_												
1	Name of Course		Diploma in Interior Decoration and Designing									
2	Max no. of Students			25								
3	Duration			1 year								
4	Course Type					Part 1	Time					
5	No. of Days per week					5 (	days					
6	No. of	No. of hours per day					Hrs					
7	Space require One			Theory Cla	ss Room –			Practical L	ab – 70	00 sq ft	each	
8	Entry qualification			H.S.C. Pass								
9	1 -		ge of Building Construction, To Understanding Building Drawing, To te, To Prepare Building Drawing on CAD, To Prepare Interior Drawing and									
10	Employ opport	yment unities	Office of Archit Engineering Fe									
11	Teache	ers Qualification	1)Deg	ree in Civil	Engg.							
			2) B.A	rch								
			3) Dip	loma in Civ	il Engg.							
12	Teachi	ng Scheme –										
	Sr.		Subject		Sub	ject	С	lock Hours	/ Weel	<	To	tal
						de	_	heory	Practi			
	1.	_	ial and Construct	ion	SUS001			2 Hrs	3 Hr		5 F	
	2.	Building Drawi			SUS002			2 Hrs	3 Hr		5 H	
	3.		tion and Designi	ng	SUS003			2 Hrs	3 Hr		5Hr	
	4. Software				SUS004			3 Hrs	3 Hr	S	6 H	
				Total							21	Hrs
13	Internship Fifteen day Summer Internship from 1st November 15th is Compulsory.											
14	Examir	nation Scheme – F	inal Examination	n will be ba	sed on syll	abus o	f both	years.				
				Subject		The	eory		Prac	tical	То	tal
	Paper	Sub	ject	Code	Duration	Max	Min	Duration	Max	Min	Max	Min
	1.	Building Materia Construction	al and	SUS001	3 Hrs	80	32	3 Hrs	20	08	100	40
	2.		ng &b Auto cad	SUS002	3 Hrs	80	32	3 Hrs	20	08	100	40
	3.	Interior Decorat	tion and	SUS003	3 Hrs	80	32	3 Hrs	20	08	100	40
	4.	Designing Software		SUS004	2 Lina	80	32	2 1150	20	08	100	40
		Software		503004	3 Hrs	80		3 Hrs	20		100	40
						320	128		80	32	400	160
	NOTE :- COMBINE PASSING (BOTH THEORY & PRACTLCAL )											
15	Industi	ry MOU is compu	Isory for starting	the course	·.							

# Subject- Building Material and Construction Code No – SUS001 (Building Material )

Theory	Practical
Chapter 1: Bricks Study of earth (Soils) used in manufacturing of Brick Procedure of manufacture of Bricks Classification of Bricks Properties of a good Brick Other types of Brick	Practical 1. Field Tests of Brick 2. Conduct Compressive Test on Brick 3. Conduct Water absorption on Brick
Chapter 2: Cement Grades of cement as per IS 12269 – 1987, IS 8182 - 1989 and IS 289 - 1989 Ingredients of Cement, Manufacture of Cement (only introduction) Various Types of Cements and its uses Effect of Cement on properties of concrete Storing of Cement	Practical 1. Field Tests of Cement 2. Determining initial & final setting time of Cement 3. Determining fineness Modulus of Cement 4. Determination of Compressive strength of cement (Industry Visit)
Chapter 3: Cement Mortar Ingredients of Cement Mortar Preparation of Cement Mortar – Hand Mixing, Machine Mixing – Advantages and Disadvantages Various Proportions of Cement Mortar Lime Mortar, its properties and use	Practical 1. Preparation of Cement Mortar 1:6
Chapter 4: Concrete Ingredients of Concrete Types of Concrete Plain Cement Concrete, (PCC) and Reinforced cement concrete (RCC) Various proportion of Concrete and its uses, Batching of concrete-Volume batching and weigh batching Procedure for preparing concrete – Hand Mixing, Machine Mixing Transportation of concrete, precautions to taken . 6.6) Laying of concrete & precautions to taken Necessity of compacting of concrete, equipment used for compacting concrete  Necessity of curing, Methods of curing Workability - water cement ratio and its importance	Practical  1) Conduct Compressive Test on    Concrete (cube Test)  2) Conduct Test for Work ability (slump test)  3) Conduct Compaction factor Test  4) Introduction to Non Destructive Tests    on Concrete
Chapter 5: Timber 9.1) Types of Timber. 9.2) Sections of Timber. 9.3) Characteristics of Good Timber. 9.4) Defects in Timber. Decay of Timber and remedies. Seasoning of Timber, necessity and methods. 9.7) Preservation of Timber. Timber based Product Plywood; Block Board, Veneers, Particle wood Finishing to Timber a) Painting b) Polishing c) Sun mica	Practical Report on Visit to a Timber Factory

