

INTERIOR DECORATION [INDC]

General Information :

1. Name of the Trade : Interior Decoration
2. Entry Qualification : Passed Class VIII
3. Duration of Craftsmen Training : 06 Months [Under Vocational Short-Term Course]

Objective of the Course :

To impart necessary competencies with the focus on development of skill and knowledge so as to enable the student to become self-employed in the relevant vocation.

Course Break-up :

- a) Practical instruction : 288 hours
- b) Theoretical instruction : 67 hours
- c) Entrepreneurial instruction : 05 hours

Marks Alloted :

- a) Practical : 400
- b) Theory : 100

Syllabus for the Trade of "Interior Decoration"

Practical	Theory	Workshop Science & Calculation
INTRODUCTION OF TRAINING Familiarisation with the Institute. Importance of trade training. Instruments used in the trade. Types of work done by the trainees in the Institute. Type of job made by the trainees in the trade.	Importance of safety and general precautions observed in the trade by the Institution. Importance of the trade in the development of industrial economy of the country. What is related instructionsubjects to be taught, achievement to be made. Recreational, medical facilities and other extra curricular activities of the Institute. (All necessary guidance to be provided to the newcomers to become familiar, with the working of Industrial Training)	Multiplication & Division-common fraction, subtraction,

Practical	Theory	Workshop Science & Calculation
Free hand sketching of geometrical models. Lettering and numbering, vertical and inclined. Construction of ordinary scales, plain, comparative, diagonal, vernier and scale of chords. - as per ISI 696-1972.	Importance Of lettering, printing of letters and number sizes, proportion etc. as per I.S.I. Code. Principles, representation and construction of different types of scales, graphic scales, recommended scales for drawing with reference to I.S.I. Codes.	-Do
Geometrical Drawing, curves, projection and its different types, sectioning, development etc.- construction of different plane geometrical figures & curves. Familiarisation of drawing instruments and materials. Layout of drawing sheets. Drawing conventional lines according to I.S.I. code. Folding of sheets. Construction of plane geometrical figures (types of lines, angles, triangles, rhombus, quadrilaterals, polygons etc.). General principles representation, i.e. Orthographic projections in 1 st and. 3 rd angle. Sectional views-different types of Sections. Isometric projection, Axonometric projection, Oblique projection & Perspective projection of geometrical solids. Simple plan: room with furniture layout.	Drawing is the language of technicians. Drawing office organization. Drawing instruments, equipments and materials their use, care & maintenance, safety precautions. Introduction to Indian Standard Institution. Code of Practice for general and architectural drawing. Geometrical drawing. Definitions, construction of plain geometrical figures. Orthographic projection, dihedral angles and Recommended methods of projection according to I.S.I. Codes. Theory of projection as specified in SP: 46-1938. Importance of sectional views, Types of sectional views and their uses. Parts not shown in section. Principle of Isometric projection, difference between isometric drawing and isometric projection. Isometric scale. Dimensioning an isometric drawing.	Units-different system and conversion. Ratio and proportion in the trade problem.

Practical	Theory	Workshop Science & Calculation
Inking and tracing. Use of Leroy set, printing of letters. Preparing Blue Prints and Ammonia Prints.	Inking and tracing operating of Leroy set and care of its accessories. Method of preparing Blue Prints or ammonia prints. Folding of prints.	
Drawing details of brick stone wooden and steel stairs. Preparing drawings of details of parts of wooden stair. Preparing drawings of straight, open newel, dog legged geometrical and bifurcated stairs and spiral stairs. Drawing different types of Lintel and Arches. Drawing perspective views of building including colouring and shading. Introduction to one point perspective and two point perspective.	Stairs: terms, forms, materials, planning and designing of stairs. Details of construction. Types of perspective projection. Fundamental concept, definition, location of station point. Perspective view-types. Method of construction technique of colouring and shading. Introduction to basic interior : History of basic interior and different furniture. Elements of principle of design	Algebra - Simple equation & transposition. Problem involving trade problem, quadratic equation. Unit of force, weight, equation of motion, laws of motion - problems.

The trainees should be able to :

1. Use of Drg. Instrument, their care & maintenance.
2. Drawing all types of lettering & using stencils.
3. Construct, read & use of plain, comparative, diagonal & vernier scale
4. Construct plain geometrical figures.
5. Draw sketches from models (plan, section & elevation)
6. Draw & design types of staircases.
7. Draw simple perspective view.
8. Planning, designing & measuring of drawing.

