



**RASHTRASANT TUKADOJI MAHARAJNAGPUR UNIVERSITY
NAGPUR**

**(Established by Government of Central Provinces Education Department by
Notification No. 513 dated the 1st of August, 1923 & presently a state university
governed by Maharashtra Public University Act 2016)**

FACULTY OF SCIENCE AND TECHNOLOGY

DIRECTION NO 12 of 2019

**DIRECTION GOVERNING THE EXAMINATION LEADING TO THE DEGREE OF
BACHELOR OF INTERIOR DESIGN.**

(SEMESTER PATTERN)

(Direction issued under Section 12(8) of the Maharashtra Public University Act. 2016 relating to award of Bachelor's degree in Interior Design in the Faculty of Science and Technology)

Whereas the Maharashtra Public Universities Act No. 6 of 2016 has come into force with effect from 1st March 2017 and was amended from time to time.

AND

WHEREAS, the University Grants Commission, New Delhi vide letter No. D.O. No. F-2/2008/(XI Plan), dated 31 January 2008 regarding new initiatives under the XI PLAN – Academic reforms in the University has suggested for improving quality of higher education and to initiate the academic reform at the earliest.

AND

Whereas the Coordinator Special Task Committee of House and Interior Design Technology in the Faculty of Science and Technology at its meeting held on 16/06/2017, has submitted the amendments to Direction no. 72 in accordance with Direction no. 13 of 2017

AND

Whereas the Special Task Committee of House and Interior Design Technology in the Faculty of Home Science at its meeting held on 25/08/2016, have recommended for starting of semester pattern and prepared the syllabus and scheme of examination for Bachelor of Interior Design, commensurate with the governing guidelines.

AND

Whereas the Special Task Committee of House and Interior Design Technology in the Faculty of Science and Technology at its meeting held on 5/11/2018 have recommended amendment in the Direction No. 21 of 2017 and submitted the scheme of examination for the course of Bachelor of Interior Design on 27/11/2018, commensurate with the governing guidelines, to be implemented from academic session 2018-19.

AND

Whereas the coordinator of the Faculty of Home Science concurred with the recommendations of the special task committee in House and Interior Design Technology in the Faculty of Home Science, vide his observations dated 25/08/2016.

AND

Whereas, the new draft direction and scheme of examinations as per semester pattern is to be implemented from the academic session 2016-2017 for Bachelor of Interior Design which is to be regulated by this direction and as such there is no existence and framing of an ordinance for the above examination.

AND

Whereas it is expedient to provide an Ordinance for the purpose prescribing examinations leading to the degree of "Bachelor of Interior Design" in the Faculty of Science and Technology, phasic repeal of the direction No. 25 of 2016 governing the existing course of Bachelor of Interior Design.

AND

WHEREAS the Hon'ble Vice-Chancellor has accepted the syllabus along with draft direction on the behalf of Academic Council on 07-10- 2016 under section 12(7) of Maharashtra Public University Act 2016.

AND

WHEREAS the Hon'ble Vice-Chancellor has accepted the syllabus along with draft direction on the behalf of Management Council under section 12(7) of Maharashtra Public University Act 2016.

AND

Whereas, the framing of an ordinance as required under provision of Act is a time consuming process, now therefore, I, Dr. Siddharthavinayak P. Kane, the Vice

Chancellor of Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur in exercise of powers vested under Section 12(8) of the Act do hereby issue the following Direction

1. This Direction shall be Called "Direction regarding examinations leading to the Degree of Bachelor of Interior Design (Semester Pattern) in the Faculty of Science and Technology ,Rashtrasant Tukadoji Maharaj.Nagpur University, Nagpur.
2. The direction shall come into force from the date of its issue by Hon'ble Vice Chancellor and shall remain in force till the relevant ordinance comes into being in accordance with the provisions of the Act.
3. The duration of the Bachelor of Interior Design course shall be of Four academic years consisting of eight semesters with University examinations at the end of each semester namely:
 - a. Bachelor of Interior Design Semester I Exam.
 - b. Bachelor of Interior Design Semester II Exam.
 - c. Bachelor of Interior Design Semester III Exam.
 - d. Bachelor of Interior Design Semester IV Exam.
 - e. Bachelor of Interior Design Semester V Exam.
 - f. Bachelor of Interior Design Semester VI Exam.
 - g. Bachelor of Interior Design Semester VII Exam.
 - h. Bachelor of Interior Design Semester VIII Exam.
4. The examination specified in paragraph 3 above shall be held twice a Year at such places on such dates as may be fixed by the Board of Examinations. The Examination specified in proceeding section shall be held twice a year at such places on such dates as may be decided by the University. The main examination of semester I,III,V and VII shall be held in winter whereas the examination for semester II,IV,VI and VIII shall be held in summer. The supplementary examination of semester I,III,V and VII will be held in summer whereas supplementary examination for semester II,IV,VI,VIII will be held in winter. There shall be no practical examination during semester I,III,V and VII. Practical examination will be held during semester II,IV,VI,VIII only considering complete curriculum of both the semesters of that particular year.
5. Subject to compliance with provisions of this direction and of other ordinances in force from time to time, a candidate for admission to the examination shall :

