Min	Max	Min	Max	Min	
3	2	-	3	80	32	20	100	40	-	-	-	-	25	10	125

Rationale:
The study of mathematics is necessary to develop skills essential for studying engineering subjects. The subject is an extension of basic mathematics of first semester which is a prerequisite for engineering studies.

Objectives:

1. To lay a strong foundation in study of calculus which is the backbone for study in engineering.
2. To make students well versed in the prerequisites for further studies in mathematics and engineering.

Syllabus
Section I

Sr No	Topic	Contents	Hours	Marks
1	**Function**	1.1 Definition of functions 1.2 Types of Functions: Polynomial, constant, explicit function, implicit function, periodic function, even and odd functions, inverse function, exponential function, logarithmic function, composite function. 1.3 Simple problems based on function.	5	10
2	**Limits**	2.1 Concept of limit of a function. 2.2 Theorems on limits (Without proof) 2.3 Limits of algebraic, trigonometric functions. 2.4 Standard limits	10	10
3	**Derivatives**	3.1 Derivatives of standard functions by first principle. 3.2 Rules of differentiation. 3.3 Derivative of composite function. (chain rule). 3.4 Derivative of implicit function, parametric function. 3.5 Logarithmic differentiation.	12	20

Section II

4		**Second ordered derivative**	03	08
5	**Applications of derivatives**	5.1 Equation of tangent and normal to the given curve. 5.2 Maxima and minima of function. 5.3 Rate problems.	10	18
6	**Vector Algebra**	6.1 Definition of vector, types of vector, vector addition, subtraction, multiplication by scalar. 6.2 Dot product, cross product and their properties.	08	14
		Total	**48**	**80**

Reference Books:

1) Basic Mathematics – II by B.M.Patel, J.M.Rawal and others - Nirali Prakashan, 6th edition -Jan 2010

2) Mathematics for Polytechnic - S. P. Deshpande- Pune Vidyarthi Griha Prakashan, Revised edition – Aug.2010

Course Name : Diploma in Textile Manufactures
Course Code : DTM
Semester : Second
Subject Title : Physics
Subject Code : 136PH22

Teaching scheme and Examination scheme:

Teaching Scheme			Paper Hours	Examination Scheme											Total Marks
L	T	P		Theory		Test	Total		Practical		Oral		Termwork		
				Max	Min		Max	Min	Max	Min	Max	Min	Max	Min	
4	-	2	3	80	32	20	100	40	50@	20	-	-	25	10	175

Rationale:
Various phenomena, principles, laws, rules discovered and invented by physics are used for industrial, engineering and technological applications. The overall growth of various engineering disciplines, namely, mechanical, electrical, electronics, civil and environmental and so on depends upon the development of physics and its detail understanding. For sustainable socio-economic development of country research techniques in engineering are required. While identifying and solving any field problem, scientific facts and results should be considered; and in this process physics plays a pivotal role. Different branches and sub-branches of physics, viz, dynamics, optics, acoustics, material science, semiconductor physics, nuclear physics and so on provide fundamental facts, laws and logical sequencing to streamline engineering and technological problems.

Objectives:
Students should be able to;

1) Identify different systems of units and convert units from one system to other as well as conversant with practical units. Estimate and minimize the errors.
2) Select proper measuring instrument considering least count, range and precision required.
3) Select appropriate materials required for a specific purpose by studying properties of materials. Understand the concepts of charge, current, resistance, capacitance.
4) Identify, analyze, discriminate and interpret logical sequence of field problems with the study of physics.
5) Analyze the relation between pressure, volume and temperature of gas and the behavior of gas.
6) Identify good and bad conductors of heat needed for a given task.
7) Identify the phenomena of interference, diffraction and polarization of light and its industrial applications.
8) Use the properties of laser, x-rays and photoelectric effect for various engineering applications.

