2.1 COMMUNICATION SKILLS – II

L	T	P
3	-	2

RATIONALE

Interpersonal communication is a natural and necessary part of organizational life. Yet, communicating effectively can be challenging because of our inherent nature to assume, overreact to and misperceive what actually is happening. Poor communication or lack of communication is often cited as the cause of conflict and poor teamwork. In today's team-oriented workplace, managing communication and developing strategies for creating shared meaning are crucial to achieve results and create successful organizations. The goal of the Communicating Skills course is to produce civic-minded, competent communicators. To that end, students must demonstrate oral as well as written communication proficiency. These include organizational and interpersonal communication, public address and performance. The objectives of this subject are understanding how communication works, gaining active listening and responding skills, understanding the importance of body language, acquiring different strategies of reading texts and increasing confidence by providing opportunities for oral and written expressions

DETAILED CONTENTS

Section A

1. Grammar and Usage (15 Hrs)

1.1 Prepositions
1.2 Pronouns
1.3 Determiners
1.4 Conjunctions
1.5 Question and Question Tag
1.6 Tenses (Simple Present, Simple Past)

Section B

2. Reading Skills (15 Hrs)

Unseen comprehension passages (at least 5 passages).

3. Writing Skills (18 Hrs)

3.1 Writing Notice
3.2 Writing Circular
3.3 Writing a Memo
3.4 Agenda for a Meeting

3.5 Minutes of the Meeting
3.6 Telephonic Messages
3.7 Paragraph writing:
Simple and Current Topics should be covered.

LIST OF PRACTICALS

(Note: The following contents are only for practice. They should not be included in the final theory examination)

1. Listening Comprehension

1.1 Locating Main Ideas in a Listening Excerpt
1.2 Note-taking

2. Developing Oral Communication Skills

2.1 Offering-Responding to Offers
2.2 Requesting-Responding to Requests
2.3 Congratulating
2.4 Expressing Sympathy and Condolences
2.5 Expressing Disappointments
2.6 Asking Questions-Polite Responses
2.7 Apologizing, Forgiving
2.8 Complaining
2.9 Persuading
2.10 Warning
2.11 Asking for and Giving Information
2.12 Giving Instructions
2.13 Getting and Giving Permission
2.14 Asking For and Giving Opinions

INSTRUCTIONAL STRATEGY

Looking into the present day needs of effective communication in every field, it is imperative to develop necessary competencies in students by giving practical tips and emphasis on grammar, vocabulary and its usage in addition to practical exercises. The teacher should give report writing assignments, projects etc. while teaching this subject.

LIST OF RECOMMENDED BOOKS

1. Communicating Effectively in English, Book-I by Revathi Srinivas; Abhishek Publications, Chandigarh.
2. High School English Grammar and Composition by Wren & Martin; S. Chand & Company Ltd., New Delhi.
3. Communication Techniques and Skills by R. K. Chadha; Dhanpat Rai Publications, New Delhi.

SUGGESTED DISTRIBUTION OF MARKS

Topic No.	Time Allotted (Hrs)	Marks Allotted (%)
1	15	30
2	15	35
3	18	35
Total	**48**	**100**

2.2 ARCHITECTURAL DRAWING -II

L	T	P
-	-	6

RATIONALE

Architectural Drawing forms a core subject for preparing scale drawings, three dimensional views, furniture drawings and layouts.

Teachers are expected to lay considerable stress on practical work so that students attain sufficient skills for preparing good quality architectural drawing.
Teachers are also expected to stress upon appropriate line work, properties, dimensioning and lettering.