In case of Bachelor of Interior Design –Semester I have passed XII standard from Maharashtra State Board of Secondary Education or an examination recognized as equivalent there to under the following faculties – Science / Home Science / Commerce / Arts with English as compulsory subject taken at one and same sitting with not less than 50% marks in aggregate for open category and 45% in aggregate for backward class candidates.

OR

The candidate should have passed the Indian School Certificate standard (XII) Examination or any other equivalent Higher Secondary (standard XII) of a Council or Board of outside Maharashtra State with, Science / Home Science / Commerce / Arts with English as compulsory subject at first attempt with 50% marks in aggregate for open category and 45% in aggregate for backward class candidates.

OR

That anyone who holds two year diploma in Interior Design and Decoration from anyone of the polytechnics or equivalent shall be eligible for admission to first semester of Bachelor of Interior Design.

b) The admitting college shall subject the applicant seeking admission to the Interior Design Course to a “Creativity test” specially designed by the Board of Studies to evaluate/assess the applicant’s aptitude. The weight age for “Creativity test” shall be 40% of the aggregate marks in the matter of admission to this course of study.

c) In case of Bachelor of Interior Design Semester III have passed the Bachelor of Interior Design Semester I and Semester II Examination of the University or an examination recognized as equivalent there to.

OR

That anyone who have passed three year diploma in Interior Design and Decoration from anyone of the polytechnics or equivalent in first attempt with not less than 45% marks in aggregate shall be eligible for admission to III semester Bachelor of Interior Design.

OR

That anyone who have passed XII standard from Maharashtra State Board of Secondary Education or an examination recognized as equivalent there to under the faculty of Science with Mathematics and English as compulsory subjects taken at one and same sitting with diploma in Interior Design and Decoration from Board of Technical Education, Maharashtra or equivalent taken at one and same sitting with not less than 45% aggregate shall be eligible for admission to III Semester under the direction in Interior Design, Home Science faculty.

d) In case of Bachelor of Interior Design Semester V have passed the Bachelor of Interior Design Semester III and IV Examination of the University or an examination recognized as equivalent there to.

e) In case of Bachelor of Interior Design Semester VII, have passed the Bachelor of Interior Design Semester V and VI Examination of the University or an examination recognized as equivalent there to.

6. A student shall undergo “Apprentice Training” after appearing at the VI and VII Semester Bachelor of Interior Design Examination cumulating to a total of five months, in an Architect’s or Interior Designer’s office and shall produce a certificate to that effect to the satisfaction of the Principal of the college.

7. A. Without prejudice to the other provisions of the ordinance No. 6 relating to the Examinations in general the provision of paragraph 5,7,8,10 and 32 of the said ordinance shall apply to every collegiate candidate.

B. The ATKT rules for admission for the Course of Bachelor Interior Design shall be as given in the following table:

Admission to semester	Candidate should have passed in all the subjects of the following examination of R.T.M. Nagpur University	Candidate should have appeared for the following examinations	Candidate should have passed at least half of the total passing heads taken together prescribed for examinations given below(on calculation fraction if any should be ignored)
Semester I	As provided in the para 5 of the direction	-----	-----
Semester II	-----	Semester I	-----
Semester III	-----	-----	Semester I and II
Semester IV	-----	Semester III	-----
Semester V	Semester I and II	-----	Semester III and IV
Semester VI	-----	Semester V	-----
Semester VII	Semester III and IV	-----	Semester V and VI
Semester VIII	-----	Semester VII	-----

8. The Fees for the examinations shall be as prescribed by the University, from time to time and whenever, any change is made the fees prescribed for any particular examination that shall be notified through a notification for the information of all concerned.

9. Every candidate for Bachelor of Interior Design Semester I,II, III, IV, V, VI, VII, and final Examination shall be examined in the subjects as set out in the appendix to Directions :-

I The scope of the subjects shall be as indicated in the respective syllabus in force from time to time.

