BOARD OF TECHNICAL EDUCATION, RAJASTHAN, JODHPUR
RULES AND REGULATION FOR DIPLOMA COURSES IN NON-ENGINEERING FOR THE YEAR 2005-2006 AND ONWARDS

1. DEFINITIONS:

Board : Means, Board of Technical Education, Rajasthan, Jodhpur constituted by Government of Rajasthan.

Chairman : Means, the Chairman of the Board, Ex-officio Director of Technical Education, Rajasthan, Jodhpur.

Secretary : Means, Joint Director Cum-Secretary of Board.

Registrar : Means, the Deputy Director (Registrar) of Board.

Diploma course : Means, 2 years/3 years (excluding practical training duration) diploma course in branch of non-engineering recognized by the Board.

Affiliated Institution :Means, an institution affiliated with Board, running Diploma course, examinations of which

Principal : Means, the Principal or the Head of the affiliated Institution.

Regular Student : Means, a student who is eligible to pursue a regular course of study i.e. to attend regular classes in a particular year in which he/she wants to appear in the examination in the institution in which he has been enrolled by the Board.

Ex-Student : Means, a student who has completed a regular course of study as prescribed by the Board during a year, but fails in the theory and/or practical examination and is eligible to reappear in theory and/or practical examination in one or more subjects

Examination : Means, any examination conducted by the board.

Year : Means, an academic session for example first year means the first academic session of the prescribed course of study. Similarly second year and third year means second and third academic session respectively.

2. ADMISSION QUALIFICATIONS AND ENROLMENT :

2.1 The minimum qualification for admission to a Diploma Course in an affiliated institution shall be as prescribed by the Government of Rajasthan from time to time.

2.2 No student shall be admitted to any examination of the Board unless he/she has been enrolled with the Board. A student during his enrolment with the Board can not enroll himself with any other Board/ University. If any such case is reported, the enrolment of the student with the Board will be cancelled and he/she will not be allowed to appear in any of the examinations conducted by the Board.

3. DURATION AND COURSE STUDY : Duration of Diploma Course shall extend over the period prescribed by the Board at an affiliated institution for regular students and the course of study shall consist of subjects, prescribed by the Board in the Teaching and Examination Scheme from time to time.

4. EXAMINATION SCHEME : The valuation of the students shall be done by the Board or by the affiliated institution on behalf of the Board as per Teaching and Examination scheme. Theory and practical Examination will be conducted by the Board at the end of each year in accordance with the prescribed Teaching and Examination Scheme at such centres and on such dates as may be notified by the Board.
4.1 THEORY EXAMINATION (TH): These shall be conducted by the Board at the end of each year in the subjects listed under "TH" in the Teaching and Examination Scheme.

4.2 PRACTICAL EXAMINATION (PR): These shall be conducted at the institution on behalf of the Board at the end of each year in the subjects listed under "PR". The mode of such examination will be as per the Teaching and Examination Scheme.

4.3 SESSIONAL ASSESSMENT: This will be done by the affiliated institution on behalf of Board on the basis of day to day work consisting of class tests listed under "CT" and regular Practical work done during the course of study listed under "PR(S)" in Teaching and Examination Scheme. Three class tests will be conducted by the institution for each subject in a year on behalf of the Board but marks for best two tests will be counted.

4.4 PRACTICAL TRAINING ASSESSMENT: On completion of training the assessment will be done by a committee constituted by the institution as per directives of the Board.

4.5 PROJECT ASSESSMENT: Diploma course students have to complete a project, wherever applicable, after final year examination as per Teaching & Examination Scheme. The assessment of the project will be done as per directives of the Board.

4.6 PRACTICAL TRAINING & PROJECT ASSESSMENT: On completion of "Practical Training & project" the assessment will be done by a committee constituted by the institution as per directives of the Board.

5. ELIGIBILITY FOR EXAMINATION:

5.1 For eligibility to appear in the Examination a student must have attended at least 75% of the lectures delivered in each subject during the year and must also have attended at least 75% of the practicals conducted in each subject during the year. The deficiency in attendance in theory classes to the extent of 5% may be condoned by the Principal and an additional 5% by the Chairman for specific reason.

5.2 A student who does not fulfill the prescribed condition as mentioned in 5.1 shall not be allowed to appear in the examination. The detention orders shall be issued by the Head of the Institution on behalf of the Board.

5.3 A student who is not eligible to appear in the examination under regulation 5.1 shall repeat the course of study as a regular student. Such students shall not be permitted, where applicable, to keep term in the next higher class.

5.4 CHECK POINT:

5.4.1 A two/three year Diploma course student has to pass Diploma course by the end of four/six academic years respectively from the year of enrolment failing which his/her enrolment with the Board will automatically be cancelled.

5.4.2 Three Year Diploma: A student has to pass all the subjects of first year and Second year by the end of fourth academic year except under rule 6.7 from the year of enrolment failing which his/her enrolment with the Board will automatically be cancelled.

5.4.3 Two Year Diploma: A student has to pass all the subjects of first year by the end of second academic year except under rule 6.7 from the year of enrolment failing which his/her enrolment with the Board will automatically be cancelled.

5.5 Time limit to pass all subjects of Diploma course will not be extended for any punishment by the institution and for the punishment awarded by the Board for the use of unfair means in the examination.
6. PASSING STANDARDS:-

6.1 33% marks in each theory examination in the subjects listed under "TH" in the Teaching and Examination Scheme.

6.2 45% marks in each practical examination in the subjects listed under "PR" in the Teaching & Examination Scheme.

6.3 45% marks in consolidated sessionals [PR(S) + CT] of all subjects listed under "PR(S)" and "CT" in the Teaching and Examination Scheme.

6.4 Deficiency to the extent of 5 marks in a subject (TH, PR and consolidated sessionals) and up to 10 marks in a year may be condoned by the chairman. Deficiency will not be condoned in more than two subjects in a year. The student whose deficiency in a subject has been condoned will be deemed to have passed the subject. Condonation will be given first in consolidated sessionals then in practical and lastly in theory subject/subjects. Condonation marks will be awarded to a student in the eligible subject/subjects only after he/she has passed all the remaining subjects of the concerned year.

6.5 A Diploma student who passes in all subjects in first/second year shall be promoted to second/third year respectively.

6.6 A Diploma student, who fails in consolidated sessional of any year will not be promoted to higher class. Such student will be declared failed and he/she will have to repeat the year in which he/she fails in consolidated sessionals as a regular student.

6.7 A Diploma student who passes in consolidated sessionals but fails in Theory/Practical examination in first/second year in not more than two subjects, (Theory and Practical of a subject will be treated as one subject) will be allowed to keep term in second/third year respectively. He/she will be allowed to reappear as Ex student in these subjects in the next year examination as and when held.

6.8 A Diploma student who passes in consolidated sessionals of final year but fails in Theory/Practical Examination of final year will be allowed to reappear in a special examination for final year to be conducted after suitable interval.

6.9 Only those diploma students who have passed all Theory/Practical subjects other than final year shall be allowed in the special examination for final year.

6.10 The special examination will be treated as part of the regular examination.

6.11 A Diploma student who passes in consolidated sessionals but fails in more than two subjects of first/second year Theory/Practical examination, is not eligible to keep term in the next higher class but may reappear in TH/PR or both as Ex-student in the subject/subjects in which he/she fails in next year examination as and when held.

6.12 A Diploma student who reappear in Theory/Practical examination as Ex-student will retain full credit of consolidated sessional marks and marks of Theory/Practical examination for subject/Subjects in which he/she does not reappear.

6.13 A Diploma student can not be given the benefit of condonation for the purpose of deciding promotion under regulation. Only the student failing in one or two subjects in any year examination can be given the benefit of condonation.

7. AWARD OF DIPLOMA:

7.1 A student will become eligible for award of a Diploma after passing in all subjects of Diploma Course.
7.2 FINAL AGGREGATE FOR DIPLOMA COURSE FOR AWARD OF DIVISION.

7.2.1 FOR 3 YEAR DIPLOMA COURSE -
(i) 40% of the aggregate marks of I Year.
(ii) 60% of the aggregate marks of II Year,
(iii) 100% of the aggregate marks of III Year.

7.2.2 FOR 2 YEAR DIPLOMA COURSE :-
(i) 50% of the aggregate marks of I Year,
(ii) 100% marks of the aggregate marks of II Year.

7.3 AWARD OF DIVISION: The division will be awarded to successful Diploma students on the basis of final percentage of marks as given below.
(i) 75% or more : I Division with Honours
(ii) 60% or more but less than 75% : I Division.
(iii) 45% or more but less than 60% : II Division.
(iv) Less than 45% but more than the: Pass Class passing standards as stated in Rule 6.0

7.4 MERCY GRACE MARK:
(i) Only 1 mercy grace mark will be awarded to those students whose Division is changed with the help of this mercy grace mark
(ii) Mercy grace mark will be awarded to those students only who have passed all the subjects of Diploma Course.
(iii) Mercy grace mark will be added in the grand total of the details of marks to award division and not in the marks of any particular semester or subject.

