

STATE BOARD OF TECHNICAL EDUCATION, JHARKHAND																	
TEACHING AND EXAMINATION SCHEME FOR POST S.S.C. DIPLOMA COURSES																	
COURSE NAME : DIPLOMA IN ARCHITECTURAL ASSISTANTSHIP																	
DURATION OF COURSE : SIX SEMESTERS										WITH EFFECT FROM 2011-12							
SEMESTER : SECOND										DURATION : 16 WEEKS							
FULL TIME / PART TIME : FULL TIME																	
SR. NO.	SUBJECT TITLE	Abbreviation	SUB CODE	TEACHING SCHEME			EXAMINATION SCHEME										SW (16002)
				TH	TU	PR	PAPER HRS.	TH (1)		PR (4)		OR (8)		TW (9)			
								Max	Min	Max	Min	Max	Min	Max	Min		
1	Communication Skills	CMS	12012	02	--	02	03	100	40	--	--	25 #	10	25@	10	50	
2	Building Construction	BCN	12368	02	--	04	03	100	40	--	--	--	--	25@	10		
3	Levelling	LLG	12369	02	--	02	02	50	20	50@	20	--	--	--	--		
5	Applied Mechanics	APM	12370	03	--	02	03	100	40	--	--	--	--	25@	10		
5	Architectural Drawing - II	ARD	12371	01	--	04	04	100	40	--	--	25@	10	--	--		
6	Architectural Graphics - II	ARG	12372	--	--	04	--	--	--	50#	20	--	--	25@	10		
7	Visual Drawing - II	VIG	12373	02	--	02	--	--	--	50@	20	--	--	--	--		
8	Development of Life Skills - I	DLS	12018	01	--	02	--	--	--	--	--	25@	10	--	--		
<b>TOTAL</b>				<b>13</b>	<b>--</b>	<b>22</b>	<b>--</b>	<b>450</b>	<b>--</b>	<b>150</b>	<b>--</b>	<b>75</b>	<b>--</b>	<b>100</b>	<b>--</b>	<b>50</b>	
Student Contact Hours Per Week: <b>35 Hrs.</b>																	
<b>THEORY AND PRACTICAL PERIODS OF 60 MINUTES EACH.</b>																	
Total Marks : <b>825</b>																	
@ Internal Assessment, # External Assessment, Ø – Common to All Conventional Diploma, #* Online Examination, <span style="background-color: gray; color: gray;">          </span> No Theory Examination.																	
Abbreviations: TH-Theory, TU- Tutorial, PR-Practical, OR-Oral, TW- Termwork, SW- Sessional Work																	
<ul style="list-style-type: none"> <li>➤ Conduct two class tests each of 25 marks for each theory subject. Sum of the total test marks of all subject are to be converted out of 50 marks as sessional work (SW).</li> <li>➤ Progressive evaluation is to be done by subject teacher as per the prevailing curriculum implementation and assessment norms</li> <li>➤ Code number for TH, PR, OR and TW are to be given as suffix 1, 4, 8, 9 respectively to the subject code.</li> </ul>																	

w.e.f. Academic Year 2011-12

**Course Name : All Branches of Diploma in Engineering & Technology**

**Semester : Second**

**Subject Title : Communication Skills**

**Subject Code : 12012**

**Teaching and examination scheme:**

Teaching Scheme			Examination Scheme					
TH	TU	PR	PAPER HRS	TH	PR	OR	TW	TOTAL
02	--	02	03	100	--	25#	25@	150

**NOTE:**

- Two tests each of 25 marks to be conducted as per the schedule given by SBTE.
- Total of tests marks for all theory subjects are to be converted out of 50 and to be entered in mark sheet under the head Sessional Work. (SW)

**Rationale:**

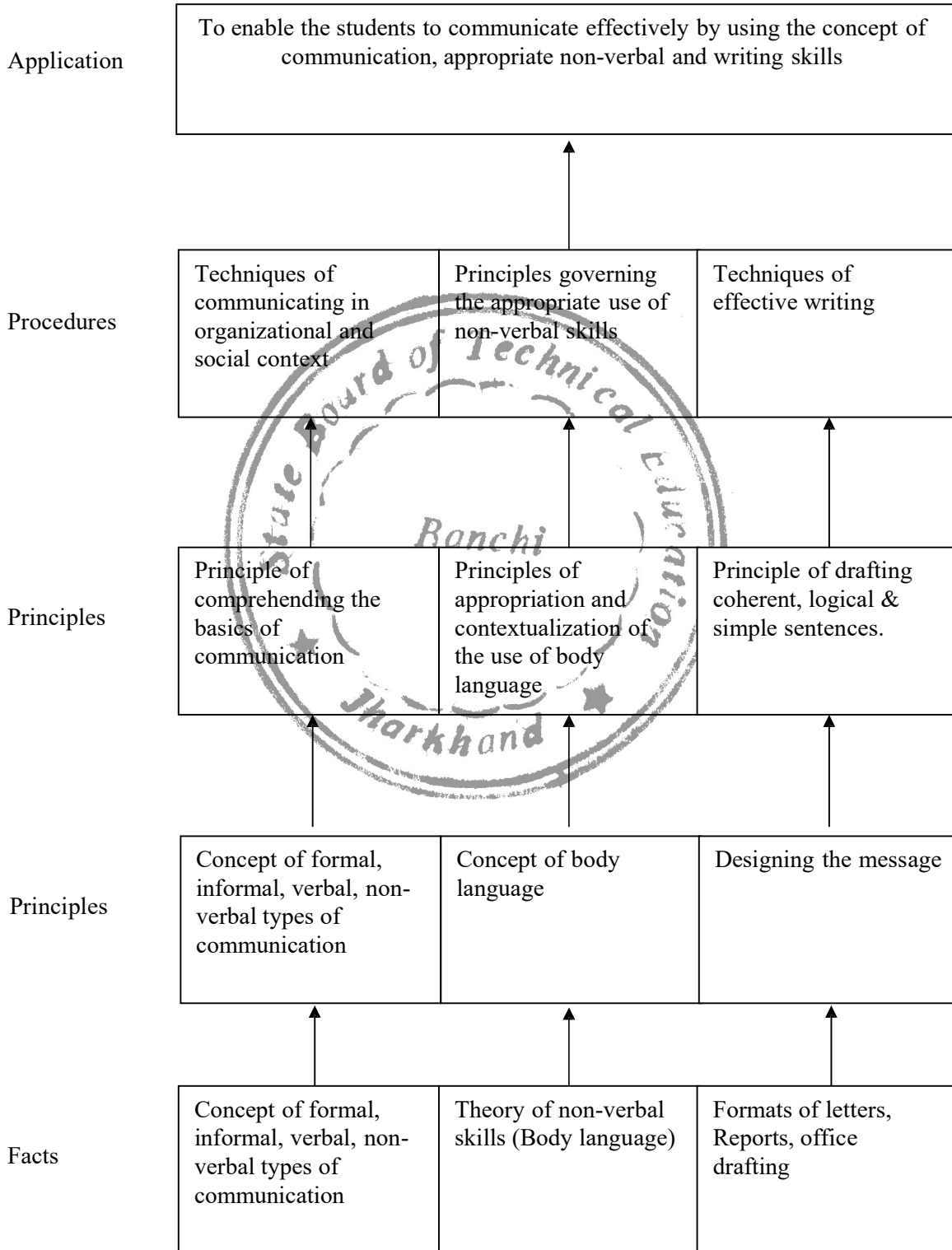
The Students have been already been exposed to the Language Skills pertaining to English, leading to a better understanding of English & use of grammar, developing a base for the language. Now with a view to achieve some mastery over the language & to develop Communication Skills, which is the main objective of this subject, the basic concepts of communication, Non-verbal and written skills have been Introduced.

**Objectives:**

The Students will be able to:

- 1) Understand and use the basic concepts of communication and principles of effective communication in an organized set up and social context.
- 2) Give a positive feedback in various situations, to use appropriate body language & to avoid barriers for effective communication.
- 3) Write the various types of letters, reports and office drafting with the appropriate format.

