

CIVIL FACULTY

COURSES & SYLLABII



INDIAN TECHNICAL EDUCATION SOCIETY, MUMBAI

Implemented From NOV.- 2014

INDIAN TECHNICAL EDUCATION SOCIETY, MUMBAI

CERTIFICATE AND DIPLOMA CIVIL FACULTY COURSES EXAMINATIONS

SYLLABUS & SCHEME OF EXAMINATIONS

SCHEME OF EXAMINATION

Sr. No.	EXAMINATION AND ABBREVIATION	PAGE NO.	PAPER
	CERTIFICATE COURSES		
1	Civil Draughtsman [CD]	2 to 5	Two papers - 100 Marks each
2	Architecture Draughtsman [AD]	7 to 9	Four papers - 100 Marks each
3	Interior Designing [ID]	12 to 14	Two papers - 100 Marks each
	DIPLOMA ENGINEERING SERVICES COURSES		
4	Diploma Civil Engineering Services [DCES]	2 to 8 & 14 – 15	Four papers - 100 Marks each
5	Diploma Interior Design Practice [DIDP]	12 to 14 & 17	Three papers - 100 Marks each

Minimum Passing - 35 Marks each paper.



INDIAN TECHNICAL EDUCATION SOCIETY, MUMBAI

CERTIFICATE COURSE CIVIL DRAUGHTSMAN [CD]

EXAM SCHEME: THEORY PAPER 100 MARKS – 3 HRS.

[CD – I / AD – I / DCES – I]

THEORY SYLLABUS

1. Introduction to Building Construction.

- ❖ Classification of Structure.
- ❖ Components of a building.

2. Introduction to Engineering material.

- ❖ Lime, Sand, Cement and Mortars etc.

3. Brick Masonry.

- ❖ Definition of brick, size of bricks, manufacturing of bricks, characteristics of good bricks.
- ❖ Terms used in Brick masonry, Principles of construction in Brick masonry, Bonds – English band, Flemish bond.
- ❖ Scaffolding, Types of Scaffolding.

4. Stone Masonry

- ❖ Terms used in Stone Masonry.
- ❖ Principles of Construction in stone masonry.
- ❖ Types of Stone Masonry.
- ❖ Comparison between Stone Masonry and Brick Masonry.

5. Foundation

- ❖ Definition of Foundation, Purpose of Foundation, Causes of Failure of Foundation.
- ❖ Formula for determining width and depth of foundation.
- ❖ Types of Foundation.
- ❖ Examination of ground, General Inspection of Soil and methods.

6. Dampness and It's prevention

- ❖ Definition of Dampness, Causes of dampness.
- ❖ Prevention of Dampness, Material used for D.P.C.

7. Floors.

- ❖ Definition, Types of Floors, Construction of Different types of flooring, skirting & dado.

8. Arches and Lintels

- ❖ Definition of Arches, Terms used in Arches, Types of Arches.
- ❖ Definition of Lintels, Types of Lintels.

9. Roofs

- ❖ Definition, Types of Roofs – Pitched Roof & Flat Roofs.
 - ❖ Terms used in Roof.
 - ❖ Types of Pitched Roofs.
 - ❖ Types of Roof covering.
 - ❖ Flat Roof.
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10. Stairs

- ❖ Definition, Terms used in Stairs, Types of Stairs, Requirement of good stairs.
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11. R.C.C.

- ❖ Definition, Material used in R.C.C.
 - ❖ Grade of Concrete, Water cement Ratio.
 - ❖ Working of Concrete – Slump Test.
 - ❖ Formwork.
 - ❖ Reinforcement Detailing in R.C.C. work.
 - ❖ Bar Bending Schedule. Cutting & Bending of Steel Reinforcement.
 - ❖ Study of various Diameters of Steel Reinforcement Bars and calculations of their weight per meter.
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12. Structural Steel work

- ❖ Types of Rivets, Advantages and Disadvantages of Riveting and welding.
 - ❖ Rolled steel sections.
 - ❖ Steel column, girder and beams.
 - ❖ Connection between columns and beams.
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13. Domestic Services

- ❖ Plumbing, Definition of Plumbing, Tools in Plumbing.
 - ❖ Sanitary Fittings.
 - ❖ Terms used in House plumbing, water supply system, House drainage System, Septic Tanks, Soak Pit, Sewers & Drains etc.
 - ❖ Domestic water supply & installation of water supply system of building.
 - ❖ Different equipment used in water supply & water purification plants such as pumps.
 - ❖ Detail procedure of water purification plant & their layout.
 - ❖ Waste disposal method adopted in sanitary Engineering, System of sanitation.
 - ❖ Use of manholes, Intercepting traps Inspection chamber etc. Excreta Disposal & Unscrewed Areas.
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14. Units and Measurement.