DETAILED CONTENTS

1. Reviewing orthographic projections (plans, line projections, solids) (1 sheet)

2. Section of Solids (4 sheets)
   Simple geometrical shapes e.g. cube: Elementary building sections highlighting line intensities for sectional and elevational components. (Example: parapet, chajjas in section and elevation behind)

3. Development of surface (1 sheet)
   Development with an aim to calculate areas if required

4. Isometric Views (3 sheets)
   Conversion of 2D geometrical shapes into 3D isometric views (30^o – 30^o), 30^o – 60^o) to realize the potential of each from simple to complex solid to basic building forms

5. Axonometric Views (5 sheets)
   Conversion of 2D geometrical shapes into 3D axonometric views at different angles (45^o – 45^o) to realize the potential of each from simple to complex solid to basic building forms. Isometric/axonometric use of any building form, from a given base plan – to be developed as per the student's imagination of the exterior/interior components (with roads, landscape elements)

Note: Total No. of minimum sheets = 14

INSTRUCTIONAL STRATEGY

This subject is one of the most important, fundamental and practical subject for diploma in Architectural Assistantship. Teachers should lay emphasis on practical work by the students and give repetitive exercises in free hand sketching, colouring and rendering like sketching, shades and shadows, lettering, printing forms and other important component of architecture. Teachers should lay stress upon perfect line work, properties, dimensioning, lettering and printing by the students in the classroom. Students should maintain portfolio of the work done by them throughout the session. Viva voce examination may be conducted by the teacher on completion of each assignment

RECOMMENDED BOOKS

1. Engineering Drawing by N.D. Bhatt; Publisher Charotar Publishing House Pvt. Ltd., New Delhi

2. Engineering Drawing by G.S. Virdhi; Khanna Publisher, New Delhi

3. Building Construction by W.B. Sikka; Publisher Tata McGraw Hill Publisher, New Delhi

4. Time Saver Standard for landscape architecture: Design and construction by Charles W.Harris Published by Mc Graw-Hills Publishers, New Delhi

5. Time Saver Standards for Building Types by Joseph De Chiara and John Callendera Published by Mc Graw Hill, New Delhi

6. Rendering with Pencil and Ink by Gill Robert W., Published by Thomos and Hudson, New Delhi

7. Architects Data by Neufert, Published by Oxford BSP Professional Books, New Delhi

2.3 BASICS OF INFORMATION TECHNOLOGY

L	T	P
-	-	4

RATIONALE

Information technology has great influence on all aspects of our life. Primary purpose of using computer is to make the life easier. Almost all work places and living environment are being computerized. The subject introduces the fundamentals of computer system for using various hardware and software components. In order to prepare diploma holders to work in these environments, it is essential that they are exposed to various aspects of information technology such as understanding the concept of information technology and its scope; operating a computer; use of various tools of MS Office/Open Office and internet form the broad competency profile of diploma holders. This exposure will enable the students to enter their professions with confidence, live in a harmonious way and contribute to the productivity.

Note:

Explanation of Introductory part should be dovetailed with practical work. Following topics may be explained in the laboratory along with the practical exercises. There will not be any theory examination.

TOPICS TO BE EXPLAINED THROUGH DEMONSTRATION

1. Information Technology – its concept and scope, applications of IT, ethics and future with information technology
2. Impact of computer and IT in society.-- Computer application in office, book publishing, data analysis, accounting, investment, inventory control, graphics, air and railway ticket reservation, robotics, military, banks, Insurance financial transactions and many more
3. Generations of computer, block diagram of a computer, CPU, memory, data – numeric data, alpha numeric data, processing of data.
4. Computers for information storage, information seeking, information processing and information transmission, computer organization, computer hardware and software; primary and secondary memory: RAM, ROM, PROM etc. Input devices; keyboard, mouse, scanner, etc ; output devices ; VDU and Printer(Impact and non-Impact printers), Plotter etc. Primary and Secondary Storage (Auxiliary Storage), Secondary storage; magnetic disks – tracks and sectors, optical disk (CD, CD-RW and DVD Memory)
5. Introduction to Operating Systems such as MS-DOS and Windows, difference between DOS and Windows
6. Basics of Networking – LAN, MAN,WAN