**Learning Structure:**



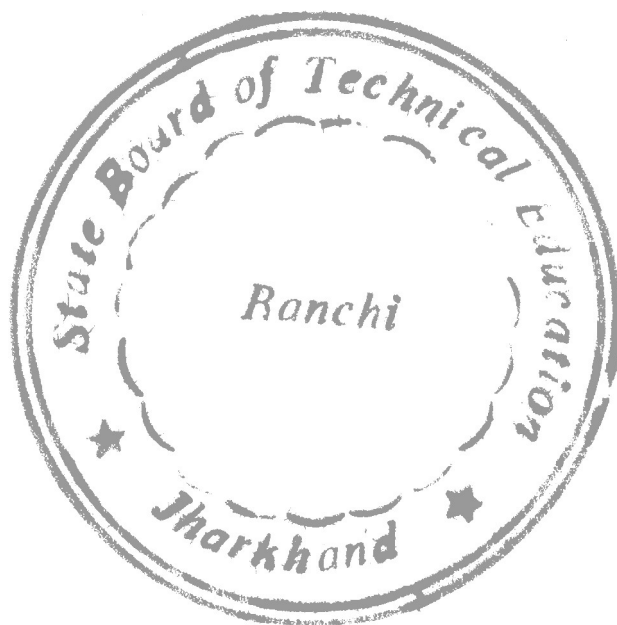


**Assignments:**

1. Communication Cycle (With the Help of Diagram) + Any two communication situations to be represented with the help of Communication Cycle. (Use Pictures)
2. Communication Situations (List of 5 Communication situations stating the type of communication viz; Vertical, Horizontal, Diagonal.
3. Barriers That Hinder a Particular Communication Situation. (State the type of barrier, and how to overcome them). (04 Caselets)
4. Writing articles (two) in keeping with the parameters of developing effective messages.  
(Collect samples from newspapers, articles, Internet and paste them in the assignment.)
5. Business Letters: a) Job Application with Resume.  
b) Enquiry Letter.  
c) Order Letter.  
d) Complaint Letter.
6. Non-Verbal Communication:
  - a) Body Language: Five Illustrations of appropriate use of Body Language used on the part of student in formal and Informal setups. (Example- formal setup- classroom)
  - b) Graphic Language: Five Illustrations of the use of Signs, Symbols, Colours, Maps, Graphs, Charts in day to day life.
7. Presentation Skills: Select topic (current issues) and ask students to give a class presentation as per the principles of effective communication and paste these topics as an assignment in the file.
8. Non-Verbal Codes: Kinesics, Physical Appearance, Haptics. (Collect five pictures per group of five students on the above mentioned non-verbal codes, analyse and discuss them in the class. Ask the students to paste these pictures along with explanation in their individual files.

GUIDELINES: Teachers can make use of group discussions, class presentations, role plays, simulations, caselets, listen and repeat drills with the help of cassettes etc to give a hand on experience for students.

Students should maintain the Institute Files to write all the eight assignments with proper Index and get it duly certified.



w.e.f. Academic Year 2011-12

**Learning Resources:**

**Books:**

Sr. No.	Author	Title	Publisher
01	SBTE, Mumbai.	Text book of Communication Skills.	SBTE, Mumbai.
02	M.Ashraf Rizvi	Effective Technical Communication	Tata McGraw Hill Companies.
03	Krushna Mohan, Meera Banerji	Developing Communication Skills	Macmillan
04	Joyeeta Bhattacharya	Communication Skills.	Reliable Series
05	Jayakaran	Every ones guide to effective writing.	Apple Publishing.
06	Website: <a href="http://www.mindtools.com/page8.html-99k">www.mindtools.com/page8.html-99k</a>		
07	Website: <a href="http://www.khake.com/page66htm/-72k">www.khake.com/page66htm/-72k</a>		
08	Website: <a href="http://www.BMConsultantIndia.Com">www.BMConsultantIndia.Com</a>		
09	Website: <a href="http://www.letstak.co.in">www.letstak.co.in</a>		
10	Website: <a href="http://www.inc.com/guides/growth/23032.html-45k">www.inc.com/guides/growth/23032.html-45k</a>		

w.e.f. Academic Year 2011-12

**Course Name : Diploma in Architectural Assistantship**

**Semester : Second**

**Subject Title : Building Construction**

**Subject Code : 12368**

**Teaching & Examination Scheme:**

Teaching Scheme			Examination Scheme					
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
02	--	04	03	100	--	--	25@	125

**NOTE:**

- **Two tests each of 25 marks to be conducted as per the schedule given by SBTE.**
- **Total of tests marks for all theory subjects are to be converted out of 50 and to be entered in mark sheet under the head Sessional Work. (SW)**

**Rationale:**

This subject will help the students to comprehend the principles of construction work & secure sufficient knowledge about strength and stability of different structures.

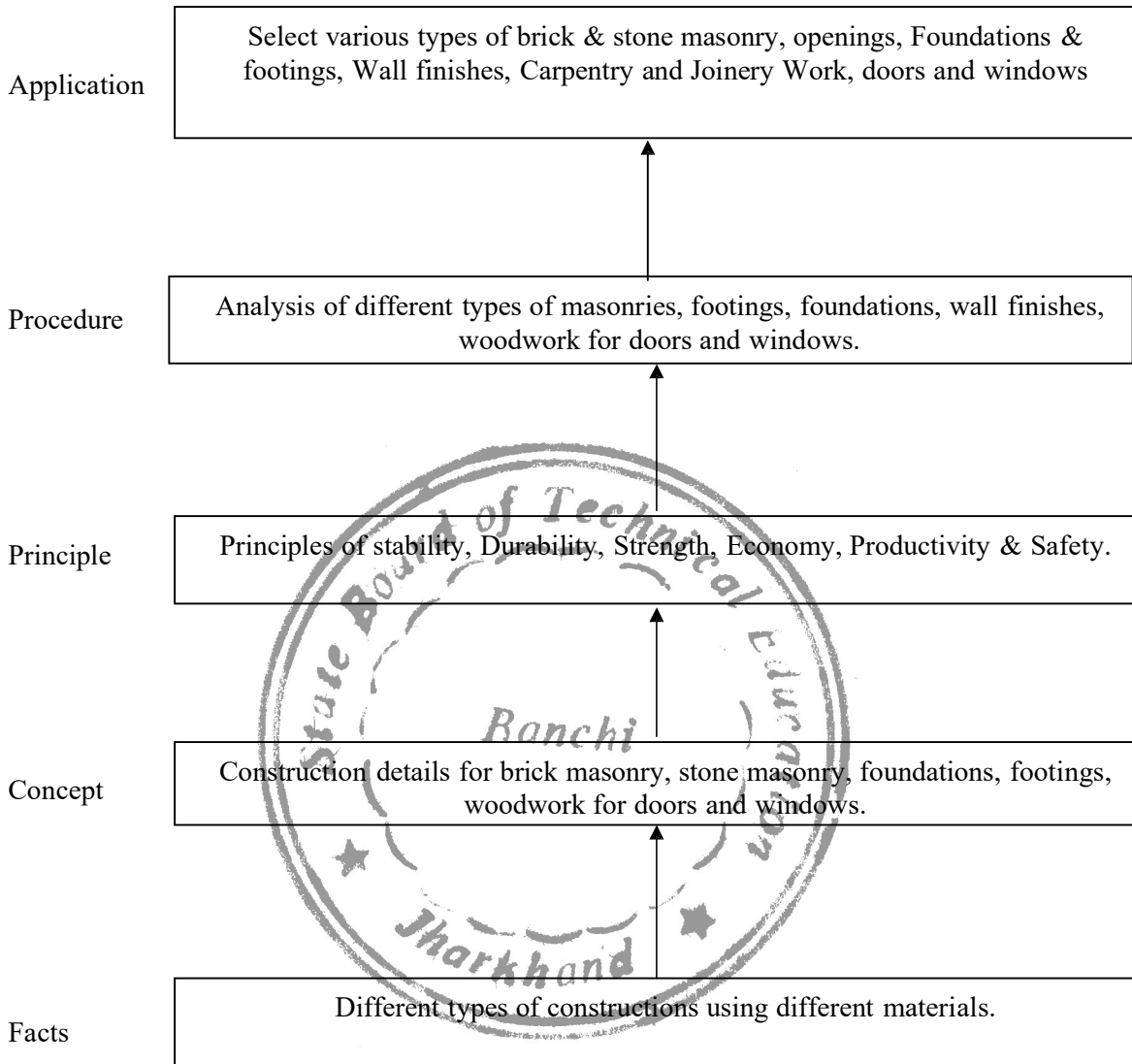
**Objectives:**

The student will be able to: -

- 1) Know various types of masonry in construction, simple foundation, footings & Carpentry work.
- 2) Select appropriate wall finishes
- 3) Select suitable doors and windows in timbers.
- 4) Draw sketches and scaled drawings of constructional elements.