- ❖ Conversation of Units, Area & Volume (Rectangle, Square, Parallelogram, Rhombus, Triangle, Circle)
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GUIDELINES FOR QUESTION PAPER SETTERS

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|--------------|--|---------------|
| Q. no.1 | Compulsory (Objective type). | 20 marks |
| Q. no.2 to 8 | Solve any five questions from Q. 2 to 8 (Subjective type). | 16 marks each |

The paper setter should take care that (as far as possible) entire syllabus is equally covered.



INDIAN TECHNICAL EDUCATION SOCIETY, MUMBAI

CIVIL DRAUGHTSMAN [CD]

EXAM SCHEME: DRAWING PAPER 100 MARKS – 3 HRS.

[CD – II / AD – II / DCES – II]

DRAWING PAPER SYLLABUS

1. Engineering Drawing, Introduction, Drawing is the language of Engineers, Drawing Instruments, Equipments and Materials.
2. Lettering Technique, Lines Lettering & Dimensioning, Types of lettering, lines and Dimensioning.
3. Different scales used in drawing (Plain & Isometric), concept of Representative factor.
4. Orthographic projection, planes of projection, First angle projection & Third angle projection.
5. Projection of lines, points & planes. Points in different quadrants, Lines parallel to one or both planes, Lines perpendicular to planes, Traces of planes, Types of planes, perpendicular and oblique planes.
6. Isometric Projection, Isometric axes, lines & planes, Isometric Projection of planes, Prisms, pyramids, To draw Isometric object from given views.
7. General Civil conventions; Meaning of F.S.I., built up area, carpet area, Rules for selecting different types of rooms & their sizes & floor heights.
8. Doors, Windows, Ventilators, Types, Parts of D / Ws, Sizes, Fixtures & fastenings used for different D / Ws, Sketches of D / W & ventilators & drawing details.
9. Plumbing accessories, types, Fitments & Sanitary symbols, plumbing symbols.
10. Electrical symbols, system of wiring, Types of wiring, layout diagrams.
11. Structural steel work drawing, Drawing of slabs, beams, columns, R.C.C., foundations, stairs.
12. R.C.C. details of Frame structures, Form work for column, beams, stairs, bar bending schedule.
13. General zoning regulations – Residential, Agriculture & Industrial.
14. To prepare plan, elevation & section from line drawing for single & double storied residential building drawing, Concept of site plan layout plan etc.

DRAWING SHEETS :

SR. NO.	TOPICS	MIN. NO. OF SHEETS
1	Lines, Lettering, Dimensioning	2
2	Plain scales and Isometric scales	1
3	Orthographic Projection	3
4	Projection of Point and Line	2
5	Projection of Plane and Solid	2
6	Isometric Projection	3
7	R.C.C. Drawing of : 1. Column Footing 2. One way and Two way slab 3. Dog-legged Stair 4. Lintel and Chajja	1
8	Different types of Doors and Windows	2
9	Different types of Stair and Staircases	1
10	Line Plan of Plumbing work and Sanitary & Water supply work	1
11	Symbols of Materials, Sanitary and Water supply Symbols	1
12	Electrical symbols and Wiring layouts	2
13	Structural Steel Work : 1. King Roof Truss 2. Queen Roof Truss 3. lean to Roof	3
14	Complete set of Drawings for : 1. Small Office 2. Residential building 3. Residential and Double Storey building 4. Tracing of Drawings, Inking work and Ammonia Print outs.	1 2 2 2
15	* Preparation of a small Municipal submission drawing	1
	Total	32

Note : Student should complete 8 sheets from point no. 1 to 6.

Student should complete 14 sheets from point no. 7 to 15.