8. MERIT: Students who pass all subjects of a Diploma course in single attempt without any condonation and within prescribed duration of the course will be considered for the merit as per rules of the Board.

9. IMPROVEMENT:

9.1 A student who passes in all subjects of Diploma may be allowed one chance for improvement of his/her performance.
9.2 Such students will be permitted to reappear only in Theory papers of one or more subjects of final year, as ex-student only in the next examination.
9.3 The student who avails of chance for improvement of his/her performance will retain full credits of marks except the theory marks of subjects in which he/she re-appears. If the student scores lesser aggregate marks or fails in one or more subjects during his chance for improvement, the aggregate marks and division scored by him/her in the previous examination will stand and no further chance for improvement would be allowed to him/her.
9.4 Such improvement of marks will be counted only for the purpose of division and not for Merit.

10. Any student debarred or rusticated by the competent authority will not be eligible to appear in any examination from the date of issue of such orders.

11. These Rules and Regulation shall come into force for students admitted from the year 2005-2006 and onwards.

12. Students pursuing a Diploma Course of recognized state Board of Tech Education or University may be permitted to migrate to this Board in accordance with rules of the Board.
13. A student who completes a course of study in a branch and become eligible for award of a Diploma may be permitted to study and appear in the second Diploma examination in accordance with rules of the Board.

14. If a student is unable to pass regularly the course of study prevailing at the time of admission then he/she is liable to be shifted in the consecutive new scheme, if any, introduced by the Board at any time.

15. The power of addition and alteration of rules shall remain with the Board of Technical Education Rajasthan, Jodhpur.

16. In case of any dispute the jurisdiction will be courts situated at JODHPUR only.

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COMPUTER APPLICATIONS -I

CODE ID 101
BC 101/CA 101/ CD 101/ TD 101
1 1 2 3

RATIONALE

The course has been designed to provide an introduction to Computer Technology and its tools. The student will be able to understand the basics of Computer and its application. The student will be able to appreciate the role of Computer Technology, more specifically computer hardware, software and its application in the present social and economic scenario.

The course has focus on the following:

* Computer Organization.
* Computer Operating System and Software
* MS Windows, Word Processing
* Presentation Packages.

CONTENTS

1. Computer Appreciation :
   1.2. Input, Output, Storage units.
   1.3. CPU, Computer System.

2. Computer Organization :
   2.1 Central Processing Unit.
      2.1.1 Control Unit.
      2.1.2 Arithmetic Unit.
      2.1.3 Instruction Set.
      2.1.4 Register.
      2.1.5 Processor Speed.
   2.2 Memory
      2.2.1 Main Memory.
      2.2.2 Storage Evaluation Criteria.
      2.2.3 Memory Organization.
      2.2.4 Memory Capacity.
      2.2.5 Random Access Memories.
      2.2.6 Read Only Memories.
      2.2.7 Secondary Storage Devices.
         2.2.7.1 Magnetic Disk.
         2.2.7.2 Floppy and Hard Disk.
2.2.7.3 Optical Disks CD-ROM.
2.2.7.4 Mass Storage Devices.

2.3 Input Devices
2.3.1 Keyboard.
2.3.2 Mouse.
2.3.3 Trackball.
2.3.4 Joystick.
2.3.5 Scanner.
2.3.6 Optical Mark Reader.
2.3.7 Bar-code Reader.
2.3.8 Magnetic Ink Character Reader.
2.3.9 Digitizer.
2.3.10 Card Reader.
2.3.11 Voice Recognition.
2.3.12 Web Camera
2.3.13 Video Cameras.

2.4 Output Devices
2.4.1 Monitors.
2.4.2 Printers.
  2.4.2.1 Dot Matrix Printers.
  2.4.2.2 Inkjet Printers.
  2.4.2.3 Laser Printers.
2.4.3 Plotters.
2.4.4 Computers Output Micro-Film (COM).
2.4.5 Multimedia Projector

2.5 Computer Software.
2.5.1 Relationship between Hardware and Software.
2.5.2 System Software, Application Software, Compiler, Interpreter, Names of some high level languages
2.5.3 Applications of Computer

3. Operating System:
3.1 Microsoft Windows
  3.1.1 An overview of different versions of Windows.
  3.1.2 Basic Windows elements.
  3.1.3 File Management through Windows.

4. Word Processing:
4.1 Word Processing Concepts.
4.2 Saving, Closing, Opening an Existing Document.
4.3 Selecting text, Editing text.
4.4 Finding and Replacing text.
4.5 Printing Documents.
4.6 Creating and Printing Merged Documents, Mail merge
4.7 Character and Paragraph Formatting, Page Design and Layout.
4.8 Editing and Proofing Tools; Checking and correcting spellings.
4.9 Handling Graphics.
4.10 Creating Tables and Charts.
4.11 Document Templates and Wizards.

5. Presentation Package:
5.1 Creating, Opening and Saving presentations.
5.2 Creating the look of presentation.
5.3 Working in different Views, working with Slides.
5.4 Adding and formatting Text, Formatting Paragraphs.
5.5 Checking Spelling and Correcting Typing Mistakes.
5.6 Making Notes, Pages and Handouts.
5.7 Drawing and Working with Objects.
5.8 Adding Clip Art and Other Pictures.
5.9 Designing Slide Shows.
5.10 Running and Controlling a Slide Show.
5.11 Printing Presentations.

REFERENCE BOOKS:
COMMUNICATION SKILLS IN ENGLISH

RATIONAL

The students seeking admission to the diploma courses do not have the required proficiency in English. It has, therefore, been decided to introduce English and Communication Techniques to help them to attain proficiency in the subject.

CONTENTS

1. Narration, Voice, Basic Sentence Patterns. (Nine basic sentence patterns)  5
2. Transformation of Sentences, Determiners, Preposition.  7
3. Tenses, Common errors (Noun, Pronoun, Articles, Adverb, Punctuation, Preposition etc.)  7
4. Modals in Conversational Usage, Prefix, Suffix, Idioms & Phrasal verbs :  4
   **Modals**
   Can, Could, Should,Will, Would, May, Might, Must, Need not, Dare not, Ought to, Used to.
   **Phrases**
   At all; In stead of; In Spite of; As well as; Set up; Up set; Look up; Call off; Call out; Come across; Set right; Look other.
   **Idioms**
   Work up (excite); Break down; Stand up for; Turn down; Pass away; Pass on; Back up; Back out; Carry out; Done for (ruined); Bring about; Go through; Ran over; Look up (improve); Pick out (selected).
5. Composition - 1. Unseen Passage, Precis Writing  2
7. Essay Writing - Essays on general and topics related to environmental problems.

PRACTICALS

We envisage two successive stages for attaining skill in communication ability;
1. Listening
   1.1 For improving listening skills the following steps are recommended,
      1.1.1 Listen to Prerecorded Tapes
      1.1.2 Reproduce Vocally what has been heard
      1.1.3 Reproduce in Written form
      1.1.4 Summarise the text heard
      1.1.5 Suggest Substitution of Words and Sentences
      1.1.6 Answer Questions related to the taped text
      1.1.7 Summarise in Writing
2. Speaking
   2.1 Introducing English consonant-sounds and vowel-sounds.
      2.1.1 Remedial exercises where necessary
   2.2 Knowing Word stress
      Shifting word stress in poly-syllabic words
      [ For pronunciation practice read aloud a para or page regularly while others monitor]
3. Vocabulary
   3.1 Synonyms. Homonyms. Antonyms and Homophones
   3.2 Words often confused, as for example,
      [I-me; your-yours; its-it's; comprehensible-comprehensive; complement-comppliment]
   3.3 Context-based meanings of the words, for example,
      3.3.1 man[N] man[vb]; step[N], step[vb]
      3.3.2 conflict _________ Israel Palestinian conflict
      Emotional conflict, Ideas conflict
      3.3.3 learn ——— I learnt from the morning news
4. Delivering Short Discourses
   4.1. About oneself
   4.2. Describing a Place, Person, Object
   4.3. Describing a Picture, Photo.
5. **Group Discussion**:
   5.1 Developing skill to initiate a discussion [How to open]
   5.2 Snatching initiative from others [Watch for weak points, etc.]

6. **Expand a topic-sentence into 4-5 sentence narrative.**

Note:
1. The Medium of teaching and examination will be English.
2. The Question on Essay Writing (Unit-7) will be compulsory. The student will have to attempt one essay out of two, touching the given points on general/local topic related to environmental problems.
3. At least one question will be set from each unit.
4. No theory question will be set from syllabus of practicals.