Syllabus
Section I

Part I - Theory

Sr No	Topic	Contents	Hours	Marks
1	**Measurements**	1.1 Units Necessity of measurement, concept of unit of a physical quantity, requirements of standard unit, Various system of units (CGS, MKS, SI, FPS), conversions, practical units, fundamental and derived physical quantities and their units. 1.2 Errors Accuracy, precision of instruments, errors, types of errors, minimization of errors, significant figures, problems 1.3 Measuring instruments: Vernier caliper, micrometer, screw gauge, spherometer, thermometer, galvanometer, voltmeter, ammeter with least count and range, errors in them and correction to it.	08	10
2	**Properties of matter**	2.1 Elasticity Deformation, restoring force, stress, strain, Hooke's law, Moduli of elasticity (Young, bulk and rigidity), relation between them, problems, stress-strain diagram for some materials (steel, aluminium, cast iron, concrete), breaking stress, factor of safety. 2.2 Viscosity Newton's law of viscosity, coefficient of viscosity, unit, streamline and turbulent flow, critical velocity, Reynold's number, problems, Stokes' law, determination of viscosity, factors affecting viscosity. 2.3 Surface tension Cohesive and adhesive forces, angle of contact, surface tension, capillary action, problems, factors affecting surface tension.	10	12
3	**Kinetics**	Newtons's laws of motion Momentum, impulse, impulsive force, Newton's laws of motion with equations and their applications, problems, pulleys, motion of lift.	4	6

4	**Electricity and Electromagnetism**	Coulomb's Law, Electric Field, Intensity of Electric field and Electric Potential, Capacitance, capacitors in series and parallel . Ohm's law, resistance, conductance, resistivity, conductivity, series and parallel combination of resistors, problems, Wheatstone's bridge, meter bridge, potentiometer, comparison of emf of cells, internal resistance of cell, heating effect of electric current	10	12

Section II

5	**Optics**	5.1 Wave theory of light Huygen's theory, wavefronts, wavenormals, laws of reflection and refraction, total internal reflection, dispersion, angle of deviation, problems 5.2 Interference and diffraction Principle of superposition, constructive and destructive interference, conditions to obtain steady interference pattern, Young's double slit experiment, diffraction, single slit and many slits diffraction, grating, applications, problems. 5.3 Polarization Polarized and unpolarized light, qualitative treatment of polarizer and analyzer, polarimeter, applications	10	12
6	**Sound**	Transverse and Longitudinal waves, Velocity of sound, Newton's formula.	3	5
7	**Gas laws and specific heats**	Boyle's law, Charle's law, Gay-Lussac's law, Kelvin scales of temperature, general gas equation, universal gas constant, N. T. P., principle specific heats and relation between them, problems.	5	6
8	**Modern Physics**	8.1 X-rays Production of x-rays, continuous and characteristic x-rays, properties and applications of x-rays, problems, Moseley's law and its importance. 8.2 Photoelectric effect Photoelectric effect, laws and characteristics of photoelectric effect, Einstein's photoelectric equation, problems, construction, working and applications of photocells	10	12

		8.3 Laser Spontaneous and stimulated emission, population inversion, pumping, lasing, properties and applications of laser, helium-neon laser and its applications, holography and its applications		
9	**Expansion, heat transmission and laws of thermodynamics**	Expansions of solids linear, aerial and cubical, relation between them, modes of transmission of heat, coefficient of thermal conductivity, good and bad conductors and applications.	4	5
		Total	**64**	**80**

Part II – Practicals

List of Laboratory experiments (10 experiments should be performed)

1. Use of vernier caliper and observations with traveling microscope
2. Use of micrometer screw gauge and observations with spectrometer
3. Determination of surface tension of liquid using capillary action
4. Determination of coefficient of viscosity using Stokes' method
6. To verify Ohm's law.
7. To find unknown resistance and series parallel combination of resistances using meter bridge.
8. To compare emfs of cells.
9. To determine internal resistance of cell using potentiometer.
10. To find refractive index of glass slab by Snell's Law

