

Course Name : Diploma in Civil Engineering
Semester : Third
Subject Title : Mathematics III
Subject Code : DTMA2101

Teaching & examination Scheme

Teaching Scheme			Paper Hours	Examination Scheme										Total Marks	
L	T	P		Theory		Test	Total		Pract		Oral		Termwork		
				Max	Min		Max	Min	Max	Min	Max	Min	Max		Min
3	1	-	3	100	35	25	125	50	-	-	-	-	25	10	150

Objective:

1. To make students well versed in various methods of integration for solving problems.
2. To expose students to techniques of solving differential equations.

Syllabus

Sr. No.	Contents	L	M
1	Integration 1.1 Definition of integration. Integration of standard functions. 1.2 Theorems of integration. 1.3 Methods of Integration 1.3.1 Integration by substitution 1.3.2 Integration by partial fractions. 1.3.3 Integration by parts. 1.4 Definite Integration 1.4.1 Definition of definite integral. 1.4.2 Properties of definite integral with simple problems.	19	40
	1.5 Applications of definite integrals 1.5.1 Area under curve. Area bounded by two curves. 1.5.2 Volume of solid of revolution.	06	10
2	Differential Equations: 2.1 Order and degree of the differential equation. 2.2 Formation of differential equations. 2.3 Solution of differential equation of first order, first degree. 2.3.1 Variable separable method. 2.3.2 Reducible to variable separable method.	12	25

	2.3.3 Homogeneous differential equation. 2.3.4 Exact differential equation. 2.3.5 Introduction of integrating factor. 2.3.6 Linear differential equation. 2.3.7 Bernoulli's differential equation.		
	2.4 Solution of Linear differential equations of higher order with constant coefficients. 2.4.1 Complementary function 2.4.2 Particular integral of e^{ax} , $\sin ax$, $\cos ax$, x^n , ve^{ax} , xv 2.5 Applications of differential equation.	11	25
	Total	48	100

TEXT BOOKS :

- 1) Applied Mathematics - B.M.Patel, J.M.Rawal and others - Nirali Prakashan, July-2010
- 2) Mathematics for Polytechnic - S. P. Deshpande- Pune Vidyarthi Griha Prakashan, first edition-Aug.2005

REFERENCE BOOKS:

- 1) Applied Mathematics – II by G.V. Kumbhojkar - C. Jamnadas & Co. second edition – 2010-11)
- 2) Higher Engineering Mathematics - B.S.Grewal - Khanna Publication, 1995.

Course Name : Diploma in Civil Engineering
Semester : Third
Subject Title : Building Construction
Subject Code : DTCE2102

Teaching & Examination Scheme

Teaching Scheme			Paper Hours	Examination Scheme											Total Marks
L	T	P		Theory		Test	Total		Pract		Oral		Termwork		
				Max	Min		Max	Min	Max	Min	Max	Min	Max	Min	
4	2	-	3	100	35	25	125	50	-	-	-	-	25	10	150

Objective: At the end of this course students will be able to

- Identify various components of buildings and their functions.
- Know the procedure for execution of various constructions activities
- Prepare checklist of operations for supervision of various construction activities
- Identify & suggest rectification the various defects in civil engineering works.

Syllabus

Part I- Theory

Sr. No.	Contents	L	M
1	Building as Structure: 1.1 Definition as per IS 1256-1958 1.2 Component of structure: Substructure (Foundation, Plinth & DPC) and Superstructure (Wall, Peirs, Floor, Lintel, Sill, Opening in Walls, Chajjas, Ceiling, Beams, Roof, Staircase, Wall finishes) neat sketch, its functions and requirement. 1.3 Load Bearing structure and framed structure. Comparison, Materials to be recommended for framed structure.	5	8
2	Foundation: 2.1 Definition, Function and essential requirement of good foundation, Types of foundation. Shallow and Deep	10	15