## (Building Construction)

Theory	Practical
Chapter 6: Foundation	Practical
1.1) Necessity and Purpose of Foundation	1) Line out for 3 to 4 Room Load Bearing
1.2) Shallow Foundation	Building
1.2.1) Spread Foundation	2) Line out for Framed structure
1.2.1.1) Footing for load Bearing Structure	
1.2.1.2) Column Footing and combined Footing	
1.3) Raft Foundation	
Grillage Foundation	
Deep Foundation and its types 1.5.1)	
Cast in-situ R.C.C. concrete pile 1.5.2)	
Pre cast concrete piles	
Foundation in Black cotton soil, Under reamed pile	
Chapter 7: Stone Masonry	Practical
Terms used in stone masonry	Construction of UCR stone masonry in
Procedure of constructing un coursed Rubble and	foundation work, UCR stone masonry for
Coursed masonry, purpose of through stone in stone	compound wall (ht 1.2 m to 1.5 m)
masonry	
Points to be observed while constructing stone	
Masonry	
Chapter 8: Brick Masonry	Practical
Terms used in Brick Masonry.	Construction of Burnt Brick Masonry in
Construction of Brick Masonry in English bond and	superstructures in English Bond /
Flemish Bond in cement mortar, pre-construction	Flemish Bond
preparation, procedure of construction, post	2) Construction of concrete block masonry
construction precaution	in superstructure
Brick Masonry stretcher bond and half brick thick	'
masonry.	
Hollow and solid concrete block masonry	
Fixing of Door and window Frame in masonry	
5.6) Brief information of Siporex block masonry	
5.7) Brief information of Concrete Block masonry	
Chapter 9: Scaffolding	Practical
Purpose and Necessity of Scaffolding	1) Erecting Single Scaffolding up to G + 1
Single and Double Scaffolding, name of parts	floor
erecting Scaffolding.	2) Erecting Double Scaffolding up to G
Materials used for Scaffolding, Tubular steel scaffolding	+ 1 floor
Chapter 10: Lintels and Sills	1) Study of Laying Lintels and Sills on
7.1) Necessity of lintels 7.2) R.C.C. Lintels	Construction Site
7.3) Jambs, Sills, Head cladding, its purpose,	
materials used and construction procedures.	
used and construction procedures.	

## Chapter 11: Reinforced Cement Concrete Different types of RCC members Definitions, its properties and its locations

Ingredients of for R. C. C. Concrete
Batching of concrete ingredients- Definition and
methods, volumetric method and weight
batching method of concrete mixing

Shape and types of Reinforcing steel bars used in RCC members. Explain Terms used - Cutting of bar; Straightening of bar; Bending of bar; Hooking of bar; lapping of bar, Binding of bars, use of G.I. wire, cover for bars.

## Chapter 12: Pointing and Plastering Necessity of Pointing

Materials used for Pointing

Procedure of applying Pointing, preparation of surface to receive pointing, Procedure of applying pointing & post applying precautions

Type of Pointing

Necessity of Plastering

Materials used for plastering

Types of plaster internal wall plaster, External wall plaster, Ceiling plaster, different types of furnishings, Stucco plaster.

Procedure of plastering for each of above type, Use of machines for plastering P.O.P. finish to wall

#### **Chapter 13: Painting**

Necessity of painting, Types of paints, thinner, varnishes. Surface preparation, Use of Primers Anti corrosive paints, its primers, its necessity

White Washing to walls and ceiling, Materials used, procedure for new and old surface

Applying Dry Distemper to walls, Material, Procedure for new and old surface

Applying Oil Bound Distemper and Emulsion, Materials used, Procedure for new and old surface

Applying Cement Paint to External walls, Materials used, Procedure for New and old surface

Applying Oil Paint Primer coat, procedure of applying oil paint to woodwork, steel work and walls.