Learning Resources:-
Text Book:

Engineering Physics by Gaur R. K. and Gupta S. L., Dhanpat Rai Publications, New Delhi, Eighth Edition, 2001., Physics Text Book of 11th & 12th std.(NCERT)

References:-

1. Fundamentals of Physics Extended, By Halliday D., Resnik R. and Walker, Wiley – India, New Delhi, Eighth Edition, 2008.
2. Physics for scientists and Engineers by Serway R. A. and Jewett, Jr. J. W., Thomson Learning (Indian reprint), New Delhi, Sixth Edition, 2007.

Course Name : Diploma in Textile Manufactures
Course Code : DTM
Semester : Second
Subject Title : Communication Skills II
Subject Code : 136HM23Q

Teaching scheme and Examination scheme:

Teaching Scheme			Paper Hours	Examination Scheme											Total Marks
L	T	P		Theory		Test	Total		Practical		Oral		Termwork		
				Max	Min		Max	Min	Max	Min	Max	Min	Max	Min	
3	2	-	3	80	32	20	100	40	-	-	-	-	25	10	125

Rationale:

The main objective of this subject is to enable students to develop effective communication skills. The basic concepts of oral, written and nonverbal communication will train them to become efficient and effective speakers. The study of Body Language will enable them to comprehend the effective use of gestures and posture. The students have been exposed to the Language Skills pertaining to English and principles of written communication will enhance their confidence and make them well versed in technical writing skills. In order to give students a proper exposure to good writing, a text book containing selected passages is introduced. Some inspirational stories and quotes will widen their horizons of knowledge and will also guide them to use these quotes in appropriate context.

Effective communication skills through enhanced language learning can motivate students to prosper in different spheres of life. The innovative learning strategies will enable students to improve their pronunciation, diction and become confident speakers. The listening skills will help them to comprehend the content and enhance their analytical skills. The development of speaking skills will improve their power of expression and instill assertiveness and confidence within them. Students will also become proficient in their conversational skills by learning correct usage of words and developing neutral accent. This will prepare them for larger responsibilities in their professional field where communication is a part and parcel of life. Eloquent speech, effective presentation and perfect articulation of ideas can leave a lasting impression and make one successful in personal and professional life.

Objectives:

1. To facilitate learner friendly atmosphere and train students to eliminate stage fear and fear of foreign language through active participation in activities
2. To train students to focus, absorb, comprehend and reproduce the key concepts
3. To acquire neutral accent and communicate fluently and confidently without the influence of mother tongue.
4. To understand and use the basic concepts of communication and speak and write effectively.
5. Instill self-confidence and presence of mind through impromptu activities.
6. Drafting effective letters in the proper format.
7. Develop scientific curiosity in students through topics like scientific queries and the universe and to develop in them scientific bent of mind.

LEARNING STRUCTURE

Application:

Enabling students to become eloquent speakers and efficient listeners through enhanced communication learning. Using appropriate oral, written and non-verbal skills.

Procedure:
1. Technique of providing responses to short and long questions
2. Principles governing the appropriate use of non verbal and oral skills
3. Technique of effective listening , speaking and comprehension .

Principles:
1. Principles of comprehending the basic of communication
2. Principles of appropriation and contextualization of the use of body language
3. Principles of drafting coherent, logical and simple sentences

Concepts:
1. Concept of spoken, written and non-verbal types of communication
2. Concept of Body Language and spoken communication through presentations
3. Formats of letters, reports and technical descriptions.

Facts:
1. Theory of communication skills
2. Theory of Body Language
3. Formats of letters: official letters pertaining to day- to -day situations and campus related situations.