***Only for classroom practice & should not be asked in exam paper**

GUIDELINES FOR QUESTION PAPER SETTERS

1. Q.1 Compulsory one problem to draw Plan, Elevation & Section – 40 marks.
2. Q.2 - Strictly on Drawing Work Sheets – 30 marks (10 each): Solve any Three out of Five (Should include one Municipal drawing)
3. Q.3 - Strictly on Drawing Work Sheets – 30 marks (10 each): Solve any Two out of Four
4. The Q. Paper should be in such a way that, a S.S.C. Student can solve in 4 hours.

SCHEME OF EXAMINATION : (CIVIL DRAUGHTSMAN)

Theory Paper – I	3 hours	100 Marks
Drawing Paper – II	4 hours	100 Marks
Sessional (Internal)		100 Marks

Total **300 Marks**



INDIAN TECHNICAL EDUCATION SOCIETY, MUMBAI

ARCHITECTURE DRAUGHTSMAN (AD)

THEORY PAPER I :	Theory syllabus for this AD Paper I is same as CIVIL DRAUGHTSMAN (CD – I) Refer this syllabus booklet Page No.2 & 3	100 Marks
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THEORY PAPER II :	Drawing paper syllabus for this AD Paper II is same as CIVIL DRAUGHTSMAN (CD – II) Refer this syllabus booklet Page No. 4 & 5	100 Marks
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SESSIONAL MARKS :	(Internal)	100 Marks
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THEORY PAPER III :	Theory Syllabus for this paper is given below Refer this syllabus booklet Page No. 7 & 8	100 Marks
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THEORY PAPER IV :	Drawing Syllabus for this paper is given below Refer this syllabus booklet Page No. 9	100 Marks
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SESSIONAL MARKS :	(Internal)	100 Marks
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Total : (600 Marks)

INDIAN TECHNICAL EDUCATION SOCIETY, MUMBAI

ARCHITECTURAL DRAUGHTSMAN [AD- III]

EXAM SCHEME: THEORY PAPER 100 MARKS – 3 HRS.

[AD – III / DCES – III]

THEORY SYLLABUS

1. R.C.C. DESIGN OF BUILDING ELEMENTS :

- ❖ Introduction to R.C.C. Design.
- ❖ Designing concept.
- ❖ Methods of Design.
 - i) R.C.C. footing ii) R.C.C. Slab iii) Column & Slab
- ❖ Complete design of G+2 & G+4 building
- ❖ Design of compression & Tension members.

2. Field Activities

- ❖ Agencies Associated in Building industry.
- ❖ Plan Sanctioning Authorities.
- ❖ Building rules and bye – laws, F.S.I., carpet area, Built – up area calculations.
- ❖ Procedure of submitting plans for approval to plan sanctioning authority.
- ❖ Planning of building.

3. Surveying and Leveling.

- ❖ Brief idea of surveying and classification of Survey.
- ❖ Chain Surveying, Instruments in chain Survey, field book.
- ❖ Plane Table Surveying, instrument used, Advantages and Disadvantages of plane tabling, Methods of Plane Tabling.
- ❖ Leveling, Terms used in leveling.
- ❖ Different types of Levels, Dumpy level and leveling staff.
- ❖ Contouring, Characteristics of contours, uses of contours.

4. Estimations

- ❖ Define Estimate, Types of Estimates.
- ❖ Methods of taking out quantities.
- ❖ Units of Measurements and Payments of Common items in Civil Engineering works.

5. Calculation of Materials & Rate Analysis of –

- ❖ Earthwork in Excavation in soft murum - Unit 100 Sq. mt.
- ❖ Earthwork in Excavation in hard murum - Unit 100 Sq. mt.
- ❖ First class brick masonry in cement mortar (1:3 to 1:6) in foundation / plinth - Unit 10 Cu. mt.
- ❖ Coursed Rubble Stone masonry in cement mortar (1:3 to 1:6) - Unit 10 Cu. mt.
- ❖ Ashler Stone Masonary in cement mortar (1:3 to 1:6) - Unit 10 Cu. mt.
- ❖ P.C.C. Bed Concrete (1:1:2 to 1:4:8) - Unit 10 Cu. mt.
- ❖ Plastering work 12 mm thick in cement mortar (1:1 to 1:6) - Unit 100 Sq. mt.
- ❖ R.C.C. slab (1:2:4) with steel (0.80 % to 1.0 %) - Unit 10 Cu. mt.
- ❖ Pointing work in cement mortar (1:1 to 1:4) - Unit 100 Sq. mt.
- ❖ White washing or colour washing to plastered wall surfaces in two coats - Unit 100 Sq. mt.
- ❖ Mosaic tiled flooring work in cement mortar - Unit 100 Sq. mt.