	<p>Foundation. Depth & size of foundation. Definition of Different Bearing Capacity of soil. Most common foundations, their suitability and requirement and neat sketches of Spread footing(Wall footing and isolated footing), Combined footing (Inverted arch footing & Continuous footing), Strap footing, Grillage foundation, Mat or Raft footing , Under reamed pile foundation.</p> <p>2.2 Plinth: Definition.</p> <p>2.3 DPC: Definition, Causes, effects, material used treatment to wall and basement</p>		
3	<p>Masonry: Stone and Brick masonry : Definition and its different types</p> <p>3.1 Definition of different terms used in masonry.</p> <p>3.2 Principles of masonry construction</p> <p>3.3 Aggregate: Classification, characteristics , uses</p> <p>3.4 Stone: Engineering properties and their selection, uses and tests Classification of stone masonry, Uncoursed and coursed Rubble masonry.</p> <p>3.5 Dressing of stones, Supervision of stone masonry construction</p> <p>3.6 Bricks: Characteristics of different classes of bricks. Common defects in brick. Surkhi, Classification on the basis of materials. Proportion of burnt clay brick, Special brick, hollow brick, Fly ash brick.</p> <p>3.7 Rules for bonds in brick work, Different types of bond, Stretcher, Header, English and Flemish bond. Laying of Brick</p> <p>3.8 Supervision of brick masonry construction, tools & plants used. Purpose of Cavity wall construction. Comparison of Stone and brick masonry.</p>	12	20
4	<p>Finishes: Plastering , Pointing and Painting :</p> <p>4.1 Plastering: Definition, Object & requirement of good plaster. Types of mortar for plastering, Lime: Classification of lime, Slaking of lime, setting, uses.</p> <p>4.2 Different terminologies used in plastering work.</p> <p>4.3 Tools for plastering, number of coats of plaster.</p> <p>4.4 Methods of cement plastering Types of plaster finishes, defects in plastering, special materials used in plastering.</p> <p>4.5 Pointing : Definition, mortar used in pointing, preparation of surface, methods of pointing & types of pointing</p> <p>4.6 Painting: Definition, characteristics of an ideal paint, Constituents of paint, Classification and types of paint, Defects in painting. Surface preparation, selection of suitable painting material, Distemper and Distempering, Color washing, white washing and varnishes.</p>	10	15
5	<p>Doors and Windows, Lintels:</p> <p>5.1 Definition of technical terms, location of doors and windows, size and type of doors panelled doors, battened doors, flush doors, collapsible doors, rolling</p>	8	12

	<p>shutters, Revolving doors, Glazed doors. Sizes of door.</p> <p>5.2 Types of windows fully panelled, partly panelled & glazed, glazed wooden, steel, Aluminum windows, sliding windows, louvered window, ventilators, cement grills.</p> <p>5.3 Protective treatment for doors and windows, fixtures and fastenings for doors and window.</p> <p>5.4 Lintels: Definition, types and load on lintel.</p>		
6	<p>Floors and Roof :</p> <p>6.1 Floors: Definition, Types of floor brick flooring, Cement concrete flooring, Mosaic flooring, Rubber flooring., floor finishes and suitability</p> <p>6.2 Roof : Definition, Different technical terms Requirement of ideal roof, Classification of roof, Pitched roof (Lean to roof, King post truss, Queen post truss),Types of Flat roof (RCC roof), Selection of roof covering.</p>	8	15
7	<p>Stairs :</p> <p>7.1 Terms used, Classification of stairs, Stairs of different materials, specifications and suitability</p> <p>7.2 Design of dog legged staircase.</p>	4	5
8	<p>Non Conventional materials and low cost housing materials :</p> <p>8.1 Non Conventional materials: Fly ash, plastics, fiberglass etc. Corrugated sheets, prefabricated brick panel, mud mortar. Ecofriendly materials. Types of timber to be recommended for structural component, Plywood, Particle board, Veneer, Sun mica, Foremica.</p> <p>8.2 Low cost housing materials: Bamboo, clay waste from granite industry, hollow concrete blocks.</p>	7	10
	Total	64	100

Part II-Tutorials

Sr. No	List of Exercises
A	Making of quarter imperial sheet of at least 20 sketches
1	Building Components
2	Shallow foundation <ul style="list-style-type: none"> i) Rectangle Combined footing and Trapezoidal footing ii) Spread footing for column iii) Strap footing iv) Types of Raft foundation v) Grillage rectangular footing
3	Deep foundation <ul style="list-style-type: none"> i) Under reamed Pile foundation ii) Precast Concrete pile
4	Brick masonry <ul style="list-style-type: none"> i) Elevation of Brick wall