Syllabus

Part I – Theory

Section I

Sr No	Topic	Contents	Hours	Marks
1		Communication Skills-II (TEXT) compiled by Mrs. R. Thomas (5 chapters giving exposure to good English and 5 topics related to Communication-process , types , body language and barriers) Chapters (5x 3 hrs) Success stories to motivate students and character building to inculcate work ethics and values Composition Communication(Each unit 1 hour) Definition, Communication Cycle/process	 15 3 6	25
		The elements of communication: Definition of communication process Stages in the process: defining the context, knowing the audience, designing the messages, encoding, selecting proper channels, transmitting, receiving, decoding and feedback Introduction to effective oral communication .Communication Barriers and how to overcome them, knowing the audience, structuring the messages, selecting proper channels, minimizing barriers and facilitating feedback		 7 8

Section II

Sr No	Topic	Contents	Hours	Marks
2		Reporting skills Converting a conversation into a narration Correcting grammatical errors in the given passage Active and passive voice	11	15
3		Narration and Summarization Explaining proverbs in one's own words Preparing a précis	6	10
4		Technical Writing Description of objects Description of process	7	15
		Total	**48**	**80**

Term work: Testing students' receptive and reading skills

Assignments:

1. Listening comprehension (2 hours)
2. Conversation sessions-enacting from newspaper report (4hrs)
3. Barriers that hinder a particular communication situation(1 hr)
4. Developing a story based on a proverb/ spin a yarn-(2hrs)
5. Speech sessions(3 hrs)
6. Description of objects and process (4 hrs)
7. Reading sessions –(2 hrs)
8. Conversational Skills: Role Plays (6 hrs)
9. Students are going to perform the role on any 6 situations, given by the teacher.
10. Dialogue writing for the given situations. (2 hrs-2 assignments
11. Newspaper Report Writing (6 hrs- 2 assignments)
12. Write any two events from the newspaper as it is.
13. Write any two events on the given situations by the teacher.

Skills to be developed:

Intellectual Skills:

1. Skills of Speaking in correct English
2. Compiling information and summarizing
3. Understanding the barriers in communication

Motor Skills:

1. Use of appropriate body language
2. Use of appropriate medium for communication
3. Assessing audience

Listening Skills:

Skills of listening and Comprehension

Learning Resources:

Text Book:

1. Communication Skills II- Compiled by Mrs. Thomas , H&M Dept

Books for reference:

1.Communication Skills for Engineers, Sunita Mishra and Muralikrishna , Pearson, New Delhi,First edition,2006
2. Technical Communication, Raman Meenakshi, OUP, India, Second impression,2004
3. Cliffs TOEFL, Pyle Michael,BPB publications,First edition,1992
4. Developing Communication Skills, Mohan Krushan, Banerji Meera, Macmillan, India, First Edition,, 2000
5. Communication Skills, Bhattacharya Joyeeta, Reliable Skills, Mumbai,First Edition, 2003
6. Eveyones Guide to Effective Writing, Jayakaran, Apple Publishing,First edition,2001.

Course Name : Diploma in Textile Manufactures
Course Code : DTM
Semester : Second
Subject Title : Engineering Mechanics
Subject Code : 136ST24

Teaching scheme and Examination scheme:

Teaching Scheme			Paper Hours	Examination Scheme											Total Marks
L	T	P		Theory		Test	Total		Practical		Oral		Termwork		
				Max	Min		Max	Min	Max	Min	Max	Min	Max	Min	
3	-	2	3	80	32	20	100	40	-	-	-	-	25	10	125

Rationale:

The This course in Applied Mechanics is designed to cover the applications of the principles of mechanics of engineering in general. This deals with static forces on the structures and bodies in motion and principles of equilibrium. The laboratory work covered under this course will provide suitable learning experiences to develop the desired abilities, skills and attitude to analyze and solve the problems encountered in Engineering.

Objectives:

Students will be able to

1. Resolve the forces.
2. Find the resultant of given force system.
3. Find the reactions of beam.
4. Find the center of gravity of composite solids.
5. Find M.A, V, R efficiency and establish Law of Machine.