**REFERENCE BOOKS**

1. Intermediate English Grammar
   Raymond Murphy,
   Pub: Foundation Books,
   New Delhi
2. Eng. Grammar, usage & Composition
   Tickoo & Subramanian
   Pub: S.Chand and Co.
3. Living Eng. Structure
   Stannard Alien.
   Pub: Longman
4. A Practical Eng. Grammar
   Thomson and Martinet.
   (and its Exercise Books)
   Pub : ELBS
5. High School English Grammar
   Wren & Martin.

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**THEORY OF MATERIALS**

**CODE ID 103**

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**RATIONALE**

This is very important subject and also the foundation of interior decoration. The student will have ideas about the different aspects of decoration in floor coverings, colours, materials used in decoration, lighting, curtains, furnishings etc.

**CONTENTS**

1. **Floor Covering**
   1.1 Wool Carpets
   1.1.1 Hand Made Carpets
   1.1.2 Hand Tufted Carpets
   1.1.3 Machine Made Carpets
   1.1.3.1 Cutpile
   1.1.3.2 Uncutpile
   1.2 Design of Carpets:
   1.2.1 Solid Plain Shades
   1.2.2 Motted Design
   1.2.3 Stripped Design
   1.2.4 Jasped Design
   1.2.5 Geometrical Design
   1.2.6 Oriental (Floral) Design
   1.2.7 Embossed Design
   1.2.8 Printed Design
   1.3 Sizes and Wall to Wall Carpets:
   1.3.1 Traditional Sizes of Carpets
   1.3.2 Wall to Wall Concept of Carpeting
   1.3.3 Standard Sizes of Rolls of Wall to Wall Carpets
   1.3.4 How to Plan Wall to Wall Carpet from a Standard Roll
   1.3.5 How to Measure any area for Wall to Wall Carpeting
   1.3.6 Estimation of Wall to Wall Carpet
   1.3.7 Installation of Wall to Wall Carpet on Floor
   1.3.8 Joining, Binding & Fringing of Wall to Wall Carpets
   1.3.9 Fittings, Accessories & Types of Underlays used for Wall to Wall Carpets
   1.3.10 How to Remove Fitted Wall to Wall Carpets
   1.3.11 How to Relay Wall to Wall Carpets
   1.3.12 Care & Maintenance.
   1.3.13 Visits to Manufacturing Units and Inspect Wall to Wall Laying of Carpet Procedure
   1.4 Other Floor Coverings:
   1.4.1 Durries:
   1.4.1.1 Cotton Carpets (Durries)
   1.4.1.2 Wollen Drugee
   1.4.1.3 Wollen Durries
   1.4.1.4 Durries of Blended Fiber.
   1.4.2 Coir & Jute Matting Chattai
   1.4.3 Shaggy Floor Covering.
2. **Windows** - Types of windows & their treatments. 4

3. **Curtains and Curtains Materials:** 7
   - 3.1 Types of Curtains:
     - 3.1.1 Plain
     - 3.1.2 French
     - 3.1.3 Pleated
   - 3.2 Lining Materials.
   - 3.3 Curtain Materials
   - 3.4 Curtain Hard wares:
     - 3.4.1 Rods
     - 3.4.2 Rings
     - 3.4.3 Railings
     - 3.4.4 Hooks
   - 3.5 Curtain Accessories:
     - 3.5.1 Swages
     - 3.5.2 Valances
     - 3.5.3 Tails
     - 3.5.4 Tapes
     - 3.5.5 Ropes
   - 3.6 Venetain Blinds
   - 3.7 Types of Blinds:
     - 3.7.1 Austrain
     - 3.7.2 Festoon
     - 3.7.3 Roller
     - 3.7.4 Roman

4. **Upholstery Covering Material and Other Items:** 4
   - 4.1 Types of Upholstery Materials:
     - 4.1.1 Cotton
     - 4.1.2 Silk
     - 4.1.3 Woolen
     - 4.1.4 Synthetic
     - 4.1.5 Rexene
     - 4.1.6 Leather
     - 4.1.7 Blended.
   - 4.2 Cushioning Materials:
     - 4.2.1 Springs
     - 4.2.2 Jute
     - 4.2.3 Cotton
     - 4.2.4 Foam
     - 4.2.5 Rubber

5. **Other Furnishings:**
   - 5.1 Bed Covers
   - 5.2 Cushion Covers
   - 5.3 Table Linen
   - 5.4 Bath Mats
   - 5.5 Toilet Sets and their Design & Stitching.

6. **Accessories:**
   - 6.1 Placement of Accessories
   - 6.2 Types of Accessories:
     - 6.2.1 Statues
     - 6.2.2 Paintings
     - 6.2.3 Lamps
     - 6.2.4 Book Shelves
     - 6.2.5 Mirrors
     - 6.2.6 Fish
     - 6.2.7 Birds
     - 6.2.8 Framing Pictures
   - 6.3 Table Accessories:
     - 6.3.1 Ashtray
     - 6.3.2 Plants
     - 6.3.3 Vases
   - 6.4 Latest Items of Furnishings & Visits to Shops.

7. **Light Fittings:**
   - 7.1 A broad Classification of Categories in Home Lighting:
     - 7.1.1 Direct
     - 7.1.2 Indirect
     - 7.1.3 Semi-Direct
     - 7.1.4 Concealed.
   - 7.2 Lighting in Different Units in House:
     - 7.2.1 Garden & Gate Lights
     - 7.2.2 Exterior & Porch Lights
     - 7.2.3 Drawing Room Lights
     - 7.2.4 Dining Room Lights
     - 7.2.5 Bed Room Lights
     - 7.2.6 Toilet Lights
     - 7.2.7 Kitchen & Pantry Lights
     - 7.2.8 Lobbies & Corridor Lights
     - 7.2.9 Verandah & Entrance Lights
     - 7.2.10 Stairs & Terrace Lights
     - 7.2.11 Different kinds of Light Fixtures for Various Places in a House
8. Visit to Factories/Show Rooms for Varities, Design and Prices.

Preparation of file (Collection of Different Types of Materials)

REFERENCE BOOKS:
1. Soft Furnishings Sarah Cambell & Hillary More
2. American Rugs & Carpets Hellen Von Resentiel
3. Oriental Rugs Erich Aschenbrenner
4. Residential Lighting Randall Whitehead

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HISTORY OF INTERIOR DESIGN-I

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RATIONALE
This part of syllabus will be useful to students for reference of Architecture style, element of the interior decoration in the past period which is in relation to ornamentation, motifs and characteristics of interior in the different periods.

CONTENTS

1. European History:
   1.1. Greek Architecture
       1.1.1 Formation and Development
           1.1.1.1 Geographical Condition
           1.1.1.2 Geological Condition
           1.1.1.3 Climatic Condition
           1.1.1.4 Religious Condition
           1.1.1.5 Social Condition
           1.1.1.6 Historical Condition
       1.1.2 Characteristics Features
           1.1.2.1 The Hellenic Period
           1.1.2.2 Hellenistic Period
       1.1.3 Greek Orders
           1.1.3.1 Meaning of Order
           1.1.3.2 Unit of Measurement
           1.1.3.3 Proportioning of Greek Classic Orders
           1.1.3.4 Types of Greek Orders
               1.1.3.4.1 The Greek Doric Order
               1.1.3.4.2 The Greek Ionic Order
               1.1.3.4.3 The Greek Corinthian Order
   1.1.4 Special Emphasis on Decoration, Ornaments & Motifs of Greek Architecture

2. Islamic History:
   2.1. The Sources of Islamic Architecture in India
   2.2. Islamic & Mughal Arches & Squinch
       2.2.1 Qutab Mosque, Delhi
       2.2.2 Ali Darwaza Qutab, Delhi
       2.2.3 Ajmer Mosque
       2.2.4 Tomb of Ghiyas-Ud-Din Tughluq, Delhi
       2.2.5 Jami Masjid, Ahmedabad
       2.2.6 Mughal, 4 centered 16th & 17th century arch
       2.2.7 Mughal, Shah Jahan, Engrailed, 17th century arch
       2.2.8 Tomb of Iltutmish, Delhi
       2.2.9 Tughlaq’s Tomb
       2.2.10 Sher Shah’s Mosque
2.3. Minars, Minarets, Towers & Turrets of Islamic & Mughal Period
   2.3.1 Chand Minar, Daulatabad
   2.3.2 Jami Masjid, Champaner
   2.3.3 Char Minar, Hyderabad
   2.3.4 Gol Gumbaz, Bijapur
   2.3.5 Akbar’s Tomb
   2.3.6 Jahangir’s Tomb
   2.3.7 Jama Masjid, Delhi
   2.3.8 Taj Mahal, Agra

2.4. Types of Domes of Islamic & Mughal Period

2.5. Special Emphasis on Decoration, Ornaments & Motifs of Islamic Mughal Period

REFERENCE BOOKS:
1. History of Architecture                      Sir Banister Fletcher
2. Indian Architecture                           Percy Brown
3. World Architecture                            G.K.Hiraskar

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BASIC DESIGN - I

CODE ID 105                                      L  T  P
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RATIONALE
This is a practical subject which will help the students to measure the drawing & the case-study of residential house & offices. They will learn presentation techniques, composition, space planning, circulation, utilization of space & other important factors which help in the decoration of a house or office.