LIST OF PRACTICALS

1. Identify and list functions of various components and peripherals of given computer.
2. Installation of operating system viz. * Windows XP, *Windows 2007 etc.
3. Installing a computer system by giving connection and loading the system software and application software and various sources to install software
4. Exercises on entering text and data (Typing Practice)
5. Features of Windows as an operating system:
   a) Start , shutdown and restore
   b) Creating and operating on the icons
   c) Opening, closing and resizing the windows
   d) Using elementary job commands like – creating, saving, modifying, renaming, finding and deleting a file , creating and operating on a folder
   e) Introduction to all properties such as changing settings like, date, time, calculator, colour (back ground and fore ground)
   f) Using short cuts
6. Word Processing (MS Office/Open Office)

   a) File Management:

      Opening, creating and saving a document, locating files, copying contents in some different file(s)

   b) Editing a document:

      - Entering text, cut, copy, paste using toolbars
      - Use of spell check
      - PDF file and its conversion in different file formats (MS Word/Excel etc.)
      - Scanning, editing and printing of a document

   c) Formatting a document:

      - Using different fonts, changing font size and colour, changing the appearance through bold/ italic/ underlined, highlighting a text, changing case, using subscript and superscript, using different underline methods
      - Aligning of text in a document, justification of document ,Inserting bullets and numbering
      - Formatting paragraph, inserting page breaks and column breaks, line spacing
      - Use of headers, footers, inserting footnote, end note, use of comments
      - Inserting date, time, special symbols, importing graphic images, drawing tools

d) Tables and Borders:

- Creating a table, formatting cells, use of different border styles, shading in tables, merging of cells, partition of cells, inserting and deleting a row in a table
- How to change docx file to doc file
- Print preview, zoom, page set up, printing options
- Using Find, Replace options

7. Spread Sheet Processing (MS Office/Open Office)

a) Starting Excel

open worksheet, enter, edit data, formulae to calculate values, format data, create chart, printing chart, save worksheet, switching between different spread sheets

b) Menu commands:

Create, format charts, organize, manage data, solving problem by analyzing data, creating graphs

c) Work books:

- **Managing workbooks (create, open, close, save, rename), working in work books**
- Editing a worksheet: copying, moving cells, pasting, inserting, deleting cells, rows, columns, find and replace text, numbers of cells, formatting worksheet

d) Creating a chart:

- Working with chart types, changing data in chart, formatting a chart, use chart to analyze data
- Using a list to organize data, sorting and filtering data in list

e) Formulas:

Addition, subtraction, division, multiplication, percentage and auto sum

8. Power Point Presentation (MS Office/Open Office)

a) Introduction to PowerPoint

- How to start PowerPoint
- Working environment: concept of toolbars, slide layout, templates etc.
- Opening a new/existing presentation
- Different views for viewing slides in a presentation: normal, slide sorter etc.

b) Addition, deletion and saving of slides

c) Insertion of multimedia elements

- Adding text boxes, importing pictures, tables and charts etc.

d) Formatting slides

- Text formatting, changing slide layout, changing slide colour scheme
- Changing background, Applying design template

e) How to view the slide show?

- Viewing the presentation using slide navigator, Slide transition
- Animation effects etc.

9. Antivirus

a) What is virus and its types

b) Problems due to virus

c) Installation and updation of antivirus (anyone out of Kaspersky, Mcafee, Norton, Quickheal etc).

d) How to scan and remove the virus

10. Internet and its Applications

a) Log-in to internet, introduction to search engine

Browsing and down loading of information from internet

b) Creating e-Mail Account

- Log in to e-mail account and Log out from e-mail account

c) Managing e-Mail

- Creating a message
- Sending, receiving and forwarding a message
- Attaching a file
- Deleting a message

INSTRUCTIONAL STRATEGY

Since this subject is practical oriented, the teacher should demonstrate the capabilities of computers to students while doing practical exercises. The students should be made familiar with computer parts, peripherals etc. and proficient in making use of MS Office/Open Office in addition to working on internet. The student should be made capable of working on computers independently. This subject should be taught with the help of LCD projector, (while teaching a group) using PowerPoint presentation slides.