- ii) Plan showing alternate courses of brick walls in different thickness as 1BT, 1 ½ BT, 2 BT in English bond
- iii) Plan showing alternate courses of brick walls in different thickness as 1BT, 1 ½ BT, 2 BT in Single and Double Flemish bond iv)
- Brick laying tools
- Stone masonry
- v) Elevation of different types of random and square rubble masonry vi)
- Hammers used for stone dressing
- 5 Plan, elevation and sectional elevation of any four types of Doors and Windows
- 6 i) King Post Roof Truss with purlins and common rafter ii) Queen Post Roof truss
- iii) Couple roof & Lean to roof
- 7 i) Dog legged stair case with quarter space landing and mid landing ii) Continuous stairs
- iii) Bifurcated stairs
- B. Laying and constructing the process of construction of brickwork and report writing of the process
- C. Observing the process of painting in residential / public building and writing a report with reference to process and type of paint selected.
- D. Observing and writing report of the process of water proofing of terrace or basement
- E. Observing and writing report of the process of plastering.

Termwork: Students shall submit journal and quarter imperial drawing sheets 20 in number for above tutorial exercises.

Learning Resources:

Text Books:

1. Building Construction by Sushil Kumar Standard Publication, Edition 19th 1997
2. Building Construction by B. C. Punmia Laxmi Publication, Edition 10th 2009

Reference Books:

1. Building Construction by S. C. Rangawala Charotar Publication, Edition 25th 2007
2. Building Construction by S. P. Arora and Bindra Dhanpat Rai Publication Edition 4th 1988
3. Civil Engineering Materials by Technical Teachers Training Institute, Chandigarh Tata McGraw-Hill Publishing Company Ltd. New Delhi Edition 1st 1992

Course Name : Diploma in Civil Engineering
Semester : Third
Subject Title : Building Design & Drawing
Subject Code : DTCE2103

Teaching & Examination Scheme

Teaching Scheme			Paper Hours	Examination Scheme										Total Marks	
L	T	P		Theory		Test	Total		Pract		Oral		Termwork		
				Max	Min		Max	Min	Max	Min	Max	Min	Max		Min
1	-	4	-	-	-	-	-	75	30	-	-	75	30	150	

Objective: At the end of this course students will be able to Read,

- interpret and draw the building drawings. Prepare
- submission drawings for the buildings. Prepare
- working drawings for the building.
- Plan various types of buildings considering the functional requirements. Apply
- the building rules, regulations and byelaws.

Syllabus

Part I –Theory

Sr. No.	Contents	L
1.	Conventions : Types of Lines- Revision of different types of lines. Symbols- Symbols of different materials used in construction, building components. Reading of working drawings of residential buildings.	3
2.	Planning Of Building : Principles of planning of Residential and Public building. (Load bearing and RCC framed structures) Space requirements and norms for various units of Residential and Public building. Rules and byelaws of local governing authorities for construction. e.g. Building line, open spaces, FSI, Headroom, min room dimensions etc.	7

	Drawing of line plans for residential building.	
3.	Types of Drawing : Development of line plan, Elevation, Section, Site Plan, Location Plan, Foundation Plan, Area statement and other details. Measured Drawing and its significance. Submission drawing and working Drawing.	6
	Total	16

List of Practicals

- 1) Students shall read and interpret the building drawings prepared professionally of already built structures. (at least two)
- 2) Students shall draw symbols of materials, doors and windows etc. used in construction on Full Imperial size drawing sheet.
- 3) Students shall draw Measured Drawing of an existing residential building(Load bearing/ Framed structure Type), showing Plan, Elevation, Sections, Construction notes, Schedule of doors and windows, area statement etc on Full Imperial size drawing sheet.
- 4) Students shall draw the line plans of following building on full imperial size **graph paper**.
 - a) Bungalow- Load Bearing Structure
 - b) Apartment- Framed Structure (G+2)
- 5) Students shall select approved above plans (two in no.) for developing and preparing detailed drawings (two in no.) One of each shall contain following
 - Ground Floor Plan.
 - First Floor Plan
 - Elevation
 - Section
 - Site Plan
 - Door & Window Schedule.
- 6) Students shall select any one of the above building either load bearing or R.C.C. Framed structure and draw following views :
 - Foundation plan.
 - Roof plan.
 - Section of staircase planned.
 - Section through W / C and bathroom. Details of
 - any one typical door and window.