CONTENTS

1. Measured Drawings:                           16
   1.1 Importance of Measurement
   1.2 Procedure of Measurement
   1.3 Requirement of a Drawing Sheet
   1.4 Types of Drawing
   1.5 Drawing Presentation

2. Measured drawing & Case-Study:               72
   2.1. Existing Interior Spaces Like:
       2.1.1 Plan, Elevation, & Section of Kitchen
INTERIOR MATERIAL AND CONSTRUCTION - I

RATIONAL

This is a practical as well as theoretical subject, which will help the students in selection of the different building materials and also help to use them in building development at various stages.

CONTENTS

1. Stones :
   1. Various Types of Stones :
      1.1 Granite
      1.2 Basalt
      1.3 Lime Stone
      1.4 Marble
      1.5 Sand Stone
      1.6 Quartzite
      1.7 Laterite
      1.8 Slate
      1.9 Artifical Stones - their Properties and uses in Interior Decoration.

2. Bricks :
   2. Qualites of I & II Class Bricks & their uses in Interior Decoration
   2.2 Various Types of Bricks :
      2.2.1 Fire Bricks
      2.2.2 Sandlime Bricks
      2.2.3 Hollow Clay Bricks
      2.2.4 Surkhi & Terracota-their Properties & uses Standard Sizes of Brick

3. Binding & Finishing Material :
   3.1 Cement :
      3.1 Properties & uses of normal Setting Cement
      3.2 White & Coloured Cement & their uses in Interior Decoration
   3.2 Lime :
      3.2.1 Classification Lime
      3.2.1.1 Fat Lime
      3.2.1.2 Hydraulic Lime
      3.2.1.3 Artifical Hydraulic Lime their Properties & uses.

4. Plasters :
   4. Various Types of Plasters
      4.1 Mud
      4.2 Lime
      4.3 Cement, their Mixture, Various Finishes, Curring, Defects & its Repairs

PRACTICALS

1. Brick Masonry
   1. Types of Bonds
      1.1 English Bonds
      1.2 Single Flemish Bonds
      1.3 Stretcher Bonds
      1.4 Header Bonds
      1.5 Garden Wall Bonds
      1.6 Herring Bone Bonds
      1.7 Diagonal Bonds.
   1. Preparation of Drawing for Different Bonds for Walls & Square Pillars up to 2 Brick Thickness.

2. Stone Masonry
   2. Types of Stone Masonry
      2.1 Random Rubble Masonry
      2.2 Uncoursed Rubble Masonry
      2.3 Coursed Rubble Masonry
      2.4 Dry Rubble Masonry
      2.5 Ashlar Fine Masonry
      2.6 Ashlar Facing Masonry
   2. Preparation of Drawing for Different Bonds for Walls & Square Pillars up to 2 Brick Thickness.

3. Opening, Lintels – Stone
   3.1 R.C.C.
   3.2 R.B.C. on Doors & Windows
   3.4 Arches
   3.4.1 Technical Terms used in Arch Work.
   3.4.2 Types of Arches
3.4.2.1 One Centered  
3.4.2.2 Two Centered  
3.4.2.3 Three Centered  
3.4.2.4 Four Centered.

4. Building Wall Section from Foundation Level to Coping Level.  
5. Foundation- Types of Brick & Stone Foundation- Spread Footing, Wall Footing.  
6. Flooring :  
6.1 Types of Flooring  
6.1.1 Inner Flooring  
6.1.2 Parkway Flooring.

REFERENCE BOOKS :  
1. Building Construction W.B.Mckay  
2. Building Construction A.Michelle  
4. Building Construction Sushil Kumar & Gupta  
5. Building Materials Ranagawala

ARCHITECTURAL DRAWING

ARCHITECTURAL DRAWING

CONTENTs  
1. Lettering : Measured & Freehand both in Pencil & Ink, Ratio between Height & Width of Letters & Numerals (Capitals & Small)  
2. Scales : Metric Conversion Tables & Scales  

Note : The Essential theory should be taught during the practicals.

REFERENCE BOOKS  
1. Engineering Drawing N. D. Bhatt  
2. Engineering Drawing(Hindi) B.C.Gupta

ART & GRAPHICS

CONTENTs  

Note : The Essential theory should be taught during the practicals.

REFERENCE BOOKS  
1. Rendering in Pen & Ink De Chiara Callender

* * * * *
### RATIONAL
The course has been designed to provide an introduction to Computer Networks, Internet and Internet Accesses, Electronic mailing systems, Worksheets concepts, Branch related software application. The student will understand the basic Web terminology. The students will be able to access Internet, send & receive emails, searching and managing data on worksheet.

### CONTENTS

<table>
<thead>
<tr>
<th>Branch Related Applications and Softwares</th>
<th>L</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Only for Costume Design &amp; Dress Making Students</td>
<td>5</td>
<td>15</td>
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<td>• Corel Draw / Photoshop</td>
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<td>1.2 Only for Textile Design Students</td>
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<td>• Corel Draw / Photoshop</td>
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<td>1.3 Only for Commercial Art Students</td>
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<td>• Corel Draw / Photoshop</td>
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<td>1.4 Only for Beauty Culture Students</td>
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<td>• Cosmopolitan/ Photoshop</td>
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<td>1.5 Only for Interior Decoration Students</td>
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<td>• 3D- Home / Autocad</td>
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<tr>
<th>Computer Networking</th>
<th>L</th>
<th>P</th>
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<tbody>
<tr>
<td>2. Need of networks.</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>2.2 Types of Network-LAN, WAN, MAN etc.,</td>
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<tr>
<td>2.3 Topologies of LAN - Ring, Bus, Star, Mesh and Tree topologies,</td>
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<tr>
<td>2.4 Components of LAN - Media, NIC, NOS, Bridges, HUB, Routers, Repeater and Gateways,</td>
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<tr>
<td>2.5 Modem - Working and characteristics,</td>
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<tr>
<td>2.6 Types of Connections - Dialup, Leased Lines, ISDN,</td>
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<tr>
<th>Internet Basic</th>
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<tr>
<td>3. Evolution.</td>
<td>5</td>
<td>15</td>
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<tr>
<td>3.2 Protocols.</td>
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<td>3.3 Interface Concepts.</td>
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<tr>
<td>3.4 Internet Vs Intranet.</td>
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<td>3.5 Growth of Internet.</td>
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<td>3.6 Internet Service Provider.</td>
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<td>3.7 URLs and Domain names.</td>
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<td>3.8 Portals and Applications.</td>
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### NOTE:
1. Above concept may be illustrated using internet. Student should practice on internet for needful searching, text & voice chatting etc.
Student are required to practice on MS-Excel and branch related software’s.

2. From topic no.1 "Branch Related Applications & Software" No question will be asked in theory paper. The Questions from this topic will be incorporated in practical examinations of respective branches.

REFERENCE BOOKS:

ENVIRONMENTAL STUDIES

RASTIONALE
Environmental study is a subject as per directions of Supreme Court / Govt. of India. Under Act. 51 A (g) of our constitution it is our fundamental duty to protect our environment.

A diploma holder must have knowledge of different types of pollution so that she may help in balancing the eco system and controlling pollution by pollution control measures. She should also be aware of environmental laws related to the control of pollution.

CONTENTS

1. General: L 5
   1.1 Biotic and abiotic environment.
   1.2 Adverse effects of Environmental Pollution
   1.3 Control strategies
   1.4 Various Acts and Regulations

2. Water Pollution: L T P 2/2
   2.1 Water Quality Standards
   2.2 Surface and underground water sources
   2.3 Impurities in water and their removal
   2.4 De-fluoridation
   2.5 Adverse effects of domestic waste water and industrial effluent to surface water sources
   2.6 Eutrophication of lakes

3. Air Pollution: L T P 2/2
   3.1 Sources of air contaminants
   3.2 Adverse effects on human health
   3.3 Measurement of air quality standards and their permissible limits
   3.4 Measures to check air pollution
   3.5 Greenhouse effect
   3.6 Global warming
   3.7 Acid rain
   3.8 Ozone depletion

4. Solid Waste Management: L T P 2/2
   4.1 Introduction to solid waste
   4.2 Its collection and disposal
   4.3 Recovery of resources
   4.4 Sanitary land-filling
   4.5 Vermi-composting
   4.6 Hazardous waste management

5. Land Pollution: L T P 2/2
   5.1 Soil conservation
   5.2 Land erosion
   5.3 Afforestation

   6.1 Basics of species
   6.2 Biodiversity
   6.3 Population dynamics
   6.4 Energy flow
   6.5 Ecosystems

7. Social Issues and the Environment: L T P 2/2
   7.1 Sustainable development and Life style
   7.2 Urban problems related to energy
   7.3 Resettlement and rehabilitation of people
   7.4 Environmental ethics
   7.5 Consumerism and waste products

8. Water Harvesting and Rural Sanitation: L T P 2/2
   8.1 Water harvesting techniques
   8.2 Different schemes of Rural Water Supply in Rajasthan
Interior Decoration

8.3 Rural Sanitation
8.4 Septic Tank
8.5 Collection and disposal of wastes
8.6 Bio-gas
8.7 Community Awareness and participation

9. Miscellaneous: 5
9.1 Non-Conventional (Renewable) sources of energy
9.2 Solar energy, Wind energy, Bio-mass energy, Hydrogen energy

Practical work: P
1. Visit to local air polluted site 6
2. Visit to local water polluted site 6
3. Visit to local area to document environmental assets-mountain / desert / river / forest 6
4. Study of local birds, plants, insects 3
5. Plantation work 3
6. Environmental awareness campaign through exhibitions 6

Note: After visits/study, the students will prepare posters, charts, reports for exhibitions/presentations.