Syllabus

Part I – Theory

Section I

Sr No	Topic	Contents	Hours	Marks
A	**Statics**			
1	**Fundamental concepts**	Statics, Dynamics, Kinematics, Kinetics, Concept of force system of forces: Co-planar Concurrent, parallel, Principle of transmissibility of a force.	2	3
2	**Resolution and Composition of forces**	Resolution of a force, concept of a moment of a force, laws of moments and couples, Composition of co-planar, concurrent, non-concurrent, parallel forces, Resultant of a general system of co-planer forces	7	3
3	**Equilibrium**	Definition, Relation between resultant & equilibrant, condition of equilibrium, Types of support-conditions, roller, hinge & fixed. Free body diagram, simply supported & over hanging beams	7	9

4	**Plane Truss**	Forces in the members of plane truss using method of sections, Center of gravity and centroid: Definition centroid of regular plane area and their combinations, Center of gravity of simple solids: Cube, Cylinder, Prism, Sphere, Cone and their combination	8	15

Section II

5	**Graphic Statics**	Representation of a force, Bow's Notation, Space Diagram, Force diagram, Funicular polygon, Condition of equilibrium, Reaction of beams subjected to uniformly distributed and concentrated loads, forces in members of a truss, centroid of a plane area.	5	7
6	**Friction**	Laws of friction, terms used: Co-efficient of friction, angle of friction, repose, equilibrium of bodies on level and inclined planes.	5	7
B	**Kinematics:**			
7	**Projectile**	Review of rectilinear motion, Motion of projectile, Time of flight, Maximum height and horizontal range, relation between angle of projection and range, maximum horizontal range.	3	7
8	**Angular Motion**	Definition, Angular displacement, Angular velocity, Angular acceleration, Tangential and Radial components equations of circular motion, Relation between rectilinear and circular motion super elevation.	4	6
C)	**Kinetics**			
9	**Work, Power and Energy**	Definition of terms, form of energy, law of conservation of energy, Relation between force, mass & acceleration and its application.	3	6
10	**Simple Mechanics**	Definition of terms used: mechanical advantage, velocity ratio, efficiency, friction in the machine , law of machine, conditions of the reversibility, study of simple machines : simple screw jack, axle and wheel, differential axle and wheel, worm and worm wheel, single purchase crab.	4	7
		Total	**48**	**80**

Term Work:

Sr.No.	Name of Experiments	Hours
A	**Note- Two half-imperial size drawing sheets in the graphic static with minimum five problems out of the following:**	
1	Resultant of concurrent forces.	
2	Resultant of parallel forces	

3	Resultant of non-concurrent, non-parallel forces.	
4	Reactions of a simply supported beam.	
5	Equilibrium of bodies.	
6	Forces in members of truss.	
7	Centroids of plane areas	
B	**Laboratory journal containing minimum five experiments out of the following:**	
1	Law of polygon of forces	
2	Forces in members of a roof truss.	
3	Forces in jib crane.	
4	Simple screw jack.	
5	Single purchase crab.	
6	Worm and worm wheel.	
7	Differential axle and wheel	
	Total	**32**

Text Books:

Sr. No.	Title of Book	Author	Edition & Publication
1.	Applied mechanics	S. B. Junnarkar	th 17 ,Revised Edition 2010, Charotar Publishing House Pvt. Ltd. 17th

Reference Books:

Sr. No.	Title of Book	Author	Edition & Publication
1.	Fundamentals of Applied Mechanics	Dadhe, jamdar and Walawalkar	2006,Sarita prakashan

Course Name : **Diploma in Textile Manufactures**
Course Code : **DTM**
Semester : **Second**
Subject Title : **Spinning and Weaving preparatory processes**
Subject Code : **136TM25**

Teaching and Examination Scheme:

Teaching Scheme			Paper Hours	Examination Scheme											Total Marks
L	T	P		Theory		Test	Total		Practical		Oral		Termwork		
				Max	Min		Max	Min	Max	Min	Max	Min	Max	Min	
4	-	3	3	80	32	20	100	40	-	-	-	-	25	10	125