Termwork: Students shall submit drawing sheets for above practicals.

Learning Resources:

Text Books:

1. Text Book of Building Drawing by Shah, Kale, Patki ,Publisher Tata McGraw- Hill, Edition 4th, 2008

Reference Books:

Civil Engineering Drawing by S.V.Deodhar.Vrinda Publications,3rd Revised Edition.1997

Subject Title : Surveying

Subject Code : DTCE2104

Teaching & Examination Scheme

Teaching Scheme			Paper Hours	Examination Scheme										Total Marks	
L	T	P		Theory		Test	Total		Pract		Oral		Termwork		
				Max	Min		Max	Min	Max	Min	Max	Min	Max		Min
3	-	4	03	100	35	25	125	50	50	20	-	-	25	10	200

Objective:

Students will be able to:

1. Use the survey instruments.
2. Take linear and Angular measurements.
3. Prepare layouts and maps.
4. Use Theodolite and Plane table.
5. Compute area and volume

Syllabus

Part I Theory:

Sr. No.	Contents	L	M
1	Introduction to Survey : Definition , Classification , General principles of surveying, Different types of scales, various types of venires, micrometers on surveying instruments, Chain surveying ,conventional symbol, instruments required for linear measurement, minor instruments for setting out right angle, Obstacles in chaining and ranging	04	06
2	Compass Traversing: Introduction and purpose, methods of traversing, meridians, bearings, Designation of bearing, Magnetic declination, computation of included angles, Types of compass- Prismatic and Surveyor's compass, Local attraction , closing error and its elimination by Bowditch's rule, Sources of error in compass, precautions of compass survey	08	16
3	Plane table surveying: Definitions, uses and advantages, temporary adjustments,	04	12

	Different methods of plane table surveying, Two point problem Errors in plane table survey, use of telescopic alidade		
4	Levelling and Contouring: Definitions, Different types of levels- Dumpy level, Tilting level, Auto level, Self reading and target leveling staff, Temporary and permanent adjustments of dumpy level, Recording and reduction of observations. Methods of leveling, Curvature and refraction correction. Contour – definitions, contour interval, equivalent, uses and characteristics of contour lines, direct and indirect methods of contouring.	12	24
5	Theodolite Traversing : Theodolite- Types of Theodolite, Components of transit Theodolite and their functions, Temporary and permanent adjustments of transit theodolite, various uses of transit theodolite, measurement of horizontal and vertical angle, prolongation of a straight line, ranging a line, laying off an angle, measurement of deflection angle. Theodolite traverse – Traverse computation by Gale’s traverse table, consecutive co- ordinates, closing error, balancing the traverse by Bowditch’s rule and transit method, omitted measurement, independent co- ordinates. Trigonometrically leveling – Measurements of heights and distance.	16	30
6	Computation of area and volume : Computations of area – Area of an irregular figure by Trapezoidal rule, average ordinate rule, Simpson’s 1/3 rule, various co ordinate methods, Planimeter: types of planimeter including digital planimeter, area of zero circle. Computations of volume- by trapezoidal and prismoidal formula, volume from spot level	04	12
	Total	48	100

Part II- Practicals

List of Practicals:

- 1 Study of various instruments used for linear measurement and minor instruments
- 2 Study of prismatic and surveyor’s compass, measurement of bearings, computation of included angles.
- 3 Plane table -Radiation, Intersection & Traversing
- 4 Study of dumpy, tilting and auto level
- 5 Differential leveling practice, reduction of level by HI and Rise and Fall method, Fly leveling.
- 6 Study of Theodolite – measurement of horizontal angle
- 7 Measurement of horizontal angle by method of repetition
- 8 Measurement of vertical angle.
- 9 Laying of an angle by method of repetition

- 10 Prolonging a straight line with the help of theodolite and Measurement of deflection angle.
- 11 Trigonometrically leveling- one plane method and two plane method
- 12 Use of Amslar polar planimeter for finding the area of irregular figures and certifying it by using Digital Planimeter

Project:

A Two days project on Theodolite traversing and plane table detailing

Term Work:

Term work shall consist of record of all practical and projects in field book and drawing of project work on full imperial drawing sheets.

Learning Resources:

Text Books

Surveying and Leveling by N.N.Basak, Publisher: Tata McGraw Hill 25th Edition 2008.