II Medium of instruction and examination shall be English.

10. An applicant for admission to an Examination shall satisfy the Head of the Department / Principal as regard the Sessional Examination / Internal assessment conducted during the academic year regarding her/his suitability to take the University examination.

11. In order to pass in the Examination an examinee shall obtain in each subject not less than the minimum marks as indicated in the Appendix- 1,2,3,4,5,6,7,8..

12. The Head of the Department/Principal shall maintain, in her /his office the complete record of the marks obtained by the candidate in the sessional examinations/internal

assessment that shall be submitted, before the commencement of the University examination, to the Director of Examination, in a sealed cover.

13. There shall be no classification of successful examinees at First, Second, Third, Fourth, fifth, sixth and seventh semester of Bachelor of Interior Design Examination.
14. Division of examinees successful at the Eighth Semester of Bachelor of Interior Design Examinations shall be determined on the basis of the aggregate marks obtained at all the semesters of Bachelor of Interior Design Examination taken together.
15. Those obtaining 60% or more marks in aggregate shall be placed in First Division and all other successful examinees in the Second Division respectively.
16. An examinee who is successful at an examination and obtained not less than 75% or more of the marks prescribed in a subject shall be declared to have passed the examination with Distinction in that subject.
17. Provision of Ordinance No. 7 -A relating to the condonation of Deficiency of marks for passing an examination and of ordinance No. 10 relating to examinations and compartments as amended up to date shall apply to the Examination under this ordinance.
18. An examinee who fails in sessional examinations / internal assessment shall submit fresh sessional work in the subject for evaluation provided further that in case any other examinee who fails in a subject in which paper and sessional are bracketed, may also submit fresh sessional work in subject to the principal of the college, who shall forward the fresh sessional/internal assessment marks of the University.
19. An unsuccessful examinee at any of the examination of Bachelor of Interior Design shall have an option to carry her / his sessional examination / internal assessment marks for theory / practical examinations to his / her successive attempt (s) at the examination. In case the examinee foregoes her/his Sessional Examination/Internal assessment marks in subject, then she/he shall be examined for the same at her/ her successive attempt.
20. As soon as possible after the examinations but not later than 30th June next following in case of examination held in March – April and 28th February following, in case of examination held in October- November the Board of Exams shall publish a list of successful examinees. List of successful examinees at the eighth Semester of Bachelor of Interior Design Examination shall be arranged in the First and Second Division as envisaged in clause 14 of this direction and names of examinee passing the said examinations as whole in the minimum prescribed period and obtaining the prescribed number of placed in the First or Second Division shall be arranged in order or Merit as provided in the Examinations in General Ordinance No. 6.

21. That educational tour or visit comprising of 1-5 days shall be compulsory to the students at least once during four years of the course.
22. Notwithstanding anything to the contrary in this direction, no person shall be admitted to this examination, if she/he has already passed the same examination or an equivalent examination thereto of other statutory University.
23. Successful examinees at the I, II, III, IV, V, VI, VII and VIII semester of Bachelor of Interior Design shall be entitled to receive a certificate signed by Registrar, titled Bachelor of Interior Design I, II, III, IV, V, VI, VII and VIII respectively and those successful at all the exams of Bachelor of Interior Design Examination shall on payment of the prescribed fee receive a degree in the prescribed form, signed by the Vice-chancellor, at the convocation to be held by the University.
24. The Scheme of Examination shall be as per Appendix: 1,2,3,4,5,6,7 and 8 (Semester pattern). The details / title of the theory papers can be suitably modified considering the need of the subject without disturbing the main structure.
25. With the issuance of this Direction, the Direction no.21 of 2017 governing the examinations leading to award of Bachelor of Interior Design in the Faculty of Science and Technology shall stand repealed.

I, further, direct that the aforesaid Direction shall come into force from the date of issuance and shall remain in force till the relevant Ordinance comes into being, in accordance with the provisions of the Maharashtra Public Universities Act, 2016.

Nagpur
Date: 22/04/2019

Sd/-
Dr. Siddharthavinayak P. Kane
(Vice Chancellor)

Absorption scheme for students of Bachelor of Interior Design four year course to Bachelor of Interior Design four year (Semester Pattern) course.

This is for information of all concerned that Bachelor of Interior Design- 4 year course has been converted to Bachelor of Interior Design 4 year course Semester Pattern, hence forth in order to accommodate the candidates who have not yet cleared the above examinations are to be absorbed in the course namely, Bachelor of Interior Design Semester I and II, Semester III and IV, Semester V and VI and Semester VII and VIII respectively. In view of the above the following absorption scheme is prescribed.