Melamine / French polish, its application on old and new wooden surfaces

#### Practical

- i) Visit to site for observing Bar bending, laying of Reinforcement bars
- ii) Observe method of providing cover, placing concrete in RCC Members
- iii) Draw Figures RCC Bars reinforcement in column Footing, column, beam, slab, lintel,

Chajja, Loft

- iv) Exercise on preparing standard Bar bending Schedule
- v) Perform bar bending and binding by using
- G.I. wire for forming Hook, EL, Bend, Lap, stirrups of 6 mm bar for column and beam

#### **Practical**

 Visit to site for observing procedure for different type of plaster work

Hands on experience of applying plaster of size 3m x 3 m on internal & external wall surface

#### **Practical**

Hands on experience of Painting of surface with

- a) White wash 3m x 3m surface area
- b) Dry Distemper 3m x 3m surface area
- c) Oil Bound Distemper 3m x 3m surface area
- d) Cement Paint 3m x 3m surface area
- Oil Paint on new Steel work and old wood work

#### **Chapter 14Stairs**

Definitions of Terms used in Stair.

Classification of stairs based on shape and materials used for construction.

Requirements of good stairs

Design of stair Thumb Rules for Design of Dog legged stair

Hand Rails Types and Fixing Procedure

#### Practical

- 1) Draw neat Sketches of any 4 types of stairs
- 2) Prepare design for RCC Dog-legged stair
- 3) Draw its plan and sectional elevation Visit site to site for observing various type of stair

#### **Chapter 15Flooring**

Definition and terms used in flooring

Flooring at Plinth level, Plinth filling & Plinth PCC

Types of Floor finishes and its suitability

Procedure of Laying Tiles such as Rough Shahabad for Pavement. Cement Briquette for pavement

Procedure of Laying polished Shahabad Tile floor.
Procedure for Laying cement Tiles, Marble
Mosaic Tile, ceramic Tiles and Marble Tiles on
floors.

Procedure for fixing PVC tiles on floors

Skirting – Function, materials used and procedure for fixing tiles.

Dado - Function, materials used and procedure for fixing.

#### **Practical**

- 1. Fixing of Tiles for Pavement
- 2. Fixing of Tiles in area 3mX4m Fixing Tiles for Dado

#### Chapter 16Door And Window

Functions of Door, Functions of window

Rules for providing Doors & windows

Parts of a Door and Window

Materials used in making of Door & window Wooden and Steel Door and Window frame

Types of Door Shutters

- a) Fully paneled Shutter
- b) Fully glazed shutter
- c) Flush Door

Fixtures & fastenings for Doors

Rolling shutter, collapsible shutters, sliding doors

Types of Windows Shutter

- a) Fully Paneled shutter
- b) Fully glazed
- c) Sliding shutters.
- d) Lowered window
- e) Steel Window
- f) Aluminum sliding windows

Fixtures and Fastening for windows Grills for window

#### Practical

- 1. Draw to a scale, drawing of fully paneled
- 2. Draw to a scale, drawing of fully glazed window
- 3. Visit to observe different types of doors and Windows

Draw Sketches of commonly used fixtures for Door & windows

#### **List of Books**

#### **Building Material**

- 1] TTTI Chandigarh Civil Engg. Materials N. Delhi, McGraw Hill, 1992
- 2] Rangwala S. C. Engg. Materials Chariot or Book Publications,
- 3] Anand Gujrath Kulkarni G. J. A Textbook of engg. Materials

#### **Building Construction**

- 1] Mackay Building Construction Vol. 1 to 4 VaynStrand
- 2] Mitchell Elementary Building Construction B. T. Batsford, London
- 3] Molnar Building Construction Drafting and Design CBS Publications. Delhi
- 4] Sushil Kumar Building Construction Delhi: Standard Publishers, 1999, 18th Ed.
- 5] Arora S. P. & Bindra S. P. Building Construction Jaipur : Dhanapat rai & Sons
- 6] Rangwala S. C. Building Construction Anand: Charotar & Publishing House

#### Raw Material:

Sufficient Raw Material for the Syllabus Practical should be compulsorily made available to perform the practical. (e.g. Bricks, Sand, Cement, Aggregate, Lime powder, white cement, Tiles, Reinforcement Bars, Binding wire, Color, Paint, Turpentine, Brush and other such consumable raw material)