**Learning Structure:**



**Contents: Theory**

Chapter	Name of the topic	Hours	Marks
1	<b>Simple Foundation and footings</b>	03	08
	1.1 Wall footings		
	1.2 R.C.C. column Footings		
	1.3 Inverted Arch footings		
2	<b>Brick Masonry</b>	06	12
	2.1 Size of Bricks, different types of Bricks		
	2.2 Technical terms used in brick work		
	2.3 Different types of bonds		
	2.4 Bonding old work with new work,		

	2.5 Racking		
3	<b>Stone Masonry</b> 3.1 Technical terms in Stone masonry 3.2 Types of stone masonry – Rubble Coursed & Ashler 3.3 Joints and dressing of stones 3.4 Composite Masonry walls	06	10
4	<b>Openings</b> 4.1 Arches - 4.1.1 Different terms used in the sketch of Arch. 4.1.2 Stone Arches - Flat stone Arch, semicircular arch. 4.1.3 Brick Arches - Rough Brick Arch, Axed Brick Arch, semicircular brick arch, flat brick arch, relieving arch & Dutch or French Arch. 4.2 Lintels - Lintels in Brick, timber & Concrete	06	18
5	<b>Carpentry Joints</b> 5.1 Different types of Joints used in Carpentry work with their uses	03	16
6	<b>Wall Finishes</b> 6.1 Plastering & pointing 6.1.1 Cement Plaster & mud plaster 6.2 Pointing - Flush pointing, cut pointing, V-grooved pointing, keyed pointing, Tuck pointing, Beaded pointing	03	08
7	<b>Doors and Windows in Timber</b> 7.1 Doors - 7.1.1 Battened, Ledged door 7.1.2 Battened, Ledged & braced door 7.1.3 Battened, Ledged, braced & Framed 7.1.4 Paneled door 7.2 Methods of fixing the door - 7.2.1 Built in method 7.2.2 Prepared opening method 7.3 Windows: 7.3.1 Fixed & Pivoted windows, 7.3.2 Sash or glazed windows, 7.3.3 Bay window, 7.3.4 Clerestory windows, 7.3.5 Corner window, 7.3.6 Dormer & Gable window, 7.3.7 Sky light	05	28
<b>Total</b>		<b>32</b>	<b>100</b>

**Practical:**

Skills to be developed:

Intellectual Skills:

- 1) Understand different types of masonries
- 2) Understand different types openings
- 3) Understand different types carpentry joints
- 4) Understand different types of Doors and Windows
- 5) Get the knowledge about construction details

Motor Skills:

- 1) Prepare constructional details

**List of Practical:**

- 1) Full imperial Drawing Sheets based on -
  - a) Simple foundations (to the scale)
  - b) Types of Bonds (to the scale)
  - c) Joints & Dressing of stones
  - d) Brick arches
  - e) Stone arches & Lintels
  - f) Carpentry Joints
  - g) Doors (to the scale)
  - h) Windows (to the scale)

**Site Visits: -**

Visits should be arranged on following works: -

- 1) Foundation under construction.
- 2) Construction of brick and stone masonry
- 3) Joinery work

**Learning Resources:**

**Books:**

Sr. No.	Author	Title	Edition	Year of Publishing	Publishers & Address
1	Sushilkumar	Building Construction	10 <sup>th</sup>	1984	Delhi – standard publishers, Distributors
2	Mitchell	Mitchell's Elementary Building Construction	15 <sup>th</sup>	1976	Bombay Allied Publishers
3	S.C.Rangwala	Building Construction	10 <sup>th</sup>	1985	Charotar Publishing House Anand

w.e.f. Academic Year 2011-12

**Course Name : Diploma in Architectural Assistantship**

**Semester : Second**

**Subject : Levelling**

**Subject Code : 12369**

**Teaching & Examination Scheme:**

Teaching Scheme			Examination Scheme					
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
02	--	02	02	50	50@	--	--	100

**NOTE:**

- Two tests each of 25 marks to be conducted as per the schedule given by SBTE.
- Total of tests marks for all theory subjects are to be converted out of 50 and to be entered in mark sheet under the head Sessional Work. (SW)

**Rationale:**

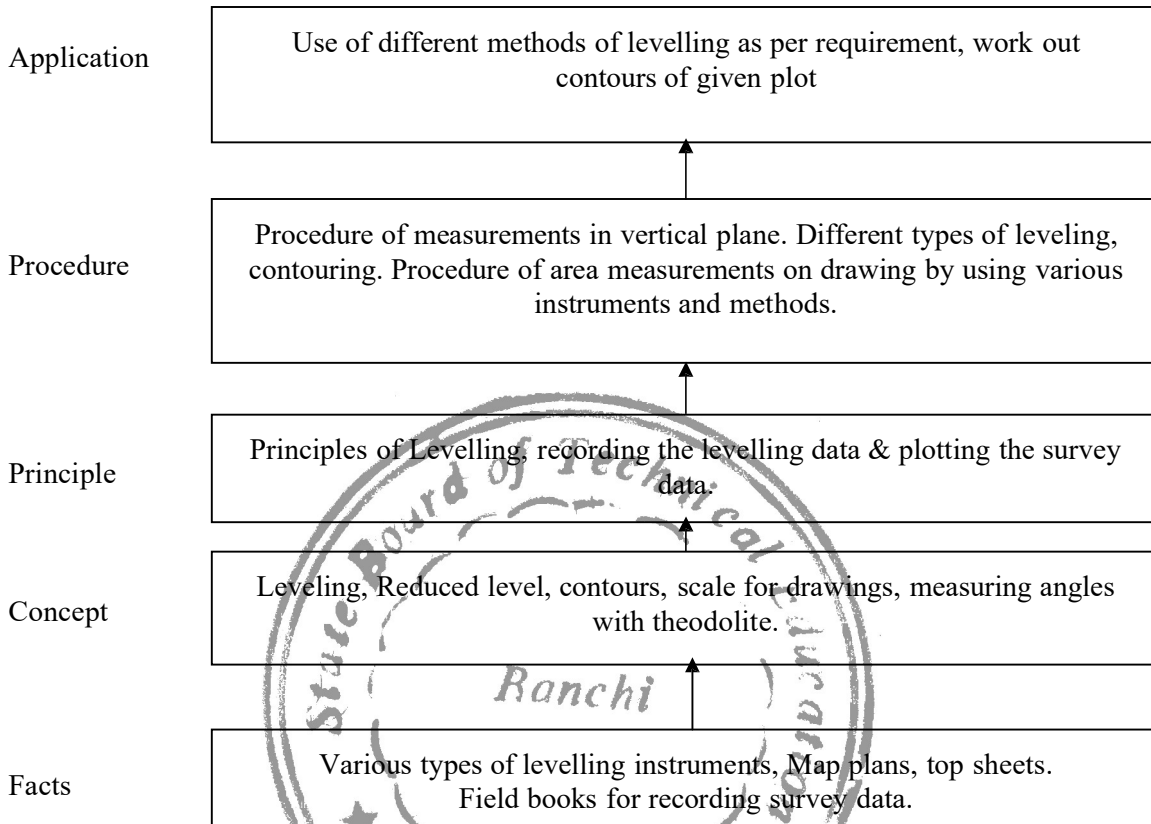
This subject will help the students to comprehend core facts, concepts, principles, and procedures in levelling. This will also help the students for proper planning in architectural design.