REFERENCE BOOKS:
1. Patyavaran Shiksha Dr. A.N. Mathur, Dr. N.S. Rathore
   & Dr. V.K. Vijay
2. Patyavaran Adhyayan Dr. Ram Kumar Gujar
   Dr. B.C. Jat
3. Patyavaran Avabodh Dr. D.D. Ojha
4. Environmental chemistry S.S. Dora
5. Ecology concepts and application: Manuel C. Muller
6. Environmental protection Emil T. Chanlett
7. Environmental science Cumingham. Saigo
8. Solid waste management: C.I. Mantell
9. Introduction to Environmental Engineering & Science Gilbert M Masters
   Prentice Hall of India, 1995
11. Ecology 1975 Odum
12. Environmental Engineering Peavy, Rowe, Tehobaniglum
14. Environmental Technologies for Dr. Upendra Pandel Sustainable Development Dr. M.P. Poonia
15. Environmental Pollution V.K. Kohli & Vikas Kohli

16. पर्यावरण बिना गेहूं के कगार पर राजीव गुप्ता
17. पर्यावरण गीतों का आगाम नेर मानक चंदेला
18. पर्यावरण (आर्थिक) पर्यावरण एवं वन मंत्रालय, नई दिल्ली
19. Panda, New letter WWF-India, New Delhi

Recommended faculty for teaching the subject: Faculty of Civil Engineering or M.Sc. in Environment or PG Diploma in Environment and Sustainable Development.

* * * * *

THEORY OF DESIGN

CODE ID 203

RATIONALE

This subject will impart the primary knowledge of different types of designs, colour schemes, colour schemes for a residential unit & commercial spaces & psychology of colours to the students. The main motive of this subject is to recognize the patterns, style of decorative designs and symmetry with interior objects.

CONTENTS

1. Design: 15 16
   1.1 Definition of Design.
   1.2 Types of Design:
      1.2.1 Functional Design
      1.2.2 Traditional Design
      1.2.3 Folk Design
      1.2.4 Modern Design
   1.3 Element of Design and their Applications in Various Interiors:
      1.3.1 Point
      1.3.2 Line
      1.3.3 Shape
      1.3.4 Space
      1.3.5 Texture
      1.3.6 Colour
   1.4 Principles of Design and their Application in Various Areas of Interior Decoration
      1.4.1 Unity
      1.4.2 Balance

[31]
1.4.3 Proportion
1.4.4 Rhythm
1.4.5 Emphasis

2. Colour:

2.1 Properties of Colour
2.2 Classification of Colours
2.3 Colour Schemes
2.4 Factors Influencing a Colour Scheme, Selection in Interior Spaces
2.5 Colour Scheme for a Residential Unit & Commercial Spaces.
2.6 Psychology of Colour.

REFERENCE BOOKS

1. Interior Design Ahmed A Kasu
2. Modern Painting in Colour Dengco
3. Home Furnishing Anna Hough & Rutt

*****

HISTORY OF INTERIOR DESIGN-II

CODE ID 204

RATIONAL

This subject will impart the primary knowledge of the rise of modern Architecture, the History of the 20th century interior design & furniture, Introduction to works of the masters in interior design, Period Furnitures ranging from Ancient Egypt, Greco-Roman, Gothic, Italian Renaissance to the English Renaissance.

CONTENTS

1. Modern Architecture:

1.1 The Rise of Modern Architecture
1.2 Modern Materials & New Techniques
1.3 History of the 20th Century Interior Design & Furniture
   1.3.1 Furniture Development in Germany
   1.3.2 Furniture Development in France
   1.3.3 Furniture Development in England
   1.3.4 Furniture Development in Italy
   1.3.5 Furniture Development in USA
1.4 Introduction to Work of Masters - Le Corbusier, Frank Lloyd, Walter Groupies, Charles Corea, B. V. Doshi

2. Period Furniture:

2.1 Ancient Egypt:
   2.1.1 Characteristic Features
   2.1.2 Decoration
   2.1.3 Sketches of Following Furniture:
      2.1.3.1 Egyptian Carved Chair (Dog Feet)
      2.1.3.2 Egyptian Stool (Duck's Head Feet)
      2.1.3.3 Egyptian Wooden Stool with Rush Top
      2.1.3.4 Egyptian Head Rest

2.2 Greco-Roman
   2.2.1 Characteristics Features
   2.2.2 Sketches of
      2.2.2.1 Klismos Chair
      2.2.2.2 Roman Table Inlaid
      2.2.2.3 Roman Tripod Torchere
      2.2.2.4 Roman Bronze Stool
      2.2.2.5 Roman Couch, Inlaid with Bone

2.3 Gothic
   2.3.1 Characteristics Features
   2.3.2 Sketches of
      2.3.2.1 The Convention Chair of Edward - I
      2.3.2.2 Gothic Cabinet
      2.3.2.3 Gothic Cupboard
      2.3.2.4 Cassone

2.4 Italian Renaissance
   2.4.1 Characteristics Features
   2.4.2 Sketches of
      2.4.2.1 Dante Chair
      2.4.2.2 Italian Renaissance Side Board or "Gredenza"
      2.4.2.3 Italian Renaissance Carved "Cassapanca"
      2.4.2.4 Italian Renaissance Carved Chair, Showing "Intarsia" Insets.

2.5 The English Renaissance - Tudor & Elizabeth:
   2.5.1 Characteristics Features
   2.5.2 Sketches of
      2.5.2.1 Tudor Wainscot Chair
      2.5.2.2 Tudor Stool
      2.5.2.3 Triangular Chair
2.5.2.4 Elizabethan Melon-Bull Draw-Top Refectory Table
2.5.2.5 Glastonbury (Folding Chair)

2.6 Jacobean
2.6.1 Characteristics Features
2.6.2 Sketches of
   2.6.2.1 Restoration Chair
   2.6.2.2 Restoration Cane-Back Aunchair
   2.6.2.3 Jacobean Turned & Covered Stretcher Stool
   2.6.2.4 Jacobean Cupboard
   2.6.2.5 Dack Chest of Jacobean Period

2.7 William & Mary:
2.7.1 Characteristics Features
2.7.2 Sketches of
   2.7.2.1 William & Mary Tumpet - Leg Highboy
   2.7.2.2 Double Hood W & M Secretary, Block Feet
   2.7.2.3 W & M Care-Back Chair
   2.7.2.4 Six Legged Marquetry
   2.7.2.5 W & M Side Table
   2.7.2.6 W & M Chest

2.8 Queen Anne:
2.8.1 Characteristics Features
2.8.2 Sketches of
   2.8.2.1 Queen Anne Side Chair
   2.8.2.2 Queen Anne Desk
   2.8.2.3 Queen Anne Cupboard
   2.8.2.4 Queen Anne Arm Chair, Showing Cabriole Leg
   2.8.2.5 Queen Anne Needlework Stool with Pad Feet
   2.8.2.6 Queen Anne Settee Showing Claw & Ball Feet

2.9 Chippendale
2.9.1 Characteristics Features
2.9.2 Sketches of
   2.9.2.1 Chippendale Ribband Back Chair
   2.9.2.2 Chippendale Drop-Leaf Side Table
   2.9.2.3 Chippendale Tilt-Top Piecrust Table

2.10 Hepplewhite:
2.10.1 Characteristics Features
2.10.2 Sketches of
   2.10.2.1 Hepplewhite "Tambour" Desk
   2.10.2.2 Hepplewhite Side Chair
   2.10.2.3 Hepplewhite Arm Chair

2.11 Adam Brothers
2.11.1 Characteristics Features
2.11.2 Sketches of
   2.11.2.1 Adam Cane-Seat Armchair
   2.11.2.2 Adam Serpentine Front Console Table
   2.11.2.3 Adam Eight-Legged Day Bed
   2.11.2.4 Adam Side-Board