Practical	Theory	Workshop Science & Calculation
How to start design-flow chart, bubble diagram, programming, planning and designing of spaces, functional aspect of design.	Space planning and related by laws. Typical floor plan, basement plan, parking plan, roof plan etc. Drawing symbol, steps, 2nd floor plan, common building terms used. Rules for dimensioning architectural drawing, projection of elevation, roof types and detailed sectional dimension of the drawing.	Area of triangles, rectangles, square, circle, regular polygons etc. problems.
Measured drawing of a classroom / Living room.	Layout of space selection, furniture styles, selection of furniture, use of furniture templates, measurement of drawing as per design.	Calculation of volume and weight of simple solid bodies - such as cubes, Prism and its problems.
Hotel suite site visit; case study and measurement of drawing.		

Practical	Theory	Workshop Science & Calculation
<p>Drawing details of single room single storeyed residential house (both pitched and flat roof). Drawing plan, elevation, section with aid of line diagrams. Layout and detailing of a residential building. Draw perspective view of the House and layout of furniture.</p> <p>Colour scheme of the designing: Preparation of the colour drawing /perspective of schemes. a) Types and characteristics of line (b) Types of forms and its application (c) kinds of design (d)Principle of Making design (e) Colour-its characteristics (f) Kinds of colour scheme (g) Colour and colour theory.</p>	<p>Residential building. Principles of Planning. Local building by laws, types of building, types of services, types of utilities. Introduction to building materials - Physical and Mechanical properties of materials. Types of, ceramic materials, glass and plywood and their utilization in interior, designing. Method of fastening parts - nail, wood screw, screw thread, stud in nuts and bolts.</p> <p>Fabrics: their classification, characteristics and identification. Different fabric, weave, texture, colour, taintness and durability, shrinking treatment for different fabric (cotton, wooden, silk and blended. Method to find out quantities of material and their cost for a single storied residential building. Finalisation of specification and the estimated cost.</p>	Trigonometrically ratio, Function applied: Problems on height and distance. Reading and plotting of simple graph. Properties of metal which are used in the interior designing.

The trainees should be able to :

1. Case study & measuring of hotel suite.
2. Draw plan, section & elevation of the residential building with the help of sketches & line diagram.
3. Draw perspective view of the design. Layout of room & furniture.
4. Knowledge of different types of material.
5. Knowledge of different types of colour for wall & designing for the ceiling.

Practical	Theory	Workshop Science & Calculation
<p>Preparing of surfaces on wood by cleaning, rubbing down, knotting, stopping, filling, artificial wood staining and graining. Preparing of surfaces on wood for varnishing, finishing polishing of doors, windows, panels, partitions of rooms, wooden boxes etc. Painting of walls, ceiling with colour, painting of doors and windows, fittings, electrical fitting, Water supply pipe lines house drainage, sanitary fittings etc.</p> <p>Painting with synthetic enamel paints of inside and outside fittings including sanitary drainage water supply gas pipes etc. of a building offices.</p> <p>Drawing details-types of floors, concrete, brick on edge, tiled, timber, patent, stone, mosaic and glass etc. Making detailed drawing of different types of door including paneled glazed and flush door. Method of fixing doors or windows frame to wall and details of opening.</p> <p>Note : Necessary practical Training will be carried out on site.</p>	<p>Painter hand tools, brushes of various sizes, diamond glazier, stopping knife, scrapers, palate Knife, chisel knife, shavehook, pump line, lining tool, rule file, etc. their description, use, care and maintenance. Use of roller. 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 analysis of rates for simple items of work. Schedule of specification. 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. Type of floor finishing methods of constructing granolithic, mosaic, brick tiled etc. used in floors. Door, windows and ventilations-parts, location, sizes and types. Details of different bending wall and section according to ISI.</p>	<p>Lever - types and problems. Heat and temperature different thermo metric scale. Linear expansion of sold, Unit of heat, problem on work, power and energy. Horse power, wattsimple problems. Friction-Laws of friction, coefficient of friction & angle of friction.</p>
<p>Plumbing Planning of plumbing, plumbing layout plan and elevation, section, details etc. Preparation of drawings showing various pipe joints for underground drainage, method of sanitary fittings in multistored building, manholes, septic tank etc.</p>	<p>Common hand tools used for plumbing and their description and uses. Description of Plumbing operations. Introduction-terms used in public health engineering. System of sanitation- house plumbing, sanitary fittings etc. Types and system of lighting. Safety precautions. Elementary first aid: Artificial Respiration and treatment of electrical</p>	<p>Sound, characteristics of sound Light: Laws of reflection, refraction - simple problems.</p>

Practical	Theory	Workshop Science & Calculation
Lighting systems in different spaces. Fixing and connecting appliances for domestic/commercial area. Electrical layout. Lighting circuits and study of planning material.	shock Elementary electricity. General idea of supply system. Wiremen's tool kits. Wiring materials, electrical fittings. System of wiring, Wiring installation for domestic lighting.	
Note:- Necessary Practical Training will be carried out on site.	AC-Purpose, types, ducting and drainage. Role of different plants and their layout in the interior designing.	
Introduction of office design project - detail layout plan, sectional elevations, perspective, plumbing system, false ceiling, wall treatments for temperature control and aquatic, electrical planning"and other furnishing details.	Office building - planning of office interior designing as per I.S. Code. Types of offices, service utilities. etc. Rules and regulation of State urban Development authorities, Board, Improvement Trust etc.	Finding surface area and volume using Prismoidal & Trapizoidal formula and also Simpson's rule.