Part – I PAPERS

Sr. No.	Scheme for BID 4 year- (Part –I)	Scheme for BID 4 year- (Semester I,II)
1	Interior Design- I	Interior Design- I and II
2	Material and Construction Techniques- I	Material and Construction Techniques- I and II
3	Product Workshop-I	Product Workshop-I and II
4	Presentation Techniques	Presentation Techniques I and II
5	Graphics	Graphics I and II
6	Communication Skills	Communication Skills I and II
7	Evolution of Design - I	-----
8	Mathematics	Mathematics I and II
9		Cultural Anthropology I and II

As per the above scheme:-

1. The candidates of old Bachelor of Interior Design- Part I shall have to appear in 'Cultural Anthropology- I and II'.
2. The marks secured by them in other papers will be considered as marks secured in papers mentioned against the respective papers in a span of two semesters.
3. In the interest of the students, students of old course (yearly pattern) may be allowed 1+5 chances to pass the subjects of the concerned year, after commencement of new course (semester pattern).

Part – II PAPERS

Sr. No.	Scheme for BID 4 year- (Part – II)	Scheme for BID 4 year- (Semester III,IV)
1	Interior Design- II	Interior Design- III and IV
2	Product Workshop-II	Product Workshop-III and IV
3	Furniture Design I	Furniture Design I and II
4	Material and Construction Techniques- II	Presentation Techniques III and IV
5	Structures - I	Structures – I and II
6	Interior Environment Control	Interior Environment Control I and II
7	Technical Presentation	Graphic Design I and II
8	Evolution of Design - II	-----
9		History of Art and Architecture I and II

As per the above scheme:-

1. The candidate who has passed in the subject 'Evolution of Design I' at first year level of 4 year degree course shall be exempted from the subject 'History of Art and Architecture I and II' of Semester III and IV.
2. The marks secured by them in other papers will be considered as marks secured in papers mentioned against the respective papers in a span of two semesters.
3. In the interest of the students, students of old course (yearly pattern) may be allowed 1+5 chances to pass the subjects of the concerned year, after commencement of new course (semester pattern).

Part – III PAPERS

Sr. No.	Scheme for BID 4 year- (Part – III)	Scheme for BID 4 year- (Semester V,VI)
1	Interior Design- III	Interior Design- V and VI
2	Furniture Design II	Furniture Design III and IV
3	Material and Construction Techniques- III	Material and Construction Techniques- V and VI
4	Structures - II	Structures – III and IV
5	Interior Services	Interior Services I and II
6	Estimation and Costing	Estimation and Costing I and II
7	Digital Applications	Digital Applications I and II
8	Cultural Anthropology	-----
9	-----	History of Art and Architecture III and IV

As per the above scheme:-

1. The candidate who has passed in the subject 'Evolution of Design II' at second year level of 4 year degree course shall be exempted from the subject 'History of Art and Architecture III and IV' of Semester V and VI.
2. The marks secured by them in other papers will be considered as marks secured in papers mentioned against the respective papers in a span of two semesters.
3. In the interest of the students, students of old course (yearly pattern) may be allowed 1+5 chances to pass the subjects of the concerned year, after commencement of new course (semester pattern).

Part – IV PAPERS

Sr. No.	Scheme for BID 4 year- (Part – IV)	Scheme for BID 4 year- (Semester VII,VIII)
1	Apprentice Training	Apprentice Training I and II
2	Project Work	Project Work
3	Interior Landscape	Interior Landscape I and II
4	Seminar	-----
5	Interior Detailing	Interior Detailing I, Interior Design VIII
6	Structure III	Structure V and VI
7	Professional Practice	Design Management I and II
8	-----	Environmental Psychology
9	-----	Green Building Technology
10	-----	Interior Design VII

As per the above scheme:-

1. The candidates of old Bachelor of Interior Design 4 year shall have to appear for the subjects 'Environmental Psychology', 'Green Building Technology' and 'Interior Design VII' of Semester VII and VIII.
2. Apprentice Training at Fourth Year level shall be completed in two phases by candidates. Two months after VI Semester and three months after completion of VIII Semester.
3. The marks secured by them in other papers will be considered as marks secured in papers mentioned against the respective papers in a span of two semesters.
4. In the interest of the students, students of old course (yearly pattern) may be allowed 1+5 chances to pass the subjects of the concerned year, after commencement of new course (semester pattern).