Rationale:
The subject is introduced to familiarize the students to the basics of spinning. The subject covers detailed study of the important processing machines involved in Ginning and Blow- room. It also covers the calculations related to these topics. Study of the yarn numbering system. Production and other calculations in blowroom.
It includes the basics of wool, silk and jute procurement and the spinning flowchart. The workshop gives the students a practical experience in the field of spinning. Introduction to the yarn manufacturing machinery- Blowroom and Card, and the calculations related to them are covered. The subject is designed to give the basic information about winding, warping, weft winding machines.

Objectives:
Students must be able to,
1) Identify the various output and input materials in Spinning.
2) Learning the first process in spinning i.e extraction and cleaning of the raw material.
3) Learn the construction and working of the various blowroom machines.
4) Compare the extraction and the cleaning processes for fibres other than cotton i.e wool, silk and jute.
5) Calculate the production and other calculation related to the performance of blowroom and card.
6) Learning the pre-weaving or preparatory processes like winding and warping and pirn winding.

Syllabus

Part I – Theory

Section I

Sr No	Topic	Contents	Hours	Marks
1	**Introduction to Spinning and Raw material procurement**	1.1 Introduction to the picking of cotton, ginning- the ginning machines and baling. Manual and mechanical picking, their construction and advantages and disadvantages.	10	12
		Humidity conditions for shart and long staple cottons. Ginning machines like saw gin and McCarthy gin. 1.2 Basic introduction to the wool processing. Impurities in wool and the process of wool cleaning. Introduction to the process of procuring silk fibre and jute retting.		

2	**Raw material Opening & Cleaning with detailed study of the machines involved**	2.1 Introduction to Blowroom: The contamination of cotton. Acclimatization of the raw material. The various concepts inopening and cleaning. Study of some conventional beaters like two and three bladed beaters, Kirschner beaters and their comparison with the modern beaters. Comparison of Modern and Conventional Blowroom lines. 2.2 Detail study of Modern Automatic bale openers and the conventional methods of bale opening. Study of Step cleaner, Axi-flow, Unimix, Uniflex, Cleanomat, and Dedusting machine-Dustex. Study of the chute feed system of transport of material to card. Study of the conventional scutcher and its comparison with the modern system of transport. Study of metal extractors, fire eliminators, waste disposal, humidification and temperature.	11	14
3	**Yarn numbering system and Blowroom Calculations**	3.1 Direct and Indirect systems like Tex, English Count, Denier, Woolen and Worsted. Calculations based on the above systems and their conversions from one system to another. 3.2 Concepts and calculations related to the performance and production of the blowroom. Cleaning efficiency and calculations of the beater beats per inch.	11	14

Section II

4	**Winding**	4.1Introduction to winding, Object of winding, Cross wound and parallel wound packages and their characteristics. Package drive and traverse motion, Close and Open wound packages, Density of the package, Soft and hard wound packages, Random and precision winding,	14	16

		4.2 Different types of tensioning devices used on winding machine. 4.3 Types of yarn guides used on winding machines 4.4 Mechanical and Electrical yarn clearing devices. 4.5Introduction to Knotter and Splicer, Types of package faults. 4.6 Introduction to automatic and modern winding machines. Features of Beninnger, Autoconer 138, 238, 338, Muratek etc. 4.7 Calculations related to production, efficiency, winding speed, traverse speed, angle of wind, coil angle etc. 4.8Preparation for winding package for dyeing.		
5	**Pirn winding**	5.1Objects, Introduction to automatic pirn winding machine. 5.2 Passage of material through the pirn winding machine 5.3 Features of ordinary and automatic pirn winding machines, Factors affecting build of a pirn.Direct and rewound weft. Advantages of direct and rewound weft. 5.4 Calculations related to production, efficiency of pirn winding .	4	8
6	**Warping**	6.1 Objectives of warping, Classification of warping machine and their study, Different types of creel. 6.2 Study of beam warping machine. Study of sectional warping machine, Section preparation. 6.3 Calculation related to section, section leasing, section winding, beaming. Difference between Beam Warping and Sectional Warping machine.	14	16