6. Finishes

- ❖ Surface Finishing, painting, varnishing, Polishing, Distempering, Cementing, Wall Papering, Plastering, Glazing work, white and colour washing.

7. Roads, Bridges & Railways

Different types of Roads, Railway Gauges.

- ❖ Materials used & Construction of Roads.
- ❖ Construction of cement concrete road & different Machinery used, Classification of bridges.
- ❖ Maintenance of different road, Types of R.C.C. bridges, Railway development in India.

8. Water Proofing Works :

- ❖ Materials for water proofing, tools and Methods used.
- ❖ Water proofing to W/C, bathrooms, Kitchen, Window sills & walls.
- ❖ Water proofing while casting slab.
- ❖ Water proofing to old slab & methods used.

9. Electrification Works :

- ❖ Different types of wiring Systems & Materials.
- ❖ Tools & accessories used in Electrification works.
- ❖ Specification & Importance of Electrification works & symbol in Electrification.

10. Building Maintenance Work :

- ❖ Old Plaster Repairing.
- ❖ Repair R.C.C. Slab, Leakage through parapet wall, basements, side walls.
- ❖ Maintenance of different types of floorings.

11. Check List For Different Building Works :

- ❖ Brick work, Plastering, Flooring checking.
- ❖ Termite proofing methods in foundation & superstructure.

GUIDELINES FOR QUESTION PAPER SETTERS

Q. no.1	Compulsory (Objective type).	20 marks
Q. no.2 to 8	Solve any five questions from Q. 2 to 8 (Subjective type).	16 marks each

The paper setter should take care that (as far as possible) entire syllabus is equally covered.



INDIAN TECHNICAL EDUCATION SOCIETY, MUMBAI

ARCHITECTURAL DRAUGHTSMAN [AD- IV]

EXAM SCHEME: DRAWING PAPER 100 MARKS – 4 HRS.

CIVIL / ARCHITECTURAL DRAWING (Drawing Paper Syllabus)

1. Introduction to Engineering Drawing and Setting out of Building.
2. Types of doors and windows.
3. Perspective views – Definition, Elements, Station point, Picture plane,
4. Methods of perspective projections.
5. Isometric Projection.
6. Sections of R.C.C. Components.
7. Airport Building Drawing.
8. Multistory Building Drawing.
9. Different types of stairs.

DRAWING SHEETS

SR. NO.	TOPICS	MIN. NO. OF SHEETS
1	Proposed Bungalow	1
2	Typical Residential Building (G + 3) or)G = 4)	1
3	Types of Stairs	1
4	Theatre Building or Bank Building	1
5	R.C.C. Drawing of Building Components – Column footing, R.C.C. Slab, Lintel and Chajja	2
6	Plain Table Survey sheet (Optional G.T.)	1
7	One Building drawing in Inking	1
8	Freehand Lettering (Single / Double stroke)	1
9	To develop a line plan	2
10	Rendering Sketching	2
11	Plan Reduction and Enlargement	1
12	Center line plan or Foundation plan	2
13	Municipal Working Drawing	2
14	Colouring the Ammonia Print	1
15	Perspective views – One point and Two points, Simple object and Perspective of Building	4
16	Isometric Projection – Simple Objects	2
	Total	25

NOTE : Minimum 20 sheets to be completed.

GUIDELINE FOR PAPER SETTER:

1. Q. 1 – To develop a Line Plan and to draw Plan and Elevation only – 50 marks.
2. Q.2 - Strictly on Drawing Work Sheets – 30 marks (15 + 15): Solve any Two out of Four
3. Q.3 - Strictly on Drawing Work Sheets – 20 marks (10 + 10): Solve any Two out of Four
3. The Q. Paper should be in such a way that, a S.S.C. Student can solve in 4 hours.



INDIAN TECHNICAL EDUCATION SOCIETY, MUMBAI

CERTIFICATE COURSE INTERIOR DESIGNING AND DECORATION [ID]

EXAM SCHEME: THEORY PAPER 100 MARKS – 3 HRS.