**Objectives:**

The students will be able to: -

- 1) Conduct survey
- 2) Find the topography of the area for proper planning & execution of architectural & Civil work
- 3) Select appropriate levelling method depending on the requirement

**Learning structure:**



**Contents: Theory**

Chapter	Name of the Topic	Hours	Marks
<b>1</b>	<b>Levelling</b>	<b>13</b>	<b>22</b>
	1.1 Definition & uses of levelling,		
	1.2 Various terms used in levelling.		
	1.3 Parts of Dumpy level. Types of levels, level slaves.		
	1.4 Various types of levelling.		
	1.5 Errors in levelling & how to eliminate them.		
	1.6 Reducing the levels with both methods. Rise & fall & collimation plane method.		
	1.7 Curvature & Refraction effect on levelling.		
	1.8 Difficulties in Levelling		
	1.9 Temporary adjustments of levelling, permissible errors in levelling		

<b>2</b>	<p><b>Contours</b></p> <p>2.1 Characteristics of contour, methods of contouring, horizontal equivalent, contour interval</p> <p>2.2 Interpolation of contour with different methods</p> <p>2.3 Grading of contours &amp; uses of contour maps</p>	<b>07</b>	<b>10</b>
<b>3</b>	<p><b>Calculation of Area:</b></p> <p>3.1 General methods of area calculations</p> <p>3.1 Procedure for finding out the area by planimeter with formula</p> <p>3.2 Mid ordinate, average ordinate, trapezoidal rule, Simpson's One Third Rule</p>	<b>07</b>	<b>10</b>
<b>4</b>	<p><b>Introduction to Theodolite</b></p> <p>4.1 Parts Of Theodolite &amp; Terms in the theodolite survey</p> <p>4.2 Various operations that can be done by it.</p> <p>4.2.1 To measure Horizontal angle</p> <p>4.2.2 To measure Vertical Angle</p> <p>4.2.3 To take bearing of line</p> <p>4.2.4 To prolong a straight line</p>	<b>05</b>	<b>08</b>
<b>Total</b>		<b>32</b>	<b>50</b>

**Practical:**

Skills to be developed

Intellectual Skills:

- 1) Identify & select suitable leveling instrument.
- 2) Identify and know the different parts of instruments
- 3) Decide the procedure for setting the instruments

Motor skills:

- 1) Use of safety devices while working
- 2) To make the temporary adjustments of instruments
- 3) Take the reading on the instrument
- 4) Prepare Field book

**List of Practical:**

- 1) Simple levelling
- 2) Continuous levelling
- 3) Longitudinal levelling
- 4) Cross sectioning
- 5) One full Imperial Size Drawing sheet on Road project for longitudinal levelling & cross sectioning

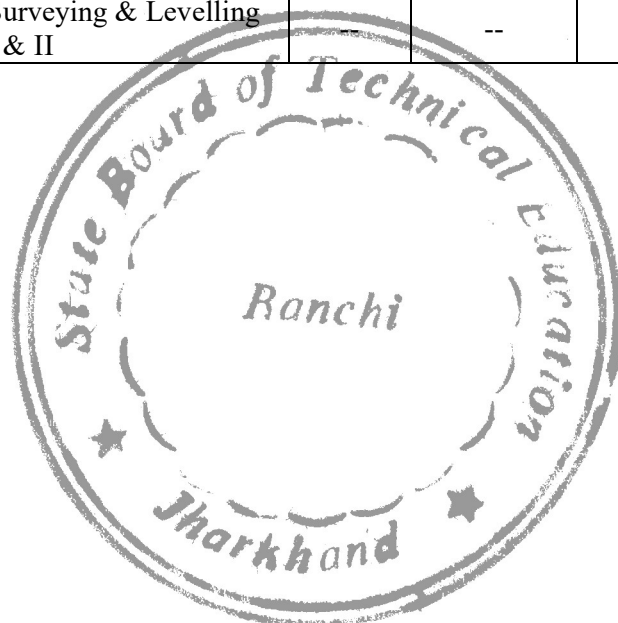
w.e.f. Academic Year 2011-12

- 6) One full Imperial Size Drawing sheet on Indirect contouring By square method
- 7) Area by planimeter

**Learning resources:**

**Books:**

Sr. no.	Author	Title	Edition	Year of Publishing	Publishers & Address
1	Kanetkar & Kulkarni	Surveying & Levelling I & II	23 <sup>rd</sup>	1993	Pune Vidyarthi Graha Publications, Pune
2	Gajare V.S.	Surveying & Levelling	1 <sup>st</sup>	1985	Nirali Prkashan, Pune
3	Kolhapure Mahabal & Shah	Surveying & Levelling	1 <sup>st</sup>	1988	Jeevandeep Prakashan
4	B. C. Punamia	Surveying & Levelling I & II	--	--	--



w.e.f. Academic Year 2011-12

**Course Name : Diploma in Architectural Assistantship**

**Semester : Second**

**Subject Title : Applied Mechanics**

**Subject Code : 12370**

**Teaching & Examination Scheme**

Teaching Scheme			Examination Scheme					
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
03	--	02	03	100	--	--	25@	125

**Rationale:**

The subject is grouped under basic engineering courses, which helps the students to understand facts, concepts, principles and techniques of scientific investigation in the field of Civil Engineering. The subject describes analysis of structure and mechanisms, principles which are commonly used in Civil Engineering Structures and also used in the machines and measuring instruments.

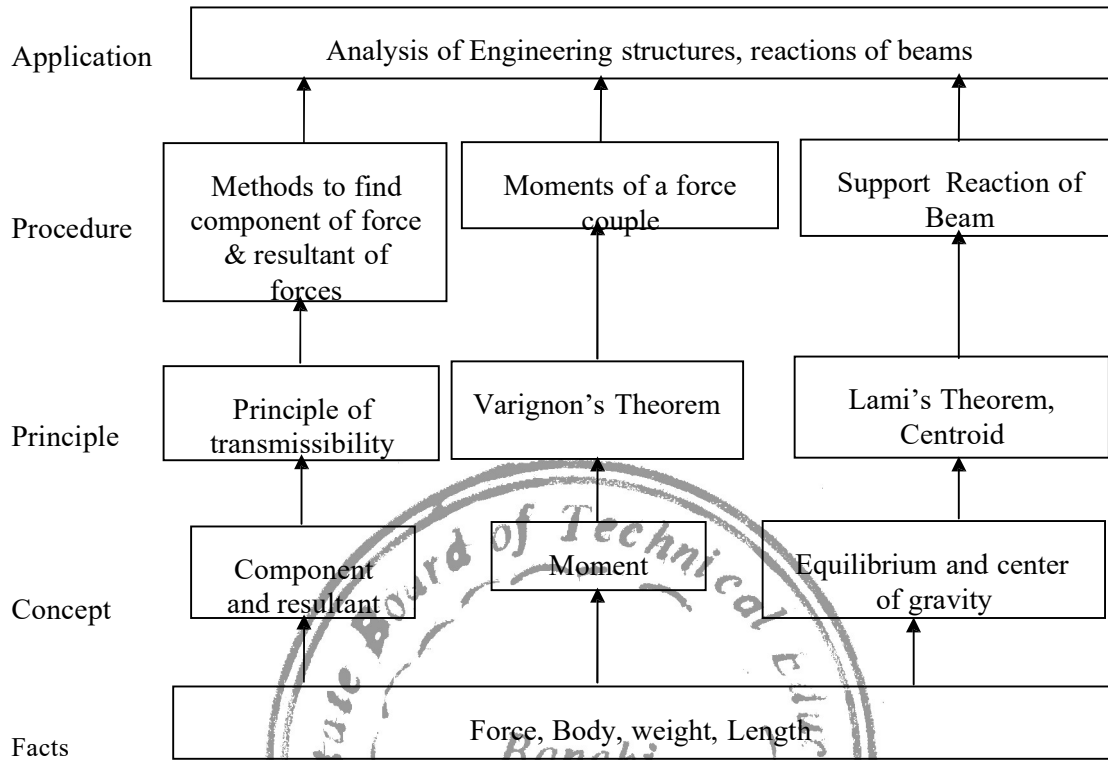
**Objectives:**

The student will be able to:

1. Resolve the forces.
2. Find the resultant of given force system.
3. Find the support reactions of beam.
4. Find the center of gravity of composite solids and centroid of plane figures.