2.12 Sheraton
2.12.1 Characteristics Features
2.12.2 Sketches of
   2.12.2.1 Sheraton Adjustable Dressing Glass
   2.12.2.2 Sheraton Folding Wash Stand
   2.12.2.3 Sheraton Gentle Mans Dressing Table

2.13 Louis xiv
2.13.1 Characteristics Features
2.13.2 Sketches of
   2.13.2.1 Louis xiv Arm Chair, Showing Saltier Stretcher, Cane Back & Leather Seat.
   2.13.2.2 Louis xiv Tapestry, Armchair, Showing Foot Feet.
   2.13.2.3 Louis xiv Cabinet Desk
   2.13.2.4 Louis xiv Carved Armoire

2.14 Louis xv (Rococo Period)
2.14.1 Characteristics Features
2.14.2 Sketches of
   2.14.2.1 Marble Rococo Console with Scroll Foot
   2.14.2.2 Cane Back Arm Chair
   2.14.2.3 "Encoignure" or Corner Cabinet
   2.14.2.4 Writing Table

2.15 Louis xvi
2.15.1 Characteristics Features
2.15.2 Sketches of
2.15.2.1 Side Table
2.15.2.2 Arm Chair
2.15.2.3 Book Case
2.15.2.4 Mantle Clock

2.16 American
2.16.1 Characteristic Features
2.16.2 Sketches of
2.16.2.1 Colonial Gate Leg Table
2.16.2.2 Early Colonial Curve Chair
2.16.2.3 Low Buoy
2.16.2.4 Side Board

REFERENCE BOOKS
1. Time Saver- Interior Design & Space Planning
   Johesf D Chiara, Julius Palero,
   Martin Zelink

* * * * *

BASIC DESIGN - II

CODE ID 205 L T P
-- -- 6

RATIONALE
This very important subject is the foundation of interior design. The student will have ideas of Anthropometrics & its application in design, three dimensional design & free hand sketching. The main motive of this subject is to recognize the perfect presentation of design with all techniques.

CONTENTS

1. Study of Anthropometrics & its Application in Design 18
   Exercises
   1.1 Child play Room
   1.2 Kitchen
   1.3 Shop
   1.4 Drawing Studio
   1.5 Living Room
   1.6 Conference Hall/ Seminar Hall

2. Colour 30
   2.1 Preparation of Colour Wheels Primary, Secondary & Tertiary Colour Wheels

3. Three Dimensional Design :
   3.1 One point Perspective of Childs play-in
   3.2 One point Perspective of Kitchen
   3.3 One point Perspective of Shop
   3.4 One point Perspective of Drawing Studio
   3.5 One point Perspective of Living Room
   3.6 One point Perspective of Conference Hall/ Seminar Hall
   3.7 Two Point Perspective
      3.7.1 Single unit Residence
      3.7.2 Single unit Office

4. Free Hand Sketching of Still Life Images :
   4.1 Details of different types of Jali Works
   4.2 Buildings - Modern & Historical

Note : The Essential theory should be taught during the practicals.

REFERENCE BOOKS :
1. Pen & Ink Robert & Gill

* * * * *

INTERIOR MATERIALS & CONSTRUCTION – II

CODE ID 206 L T P
1 -- 5

RATIONALE
This very important subject is the foundation of interior construction. The student will have ideas of various types of Timber, Glasses, Paints, Varnishes, Polishes, Distempers and Tiles & their applications in construction. The main motive of this subject is to recognize the perfect presentation of design with all techniques.

CONTENTS

1. Timber :
   1.1 Classification -
      1.1.1 Exogenous
      1.1.2 Endogenous
      1.1.3 Soft Wood
      1.1.4 Hard Wood
   1.2 Various Types of Indian Timber
### Interior Decoration

#### 1.2.1 Teak
1.2.2 Sal
1.2.3 Chir
1.2.4 Mango
1.2.5 Babul
1.2.6 Deodar
1.2.7 Toon Shisham
1.2.8 Pine Neem

Properties and uses of above Timbers.

#### 1.3 Availability and Cost of Wood.

#### 1.4 Timber Used in Furniture Manufacturing -
1.4.1 Seasoning of Timber
1.4.2 Defects in Timber
1.4.3 Preservation of Timber
1.4.4 Recognition Methods of Superior and Inferior Qualities.

#### 1.5 Woods Products :
1.5.1 Properties and uses of the following -
1.5.1.1 Commercial Plywood
1.5.1.2 Block Board
1.5.1.3 Teak Block Board
1.5.1.4 Teak Ply Board
1.5.1.5 Particle Board
1.5.1.6 Plastic Laminates

### Glasses :
2.1 Properties sizes & uses in Decorative Purposes of following types of Glasses :
2.1.1 Sheet
2.1.2 Plate
2.1.3 Wired
2.1.4 Laminated
2.1.5 Safety
2.1.6 Insulating
2.1.7 Coloured
2.1.8 Ground
2.1.9 Heat Resistant
2.1.10 Glass-Blocks

### Paints, Varnishes, Polishes, Distempers, Snowcem etc. :
3.1 Paints-Ingredients of Paints
3.2 Aluminum Paints

### 3.3 Cellulose Paints
3.4 Melamine Paint
3.5 Zinc Paints
3.6 Plastic Emulsion Paints
3.7 Silica Paints, Trade Names, Properties, Covering, Capacities Costs, Handling Techniques uses of above.

### 3.8 Varnishes : (Properties and uses)
3.8.1 Water and Oil Varnishes
3.8.2 Spirit Varnishes

### 3.9 Polish : (Properties and uses)
3.9.1 French polish
3.9.2 Wax polish

### 3.10 Lacquer : (Properties and uses)
3.10.1 Tar
3.10.2 Bitumen

### 3.11 Distempers and Snowcem -
3.11.1 Properties and uses
3.11.2 Painting on Wood Work and Iron Work

### 4. Tiles :
4.1 Various Types of Tiles : (Properties and uses)
4.1.1 Roofing Tiles
4.1.2 Floor Tiles
4.1.3 Wall Tiles

### 4.2 Decorative Tiles : (Properties and uses)
4.2.1 Ceramic Tiles
4.2.2 Glazed Tiles
4.2.3 Vinyl Tiles

### 5. Stairs :
5.1 Classification of Stairs
5.2 Staircase Requirements

### PRACTICALS

#### 1. Doors : Detailed Drawings of the Following :
1.1 Battened, Ledged & Braced Door,
1.2 Partly Panelled and Partly Glazed Door
1.3 Flush Door

#### 2. Windows: Detailed Drawings of the Following :

[39]
2.1 Bay/ Bow Window
2.2 Corner Window
2.3 Grills & Fly Proof Mesh Window

3. Stairs : 30
3.1 Introductions to Different Types of Staircases
3.1.1 Dog-Legged
3.1.2 Open Well
3.1.3 Spiral
3.1.4 Helical Type

4. Panelling : 20
4.1 Detailed Drawing of Panelling in Plywood, Ply Board, & Wood Laminates.

5. Partition : 20
5.1 Detailed Drawing of Simple Partition in Wood & Glass.

6. Collect samples & prepare file on 20
6.1 Glasses
6.2 Paints & Varnish
6.3 Titles

REFERENCE BOOKS :
1. Material of Construction D.N. Ghosh
2. Building Material N.Choudhary

--- * * * *

INTERIOR DESIGN & FURNITURE DESIGN - I
CODE ID 207 L T P
-- -- 9

RATIONALE
This is a totally practical subject which will help the students to design a house, office & their furniture also. The students will be able to develop the sense of creativity in decorating the mentioned spaces.

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WORKSHOP
CODE ID 208 L T P
---- 3

RATIONALE
For the student of interior design, knowledge of workshop practice is essential. This subject will introduce the student wood working processes like wood joinery work, painting & polishing & preparation of surface. By going through the exercises a student will be able to design wood furniture's, its painting & polishing.
CONTENTS

2. Exercise in Painting, Polishing Including Preparation of Various Surfaces Like Wood, Wall & Metal Surface. 9
3. Introduction to POP Modelling (any one) – Preparation of Models of Ceiling, Panels, Pillars, Cornices. 36
4. Preparing Models of:
   4.1 One Interior Project
   4.2 One Exterior Project 36

Note: The Essential theory should be taught during the practicals.

REFERENCE BOOKS:
1. Workshop Technology Hazara & Dwivedi
2. Workshop Technology

* * * * *

PROFESSIONAL MANAGEMENT AND ENTREPRENEURSHIP

CODE ID 301
CA 301/ CD 301/ TD 301
2 2/2 --

RATIONALE
To achieve the targets and goals in an organisation, it is essential to co-ordinate the entire system. For this process, the knowledge of principles of management, personnel management, material management and financial management is required.