The trainees should be able to :

1. Have knowledge of paints & varnishes.
2. Draw different types of floors.
3. Draw different types of doors &windows including knowledge of carpentry joints.
4. Have general idea on plumbing, carpentry & electrical wiring.
5. Have knowledge of paint & painting technology.
6. Have knowledge of AC, lighting & electrical fitting.
7. Familiarisation of different types of furniture.
8. Calculation of materials used in furniture, estimate and cost economics.

Practical	Theory	Workshop Science & Calculation
Use of Carpenter's hand tools involving sawing, planing and chiseling. Marking out and marking simple joints used in doors and trusses. Construction of a table, chair, sofa, cabinets, beds, dining table etc. Note:- Necessary Practical Training will be carried out on site.	Safety precautions and elementary first aid. Preparation of glue and putty. Carpenter's hand tools, their names, description and use. Common joints. Use of nails, screws, hinges, dowels etc. Grinding and sharpening of tools. Their care and maintenance. Use of different types of joints. Properties and uses of different timbers used in construction work. Design of furniture for different purpose-Bed rooms, dining hall, library, Office Workshop. Classroom, Kitchen etc.	Centre of Gravity, Moment and moment of inertia of different sections.

Practical	Theory	Workshop Science & Calculation
Types of wood, classification and uses. False ceiling - Partition - Low height, full height, partly glazed.	Type of partition - wall, wooden, glass etc. Modes & their finishing.	Load-various type, bending moment Shear force, cantilever and simple supported beams. Load calculation of different members of a truss (graphical representation)

VISIT TO DIFFERENT SITES WHERE INTERIOR DECORATION AND DESIGNING WORKS ARE IN PROGRESS

Practical	Theory	Workshop Science & Calculation
Auto-CAD Training 1. Elementary DOS (Disc Operating system.) 2. Knowledge Editor 3. How to install Auto-CAD 4. Elementary Command of Auto CAD 5. Knowledge-Window Software 6. Freeh and Working practice on Auto-CAD. 7. Practice on 3D drawing & Designing Project work - isometric view, light tracing, copying, estimating for masonry work, reinforcement, wood works etc.	1. What is Computer General Term used in Computer 2. Elementary DOS command 3. Word processor, commands and their uses 4. Window Command and their uses 5. Auto-CAD commands and use of different menus of Auto CAD 6. Theory about 3D drawing	Electricity - Ohm's Law. Parallel and series connection problems. Use and practice with planimeter and pantograph. Revision and test

REVISION AND TEST

1. Construct different types of partition. & ceiling
2. Draw plan, sectional elevation & perspective view of a office including plumbing, electrical, colouring & shading
3. Estimating for masonry work, reinforcement, woodwork etc. Knowledge of joineries.
4. Prepare working drawing of different types of designing building by Auto CAD.

Final Achievement :

1. Use & Maintenance of : drawing instrument & drafting m/c.
2. Construction & use of different scales.
3. Space planning Selecting space, programming circulation & design
4. Measured drawing - Case study of hotel suits & corporate house
5. Detailed construction of table, chair, sofa, cabinets, beds & dining tables etc.
6. Construction - Plan, sectional elevation, perspective views, plumbing, electrical, painting & finishing etc. of a corporate office
7. Estimating for masonry work, reinforcement & wood work etc.
8. Designing various types of staircases, roofs, ceilings, partitions, walls etc.
9. Preparing tracing job of printing of a given drawing (ammonia / blue-print)
10. Setting of plants within the design
11. Specification of paints, colour, finishing of wall & ceiling

ENTREPRENEURIAL INSTRUCTION

Sl. No.	Course Curriculum	Hours.
1.	Brief idea on nature of small business management and Industrial Technical Skill.	
2.	Preparation of schemes and vetting to Financial Institution / Lead Bank for obtaining loans.	
3.	Rules for setting up of business / production unit.	
4.	Maintenance of Accounts, labour, capital etc.	
5.	Man management, Communication, Motivation	
6.	Operational management	
7.	Market survey	
8.	Quality control	
9.	Visit to Industrial units for gathering idea to start the unit	
10.	Choice of technology as per demand of local people of the area/district / state.	
11.	Knowledge of Sales tax etc.	
12.	Brief idea for registration of SSI, Trade License, Project Report, Proposal for loans, etc.	
		Total 05