		Features of modern beam warping & sectional warping machine, 6.4 Calculations required for warping, speed calculation, measuring and stop motion calculation. Hard waste control, beam defects, Tension control. Calculation related to the density of the beam.		
		Total	**64**	**80**

Part II: - Practicals

List of laboratory experiments:

1 Study of laboratory model of ginning machines.
2 A General study of hopper bale breaker B Study of hopper feeder
3 Study of different beaters in blow room
4 Study of feed regulating mechanism
5 Study of the scutcher and the knocking off motion, full length stop motion & the Weighting system.
6 Study of Franz Muller and Mettler winding machines.
7 Study of Sectional warping.
8 Calculations of winding speed of Franz Muller and Mettler.

Learning Resources:

Text Book:

1. The Technology of Short staple spinning, Vol. 1 by Werner Klein, Published by The Textile Institute, First Edition-1987
2. A practical guide to Blowroom and Carding-Volume 2, by Werner Klein, Published by- The Textile Institute, First Edition 1987.
3. Spun yarn technology, by Eric Oxtoby, Published by Butterworths and Co (Publishers) Ltd, First edition 1987.
4. Winding, Warping- Dr. M K Talukdar

References:

1. Manual of Cotton spinning, The Characteristics of Raw Cotton, The Textile Institute, Volume I by Coulson.
2. Manual of Cotton spinning, The Characteristics of Raw Cotton, The Textile Institute, Volume II Part I by E Lord.
3. Elements of raw cotton and blowroom, by Dr A R Khare, Published by Sai Book Centre, Mumbai, First Publication 1999, Re-print 2007.
4. Elements of carding and drawframe, by Dr A R Khare, Published by Sai Book Centre, Mumbai, First Publication 1999.

Course Name : **Diploma in Textile Manufactures**
Course Code : **DTM**
Semester : **Second**
Subject Title : **Computer Fundamentals**
Subject Code : **136TM26**

Teaching and Examination Scheme:

Teaching Scheme			Paper Hours	Examination Scheme											Total Marks
L	T	P		Theory		Test	Total		Practical		Oral		Termwork		
				Max	Min		Max	Min	Max	Min	Max	Min	Max	Min	
-	-	2	-	-	-	-	-	-	-	-	-	-	25	10	25

Rationale:

The Computer Application subject aims at basic understanding of information technology and the knowledge of Computer is essential to deal with the global situation. The Application Software e.g. MS Word & Power Point will equip students for communication and presentation.

The power of Computer in day to days' information processing can be experienced by using by application software such as Excel and Access. Excel is the calculating tool for general purpose as well as scientific work. Access a data base is a powerful tool to store the huge amount of information and retrieve the desired information.

Syllabus

Sr No	Topic	Contents	Hours
1	**Operating system**	Windows desktop, start menu, drives, folders, my computer, Control panel, types of files like data files, image files, audio files and their extensions	04
2	**Word processing**	Various commands like cut, copy and paste, Creating a document, Editing a document, PDF files, Acrobat Reader and Adobe page maker System utilities like win zip and ant virus programs	06
3	**Spread-sheets**	MS Excel, Concept of worksheets, graphs, Mathematical and other functions	04
4	**Presentation Software**	MS Power Point – basic concepts, slide shows animation effects and background	06
5	**Data Based Management**	Ms Access, Creating data based objects like table, forms, queries and reports	04
6	**Basic of C program**	Simple C program with basic input, output statements, use of if, while and for statement	08
		Total	**32**

References-

1. Computer fundamentals by Dr.V. Rajaram
2. User's Manuals for DOS, Windows, Unix / Linux.

3. C programming by Dr. Balaguruswami