#### **List of Tools and Equipment**

#### A] General Class room

Sr	Name of Item	No.
1	Chair with writing pad	25
2	Steel table 4' x 3'	2
3	Teacher chair	2

#### **B] For Building Material and Construction Practical**

Sr	Name of Item	No.
1	Measuring Flexible Steel Tape 3 mtr	25
2	Measuring Flexible Steel Tape 15 mtr	1
3	Measuring Flexible Steel Tape 30 mtr	1
4	Trowel	1
5	Brick hammer	1
6	Plumb bob	1
7	Sprit level	1
8	Brick Swa	1
9	Hack Swa	1
10	Pick axe	1
11	Marble Cutter	1
12	High Speed Imact Drill	1

### Subject - Building Drawing & Auto cad

#### Code No – SUS002

Code No – 505002	Bread 1
Theory	Practical
A] Building Drawing	1 Year
Chapter 1: Introduction to Drawing 1.1) Different Drawing Instrument and their use 1.2) Letters its types, Sizes and its use in Drawing 1.3) Convention of different lines 1.4) Giving dimensions 1.5) Scales and its uses 1.6) Study of IS 962	Practical 1) Prepare Sheet on lettering 2) Prepare Sheet on lines 3) Prepare Sheets on Geometrical Construction 4) Prepare Sheets on Conventional Sign and Symbols
Chapter 2: Orthographic Projection 2.1) Introduction to orthographic projections 2.2) First Angle Projections Method Third Angle Projections Method Drawing orthographic Projections of simple pictorial view	Practical  1) 1 <sup>st</sup> Angle Projections 2 Solids 2) 3 <sup>rd</sup> Angle Projections 2 Solids
Chapter 3: Isometric View 3.1) Method of Preparing Isometric Views 3.2) Isometric View of Rectangular Objects 3.3) Isometric View of Circular Objects 3.4) Isometric View of Building	Practical 1) Isometric View of Rectangular Objects 2) Isometric Vies of Circular Objects 3) Isometric View of Building
Chapter 4: Building Drawing Dimensions and Details of Foundation C/S. DPC, Different Types of Door and Windows, Roof Trusses, Flooring C/S, Staircase, Brick Masonry, Lintel, Arches, Chajja, C/S details of RCC Chajja, Lintel, Beam, Footing, Column, Slab, Pardi, Staircase etc.	Practical Detailed Drawing of Foundation C/S. DPC, Different Types of Door and Windows, Roof Trusses, Flooring C/S, Staircase, Brick Masonry, Lintel, Arches, Chajja, C/S details of RCC Chajja, Lintel, Beam, Footing, Column, Slab, Pardi, Staircase etc.
Chapter 5: Building By Laws and Standard Norms  3.1) Definitions of Plot Area, Plinth Area, Built up Area, Carpet Area, Floor Space Index (FSI) Permissible Built up Area for Residential Bldg., Public Building Definition of Marginal Distance and their necessity, Normal Marginal Distances provided for Residential Buildings Definition and Necessity of Building Line, Development Line Min Dimensions for following  3.6.1) Plinth height, Sill height, Head Room in Residential Bldg, Public Buildings, Mezzanine floor, Basements and stilts for car parking  3.7) Minimum Dimensions of: Living Room, Bed Room, Master Bed Room, W.C. Bath, Toilet.  3.7.1) Min. Width for passage and Balcony  3.8) Rules for Window Opening  3.9) Min. width of step and Landing, Head Room, Thumb Rules for fixing Rise and Tread.  3.9.1) Permissible Height of Pardi, of Building as per FSI and Road Width	Practical  1) Student to Draw for A Residential. Bungalow (Load Bearing) i.e. minimum 2 Bedrooms (one Bed room with attached Toilet), 1Hall, 1Kitchen, Veranda, Staircase, Toilet block, and Car Parking. a) Plan, b) Elevation c) Two sections d) Schedule of door and window e) Site plan, f) Area statement, g) Construction notes. h) Schedule of finishes

## Chapter 6: Development of Line Plan of a Building

Symbols and notations as per BIS 696 in Civil Engg. Drawing.

Preparing Line Plan of Building, necessity of preparing line plan.