Absorptions scheme to transfer from Bachelor of Interior Design (yearly pattern) to Bachelor of Interior Design (semester pattern) can be implemented as below

Student who has passed all the subjects of first year(yearly pattern) should be directly allowed to take admission to third semester of new course.

Student who has passed all the subjects of first year(yearly pattern) and second year (yearly pattern)should be directly allowed to take admission to fifth semester of new course.

Student who has passed all the subjects of first year, second year and third year (yearly pattern) should be directly allowed to take admission to seventh semester of new course.

In the interest of the students, students of old course(yearly pattern) may be allowed 1+5 chances to pass the subjects of the concerned year, after commencement of new course (semester pattern).

If an examinee failed to pass the under graduate program within EIGHT successive years (for Eight semesters degree) from the date of his / her first admission to particular program he/ she shall be declared as “Not Fit for the Course (NFC)” and he/ she will not be allowed to appear further for any previous examination of the course.

Appendix
Teaching and Examination Scheme
Bachelor of Interior Design
Four Year(Eight Semester) Degree Course
BID Semester I

S. No.	Subject	Teaching Scheme	Examination Scheme				
			Duration Hrs.	Max. Marks. Th. Paper	Max. Internal Assessment	Total	Min. passing marks.
1T1	Interior Design I	6			100	100	40
1T2	Material & Construction Techniques I	4	2	40	10	50	20
1T3	Graphics I	6	2	40	10	50	20
1T4	Cultural Anthropology I	4	2	40	10	50	20
1T5	Communication Skill I	4	2	40	10	50	20
1T6	Mathematics I	4	2	40	10	50	20
1T7	Presentation Techniques I	3	..	..	25	25	10
1T8	Product Workshop I	3	..	..	25	25	10

Note:

- 1) Th = Theory, Max = Maximum, Min = Minimum
- 2) Minimum marks for passing will be 40% of the total marks allotted to that paper or Internal assessment.

Grand Total of semester I - 400 marks.

Appendix
Teaching and Examination Scheme
Bachelor of Interior Design
Four Year(Eight Semester) Degree Course
BID Semester II

S. No.	Subject	Teaching Scheme	Examination Scheme				
			Duration Hrs.	Max. Marks. Th. Paper	Max. Internal Assessment	Total	Min. passing marks.
2T1	Interior Design II	6	6*	80	20	100	40
2T2	Material & Construction Techniques II	4	2	40	10	50	20
2T3	Graphics II	6	2	40	10	50	20
2T4	Cultural Anthropology II	4	2	40	10	50	20
2T5	Communication Skill II	4	2	40	10	50	20
2T6	Mathematics II	4	2	40	10	50	20
2T7	Presentation Techniques II	3	..	..	25	25	10
2T8	Product Workshop II	3	..	..	25	25	10

Note:

- 1) Th = Theory, Max = Maximum, Min = Minimum
 - 2) Minimum marks for passing will be 40% of the total marks allotted to that paper or Internal assessment.
- * The exam duration for Interior Design II is 6 hours (3 hours in two sittings) as the students have to design full project of interiors with all details.

Grand Total of semester II - 400 marks.

Appendix
Teaching and Examination Scheme
Bachelor of Interior Design
Four Year(Eight Semester) Degree Course
BID Semester III

S. No.	Subject	Teaching Scheme	Examination Scheme				
			Duration Hrs.	Max. Marks. Th. Paper	Max. Internal Assessment	Total	Min. passing marks.
3T1	Interior Design III	9			100	100	40
3T2	Material & Construction Techniques III	4	2	40	10	50	20
3T3	Furniture Design I	6	2	40	10	50	20
3T4	History of Art and Architecture I	4	2	40	10	50	20
3T5	Structure I	3	2	40	10	50	20
3T6	Interior Environment Control I	4	2	40	10	50	20
3T7	Graphic Design I	6	2	40	10	50	20
3T8	Product Workshop III	3	..	..	25	25	10

Note:

- 1) Th = Theory, Max = Maximum, Min = Minimum
- 2) Minimum marks for passing will be 40% of the total marks allotted to that paper or Internal assessment.

Grand Total of semester III - 425 marks.