As the opportunities for wage employment are reducing day by day, Govt. of India realised for the development of entrepreneurship. To make aware the students of different branches of diploma courses, can be learn how to equip themselves for setting up a small scale industry of their own area of study. This course includes the procedure for how to select, proceed and start the small scale industry.

CONTENTS

1. Meaning and Scope of Business:
   1.1 Definition
   1.1.1 Profession
   1.1.2 Trade
   1.1.3 Industry
   1.2 Objectives of business and profession. 2 1

2. Types of Business Organisation:
   2.1 Brief description
   2.2 Advantages and disadvantages of
      2.2.1 Individual
      2.2.2 Partnership
      2.2.3 Cooperative, private
      2.2.4 Public limited organisations
   2.3 Characteristics of small business
   2.4 Business ethics
   2.5 Organisaton charts. 6 3

3. Management Techniques:
   3.1 Leadership
   3.2 Authority
   3.3 Responsibility
   3.4 Functions of Management. 3 1
4. Quality Control: 4 3
4.1 Meaning
4.2 Importance of keeping standard
4.3 Factors, responsible for deviation from standards.
4.4 ISO and ISO-9000 to 9006
4.5 Total quality management.

5. Financial Management: 5 3
5.1 Sources of finance
5.2 Brief idea of
5.2.1 Cash and credit
5.2.2 Cheques
5.2.3 Drafts
5.2.4 Bill of exchanges
5.2.5 Promissory note.

6. Marketing: 6 3
6.1 Basic concept
6.2 Market research
6.3 Market promotion
6.4 Branding
6.5 Packaging
6.6 Pricing
6.7 Planning and development
6.8 Advertisement media and effectiveness.
6.9 Sales forecasting
6.10 Marketing mix
6.11 Pricing policy
6.12 Sales promotion and salesman ship.
6.13 After sales services
6.14 Complaints and their redress

7. Material Management: 4 1
7.1 Function and duties of purchase department
7.2 Purchase order
7.3 Contracts
7.3.1 Legality of contracts
7.3.2 Types of contracts
7.4 Tenders
7.4.1 Types of tenders
7.4.2 Tendering procedure
7.4.3 Earnest money
7.4.4 Security money.
Note: Entrepreneurship awareness camp should be arranged for 3 to 4 days at a stretch. No question will be asked in the examination from the topics under Entrepreneurship Awareness Camp.

Entrepreneurial Awareness Camp: Topics to be covered in the camp
1. Who is an entrepreneur?
2. Need for entrepreneurship, entrepreneurial career and wage employment.
3. Scenario of development of small scale industries in India.
4. Entrepreneurial history in India, Indian values and entrepreneurship.
5. Assistance from District Industries Center, Commercial banks, State Financial Corporation, Small Industries Service Institutes, Research and Development laboratories & other financial and development corporations.
7. Opportunities for business, service & industrial ventures.
8. Learning from Indian experiences in entrepreneurship (Interaction with successful entrepreneurs).

The camp can be arranged by the institution itself with the help of other agencies such as RIICO, Science & Technology Department, Rajcon, DOI etc.

REFERENCE BOOKS:
1. Hand Book of Small Scale Industry P.M. Bhandari
2. Hand Book on Entrepreneurship Development O.P. Harkut
3. Entrepreneurial Development S.S. Khanka
4. Statistical Quality Control Mahohar Mahajan
6. ISO :14000
9. The Story of an Entrepreneur M. Nath, IMT Monograph
11. Hand Book of Entrepreneurship Rao & Pareek, Learning System 1978 New Delhi, * * * * *

COMPUTER AIDED DESIGN
CODE ID 302
L T P
-- -- 3

RATIONALE
This Subject increases the productivity of the designer, improves the quality of design, improves communication and improves the efficiency of design.

PRACTICALS

1. Layout and Sketching : 10
   1.1 Units
   1.2 Angles
   1.3 Angle Measure
   1.4 Angle Direction
   1.5 Area
   1.6 Title Block
   1.7 Layout

2. Drawing Environment : 5
   2.1 Limits
   2.2 LT Scale
   2.3 Measure
   2.4 Pan

3. Elements of Drawing : 40
   3.1 Line
   3.2 Curves
     3.2.1 Circle
     3.2.2 Ellipse
     3.2.3 Arc
   3.3 Rectangle
   3.4 Polygon
   3.5 Erasing
3.6 Colouring of Object
3.7 Filling of Object
3.8 Scaling of Drawing
3.9 Text
3.10 Creating User made Objects
3.10.1 Block
3.10.2 Insert
3.11 Transformation
3.12 Change
3.13 Cutting of Objects
3.14 Dimensioning in Drawing
3.15 Layer
3.16 Fillet
3.17 Co-ordinate System
3.18 Explode
3.19 Union
3.20 Distance

By using above commands two computer Aided Submission of the work done in I.D. & F.D. (ID 307)

4. 3D Functions
4.1 Elevation
4.2 Hide
4.3 Plan
4.4 Render
4.5 Revolve
4.6 Rotate
4.7 Section
4.8 Shade
4.9 Shape
4.10 Slice

By Using above commands two computer Aided Submission of the work done in I.D. & F.D. (ID 307)

Note: The Essential theory should be taught during the practicals.

REFERENCE BOOKS:
2. Computer Graphics Foley, Dam, Feiner, Hughes, Pearson
3. Computer Graphics Roger F.

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INTERIOR SPECIFICATION AND QUANTITY ESTIMATION

CODE ID 303

L T P
2 2/2 --

RATIONALE

This subject is the backbone of Interior Decoration. Whatever work is under taken as original construction or as repairs or renovation, it needs finance and it is always necessary to know before hand the Cost of the project so that proper provision in the Budget may be made. Along with the funds, the second requirement is that of quantities of various materials required which could be found out from various drawings of the project. Hence the provision of this subject is necessary.

CONTENTS

1. Quantities

   1.1 Working out Quantities for a two Room residential Building in Particular, the in Following items:
      1.1.1 Plastering / Decorative Plastering
      1.1.2 Painting
      1.1.3 Lime Punning
      1.1.4 Flooring
      1.1.5 Curtains
      1.1.6 Polishing
      1.1.7 Panelling
      1.1.8 Stone Cladding
      1.1.9 Ceramic/ PVC tile cladding
      1.1.10 Grid Finish
      1.1.11 Painting Iron Work
      1.1.12 Wood Work (Doors & Windows)
      1.1.13 Glazing
      1.2 Data collection and keeping information of market prices of above items.
      1.3 Prepare bill of quantities of above items.

2. Specifications

   2.1 General Specifications
   2.2 Detailed Specifications
      2.2.1 Plastering

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2.2.2 Mosaic and Terrazo floor  
2.2.3 White Washing  
2.2.4 Distempering  
2.2.5 Snowcem  
2.2.6 Painting on Iron work  
2.2.7 Varnishing  
2.2.8 French Polishing  
2.2.9 Wood Work (Doors & Window)  
2.2.10 Glazing

3. Types of Estimate & Procedure of Works:

3.1 Types of Estimate:
  3.1.1 Preliminary Estimate  
  3.1.2 Approximate Estimate  
  3.1.3 Abstract Estimate  
  3.1.4 Plinth Area Estimate  
  3.1.5 Cube Rate Estimate  
  3.1.6 Detailed Estimate  
  3.1.7 Revised Estimate  
  3.1.8 Supplementary Estimate  
  3.1.9 Annual Repair or Maintenance Estimate

3.2 Procedure of Works:
  3.2.1 Measurement Book  
  3.2.2 Units of Measurement  
  3.2.3 Mode of Payment

4. Professional Practice:

4.1 Ways of Practice  
4.2 Procedure of Execution  
4.3 Arbitrations  
4.4 Interior Designer's Role  
4.5 Need for an Interior Designer  
4.6 Fees of an Interior Designer  
4.7 Indian Institute of Interior Designers (IIID)  
  4.7.1 Rules of Regulations of IIID  
  4.7.2 Code of Conduct of IIID  
  4.7.3 Membership and their Responsibilities

REFERENCE BOOKS:
2. Interior Design  Ahmed A Kasu

BUILDING SERVICES

CODE ID 304
L  T  P
2  2  --

RATIONALE
This Subject Serve mechanical part of building which run parallel to building development. The basic part of services are the operation and inter-relation of water supply, sewer system, plumbing, heating & cooling inside the house.