**Learning structure:**



**Contents: Theory**

Chapter	Name of the topic	Hours	Marks
1	<b>Fundamentals:</b> Definitions of mechanics, statics, dynamics, body, rigid body, mass, weight, length, time, scalar and vector, fundamental units, derived units, S.I. units	02	04
2	<b>Force:</b> <b>2.1 Introduction to force,</b> Definition of a force, unit force, Newton, S.I. unit of a force, representation of a force by vector and by Bow's notation, method, characteristics of a force, effects of a force, principles of transmissibility <b>2.2 Resolution of a force:</b> Definition, method of resolution, types of component forces, perpendicular components and Non – perpendicular components <b>2.3 Moment of a force:</b> Definition, measurement of moment of a force, S.I. unit, geometrical meaning of moment of a force, classification of moments according to direction of rotation, sign convention, law of moments, Varignon's theorem of moment and it's use, couple – definition, S.I. unit, measurement of a couple, properties of	20	38

	<p>couple.</p> <p><b>2.4 Force system:</b> Definition, Classification of force system according to plane and line of action</p> <p><b>2.5 Composition of forces:</b> Definition, Resultant force, Methods of composition of forces.</p> <p>I – Analytical method– (i) Trigonometric Method (Law of parallelogram of forces) (ii) Algebraic method (Method Of Resolution)</p> <p>II – Graphical method: Introduction, space diagram, vector diagram, polar diagram and funicular polygon, Resultant of concurrent, Non – Concurrent and parallel force system by analytical and graphical method</p>		
3	<p><b>Equilibrium:</b></p> <p>3.1 Definition, conditions of equilibrium, analytical and graphical conditions of equilibrium for concurrent, non – concurrent and parallel force system, free body diagram.</p> <p>3.2 Lami’s theorem – statement and explanation, Application of Lami’s theorem for solving various engineering problems.</p> <p>3.3 Equilibrant: Definition, relation between resultant and equilibrant. Equilibrant of concurrent, non – concurrent and parallel force system</p> <p>3.4 Beams – Definition, types of beams (cantilever, simply supported, over hanging, fixed, continuous) Types of end supports (simple support, hinged, roller), classification of loads, point load, uniformly distributed load, reactions, of a simply supported and over hanging beams by analytical &amp; graphical method.</p>	18	36
04	<p><b>Centroid and center of Gravity</b></p> <p>4.1 Centroid Definition of centroid, moment of an area about as axis. Centroid of basic geometrical figures such as square, triangle, circle, semicircle &amp; quarter circle. Centroid of composite figure.</p> <p>4.2 Center of gravity Definition, center of gravity of simple solids such as cylinder, sphere, hemisphere, cone, cube and rectangular block. Center of gravity of composite solids.</p>	08	22
<b>Total</b>		<b>48</b>	<b>100</b>

w.e.f. Academic Year 2011-12

**Practical:**

Skills to be developed:

Intellectual skill:

1. Calculate the forces on given structure.
2. Interpret the result.

Motor skill:

1. Handle the equipment carefully.
2. Draw graphical sheets.

**List of Assignments:**

- 1) One assignment contains sample problem on
  - a) Resolution of Force
  - b) Resultant of different force systems by algebraic method
- 2) Half Imperial size drawing sheets containing graphical solutions for –
  - a) Concurrent force system: Two problems
  - b) Non – concurrent Force system: Two Problems
  - c) Parallel Force system: Two problems
- 3) Reactions of a Beam: Two problems
- 4) One assignment contains sample problem on
  - a) Lami's Theorem
  - b) Equilibrant
  - c) Support reactions of different types of beams (Different loadings and different supports)
- 5) One assignment contains sample problem on
  - a) Centroid of plane geometric figures
  - b) Center of gravity of different composite solids

**Learning Resources:**

**Books:**

Sr. No.	Author	Title	Publisher & address
01	Beer – Johnson	Engineering Mechanics	Tata McGraw Hill, Delhi
02	Basu	Engineering Mechanics	Tata McGraw Hill, Delhi
03	Joseph F. Shelly	Vector Mechanics for Engineers Vol. I & II	Tata McGraw Hill, Delhi
04	V.K.Kumawat	Engineering Mechanics	Tech-max publication , Pune

w.e.f. Academic Year 2011-12

**Course Name : Diploma in Architectural Assistantship**

**Semester : Second**

**Subject Title : Architectural Drawing – II**

**Subject Code : 12371**

**Teaching & Examination Scheme:**

Teaching Scheme			Examination Scheme					
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
01	--	04	04	100	--	25@	--	125

**NOTE:**

- **Two tests each of 25 marks to be conducted as per the schedule given by SBTE.**
- **Total of tests marks for all theory subjects are to be converted out of 50 and to be entered in mark sheet under the head Sessional Work. (SW)**

**Rationale:**

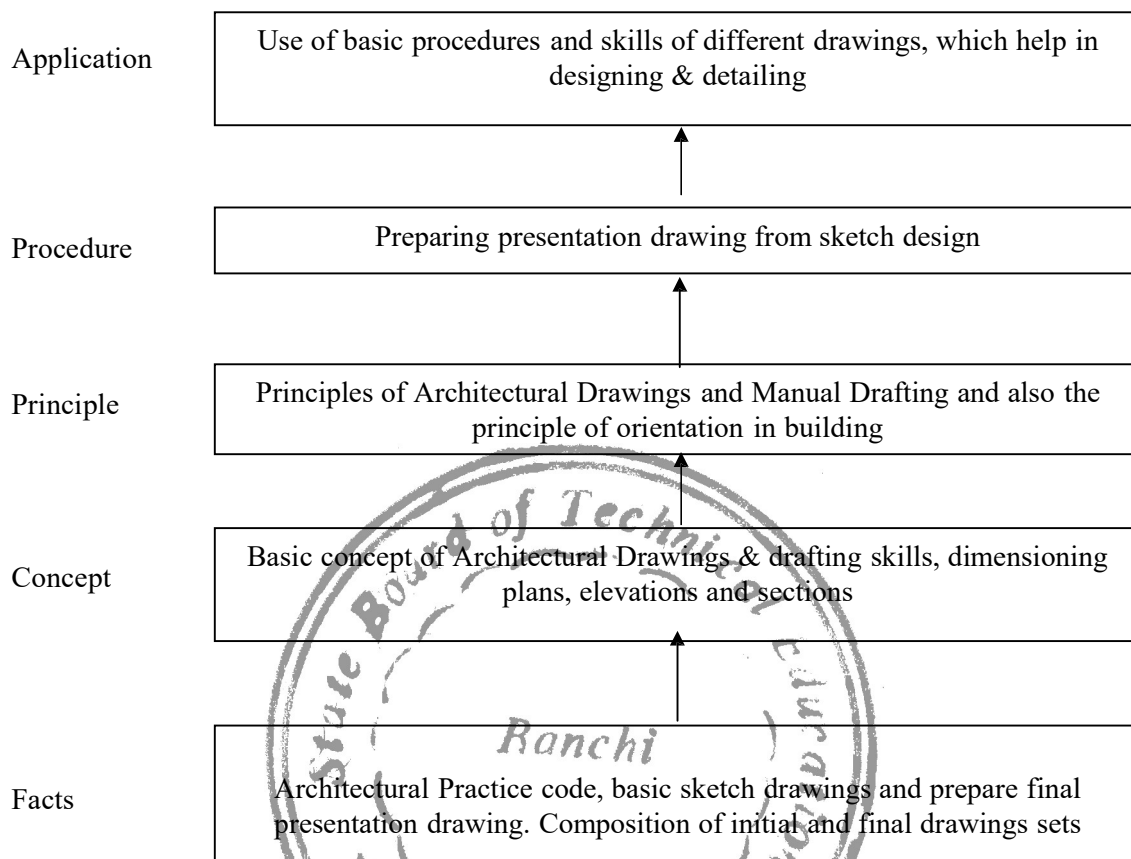
It helps the student to understand and attain basic of architectural drawing in order to graphically represent what they learn in other related subject.

**Objectives:**

The student will be able to:

- 1) Know difference between load bearing & R.C.C. structure.
- 2) Develop the drawings from line plan.
- 3) To know the basic of anthropometry.
- 4) Draw presentation drawings.
- 5) Draw furniture layout.