Reference Books:

Surveying and Leveling Vol. I, II by B. C. Punmia, Publisher: Laxmi Publication, 16th edition, 2005.

Course Name : Diploma in Civil Engineering
Semester : Third
Subject Title : Applied Mechanics
Subject Code : DTME2105

Teaching & Examination Scheme

Teaching Scheme			Paper Hours	Examination Scheme											Total Marks
L	T	P		Theory		Test	Total		Pract		Oral		Termwork		
				Max	Min		Max	Min	Max	Min	Max	Min	Max	Min	
3	-	2	3	100	35	25	125	50	-	-	-	-	25	10	150

Rationale: This course in Applied Mechanics is designed to cover the applications of the principles of mechanics of engineering in general and Civil engineering in particular. 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 Civil Engineering.

Objectives: Students will be able to

- Resolve the forces.
- Find the resultant of given force system.
- Find the reactions of beam.
- Find the center of quantity of composite solids.
- Find M.A, V, R efficiency and establish Law of Machine.

Sr. No.	Topic	L	M
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	4
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	12
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	12
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	7	12
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	6	10

	loads, forces in members of a truss, centroid of a plane area.		
6	Friction: Laws of friction, terms used: Co-efficient of friction, angle of friction, repose, equilibrium of bodies on level and inclined planes.	5	10
B)	Kinematics:		
1	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	10
2	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	8
C)	Kinetics		
1	Work, Power and Energy: Definition of terms, form of energy, law of conservation of energy, Relation between force, mass & acceleration and its application.	3	10
2	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	12
	Tutorial:- Examples based on the above syllabus covering the applications of the principles of mechanics in civil engineering field will be studied in tutorial classes.		
	Total	48	100

Sr.No.

List of Experiments

- Note** - Two half-imperial size drawing sheets in the graphic static with minimum five problems out of the following:
- A
- 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

Term Work- Students shall submit journal prepared on above experiments.

Learning Resources

Text Books

Applied Mechanics by S. B. Junnarkar Charotar Publishing House Pvt. Ltd. 17th, Revised Edition 2010,

Reference Books:

Fundamentals of Applied Mechanics by Dadhe, jamdar and Walawalkar Sarita Prakashan 2006,

Course Name : Diploma in Civil Engineering
Semester : Third
Subject Title : Concrete Technology
Subject Code : DTCE2106

Teaching & Examination Scheme

Teaching Scheme			Paper Hours	Examination Scheme											Total Marks
L	T	P		Theory		Test	Total		Pract		Oral		Termwork		
				Max	Min		Max	Min	Max	Min	Max	Min	Max	Min	
4	-	-	3	100	35	25	125	50	-	-	-	-	25	10	150

Objective:

Concrete is the most versatile material of construction, simple to make but most complex to understand. The cement and concrete industry is witnessing a very rapid development day to day and hence the aim of this course is to impart a professional / practical knowledge about advanced concrete technology by understanding concrete right from its chemistry, making, placing to testing of hardened concrete. At the end of the course, the students are expected to:

- ☐ Have an overall understanding of the behavior of concrete.
- ☐ Understand basic chemistry of Cement, Fly ash, Plasticizer, Retarder, etc.
- ☐ Hands on experience of designing concrete mix as per IS code guidelines.

The study will be supplemented by intensive tutorials, laboratory work, ensuring active participation of students.

Syllabus

Sr. No.	Content	L	M
01	Introduction:		15
a)	Definition of Concrete, Advantages of concrete	3	
b)	Cement, composition of cement, types of cement, tests on cement, setting time, fineness, strength of cement.	6	
c)	Aggregates, classification, strength of aggregate, bulking of sand, sieve analysis, Quarry selection ,Water Quality Requirements as per I.S 456-2000	7	
02	Properties of Concrete:		20
a)	Workability: Factors affecting Workability, Measurement of workability, slump test, compacting factor, Recommended slumps for placements in various conditions as per I.S 456-2000.	7	