RECOMMENDED BOOKS

1. Fundamentals of Computer by E Balagurusamy,Tata McGraw Hill Education Pvt. Ltd, New Delhi
2. Fundamentals of Computer by V Rajaraman; Prentice Hall of India Pvt. Ltd., New Delhi
3. Fundamentals of Computer by Sumita Arora by Dhanpat Rai and Co , New Delhi
4. Computers Today by SK Basandara, Galgotia Publication Pvt Ltd. Daryaganj, New Delhi.
5. Internet for Every One by Alexis Leon and Mathews Leon; Vikas Publishing House Pvt. Ltd., Jungpura, New Delhi
6. A First Course in Computer by Sanjay Saxena; Vikas Publishing House Pvt. Ltd., Jungpura, New Delhi
7. Computer Fundamentals by PK Sinha; BPB Publication, New Delhi
8. Fundamentals of Information Technology by Leon and Leon; Vikas Publishing House Pvt. Ltd., Jungpura, New Delhi
9. Information Technology for Management by Henery Lucas; Tata McGraw Hill Education Pvt Ltd , New Delhi
10. MS Office by BPB Publications, New Delhi

2.4 BUILDING CONSTRUCTION - I

L	T	P
-	-	8

RATIONALE

The aim is to develop an understanding of the behaviour and function of various components of buildings. For this it is essential that the students are taught the various components of building such as foundations, floors, super structure, joints, opening, roofs etc. The first year timber construction and RCC will be dealt with.

Teachers must supplement their lectures with models, audio-visuals and on site study of various building components.

For drawing work, stress must be laid on scale, dimensioning, lettering, and composition of the drawing.

At the end of the first year, the students should be able to draw a complete vertical section through a simple single storied flat roof building.

The subject teacher shall introduce the theory component of the topic to the students before drawing sheets are attempted by the students.

DETAILED CONTENTS

Note: The theoretical constructions should be imparted to the students along with building construction drawings

1. Masonry Construction

   1.1 Brick work (1 sheet)
   - Study of standard brick (FPS and MKS system) its dimensions
   - Brick moulding and manufacturing technique in a brick kiln
   - Specially formed bricks

   1.2 Brick work in Foundation (1 sheet)
   Trenching concrete bedding and brick work in Section and Plan.

   1.3 Stone work (1 sheet)
   Various types of stones used for masonry work with special reference to locally available stone. Exposure to cutting of stones and their finishing. Classification of stone masonry.

   1.4 DPC (1 sheet)
   - Sources of dampness and effects of dampness
   - Treatment of building components for effective damp proofing

   1.5 Brick work in super structure (Different Bonds) (1 sheet)

1.6 Openings in Walls (2 sheets)

1.7 Classification of Arches and Lintels (2 sheets)

2. Joinery (1 sheet)

- Doors and windows frames – their fixing

Note: Total minimum 11 sheets

INSTRUCTIONAL STRATEGY

This subject is of practical in nature. While imparting instruction for preparation of various drawings of different types of buildings and their components, the teacher should organize demonstration and field/site visits to show various stages, sizes and scales of operations involved in building construction. The teacher should involve the theoretical aspects of the instructions to the students before drawings are attempted by the students. Students may prepare the port-folio of the work done by them throughout the session. Teacher may also organize viva-voce after each drawing assignment so as to test the level of understanding of the students about underlying concepts, principles, and procedures.