Development of Plan of Residential Building having living Room, Kitchen Room, Bed Room, Bath room and w.c. with slab. Draw to scale – Plan, Elevation Sections in 3 directions

Working drawings and its necessity.

- 2) Draw tracing of above drawing
- 3) Prepare ammonia sheet
- 4) Simple Working Drawing (For Only Concept clearing)

## Subject - Software & Auto cad

### Code No - SUS002

Theory	Practical
B] Computer Fundamental	6 Month
1] Fundamentals Of Computer	List of Practical
Introduction Components of PC The system Unit Front part of system Unit Back part of system Unit CPU Memory of computer Monitor Mouse, Keyboard Disk, Printer, Scanner, Modem, Video, Sound cards, Speakers	<ol> <li>Working with Windows 2000 desktop ,start icon, taskbar, Recycle Bin, My Computer icon ,The Recycle Bin and deleted files Creating shortcuts on the desktop</li> <li>The Windows 2000 accessories, WordPad – editing an existing document, Use of Paint – drawing tools         The Calculator, Clock</li> <li>The Windows Explorer window, concept of drives, folders and files? Folder selection techniques, Switching drives, Folder creation, Moving or copying files, Renaming, Deleting files and folders</li> <li>Printing, Installing a printer driver, Setting up a printer, Default and installed printers, Controlling print queues, Viewing installed fonts, The clipboard and 'drag and drop', Basicclipboard</li> </ol>
	concepts Linking vs. embedding,
2] Introduction To Windows 2000/Xp Working with window Desktop Components of window Menu bar option Starting window Getting familiar with desktop Moving from one window to another Reverting windows to its previous size Opening task bar buttons into a windows Creating shortcut of program Quitting windows	<ol> <li>Moving through a Word document menu bar and drop down menus toolbars</li> <li>Entering text into a Word 2000 document, selection techniques Deleting text</li> <li>Font formatting keyboard shortcuts</li> <li>Paragraph formatting Bullets and numbering</li> <li>Page formatting What is page formatting? Page margins Page size and orientation Page breaks, Headers and footers</li> <li>Introducing tables and columns</li> </ol>
3] GUI Based Editing, Spreadsheets, Tables & Presentation	11. Printing within Word 2000 Print setup Printing options Print preview
Application Using MS Office 2000 & Open Office.Org Menus Opening, menus, Toolbars, standard toolbars, formatting toolbars & closing Quitting Document, Editing & designing your document Spreadsheets Working & Manipulating data with Excel Changing the layout Working with simple graphs Presentation Working With PowerPoint and Presentation	<ul> <li>12. Development of application using mail merge Mail merging addresses for envelopes Printing an addressed envelope and letter</li> <li>13. Creating and using macros in a document</li> <li>14. Creating and opening workbooks Enteringdata</li> <li>15. Navigating in the worksheet Selecting items within Excel 2000 Inserting and deleting cells, rows and column Moving between worksheets, saving worksheet, workbook</li> </ul>
4] Introduction To Internet What is Internet Equipment Required for Internet connection Sending &receiving Emails Browsing the WWW Creating own Email Account Internet chatting	<ul> <li>16. Formatting and customizing data</li> <li>17. Formulas, functions and named ranges</li> <li>18. Creating, manipulating &amp; changing the chart type</li> <li>19. Printing, Page setup, Margins     Sheet printing options, Printing a worksheet</li> <li>20. * Preparing presentations with Microsoft Power Point. Slides and presentations, Opening an existing presentation , Saving a presentation</li> </ul>

#### 5] Usage of Computer System in various Domains

Computer application in Offices, books publication data analysis ,accounting , investment, inventory control, graphics, database management, Instrumentation, Airline and railway ticket reservation, robotics, artificial intelligence, military, banks, design and research work, real-time, point of sale terminals, financial transaction terminals.