Appendix
Teaching and Examination Scheme
Bachelor of Interior Design
Four Year(Eight Semester) Degree Course
BID Semester IV

S. No.	Subject	Teaching Scheme	Examination Scheme				
			Duration Hrs.	Max. Marks. Th. Paper	Max. Internal Assessment	Total	Min. passing marks.
4T1	Interior Design IV	9	12*	80	20	100	40
4T2	Material & Construction Techniques IV	4	2	40	10	50	20
4T3	Furniture Design II	6	2	40	10	50	20
4T4	History of Art and Architecture II	4	2	40	10	50	20
4T5	Structure II	3	2	40	10	50	20
4T6	Interior Environment Control II	4	2	40	10	50	20
4T7	Graphic Design II	6	2	40	10	50	20
4T8	Product Workshop IV	3	..	..	25	25	10

Note:

- 1) Th = Theory, Max = Maximum, Min = Minimum
- 2) Minimum marks for passing will be 40% of the total marks allotted to that paper or Internal assessment.

* The exam duration for Interior Design IV is 12 hours (3 hours in two sittings for two days) as the students have to design full project of interiors with all details.

Grand Total of semester IV - 425 marks.

Appendix
Teaching and Examination Scheme
Bachelor of Interior Design
Four Year(Eight Semester) Degree Course
BID Semester V

S. No.	Subject	Teaching Scheme	Examination Scheme				
			Duration Hrs.	Max. Marks. Th. Paper	Max. Internal Assessment	Total	Min. passing marks.
5T1	Interior Design V	12			100	100	40
5T2	Material & Construction Techniques V	4	2	40	10	50	20
5T3	Furniture Design III	6	2	40	10	50	20
5T4	History of Art and Architecture III	4	2	40	10	50	20
5T5	Structure III	3	2	40	10	50	20
5T6	Interior Services- I	4	2	40	10	50	20
5T7	Estimation and Costing -I	3	2	40	10	50	20
5T8	Digital Application -I	4	..	..	50	50	20

Note:

- 1) Th = Theory, Max = Maximum, Min = Minimum
- 2) Minimum marks for passing will be 40% of the total marks allotted to that paper or Internal assessment.

Grand Total of semester V - 450 marks.

Appendix
Teaching and Examination Scheme
Bachelor of Interior Design
Four Year(Eight Semester) Degree Course
BID Semester VI

S. No.	Subject	Teaching Scheme	Examination Scheme				
			Duration Hrs.	Max. Marks. Th. Paper	Max. Internal Assessment	Total	Min. passing marks.
6T1	Interior Design VI	12	12*	80	20	100	40
6T2	Material & Construction Techniques VI	4	2	40	10	50	20
6T3	Furniture Design IV	6	2	40	10	50	20
6T4	History of Art and Architecture IV	4	2	40	10	50	20
6T5	Structure IV	3	2	40	10	50	20
6T6	Interior Services- II	4	2	40	10	50	20
6T7	Estimation and Costing -II	3	2	40	10	50	20
6T8	Digital Application II	4	..	..	50	50	20

Note:

1) Th = Theory, Max = Maximum, Min = Minimum

2) Minimum marks for passing will be 40% of the total marks allotted to that paper or Internal assessment.

* The exam duration for Interior Design VI is 12 hours (3 hours in two sittings for two days) as the students have to design full project of interiors with all details.

Grand Total of semester VI - 450 marks.

Appendix
Teaching and Examination Scheme
Bachelor of Interior Design
Four Year(Eight Semester) Degree Course
BID Semester VII

S. No.	Subject	Teaching Scheme	Examination Scheme				
			Duration Hrs.	Max. Marks. Th. Paper	Max. Internal Assessment	Total	Min. passing marks.
7T1	Interior Design VII	6			100	100	40
7T2	Interior Landscape I	3	2	40	10	50	20
7T3	Environmental Psychology	3	2	40	10	50	20
7T4	Structure - V	3	2	40	10	50	20
7T5	Design Management I	2	2	40	10	50	20
7T6	Interior Detailing I	6	..	..	100	100	40
7T7	Apprentice Training I	..	..	..	50	50	20

Note:

- 1) Th = Theory, Max = Maximum, Min = Minimum
- 2) Minimum marks for passing will be 40% of the total marks allotted to that paper or Internal assessment.

Grand Total of semester VII - 450 marks.