[ID - I / DIDP I]

THEORY SYLLABUS

1. History of Interior Design
 - 1.1 Interior decoration as a profession.
 - 1.2 Emergence of professional interior designer.
 - 1.3 Modern Interior design features.
2. Basic of Design Composition
 - 2.1 The Elements – Line, Form, Texture, Color, Pattern, Light.
 - 2.2 The Principles – Balance, Emphasis, Rhythm, Proportion, Unity or Harmony.
 - 2.3 Primary & Secondary design components.
3. Introduction to various materials used in Interior Decoration
 - 3.1 Plywood & related products, Timbre & wall papers, Plastic & related products, Glass & related products, Paints & related products, Ferrous & no-ferrous metals, Gypsum & related products, Various types of adhesives etc.
 - 3.2 Building construction materials – Stone Bricks, Cement, Mortar, Concrete, Sand etc.
4. Ventilation - Natural & Artificial
 - 4.1 The need for Air – Conditioning.
 - 4.2 Various types of A/C units such as – Window, Split A/C, Central A/C system etc.
 - 4.3 Air – Conditioning under Indian Climatic Condition.
5. Lighting – Natural & Artificial
 - 5.1 Natural lighting – Guidelines & various aspects.
 - 5.2 Different types of light arrangement.
 - 5.3 Variety of lamps
 - 5.4 Lighting Accessories.
 - 5.5 Electrical Wiring.
6. Acoustics
 - 6.1 Properties of Sound, Sound in Interiors, Absorption.
 - 6.2 Acoustic design of a hall.
 - 6.3 Guidelines for good acoustic design.
7. Building Protection
 - 7.1 Dampness Protection.
 - 7.2 Termite Protection.
 - 7.3 Fire Protection.

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- 8. Interior furnishing
 - 8.1 Ceiling – Suspended Ceiling.
 - 8.2 Walls – Painting, Wallpaper, Tiling, Paneling, Cladding, Glass, Fabrics.
 - 8.3 Doors and Windows – Curtains, Blinds.
 - 8.4 Flooring – Stone Flooring, Marble Flooring, Tiled Flooring & their specifications etc.
 - 8.5 Furniture – Upholstery, Partition, Built in Furniture.
 - 8.6 Decorative Items – Plants, Flowers, Paintings, Sculptures, Pictures.
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9. Painting Interiors

- 9.1 Ingredients of Paint.
 - 9.2 Types of Paints – Water – Based Paints, Oil – Based Paints.
 - 9.3 The Painting process.
 - 9.4 Common painting defects and remedies.
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10. Quantities and Estimating

- 10.1 Need of Estimating.
 - 10.2 Method of Estimating.
 - 10.3 Rate analysis of various items used during work.
 - 10.4 Brief information of Tender system – Types of tenders, Tender notice etc.
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11. Vastushastra -

- 11.1 Introduction to Vastushastra.
-

12. Plumbing & Sanitary appliances

- 12.1 G.I. pipes, PVC pipes.
 - 12.2 Wash basin, Showers, Urinals, Water closet (W.C.), E.W.C. of Cocks / Valves / Taps, Wall Mixers, Basin Mixers, Traps, Pipe systems etc.
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13. Color Theory –

- 13.1 Color Wheel
 - 13.2 Primary, Secondary & Territory colors.
 - 13.3 Different color schemes.
 - 13.4 Shades & Shadows.
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14. Interior Landscaping.

GUIDELINES FOR QUESTION PAPER SETTERS

- | | | |
|--------------|--|---------------|
| Q. no.1 | Compulsory (Objective type). | 20 marks |
| Q. no.2 to 8 | Solve any five questions from Q. 2 to 8 (Subjective type). | 16 marks each |

The paper setter should take care that (as far as possible) entire syllabus is equally covered.



INDIAN TECHNICAL EDUCATION SOCIETY, MUMBAI INTERIOR DESIGNING AND DECORATION [ID]

EXAM SCHEME: DRAWING PAPER 100 MARKS – 4 HRS.