RECOMMENDED BOOKS

1. Building Construction by WB Mckay; Longman Publication, Khanna Publisher, New Delhi
2. Building Construction by SP Bindra and SP Arora; publisher Dhanpat Rai & Co. New Delhi
3. Building Construction by BC Punmia; Publisher Laxmi Publication, New Delhi
4. Building Construction by Sushil Kumar, Standard Publisher, New Delhi
5. Construction of Buildings (Vol I and II) by Barry
6. Building Construction by VB Sikka; Publisher Tata McGraw Hill Publisher,New Delhi
7. Building Construction by Rangwala; Publisher Charotar Publishing House Pvt. Ltd., New Delhi
8. A Course in Civil Engineering by V.B.Sikka, Published by Tata McGraw Hill Publisher,New Delhi

2.5 BUILDING MATERIALS - II

L	T	P
3	-	-

RATIONALE

Diploma holders in Architectural Assistantship are supposed to prepare working drawings of buildings. Knowledge of building materials is very essential from the point of construction for providing detailed specifications in the working drawings. Therefore, the course in building materials includes imparting basic knowledge in the properties and use of the basic materials like: stones, bricks, lime, cement, paints, timber, exterior and interior finishes, glass, plastics, building hardware, roofing materials, additives and admixtures, adhesives etc.

Teachers are expected to demonstrate the samples of different materials, discuss their properties with particular reference to their use and appearance in particular situations depending upon climate and environmental conditions of the site, where the materials are to be used. Students should be encouraged to collect samples of various materials and efforts should be made to maintain a good building material museum.

DETAILED CONTENTS

NOTE: The students are also expected to go through Architecture Journals like inside – Outside, Interiors today, Design and Interiors, Architect and builder, Builders Friend etc. They should make scrapbook of relevant brochures.

1. Floor Finishes (Laying sizes, availability, popular brand names, quality of polish, uses and current market rates) (6 hrs)

   - Terrazzo Tiles and Flooring
   - Glazed terracotta and ceramic tiles
   - Cement Concrete Tiles
   - Marble stone, Kota stone, slate, red sand stone, granite – their tiles and slabs
   - Parquet (Wooden)
   - Linoleum tiles and rolls
   - PVC
   - Heavy duty flooring for industrial building

2. Wall Finishes (along with application method) (8 hrs)

   - Wall board homogeneous
   - Laminated fiber boards – types
   - Plastic wall tiles – tiles available
   - Wall papers
   - Cork sheets and tiles

- Thermocoal
- Foam rubber tiles and rolls
- Textured paint finishes

3. Ceiling Materials (Size, quality, their availability, types of finishes, uses, trade names, market rate and application methods. (8 hrs)

- Hession cloth
- Gypsum plaster boards plaster of Paris board
- Plain AC sheets – E board etc.
- Plywood
- Hard Board
- Cellotex
- Fibre Boards
- Fibre glass
- Asbestos tiles
- Thermocoal
- Medium density fibre board (MDF)

4. Roofing Materials (8 hrs)

- Asbestos sheets
- GI sheets
- Shingles
- Ferro-cement sheets
- Fibre sheets
- Slates
- Manglore tiles
- Pan tiles
- Corrugated PVC sheets

Their standard sizes, uses, availability, prices and knowledge about supporting system

5. Additives and Admixtures (6 hrs)

- Water repellants and water proofing agents
- Accelerators
- Air entraining agents
- Hardners
- Workability increasing agents
- Fly ash

Their availability, uses, costs, performance specifications, and properties used under various conditions.

6. Adhesives (4 hrs)

Synthetic resins (their trade names, uses of synthetic resins, costs, application in various situations as compared to traditional materials and methods)

7. Kitchen and Toilet Fixtures (8 hrs)

Market survey of various materials and collection of data with reference to their properties, sizes, costs, designs etc. (Specifications of kitchen and toilet fittings and fixtures, their popular brand names, shapes and sizes).

Note: Sizes, specifications and availability of sanitary fittings e.g. W.C/ Cisterns/Urinals/Wash basins/Kitchen sinks, related accessories their types, brands and costs.