**Learning structure:**



**Contents: Theory**

Chapter	Name of the Topic	Hours	Marks
1	1.1 Load bearing structure and R.C.C. Structure	2	
	1.2 Development of preliminary architectural drawing from given sketch. Design of single unit	4	
	1.3 Development of elevation, section from given plans	2	
	1.4 Basic anthropometrics study	2	
	1.5 Consideration of orientation and furniture layout	2	
	1.6 Assembly of Group of such units under one roof with circulation consideration	4	
<b>Total</b>		<b>16</b>	<b>100*</b>

\* See Note

**Practical:**

Skills to be developed:

Intellectual skills:

- 1) Identify load bearing and R.C.C. structure
- 2) Student can get knowledge to make development of preliminary Architectural Drawings from sketch drawing.
- 3) Study of basic anthropometry.
- 4) Presentation drawings and detailing

Motor Skills:

- 1) Development of given sketch.
- 2) Make of use of Anthropometry
- 3) Make furniture layouts
- 4) Make use of scales

**List of Practical:**

- 1) One full imperial size drawing sheet on Anthropometry
- 2) One full imperial size drawing sheet showing the difference between R.C.C. Framed & Load bearing structure
- 3) Development of Given Sketch plan showing furniture layout of 2/3 room residential building

**Notes:**

Problem should be based on sketch development on two/three room residential building.  
(Total marks 100 marks)  
Break up as follows:

- 1) Plan with furniture layout 45 marks
- 2) Section 25 mark
- 3) Elevation 20 mark
- 4) Schedule of Openings 10 marks

**Learning Resources:**

**Books:**

Sr. No.	Author	Title	Publisher & address
1	V.S.Parmar	Design fundamentals in Architecture	Somaiyya Publication, Mumbai
2	Robert Gill	Rendering with Pen and Ink	Thames & Hudson, London
3	Gajanan Bhagwat & A.Desia	Visual Art and Basic Study	Sommaiya Publication, Mumbai

w.e.f. Academic Year 2011-12

**Course Name : Diploma in Architectural Assistantship**

**Semester : Second**

**Subject Title : Architectural Graphics – II**

**Subject Code : 12372**

**Teaching & Examination Scheme:**

Teaching Scheme			Examination Scheme					
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
--	--	04	--	--	50#	--	25@	75

**Rationale:**

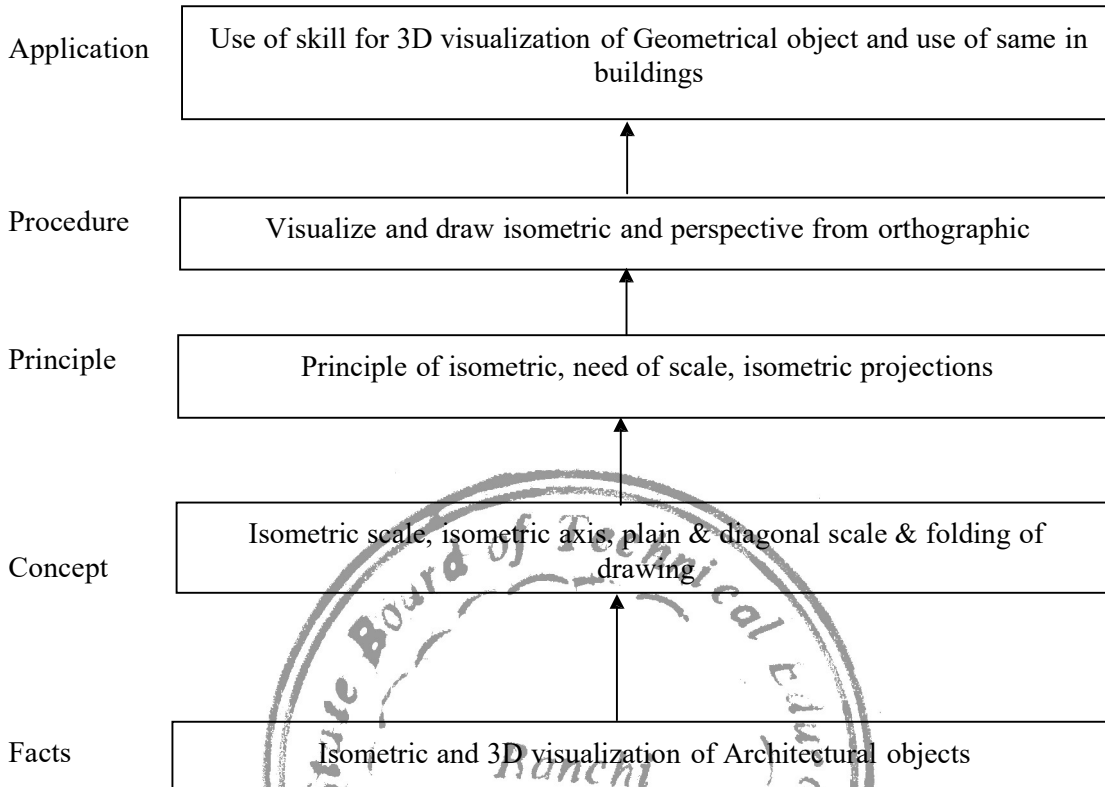
This is core technology subject. Architectural graphics is basic of architecture. It helps him in learning further aspects of architectural drawings. It helps to understand 3 D visualisation of geometrical forms and develop perspective vision.

**Objectives:**

The student will be able to:-

- 1) Increase visualization power in 2D and 3D drawings,
- 2) Design and understand graphical structure of building in any form or shape.
- 3) Draw the different views.
- 4) Reduce and enlarge the given drawings.
- 5) Practice the tracing of drawings.
- 6) Make fold of drawings.

**Learning Structure:**



**Contents: Theory**

**Note:** Contents of theory are to be taught in practical period

Chapter	Name of the Topic
1	<b>Isometric/ Axonometric</b> 1.1 Isometric, Axonometric & oblique projection 1.2 Isometric & Axonometric inclined planes 1.3 Reduction and enlargement of drawings
2	<b>Fundamental of perspective</b> 2.1 Principles of perspective 2.2 Reality & appearance 2.3 Basics of perspective: - Cone of Vision, Visual rays, Picture plane, eye level, spectator and vanishing point 2.4 Basic of one point & two point perspective 2.5 Study of Cube in perspective
3	<b>Tracing of drawings</b> 3.1 Practice of tracing of drawings and taking out ammonia prints & methods for folding of drawings



w.e.f. Academic Year 2011-12

**Practical:**

Skills to be developed:

Intellectual Skills:

- 1) To get knowledge about drafting skills
- 2) To attain skill of 3D visualisation
- 3) To attain skill of perspective vision

Motor Skills:

- 1) Make use of drafting instruments
- 2) Draw different 3D views
- 3) Make use of different types of papers for Drafting

**List of Practical:**

- 1) 04 full imperial size drawing sheets on chapter 01
- 2) 02 full imperial size drawing sheets on chapter 02
- 3) 01 full imperial size tracing sheet on chapter 03  
(Ammonia print of the same tracing)

**Note:**

It is expected that the subject should be taught by architect only.