Appendix
Teaching and Examination Scheme
Bachelor of Interior Design
Four Year(Eight Semester) Degree Course
BID Semester VIII

S. No.	Subject	Teaching Scheme	Examination Scheme				
			Duration Hrs.	Max. Marks. Th. Paper	Max. Internal Assessment	Total	Min. passing marks.
8T1	Interior Design VIII	9	12*	80	20	100	40
8T2	Interior Landscape -II	3	2	40	10	50	20
8T3	Green Building Technology	3	2	40	10	50	20
8T4	Structure - VI	3	2	40	10	50	20
8T5	Design Management II	2	2	40	10	50	20
8T6	Project Work	3	..	.	100	100	40
8T7	Apprentice Training II	..	..	..	50	50	20

Note:

- 1) Th = Theory, Max = Maximum, Min = Minimum
- 2) Minimum marks for passing will be 40% of the total marks allotted to that paper or Internal assessment.

* The exam duration for Interior Design VIII is 12 hours (3 hours in two sittings for two days) as the students have to design full project of interiors with all details.

Grand Total of semester VIII - 450 marks.

INTERIOR DESIGN
SEMESTER I
1T1 INTERIOR DESIGN I
SESSIONAL

Sessional - 100

Passing Marks - 40
Total Marks - 100

AIM: The aim of the subject is to understand the principles of design and its application to interior design. Visual perception through simple design elements and organization.

UNIT I

Understanding visual perception of forms analyzed through spatial elements like, line , plane and volume through graphic tools and 3D explorations. Understanding their combinational character.

UNIT II

Impact of variables like size, shape, colour, tone, texture and light on spatial elements of design. Compositions as symmetrical, asymmetrical, balanced/ unbalanced, steady/ dynamic etc. perception of forms through movement in space.

UNIT III

Understanding design issue through order, pattern, rhythm- ISSUES Composition. Synthesis of these elements evolves understanding of order in space and form, Variation, issues of geometry, principles of perception, proximity, closure similarity form in content, figure and ground relationships, static and dynamic aspects of spaces.

UNIT IV

Analysis of visual elements of design leading to establishment of design principles like Unity and Balance.

UNIT V

Geometrical character of design elements leading to principles like contrast, Harmony, Rhythm, Proportion, emphasis and subordination, repetition etc.

SESSIONAL WORK:

The exercises shall be based on:

1. Understanding and application of design elements and variables.
2. Understanding and application of design principles through 2D and 3D compositions.
3. Quantitative and qualitative aspects of space through design exercise.

REFERENCES:

1. Time Saver Standards
2. Visual Arts: A Basic Study by Bhagwat Desai
3. Form Space and Order by D.K.Ching

INTERIOR DESIGN
SEMESTER I
1T2 MATERIAL AND CONSTRUCTION TECHNIQUES – I
PAPER II

Theory - 40
Sessional - 10
Total Marks -50
Passing Marks: 20

Aim: Understanding building as a system. Introduction to basic building material and construction methods. General idea about their chemical and physical properties leading to structural strength and aesthetic qualities. Emphasis should be given on developing understanding about making choice of appropriate building materials in a given situation.

UNIT I

Building Terminology, Building components, its characteristics and behavior. Relationship between building components & building material

UNIT II

Materials - Clay, brick, stone their physical and behavioral properties, process of manufacture, tools and techniques of application to built form and interiors

UNIT III

Openings in masonry, arches, lintels

UNIT IV

Material – Sand, cement, aggregate, mortar, concrete. Process of manufacture, in situ reinforced cement concrete construction, physical and behavioral properties, application in built forms and interiors. Cane and bamboo, tools and techniques of joinery, application to built forms and interiors

Sessional Work: Plates, Site visit reports, tutorials, notes, sketches and market surveys.

REFERENCES:

1. Building Construction by Sushil Kumar
2. Building Construction by Rangwala
3. Building Construction by Barry and McKay

INTERIOR DESIGN

SEMESTER I

1T3 GRAPHICS I

PAPER III

Theory: 40
Sessional: 10
Total Marks: 50
Passing Marks: 20

AIM : To introduce students to technical drawing methods and equipment , language of graphics i.e. vocabulary and grammarenable students to express simple three dimensional objects by developing their skill for communicating graphically objects so as to later adopt the same for depicting buildings and building components.

UNIT 1

Familiarization of equipment and recapitulation: Ability to handle and use various drawing instruments and media for technical drawing and sketching.Introduction to graphic language and its components viz. Line types; meaning and application, lettering , use of various metric scales, conventions ,standard annotations and format .Principles of plane geometry and geometrical constructions .systems of measurement MKS and FPS.

UNIT II

Understanding scales: study of scales, their use in practice and construction of plain and diagonal scale.Concept of enlargement and reduction of objects.

UNIT III

Introduction to orthographic projections : The concept of representing objects and elements of drawing such as point , line , planes and simple regular geometric forms / 3 dimensional objects as plan/s section/s and elevation/ learning the basics of drawing orthographic projections for simple combinations of point , line , planes and solids primarily as first angle projections and or third angle projections.