- 21. Using the AutoContent wizard ,Starting the AutoContent wizard, Selecting a presentation type within the AutoContent wizard Presentation type Presentation titles, footers and slide number
- 22. Creating a simple text slide, Selecting a slide Layout Manipulating slide information within normal and outline view, Formatting and proofing text, Pictures and backgrounds, drawing toolbar, AutoShapes, Using clipart, Selecting objects, Grouping and un-grouping objects, The format painter
- Creating and running a slide show, Navigating through a slide show, Slide show transitions, Slide show timings. Animation effects
- 24. Microsoft Internet Explorer 5 & the Internet Connecting to the Internet The Internet Explorer program window, The on-line web tutorial Using hyper links, Responding to an email link on a web page
- 25. Searching the Internet, Searching the web via Microsoft Internet Explorer, Searching the Internet using Web Crawler, Searching the Internet using Yahoo, Commonly used search engines

## 6] Information technology for benefits of community

Impact of computer on society Social responsibilities Applications of IT Impact of IT Ethics and information technology Future with information technology

- 26. Favorites, security & customizing Explorer Organizing Favorite web sites Customizing options general, security, contents, connection, programs, advanced
- 27. \* Using the Address Book Adding a new contact Creating a mailing group, Addressing a message, Finding an e-mail address
- 28. Using electronic mail, Starting Outlook Express Using the Outlook Express window, Changing the window layout, Reading file attachment, Taking action on message-deleting, forwarding, replying
- 29. Email & newsgroups, Creating and sending Emails Attached files, Receiving emails, Locating and subscribing to newsgroups, Posting a message to a newsgroup
- 30. Chatting on internet, Understating Microsoft chat environment, Chat toolbar

#### C] Computer Aided Designing and Drafting

#### 1.0 CAD Software

Meaning, various CAD software available in the market AutoCAD, Felix Cad, Auto Civil, 3D Max; etc.) Starting up of CAD, CAD Window, Tool bar, Drop down menu, Command window, Saving the drawing. Introduction of Graphic screen.

#### 6 Month

Practical related Creating New file, Closing Drawing, Saving Drawing, Startup Methods, Modes in AutoCAD, Use of Function Keys, Use of Keyboard and Mouse in AutoCAD Practice.

#### 2.0 CAD Commands

WCS icon, UCS icon, co-ordinates, drawing limits, grid, snap, ortho features. All Drawing commands, line, circle, polyline, multiline, ellipse, polygon etc.

All Editing commands – Copy, move, offset, fillet, chamfer, trim, lengthen, mirror, rotate, array etc.

Working with Layers, Block, hatches, fills, dimensioning, text etc.

Practice on Small Drawing Objects using Commands in Draw Menu Practice of Editing command on above drawing objects, Dimensioning Drawing, Creating Title block, Area Statement and Schedule of Opening using Text in AutoCAD,

#### 3.0 Use of Cad software for practice of:

Generation of line plan, Detailed Plan, elevation, section, site plan, Area statement and print commands

Generation of 3D view using 3D Modeling commands and 3d Operation commands, Creating 3D of Building

Introduction to Auto desk Architect, 3D Max

Drawing Plan, Elevation, Section, Site Plan in AutoCAD

Creating 3D Model of Building and Generating required 3D view from all sides.

Other CAD Practical based on the Theory.

#### **List of Books**

#### **Building Drawing**

- 1] Malik, R.S. & Meo G.S. Civil Engg Drawing Delhi: New Asian Publishing
- 2] Shah P. J. Engg. Drawing 1 Ahmedabad: D. J. Shah Publishing
- 3] Bhat N. D. Engg. Drawing Anand: Charotor
- 4] Gurucharan Singh Civil Engg. Drawing Delhi: Standard Publishers
- 5] Sane Y.S Building planning
- 6] Shaha Kale & Patki Building Drawing
- 7] Mackay W. B. IS962 Beauro of standards India (ISI)

#### **Computer Fundamental**

- 1] Vikas Gupta Comdex Computer Course Kit First Dreamtech
- 2] Henry Lucas Information Technology for management 7Th Tata Mc-Graw Hills
- 3] B.Ram Computer Fundamentals Architecture and Organisation Revised 3<sup>rd</sup> New Age International Publisher

#### **CAD Books**

- 1] Reference Manual of AutoCAD AutoDesk
- 2] Reference Manual of Felix cad Felix CAD
- 3] Reference Manual of Intel CAD
- 4] Reference Manual of Auto Civil
- 5] Reference Manual of 3D-Max

#### List of Tools and Equipment

#### A] General Class room

Sr	Name of Item	No.
1	Chair with writing pad	25
2	Steel table 4' x 3'	2
3	Teacher chair	2