Note: The study should be supported by market survey of materials with brands, sizes, rates and availability. An exercise should be conducted to take the students to building material exhibitions and make them aware of new materials being launched in market and let them prepare a brief report on the application of new materials and understand how to chose a material for a specific purpose after evaluating its availability, cost, performance and elegance etc.

Teachers should demonstrate samples of various materials while imparting classroom instruction. Teachers may also arrange some field visits to manufacturing production units and retailer shops like cement, kilns, timber saw mills and seasoning plants, hardware shops, glass houses etc. Students should be encouraged to collect samples of various materials and catalogues of manufacturer. The students may maintain a scrapbook for this purpose. A museum of building construction, materials may be developed where samples of latest materials their specifications, characteristics, rates availability (supplier and relevant codes may be kept) to enhance to level of understanding of the students. The application of various materials should be shown to students in various buildings of importance, as reference

INSTRUCTIONAL STRATEGY

This is one of the fundamental subject covering basic building construction and finishing materials. Teachers should demonstrate samples of various materials while imparting classroom instruction. Teachers may also arrange some field visits to manufacturing/ production units and retailer shops like cement, kilns, timber saw mills and seasoning plants, hardware shops, glass houses etc. Students should be encouraged to collect samples of various materials and catalogues of manufacturer. The students may maintain a scrapbook for this purpose. A museum of building construction, materials may be developed where samples of latest materials their specifications, characteristics, rates, manufacturer (supplier and relevant codes may be kept) to enhance the level of understanding of the students

RECOMMENDED BOOKS

1) Sharma, SK; and Mathur, GC; "Engineering Materials;" Delhi-Jalandhar, S. Chand and Co.

2) Surendra Singh; "Engineering Materials;" New Delhi, Vikas Publishing House Pvt. Ltd.

3) Choudhary, N; "Engineering Materials;" Calcutta, Technical Publishers of India.

4) Bahl, SK; "Engineering Materials;" Delhi Rainbow Book Co. New Delhi

5) TTTI, Chandigarh "Civil Engineering Materials:" Tata McGraw Hill Publication, New Delhi

6) Kulkarni, GJ; "Engineering Materials;" Ahmedabad, Ahmedabad Book Depot.

7) Shahane; Engineering Materials; Poona, Allied Book Stall.

8) Gurcharan Singh; Engineering Materials, Standard Publishers Distributors, New Delhi

9) A course in Civil Engineering by VB Sikka, published by SK Kataria and Sons Publishers, New Delhi

SUGGESTED DISTRIBUTION OF MARKS

Topic No.	Time Allotted (Hrs)	Marks Allotted (%)
1	06	12
2	08	16
3	08	16
4	08	16
5	06	14
6	04	10
7	08	16
Total	**48**	**100**

2.6 HISTORY OF ARCHITECTURE - I

L	T	P
3	-	-

RATIONALE

The course on History of Architecture develops appreciation regarding past and current trends in the field of architecture. The knowledge of this course will help the students to understand how political, physical, social, economical and technological change affect the architecture, materials and construction techniques. The course covers broad topics like: pre-historic architecture, important civilizations, (Indian, Egyptian, Greek and Roman), medieval architecture in Europe, and temple architecture and Budhish architecture in India.

The teacher should try to create interest among the students for this course by organizing site visits to the local old monuments. Audio-visual aids should also be used to explain various architectural developments. While imparting instructions, teacher should stress upon the context of form and space, construction methods structural systems and materials. The teacher should motivate the students to take general reference for form, drawings structural solutions and materials from the history, while designing their project.

DETAILED CONTENTS

1. Pre Historical Architecture and Introduction to History of Architecture (6 Hrs)

    1.1 Importance of history to understand the Architecture.

    1.2 Examples of Early shelters, Stone Age, Tumuli, etc. as expression of man's physical and spiritual needs.

    1.3 Determinants of built form – geo physical, societal, technological etc. (Early caves, timber huts, stone houses etc).