**Learning Resources:**

**Books:**

Sr. No.	Author	Title	Edition	Year of Publication	Publisher & address
1	Bhat N.D.	Engineering Drawing	40 <sup>th</sup>	1999	Charotar Publication House Anand
2	Shah, Kale, Patki	Building Drawing	<sup>rd</sup>	1997	Tat Mc – Graw Hill co. Ltd, New Delhi
3	Lawson	Practice Perspective Drawings	3 <sup>rd</sup> 1 <sup>st</sup>	1981	Mc- Graw Hill books co. London

w.e.f. Academic Year 2011-12

**Course Name : Diploma in Architectural Assistantship**

**Semester : Second**

**Subject Title : Visual Drawing - II**

**Subject Code : 12373**

**Teaching & Examination Scheme:**

Teaching Scheme			Examination Scheme					
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
02	--	02	--	--	50@	--	--	50

**Rationale:**

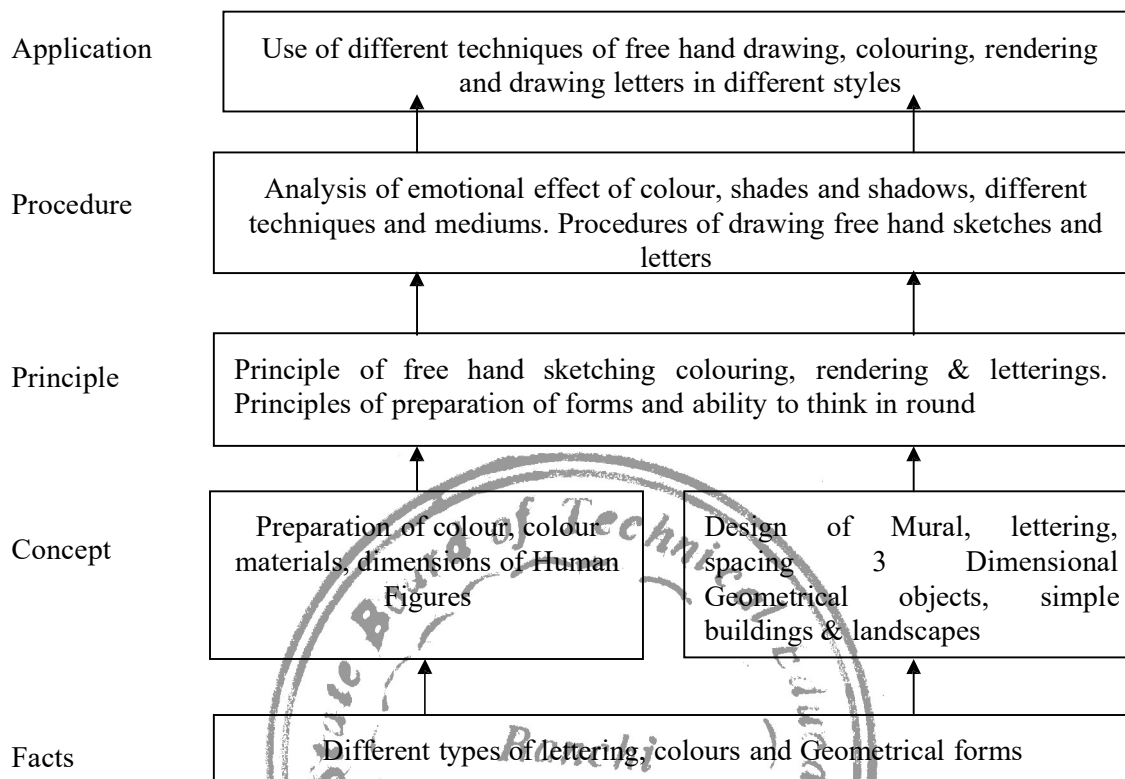
This subject will help the students to understand the facts, concepts and techniques of colouring, rendering and Free hand sketching. It will also help to understand the graphic language of communication.

**Objectives:**

The student will be able to:-

- 1) Analyse emotional effect of colours, shades and shadows.
- 2) Know procedures of drawing, free hand sketches & letters.
- 3) Principles and preparation of form & ability to think in round.
- 4) Design of mural.
- 5) Design two & three dimensional geometrical objects.
- 6) Sketch simple building landscape.

**Learning structure:**



**Contents: Theory**

Chapter	Name of the Topic	Hours
1	<b>Texture</b> 1.1 Texture of various objects and texture for showing various materials used in buildings a) Bricks b) Stone c) Marble d) Plaster e) Tiles f) Timber	06
2	<b>Sketching</b> 2.1 Living Room 2.2 Kitchen Equipment 2.3 Bed Room, Various items of home and office – cupboards, Beds, Wardrobes, dressing tables Arrangement of these furniture in Living, Kitchen, Bed room and Office rooms	08
3	<b>Colouring and rendering</b>	18

3.1 The source of colour (Light, Eye and mind (brain)) Nature Law of light rainbow colours.	
3.2 Colour Mixtures	
3.3 Colour Circle (Wheel)	
3.4 Colour Scheme(All colour schemes)	
3.5 Use of colour scheme	
3.6 Gray Scale (High, Middle, Low Key) its use	
3.7 Colour simultaneous Contrast	
3.8 Advancing or receding colours	
3.9 Emotional effect of colours	
3.10 Effect of light on colour	
3.11 Hue, Value, Intensity (Qualities of colours)	
3.12 Colours meaning	
<b>Total</b>	<b>32</b>

**Practical:**

Skills to be developed:

Intellectual skills:

- 1) To know the various surface textures
- 2) To identify the types of letters from their appearance
- 3) To identify the various rendering techniques
- 4) To identify the various colour schemes

Motor Skills:

- 1) To apply the various types of texture to surfaces
- 2) To apply the different colour schemes to the furniture
- 3) To apply various rendering effects

**List of Practical:**

Texture	-	01 sheet
Sketching of home objects	-	01 sheet
Colouring and rendering	-	05 sheets

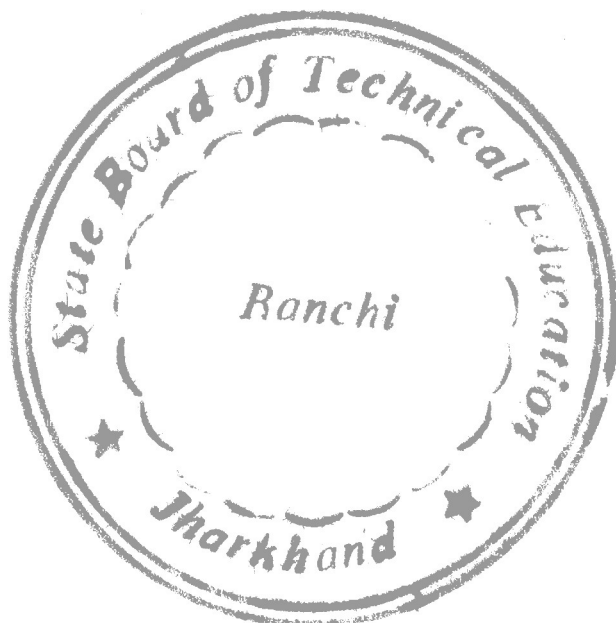
**Note:**

This subject should be taught by Art Teachers (Art Master) only

**Learning Resources:**

**Books:**

<b>Sr. No.</b>	<b>Author</b>	<b>Title</b>	<b>Publishers &amp; Address</b>
1	Ross F. George	Speedball text book Lettering poster design for pen & brush	Thames & Hudson, London
2	Jagtap, Telang	Rang siddhant (Marathi & English Edition)	Jagtap Publication, Pune
3	Robert Gill	Rendering (With Pen & Ink)	Thames & Hudson, London
4	Milind Mullik	Perspective	Jyotsna Prakashan
5	Milind Mullik	Opeque	Jyotsna Prakashan
6	Shivaji Tupe	Sketch Book	Jyotsna Prakashan



w.e.f. Academic Year 2011-12

**Course Name : Diploma in Architectural Assistantship**

**Semester : Second**

**Subject Title : Development of Life Skills - I**

**Subject Code : 12018**

**Teaching & Examination Scheme:**

Teaching Scheme			Examination Scheme					
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
01	--	02	--	--	--	25@	--	25