#### **B] For Building Drawing Practical**

Sr	Name of Item	No.
1	Drawing Table	25
2	T-Square/ mini Drafter	25

#### **C]** For Computer Fundamental and CAD Practical

Sr	Name of Item	No.
1	Computer System i3 with accessories Complete with license OS.	5+1
	compatible for- to run AutoCAD 2022	
2	Plotter- HP Design Jet 500 latest model	1
3	Scanner	1
4	Computer table	5+2
5	Chair for computer	10+2
6	Laser Printer	1
7	AutoCAD 2022 or above Software	1
8	M. S. Office Software	1

## Advance Interior Decoration and Designing Code No – SUS003

Code No - 303003	
Theo	Practic
ry	al
•	
1: Introduction	Practice oriented exercise: 8 Sheet
Introduction, purpose of design & decoration	Journal containing sketches and write
Process and factors of design & decoration	up
Structural design, decorative design with	
Characteristics & examples	
2: Principles of design	
<b>2.1</b> The principles such as symmetry, balance,	
harmony, rhythm, colour, emphasis, scale &	
proportions	
3: Elements of design	
<b>3.1</b> Elements such as line, form, texture, light,	
space, pattern, colour 4: Element of Interior Design	
Lights, electric & Communication	
Wiring, Water Supply & Drainage System	
Landscaping, Upholstery, Painting	
5: Ergonomics & Anthropometrics	Practice oriented exercise: 8 sheet
Ergonomics, a total study	Tradice change exercise. Consec
Anthropometrics, a total study	
Environmental Control	
Comfortable Design	
Natural Day Light	
Climatology	
Air-Conditioning	
Fire Safety	
6: History of interior design	
Classical & Medieval interiors	
Nineteenth century & Modern interiors	
Oriental interiors & Indian interiors	
Future Trends in interiors	
7: Basic Joinery	
Importance of Joint	
Types of Joint	
Butt Joint, Rebated Joint, Tungue & Groove Joint,	
Mitre Joint, Mortise & Tenon Joint, Dovetail	
Joint, Housing Joint, Cross Lab Joint 8: Drawing presentations	Practice oriented exercise: 12 sheet
Representing furniture items, plants, accessories	1 TACILOE OFFICIACIO EXCLOSE. 12 SHEEL
etc as well as styles in parallel & orthographic	
projections.	
Using cut & paste; black& white; colour rendering	
and such techniques of presentations.	
9: Perspective presentations	
Drawing 1-point perspective projections.	
Drawing 2-point perspective projections.	
10: Study of residential interiors	
Living space	
Dining space	
Living-dining space	
Kitchen	
Kitchen-dining space	

Theory	Practical
11 Study of Residential Interior	Practice oriented exercise: 12 Sheet
Master bedroom with attached Toilets	
Children's Bedroom	
Guest Bedroom	
Utility area (Store Room, Study Roometc.)	
W. C., Bathroom or Toilet Block	
12 Design Program for Residential Flat 1 BHK / Hostel Room / Bank / Restaurant Detail Plan Sectional Elevation	
Furniture Detailing (Orthographic or Isometric	
view)	
Electrical Layout & Falls Ceiling	
Ceiling layout & Details	
Prospective of Furniture Model (Any One)	
Cut & Paste of Furniture & other accessories	

Theory	Practical
Joints in Structure - Need for joints in building ,	Construction joints – wall, column, slab details.
construction joints –position of construction joints , method of forming construction joints	
Expansion and construction joints	Expansion joints -details
Details of expansion and construction joints in wall	
roofs, spacing of expansion joints, materials used in expansion joints.	
False (Suspended) ceiling: Requirement of false	Fixing Details. Design of False Ceiling in a
ceiling, Materials used for false ceiling to suit	residence (at Living, Dinning, Toilet etc.)
different purposes like Acoustical / Thermal /	, , ,
Ordinary	
Lighting, Classification of false ceiling and related theory of Acoustics.	Design of False Ceiling in a Restaurant,
Construction details of false ceilings as per	Reception / Lounge, Office Area etc.
Materials & Design.	
<b>Partition:</b> Need for partition, Materials used for partitions, Brick partition, Glass partition, etc.,	Design & details of partition walls using Aluminum & Timber sections.
Metal lathe, timber, hollow block, concrete, AC	Design & details of partition walls using GI, PVC &
sheet or GI sheet	composite sections.
Acoustical partition, Gypsum, semi glazed, glass	Fixing details of materials used for partitions.
block, PVK, partition, construction details for fixing partition of different types.	
Paneling:	Plan elevation &sections.
Requirement of paneling, Materials used for	Construction details. Fixing details of materials used
paneling, Types of panel, Construction details	for paneling.
Traditional paneling, Modern paneling at	Plan ,elevation , fixing details of materials
Restaurants, Hospitals, Lounges at Hotels.	Constructional Detail: (using different material) for
Conference halls, convention centers, etc. Concept of False Flooring, Termite Control, Pest	Design theories related to Reception / Bank counters Wardrobe etc. Dining / conference table
Control etc. for better maintenance of structures	etc
from pre-construction stage to post construction	
stage.	