2. Western Civilization (8 Hrs)

    2.1 Egyptian Civilization Concept of the Royal Necropolis, locational context and architectural characteristics of public buildings, e.g. Mastabas (master of sakara) pyramids and temples (rock – cut and structural) – one example of each type to be chosen.

    2.2 Mesopotamian Civilization the urban context and architecture of public buildings (Ziggurats and palaces) - one example of each.

3. Greek Civilization (8 hrs)

3.1 Greek towns, location and characteristics of typical civic spaces such as Agora, Acropolis, Theatres etc.

3.2 Significant characteristics of Greek Architecture such as Materials, construction systems, system of proportioning, Greek orders, architecture of Greek temples – Parthenon, Athens.

4. Roman Civilization (8 hrs)

4.1 Significant characteristics of Roman Architecture. Concept of monumentality, materials and construction systems, Roman orders.

4.2 Building analysis – Colosseum, Thermal, Basilicas, Pantheon Rome, The Roman villa – their form, scale and constructional/structural systems.

5. Indian Civilization (10 Hrs)

5.1 Indus Valley Civilization: Form of the Harappan city, location and role of public buildings.

5.2 Architecture of the typical Harappan dwelling, Great Granary and Great Bath.

5.3 The Vedic Village, building typology and construction.

6. Buddhist Architecture in India (8 Hrs)

6.1 Buddhist settlements in India, factors in selection of sites of Buddhist architecture.

6.2 Building typology – stupas, Chaityas and Viharas - suitable examples from each; geographical context to illustrate differences in form, construction methods and ornamentation.

Note:

While imparting instructions wherever possible, in this subject, the teachers should organize site visits to the old monuments and buildings with extra-ordinary architectural features. Experts/Guides should be invited to deliver lectures on the relevant themes in order to generate interest in the students. Audio-visual materials available on the subject, in the country and abroad, be procured and presented to the students from time to time to enrich the quality of classroom instructions. Special architectural features of some old/ historical famous Indian and International buildings may be presented to the students as case studies. Students may be encouraged to prepare case studies of at least one famous old/historical building. The teachers and students may visit web sites, relevant to the history of architecture.

INSTRUCTIONAL STRATEGY

While imparting instructions in this subject, the teachers should organize site visits to the old monuments and buildings with extra-ordinary architectural features. Experts/Guides from state and national Archaeology departments may be invited to deliver lectures on the relevant themes in order to generate interest in the students. Audio-visual material available on the subject, in the country and abroad, may be procured and presented to the students from time to time to enrich the quality of classroom institutions. Special architectural features of some old/historical famous Indian and International buildings may be presented to the students as case studies. Students may be encouraged to prepare case studies of at least one famous old/historical building. Web sites, relevant to the history of architecture may be visited by the teachers and students.

RECOMMENDED BOOKS

1. History of Architecture by Sir Banister Fletcher, Architectural Press, Oxford, UK
2. Indian Architecture (Hindu Period) by Percy Brown, Read Books Design, 2010
3. Indian Architecture (Hindu and Buddhist Period) by Satish Grover, Vikas Publishers, New Delhi
4. Encyclopedia of Architecture, (ed) Dennis Sharp, Mc. Graw Hiss Publishers, New Delhi

SUGGESTED DISTRIBUTION OF MARKS

Topic No.	Time Allotted (Hrs)	Marks Allotted (%)
1	06	12
2	08	18
3	08	18
4	08	16
5	10	20
6	08	16
Total	**48**	**100**

2.7 ARCHITECTURAL DESIGN - I

L	T	P
-	-	6

RATIONALE

Diploma holders in Architectural Assistantship find employment with private architects and also majority of them go for self-employment. Therefore, they are required to develop aptitude/skills to design residential, commercial and other public buildings.