b)	Bleeding of Concrete, Water Cement ratio, Shrinkage, Creep, Durability of Concrete	5	
c)	Test on Concrete: Compression Test, Cube test, Cylinder Test	5	
03	Mix design: Objectives of mix design, mean strength, Introduction to various grades as per I.S 456-2000, proportioning for normal mix as per I.S. methods.	8	15
04	Special types of concrete: Ready mix concrete, precast concrete, vacuum concrete, shotcrete, lightweight concrete, high performance concrete.	6	10
05	Admixtures as per I.S 456-2000: Chemical Admixtures such as Plasticizers, Retarders, Accelerators, Water Reducing admixtures	6	10
06	Mixing and Compaction of Concrete: Hand Mixing and Machine Mixing, Hand Compaction and Machine Compaction.	4	10
07	Curing of Concrete: Objectives and methods of Curing; Duration of curing and removal of formwork.	4	10
08	Defects in Concrete: Identification and methods of repairs	3	10
	Total	64	100

Term work

Students shall submit minimum 8 assignments based on the above syllabus.

Learning Resources

Text Books

Properties of Concrete by A.M. Neville Publisher John Wiley & Sons
4th Edition, 1996.

Reference Books

1. Cement Concrete Mix Design Principles and practice by M.Y. Sabnis, GMS Publications edition 2005
2. Concrete Technology by M.S. Shetty S.Chand Publication edition 2008,

Course Name : Diploma in Civil Engineering
Semester : Third
Subject Title : Development of Life Skills
Subject Code : DTHU2107

Teaching & Examination Scheme

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

Objective:

1. To train students in overcoming stage fright, to attain composure, to organize thought process and develop voice modulation and body language.
2. To develop students' interpersonal skills and leadership quality, to improve their listening and persuasive skills, and train them in the ways of identifying the source of information, collecting and planning .

Syllabus

Sr. No.	Topic	Hours
01	Oral Skills and Writing Skills <ul style="list-style-type: none"> • Elocution • Group Discussion • Presentations • Resume 	4 5 6 2

	<ul style="list-style-type: none"> • Summarization 	2
02	Managerial Skills <ul style="list-style-type: none"> • Interview Techniques Time • Management Manners & • Etiquette Body Language • Personality Development • Positive thinking • 	2 2 2 2 3 2
	Total	32
03	Practical <ol style="list-style-type: none"> 1. Students deliver a prepared speech. 2. Group discussions conducted in class 3. Group of 6-7 students make a power point presentation 4. Assignments on resume writing and summarization 5. Mock interviews in class 6. Role play by students. 	

Term Work- Students should submit term work file based on above topics.

Learning Resources

Text Book:

1. Business Communication- Raman Meenakshi, Oxford, India, 1st edition, 2008

Reference Books

1. Contemporary Management, Gupta C. B., APH, New Delhi, 1st edition, 1992
2. Organisational Behaviour, Sekaran Uma, Tata Mcgraw Hill, New Delhi, 2nd edition, 2008
3. Technical Communication, Raman Meenakshi, Sharma Sangeeta, OUP, India, 2nd impression, 2004

Course Name : Diploma in Civil Engineering
Semester : Third
Subject Title : Professional Practices - I
Subject Code : DLHU2108

Teaching & Examination Scheme

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

Objective: Students will be able to

- Acquire information from different sources.
- Prepare notes for given topic
- Present given topic in a seminar
- Interact with peers to share thoughts
- Prepare a report on industrial visit, expert lectures.

Sr. No.	Activity
1	Industrial Visits : Industrial visits be arranged and report of industrial visit should be submitted by the individual student to form part of the term work. Visits to any two of the following <ul style="list-style-type: none"> • Construction site for residential building • Architect / Structural design Office Road • construction site • Water Treatment Plant
2	Lectures by Professional / Industrial Expert : On any three following suggested areas Fire Hazards in High Rise Buildings Concrete Quality for Construction Pollution Control Topics related to Social Awareness- Traffic Control System, Communication in Industry, Health Awareness etc.
3	Group Discussion : The students should discuss in group of six to eight students and submit report

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	<p>in the term work. Topic for group discussion may be selected by the faculty members. Topics suggested are-</p> <ul style="list-style-type: none"> • Topics related to Civil Engineering. • Sports • Nature & environment related topics • Cultural topics
4	<p>Market Survey :</p> <p>A group of six to eight students is expected to collect the information regarding cost of items used in building construction such as floor tiles, paints, door- window panels, and plumbing accessories and submit a report as a term work.</p>
	Total

Term Work- Students shall submit report / term work file based on above topics.