[ID – II / DIDP - II]

SYLLABUS

List of Sheets –

- 1) Study of Lines
- 2) Study of Scales
- 3) Orthographic Projection of a cube, rectangle, block, pyramid, prisms, hexagon, sphere.
- 4) Isometric Projection of a cube, rectangle, block, pyramid, prisms, hexagon, sphere.
- 5) Various Types of Materials
- 6) Different types of bats & bricks (introduction).
- 7) Different types of curtains.
- 8) Color Schemes – Color wheel, Primary & Secondary colors, various methods of mixing of colors.
- 9) Residential Drawing in British and Metric Scale – A) Plan B) Elevation
C) Details of doors & windows
- 10) Space standards & standard sizes – doors, windows, cooking platform, writing table, bed – single, double, wardrobe, chairs, sofas construction etc.
- 11) Partitions, false ceilings, paneling etc.
- 12) Different types of table lamps, plants, curtains, accessories etc.
- 13) Different types of carpentry joints.

GUIDELINE FOR PAPER SETTER:

1. Q. 1 – To develop a line plan and to draw plan and elevation only – 50 marks.
2. Q.2 & Q.3 – strictly on Drawing Work Sheets – 50 marks.
3. The Q. Paper should be in such a way that, a S.S.C. Student can solve in 4 Hrs.

SCHEME OF EXAMINATION :

Theory paper – I	3 hours	100 Marks
Drawing paper – II	4 hours	100 Marks
Sessional Marks (Internal)		100 Marks
Total		300 Marks



INDIAN TECHNICAL EDUCATION SOCIETY, MUMBAI

DIPLOMA CIVIL ENGINEERING SERVICES (DCES)

THEORY PAPER I :	Theory syllabus for this Diploma Paper I is same as CIVIL DRAUGHTSMAN (CD – I) Refer this syllabus booklet Page No.2 & 3	100 Marks
THEORY PAPER II :	Drawing Paper syllabus for this Diploma Paper II is same as CIVIL DRAUGHTSMAN (CD – II) Refer this syllabus booklet Page No.4 & 5	100 Marks
THEORY PAPER III :	Theory syllabus for this Diploma Paper III is same as ARCHITECTURE DRAUGHTSMAN (AD – III) Refer this syllabus booklet Page No. 9	100 Marks
THEORY PAPER IV :	Syllabus for this paper is given below Refer this syllabus booklet Page No. 15 & 16	100 Marks
SESSIONAL MARKS :	Internal	100 Marks

Total : (500 marks)

INDIAN TECHNICAL EDUCATION SOCIETY, MUMBAI

DIPLOMA CIVIL ENGINEERING SERVICES (DCES – IV)

EXAM SCHEME: THEORY PAPER 100 MARKS – 3 HRS.

THEORY SYLLABUS

1. ESTIMATING & COSTING

- a) Introduction.
- b) Different methods of taking out quantities – center line, out – put & in-in problems on square, Rectangular & Circular Sections.
- c) Units of measurement & unit of payment of different items of works.
- d) Calculation of quantities of materials for,
 - i. Plain cement concrete of different proportions.
 - ii. Brick & Stone Masonry in cement & lime mortar.
 - iii. Plastering & Painting with Cement Mortar in foundation & Super structure.
 - iv. Woodwork for fully paneled doors & windows.
 - v. R.C.C. slab – Calculating Reinforcement & concrete.
 - vi. Painting work for brick work & stone work.
- e) Analysis of rates of the following items of work – includes labour, material rates etc.
 - i. Earthwork in Excavation & filling.
 - ii. Cement concrete in foundation.
 - iii. R.C.C. & R.B. in roof slabs.
 - iv. I Class burnt brick masonry in C.M.Coarse rubble stone masonry in C.M.
 - v. Cement Plaster.
 - vi. Cement pointing – flash & deep pointing.
 - vii. White washing on new surface
 - viii. Painting on new woodwork.
 - ix. Cement concrete floor.
 - x. Paneled & glazed door.
- f) Preparation of detailed estimate; complete with detailed reports, specification etc. preparation of complete estimate of proposed bungalow.
- g) To prepare abstract sheet from given drawing.
- h) Types of Contracts, Tender Notice, Documents required in Tendering conditions of contracts, adding % as contractors profit.
- i) Taking out quantity for septic tank.