Teachers while imparting instructions/giving assignments to students are expecting to teach various elements of design like form function, balance, light of shadow, shape, plane, volume, line, rhythm, proportions, textures and other such related elements. Teachers are also expected to show various types of designs of small building to develop and appreciation for this subject.

Teachers should also motivate students to maintain sketch book/portfolio of all the assignments given to the students.

DETAILED CONTENTS

The subject includes the elements of Anthropometrics with respect to:

a) Human body
b) Various activities and human body
c) Furniture and fitting (standards)
d) Vehicles (all angles movement, parking, turning, sizes etc)
e) Street furniture

Note: a) All dimensions in all segments to be related to human figures.
b) Dimensions should be resolved from actual measurements.
c) Minimum of 10 sheets should be made in the semester

1. Proportion of Components of Human Body (1 sheet)
   The proportions of the different components of the human body; Examples from Le Corbusier Modular Man, Vitruvius Marco Pollione, Vastu Pursha Mandala

2. Human Activities 2 sheets)
   Requirement of space (2-D, 3-D) for various human activities (Single and multiple use of spaces such as queues etc.)

3. Furniture Standards (2 sheets)
   Furniture standards (sizes of domestic and public furniture); Toilet and Kitchen equipment - sizes and standards; Doors and windows - sizes, standards and locations.

4. Vehicles (1 sheet)

Vehicles in motion, parking along with turning radii for two-wheelers, cars, buses, vans etc. Standard road width.

5. Street furniture (3 sheets)

Standards for drinking fountains, waiting queues at bus stops, garden seats, waste bins, telephone booths, street lights, foot paths, public walkways, railing etc.

6. Graphic Representation of plant material (ground cover, foliage, shrubs, trees) human figures and vehicles. (2 sheets)

Note: While imparting instruction, special visits may be arranged to demonstrate and explain important architectural features of different types of residential, commercial and public buildings. Practicing architects may be invited from time to time to present case studies and to deliver expert lectures on important elements like form, function, balance, light of shadow, shape, plane, volume, line, rhythm, proportions, textures and other such element appropriate to various designs. Teacher may present some of the already completed design works of practicing architects to the students and explain the important features and elements. Audio-visual material available in this field may be procured and presented to the students from time to time. Students should be encouraged to visit relevant web-sites and teachers should develop the design problems/assignments which can be taken up by the students using relevant and appropriate software. Students should be given group and independent design/drawing assignments and they should also maintain sketch book/portfolio of all the assignments given to them throughout the session. Teachers may conduct viva-voce on completion of each assignment. Students may present seminars towards the end of the session.

Total No. of Sheets = 11 (Minimum)

INSTRUCTIONAL STRATEGY

This is one of the most important practical oriented subject for diploma in architectural assistantship. While imparting instruction, special visits may be arranged to demonstrate and explain important architectural features of different types of residential, commercial and public buildings. Practicing architects may be invited from time to time to present case studies and to deliver expert lectures on important elements like form, function, balance, light of shadow, shape, plane, volume, line, rythem, proportions, textures and other such element appropriate to various designs. Teacher may present some of the already completed design works of practicing architects to the students and explain the important features and elements. Audio-visual material available in this field may be procured and presented to the students from time to time. Students should be encouraged

to visit relevant web-sites and teachers should develop the design problems/assignments which can be taken up by the students using relevant and appropriate software. Students should be given group and independent design/drawing assignments and they should also maintain sketch book/portfolio of all the assignments given to them throughout the session. Teachers may conduct viva-voce on completion of each assignment. Students may present seminars towards the end of the session.

RECOMMENDED BOOKS

1. Time Saver Standards for Building Types by Joseph De Chiara and John Callendera
2. Architects Data by Neufert
3. Space, Time and Order by DK Ching
4. Architectural Aesthetics by Sangeet Sharma, Abhishek Publication, 57-59, Sector 17, Chandigarh