CONTENTS

1. Water Supply & Drainage:
   1.1 Water Supply:
       1.1.1 Hot and Cold Water Supply in residential building
   1.2 Plumbing:
       1.2.1 Types of Pipes  
       1.2.2 Sizes of Pipes  
       1.2.3 Water supply fitting in toilets and kitchen
   1.3 Drainage:
       1.3.1 Principles of Drainage  
       1.3.2 Materials of Drain-pipes  
       1.3.3 Traps  
       1.3.3.1 Types of Traps  
       1.3.3.2 Function of Traps  
       1.3.3.3 Uses of Traps

2. Acoustics:
   2.1 Properties of Sound  
   2.2 Sound Insulation  
   2.3 Sound Absorption  
   2.4 Acoustic Design of a hall  
   2.5 Guidelines for good acoustic design

3. Ventilation:
   3.1 Natural Ventilation:
       3.1.1 Guidelines for natural ventilation  
       3.1.2 Mechanical Ventilation  
       3.1.3 Recommended fresh air supply  
       3.1.4 Size of the operating for natural ventilation
3.2 Air-Conditioning:
  3.2.1 The need for air conditioning
  3.2.2 Atmospheric Conditions for human comfort
  3.2.3 Process of Air-Conditioning
  3.2.4 Air-Conditioning under Indian Climatic conditioning
  3.2.5 Types of Air-Conditioning methods

REFERENCE BOOKS:
2. Interior Design Ahmed Akasu
3. Water Supply & Sanitary Engineering Garpure

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NATURAL INTERIOR SCAPING

CODE ID 305       L  T  P
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RATIONALE
This Subject is meant to provide guidance as to how the natural elements such as flowers, plants, stone etc. can be used for developing interior spaces and bringing in nature into the built form or spaces.

PRACTICALS

1. Climatology:
   1.1 Tropical climate.
   1.2 Micro climate of interior of city level.
   1.3 Micro climate of Region

2. Natural Landscape of Elements:
   2.1 Plants.
   2.2 Water bodies.
   2.3 Trees.
   2.4 Pebbles
   2.5 Rocks.
   2.6 Bricks
   2.8 Wood
   2.9 Tiles

3. Small Exercise on the Landscape Design:
   3.1 Courtyard.
   3.2 Residential garden.
   3.3 Commercial space.

4. Interior Scapes:
   4.1 Flower:
      4.1.1 Cultural values.
      4.1.2 Colours.
      4.1.3 Religious views
      4.1.4 Traditional Importance
      4.1.5 As a decorative elements.
      4.1.6 Textures.
      4.1.7 Visual perception in various indoor & Out door spaces.
      4.1.8 Drawing and practical exercise on type of flowers.
   4.2 Indoor and out door plants:
      4.2.1 Characteristics
      4.2.2 Colour
      4.2.3 Texture
      4.2.4 Foliage
      4.2.5 Science of growing, Maintaining greenery
      4.2.6 Drawing and practical exercise on types of Indoor and Outdoor plants.
   4.3 Drawing and Practical exercise on types of flower arrangement:
      4.3.1 Eastern Style.
      4.3.2 Western style.
   4.4 Drawing and practical exercise on types of accessories used in the flower arrangement.

5. Drawing and Practical exercise on Different treatments:
   5.1 Exterior wall treatment.
   5.1.1 Murals.
   5.1.2 Different types of materials.
      5.1.2.1 Stone.
      5.1.2.2 Tiles.
      5.1.2.3 Brick.
      5.1.2.4 Bamboo.
      5.1.2.5 Rocks.
   5.2 Different Types of water bodies.

Note: The Essential theory should be taught during the practicals.
REFERENCE BOOKS:
1. Ikebana.
2. Foliage House Plants.
3. Interior Design
   Ahmed A. Kasu
4. Time Saver Standards
   Charles W. Harris
   Landscape Design.

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INTERIOR MATERIAL & CONSTRUCTION - III

CODE ID 306

RATIONALE
This is an important subject and is the foundation of Interior Construction. The students will have ideas about various types of doors, windows, roofs, metals & their uses, and interior finishing materials.

CONTENTS

1. Metals and Building Finishes:
   1.1 Properties and uses of the following:
   1.1.1 Aluminium
   1.1.2 Copper
   1.1.3 Zinc
   1.1.4 Tin
   1.1.5 Brass
   1.1.6 Gun Metal
   1.1.7 Stainless Steel
   1.1.8 Asbestos
   1.1.9 Mica
   1.1.10 Rubber
   1.1.11 Plaster of Paris
   1.1.12 Bakelite
   1.1.13 Coal tar

2. Building Protection:
   2.1 Damp Proofing
   2.2 Termite Protection
   2.3 Fire Protection

3. Wall Papers:
   3.1 Types, Properties and uses & procedure of wall papering & Fabrics.

4. False Ceiling:
   4.1 Types of false ceiling materials & their uses.

5. Metal Doors and Windows:
   5.1 Sections, Mechanism and Working details of Metal Doors & Windows

6. Roofs:
   6.1 Introduction to exhibition design and temporary structures.
   6.2 Explanation of Various types of roofs
      6.2.1 Flat roofs
      6.2.2 Pitched roofs

PRACTICALS

1. Doors: Detailed Drawings of the Following:
   1.1 Aluminum Doors
      1.1.1 Sliding Doors
      1.1.2 Swing Doors
      1.1.3 Revolving Doors
      1.1.4 Centre Pivoted Door
   1.2 Steel Doors
      1.2.1 Sliding Doors
      1.2.2 Swing Doors
      1.2.3 Revolving Door

2. Windows: Detailed Drawing of the Following:
   2.1 Aluminum Window
      2.1.1 Sliding Window
      2.1.2 Pivoted Window
      2.1.3 Curtain Wall
   2.2 Steel Window
      2.2.1 Fixed Window

3. Roofs: Detailed Drawing of the Following:
   3.1 Flat Roofs
   3.2 Pitched Roofs
REFERENCE BOOKS:
1. Building Construction  B.C. Punmia
2. Building Construction  Mitchell
3. Building Construction  W.B. Mackay

INTERIOR DESIGN & FURNITURE DESIGN - II
CODE ID 307      L    T    P
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RATIONALE
It has been very aptly put, “Interiors is an Art, an urge to design interiors is as human.” This being the core of Interior Design will enable a student to develop the sense of creativity and aesthetics. The subject include detailed furniture design elementary in interior decoration.

PRACTICALS

P

1. Preparing Interior Layout Plans and Perspectives of the Following Parts of 3 to 5 Start Hotel:
   1.1 Lobby
   1.2 Restaurants
   1.3 Pub Cum Bar
   1.4 Suite Rooms
   1.5 Beauty Parlour

2. Working Project:
   2.1 Introduction to working project in form of a prototype study of any existing apartment building.
   2.2 Designing interior of flats of the above Apartment Building:
      2.2.1 Furniture layout plans
      2.2.2 Flooring
      2.2.3 Electric
      2.2.4 Ceiling Plans

3. Furniture Design:
   Practical exercise on furniture design in form of working drawing of the following:
   3.1 Bed for suite Rooms
   3.2 Built in wardrobe

Note: The Essential theory should be taught during the practicals.

REFERENCE BOOKS:
1. Interior Design  Ahmed A. Kasu
2. Time Saver Standards  Joseph D. Chiara
   (Interior Design)  Julius Palero, Martin Zelink

APPLIED DESIGN & DRAWING
CODE ID 308      L    T    P
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RATIONALE
This subject aims to prepare a student to stand with the demand of the market. A design should be foremost functional, it should meet up all the requirements for executions of the project.

PRACTICALS

P

1. Designing Commercial Space:
   1.1 Bank: Design and Detailed Drawing of the following:
      1.1.1 Interior Layout Plan
      1.1.2 Furniture Details - Workstation, Manager’s Table
      1.1.3 Ceiling Plans
      1.1.4 Electric Layout Plan
      1.1.5 Flooring Layout Plan
      1.1.6 Wall Panelling if any
      1.1.7 Flooring Plans

   1.2 Interior Designer's Office: Design and Detailed Drawing of the following:
      1.2.1 Interior Layout Plan
      1.2.2 Furniture Details - Computer Table, Reception Desk
      1.2.3 Ceiling Plans
1.2.4 Electric Layout Plan
1.2.5 Flooring Layout Plan
1.2.6 Panelling if any
1.2.7 Floor Layout Plan

Note: The essential theory should be taught during the practicals.

REFERENCE BOOKS:
1. Time Saver Standards Joseph D Chiara
   (Interior Design) Julius Palero

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PROJECT

Project work shall be assigned to the student at the start of III year classes, registered as per B.T.E.R. Rules & Regulation and will be carried out after the final Examination for 3rd year, for twenty four continuous working days.

The project can be assigned to the students individually or in groups. Project work shall consist of the actual task and the report writing. The actual task may be of different nature like designing, fabrication, survey and studies in market / organization, etc. Some other problems may be given as per the need and local conditions. Facilities of computer may be utilized for the project work.

It is further advised that the topics of the project may be decided at the beginning of the IIIrd year. The students may also be encouraged to collect material and do preparatory work during the year of study.

At the end of the project, a project report should be submitted by each student before the final assessment. The assessment of the project should be of continuous nature throughout the project duration. The final assessment will be done immediately after completion of project by examiners on the basis of project report, work done during the project and viva - voce.

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