**Fabrics:** their classification, characteristics and identification. Different fabric, weave, texture, colour, taint ness and durability, shrinking treatment for different fabrics (cotton, wooden, silk and blended.

Design of furniture for different purpose – Bed rooms, dining hall, Library, Office Workshop, Classroom, Kitchen etc.

Painter hand tools, brushes of various sizes, diamond lazier, stopping knife, scrapers, palate Knife, chisel knife, shave hook, pump line, lining tool, rule file, etc. their description, use, care and maintenance.

Paints and Varnishes – method of preparation-Different types – classification and their application on woods. Painter's equipments classification, function and their uses – principles of spray gun painting. Method of application and precautions. Painting by spray gun, brushes and roller - different specific application and their defects and remedies. Different colour used, selection of paints for different types of fitting, electrical fittings, water supply, sanitary and drainage line etc. Preparation of glue and putty Practice of Painting on various surface for patch of 2x2 ft size using different paint and varnish.

#### Modes of Measurements

Points Considered while fixing unit of measurement Modes of measurements of item of work as per IS 1200

Desired Accuracy of measurement

#### Detail Estimate

Definition of Detail Estimate, Uses of Detail Estimate

Data required to prepare detailed estimate
Procedure of preparing detailed estimate of any
work

Taking out quantities and entering the data in measurement sheet and completing abstract sheet. Abstracting using Abstract sheet, List of items with their unit of measurement, Definition of contingencies, work charge establishment, Provisions in details estimate for sanitary, water supply, Electrification.

Types of Estimates, Detail Estimate, Revised Estimate, Supplementary Estimate, Annual report and Maintenance Estimate, Special Report Estimate, Additions and Alteration Estimate. Procedure of calculating Quantities for Different Item of work Rules for Deduction in concrete, Masonry, Pointing & Plastering, Painting, Multiplying factor related to oil painting

#### Practical

List our different item of interior decoration work and write unit of measurement and rate of each item using different CSR

#### Practical

- 1. Preparation of Detail Estimate of a Residential Building (Load Bearing Structure)
- Details estimate of Furniture Estimate of minimum
   BHK

Note: No. 1 is Compulsory and any one out of 2 and 3

#### **List of CD Books( Journal)**

- 01] Home Plans & Elevations (pebbles) (CD)
- 02] Home Plans & Elevations (pebbles) (CD)
- 03] Home Plans & Elevations (pebbles) (CD)
- 04] Home Plans & Elevations (pebbles) (CD)
- 05] Time Saver Standards, Design Space Planning Joseph De chiara 1991 McGraw Hill New York
- 06] Interior Design John Pile 1995 Harry N.A.
- 07] Interior Design Ahmed Kasu 1995 Twain
- 08] Interior Design Illustrated Francis D. K. Ching 1987 Van Norstrund
- 09] Living Area Shirish Bhagat 1993
- 10] Building Construction S. C. Rangniala 1993 Charottar Anand
- 11] Building Construction Sushil kumar 1991 Van Norstrund New York
- 12] Architectural Material Science D. Airapetov 1986 Mir New York
- 13] Neufrat Architects Data John Thackara 1986 Oxford London
- 14] Human Dimensions Julius Panerio 1974 Whitney New York
- 15] Pidilite Industries FEVICOL BOOK No 1 To 14
- 16] Wood Work Theory & Practice John Walton Canbera High school Sydney
- 17] Furniture Exhibitions articles

#### A] General Class room

Sr	Name of Item	No.
1.	Chair with writing pad	25
2.	Steel table 4' x 3'	2
3.	Teacher chair	2