2. CONSTRUCTION MANAGEMENT

a) Introduction :

Classification of construction into light, heavy & industrial. Importance of construction industry, Agencies Associated with construction works.

b) Construction Planning :

Necessity & Importance, Planning at different stages, methods of planning, scheduling, pretender & contract planning by contractor, types of schedules.

c) Construction Labour :

Introduction, Labour welfare, payment of wages act, minimum wages act. Workmen compensation act, contract labour act, labour insurance act.

d) Inspection & Quality Control :

Introduction, stages of Inspection, Major items of control, Technical services required for inspection.

e) Safety in Civil Engineering :

Importance, terms used, Accident, Accident cost, safety – programme.

3. ACCOUNTS

a) Introduction :

Necessity of maintaining accounts, List of reference books, in accounts.

b) Stores & material Management :

Introduction, Material management, Stores, Necessity & Safely of stores, monthly balance return of stock, surpluses & shortages of stock, Action for rectification of stock register, Losses of stock, Recording the loss, estimates of loss of stock & writing off.

c) Different types of contract :

% rate contract as per C.S.R. Labour rate (% above or below) for various items for covered area construction through rate basis, item rate contract. Types of Contract.

d) Allotment of Works :

Concept of quotation, tender, contract agreement – brief reference, work order, rules & different types of forms, Deposit works.

Q. no.1	Compulsory (Objective type).	20 marks
Q. no.2 to 8	Solve any five questions from Q. 2 to 8 (Subjective type).	16 marks each

The paper setter should take care that (as far as possible) entire syllabus is equally covered.

REFERENCE BOOKS FOR CIVIL FACULTY

1. Building Construction - Sushilkumar
2. Building Construction - Rangwala
3. Water Supply & Sanitary Engineering - Bindra
4. Engineering Drawing – N. D. Bhatt
5. Civil Engineering Drawing – Shah & Kale, Patki
6. R.C.C. Design – Shah & Kale
7. Building Material - Rangwala
8. Construction Management Account - Agarwal
9. Estimating & Costing – B. N. Dutta
10. Estimating & Costing - Mule
11. Estimating & Coasting - Chakraborty
12. A To Z Civil Engineering Practice - Mantri



INDIAN TECHNICAL EDUCATION SOCIETY, MUMBAI

DIPLOMA COURSE DIPLOMA INTERIOR DESIGNING PRACTICE [DIDP]

THEORY PAPER I :	Theory syllabus for this Diploma Paper I is same as ID Paper I Refer this syllabus booklet Page No. 10 & 11	100 Marks
THEORY PAPER II :	Drawing Paper syllabus for this Diploma Paper II is same as ID Paper II Refer this syllabus booklet Page No. 12	100 Marks
THEORY PAPER III :	Drawing Paper syllabus for this Diploma Paper III is given bellow Page No. 17	100 Marks
SESSIONAL MARKS :	Internal	200 Marks

Total : (500 marks)

INDIAN TECHNICAL EDUCATION SOCIETY, MUMBAI

DIPLOMA COURSE DIPLOMA INTERIOR DESIGNING PRACTICE [DIDP]

[DIDP III]

EXAM SCHEME: DRAWING PAPER 100 MARKS – 4 Hrs.

SYLLABUS

List of Sheets –

- 1) Study of Views
- 2) ISO and Ortho of a dressing table.
- 3) ISO and Ortho of a chair.
- 4) ISO and Ortho of a wardrobe
- 5) Rendering techniques & building materials.
- 6) Sitting arrangement in living room, bed room, children bed room (single U shape, L shape, Parallel), Modular kitchen, study room etc. Shop – plan, elevation & section.
- 7) One point perspective – bed room, kitchen, living room, shop etc.
- 8) Two point perspective – bed room, kitchen living room, shop etc.
- 9) Structural glazing work of buildings. Aluminum composite paneling.
- 10) Various electrical symbols used in lighting drawings.
- 11) Electrical layout.
- 12) Elevation of Room.
- 13) Commercial drawing – Shop - A) Plan B) Elevation C) View

GUIDELINE FOR PAPER SETTER:

1. Q. 1 – To develop a line plan and to draw plan and elevation only – 50 marks.
2. Q.2 & Q.3 – strictly on Drawing Work Sheets – 50 marks.
3. The Q. Paper should be in such a way that, a S.S.C. Student can solve in 4 Hrs.

SCHEME OF EXAMINATION :

Theory paper – I	3 hours	100 Marks
Drawing paper – II	4 hours	100 Marks
Drawing paper – III	4 hours	100 Marks
Sessional Marks (Internal)		200 Marks
Total		500 Marks