**Rationale:**

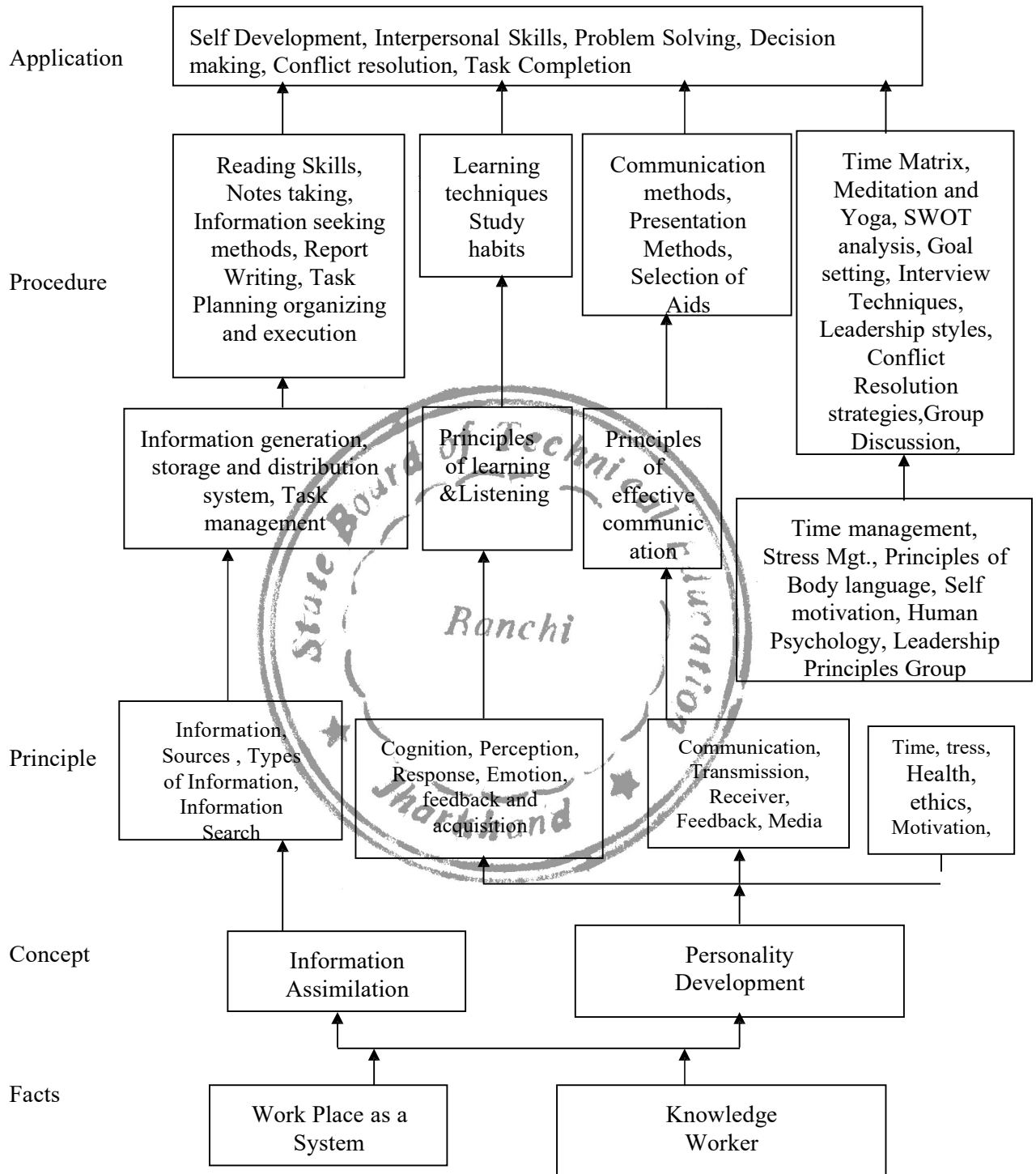
In today's competitive world, the nature of organizations is changing at very rapid speed. In this situation the responsibility of diploma holder is not unique. He will be a part of a team in the organization. As such the individual skills are not sufficient to work at his best. This subject will develop the student as an effective member of the team. It will develop the abilities and skills to perform at highest degree of quality as an individual as well as a member of core group or team. Such skills will enhance his capabilities in the field of searching, assimilating information, managing the given task, handling people effectively, and solving challenging problems. The Subject is Classified Under Human Science.

**Objectives:**

The students will be able to:

1. Develop reading skills
2. Use techniques of acquisition of information from various sources
3. Draw the notes from the text for better learning.
4. Apply the techniques of enhancing the memory power.
5. Develop assertive skills.
6. Prepare report on industrial visit.
7. Apply techniques of effective time management.
8. Set the goal for personal development.
9. Enhance creativity skills.
10. Develop good habits to overcome stress.
11. Face problems with confidence.

**Learning Structure:**



**Contents: Theory**

<b>Chapter</b>	<b>Name of the Topic</b>	<b>Hours</b>
<b>1</b>	<b>Importance of Development of Life skills</b> Introduction to subject, importance in present context, application	<b>01</b>
<b>2</b>	<b>Information Search</b> Information source –Primary, secondary, tertiary Print and non -print, documentary, Electronic Information center, Library, exhibition, Government Departments. Internet Information search – Process of searching, collection of data – questionnaire, taking Interview, observation method.	<b>02</b>
<b>3</b>	<b>Written communication</b> Method of note taking Report writing –Concept, types and format.	<b>01</b>
<b>4</b>	<b>Self Analysis</b> Understanding self – Attitude, aptitude, assertiveness, self esteem, Confidence buildings. Concept of motivation.	<b>02</b>
<b>5</b>	<b>Self Development</b> Stress Management –Concept, causes, effects, remedies to avoid/minimize stress. Health Management – Importance, dietary guidelines and exercises. Time management- Importance, Process of time planning, Urgent Vs importance, Factors leading to time loss and ways to handle it, Tips for effective time management. Emotion-Concept, types, controlling, emotional intelligence. Creativity-Concept, factors enhancing creativity. Goal setting – Concept, setting smart goal.	<b>07</b>
<b>6</b>	<b>Study habits</b> Ways to enhance memory and concentration. Developing reading skill. Organisation of knowledge, Model and methods of learning.	<b>03</b>
<b>Total</b>		<b>16</b>

**LIST OF ASSIGNMENTS:****The Term Work Will Consist Of Following Assignments.**

- 1) Self Awareness.
- 2) Techniques of developing positive attitude.
- 3) Learning, Memory and Concentration.
- 4) To understand the concept of study techniques and participate in a panel discussion on it.



w.e.f. Academic Year 2011-12

- 5) To understand the concept of motivation and emotional intelligence.
- 6) Goal Setting.
- 7) Information search in library.
- 8) Information search through internet.
- 9) Time Management.
- 10) Health and stress Management
- 11) Assertiveness and confidence building
- 12) Creativity

**Note:**

These are the suggested assignment for guidelines to the subject teacher. However the subject teachers can select, design any assignment relevant to the topic, keeping in mind the objectives of this subject.

**Learning Resources:**

**Books:**

Sr. no.	Author	Title	Publisher & address
1	Marshall Cooks	Adams Time management	Viva Books
2	E.H. Mc Grath , S.J.	Basic Managerial Skills for All.	Prentice Hall of India, Pvt Ltd
3	Allen Pease	Body Language	Sudha Publications Pvt. Ltd.
4	Lowe and Phil	Creativity and problem solving	Kogan Page (I) P Ltd
5	Adair, J	Decision making & Problem Solving	Orient Longman
6	Bishop, Sue	Develop Your Assertiveness	Kogan Page India
7	Marion E Haynes	Make Every Minute Count	Kogan Page India
8	Pearson Education Asia	Organizational Behavior	Tata McGraw Hill
9	Michael Hatton (Canada – India Project)	Presentation Skills	Kogan page India
10	--	Stress Management Through Yoga and Meditation	Sterling Publisher Pvt Ltd
11	Richard Hale ,Peter Whilom	Target setting and Goal Achievement	Kogan page India
12	Chakravarty, Ajanta	Time management	Rupa and Company
13	Harding ham A	Working in Teams	Orient Longman

**Internet Assistance:**

- 1) <http://www.mindtools.com>
- 2) <http://www.stress.org>
- 3) <http://www.ethics.com>
- 4) <http://www.coopcomm.org/workbook.htm>
- 5) <http://www.mapfornonprofits.org/>
- 6) <http://www.learningmeditation.com> <http://bbc.co.uk/learning/courses/>
- 7) <http://eqi.org/>
- 8) <http://www.abacon.com/commstudies/interpersonal/indisclosure.html>
- 9) <http://www.mapnp.org/library/ethics/ethxgde.htm>
- 10) [http://www.mapnp.org/library/grp\\_cnfl/grp\\_cnfl.htm](http://www.mapnp.org/library/grp_cnfl/grp_cnfl.htm)
- 11) <http://members.aol.com/nonverbal2/diction1.htm>
- 12) [http://www.thomasarmstron.com/multiple\\_intelligences.htm](http://www.thomasarmstron.com/multiple_intelligences.htm)
- 13) <http://snow.utoronto.ca/Learn2/modules.html>
- 14) <http://www.quickmba.com/strategy/swot/>