UNIT IV

Orthographic projections:Drawing Orthographic Projections of simple and complex solids based on geometrical constructions , either single or in combinations.

UNIT V

Understanding and drawing views: learning the basics of drawing isometric views and Axonometric projections for representing various simple and complex geometrical shapes and forms and rendering the same to understand materials .

SESSIONAL WORK:

1. Exercises should be based on simple and complex geometrical shapes and cover all units in plate forms.
2. Sessional work should be planned to cover all the units mentioned in course outline with thrust on skill development, accuracy and understanding of the topic.
3. Maximum weight age of 10 percent in assessment should be given to the assignments of geometrical constructions.
4. Manually drafted assignments to cover the course outline based on all units.

REFERENCES:

1. Ching Francis D.K.: Architectural Graphics
1. Leslie Martin: Architectural graphics:
2. Jolhe D A : Engineering Graphics , Tata McGraw Hill , New Delhi
3. Bhat N D, “Elementary Engineering Drawing-Plane and Solid Geometry”, Chartotar Publishing House, Anand (1988)
4. M.S.Kumar : Engineering Drawing, DD publications, Chennai
5. I.H. Morris : Geometrical Drawing for Art Students, Orient Longman Chennai.

INTERIOR DESIGN
I SEMESTER
1T4 CULTURAL ANTHROPOLOGY I
PAPER IV

Theory – 40
Sessional – 10
Total Marks: 50
Passing Marks – 20

UNIT I

Society –

- i) Meaning and Definition
- ii) Characteristics of Society
- iii) Types of Society
- iv) Factors Bringing Changes in Society
- v) Impact of Modernization on Society and Study of Society in Interior Design

Culture –

- i) Meaning and Definition
- ii) Characteristics of Culture
- iii) Types of Culture in India
- iv) Factors Bringing Changes in Culture – Modernization, Urbanization, Technology
- v) Tradition and Rituals of any one State
- vi) Art form and Craft form in Indian States

Anthropology -

- i) Meaning and Definition
- ii) Meaning and Definition of Cultural Anthropology
- iii) Importance of Anthropology in Studying Interior Design.

Chapter 2 – Ethnography

- i) Meaning and Definition
- ii) History of Ethnography
- iii) Significance of Ethnography in Interior Design.

REFERENCEBOOKS –

1. NadeemHasnain, 2011, Indian Anthropology
2. Mohd. Irfan, 2012 , Social Exclusion And Muslim Ethnograph, Neha Publishers & Distributors

INTERIOR DESIGN

SEMESTER I

1T5 COMMUNICATION SKILLS

PAPER V

Theory: 40

Sessional: 10 Total Marks: 50

Passing Marks : 20

AIM: To provide an adequate mastery of technical and communicative English Language training primarily, reading and writing skills, secondarily listening and speaking skills. To develop all the four skills and nurture the personality of the students, to enable them to survive in the competitive world and become professionally competent. In Language acquisition four Skills play a significant role.

UNIT I: LISTENING: a) Importance of Listening Skills, b) Developing Listening Skills, c) Seminar Presentation Techniques

UNIT II :SPEAKING : a) Voice training and expression b) Non verbal communication) Role Playing) Group Discussion) Report Presentation) Professional Manners and Etiquettes) Personal Interview Techniques. Hygiene 1) Voice training and expression (*Effective Public Speaking*) 2) Non verbal communication: Body Language

UNIT III: READING : a) Book review 'Reflections on Vital issues'

UNIT IV: WRITING : a) Paragraph writing) Correction of Errors) Précis Writing d) Unseen Passage) Technical report writing, Essay writing Letter writing Dialogue writing.

UNIT V :SOFT SKILL DEVELOPMENT : a) Effective Public Speaking, Goal Setting, Time Management) Team Building) Stress Management f) Health and

SESSIONAL WORK:

1. Activities related to Listening Skills, Telephonic conversation
2. Situational listening Skills (Meeting, Dialogue, Seminars etc)
3. Essay writing, Letter writing, Correction of Errors, Précis Writing
4. Comprehension Passage, Paragraph writing (Related to B.I.D. Syllabus, For Eg: Interior of a Mall/ Monument, etc).
5. *Goal Setting and* Three minutes Presentation
7. Presentation of a Research Paper-Syllabus based topic

REFERENCES:

1. Professional Communication Skills : By Pravin, S.R. Bhatia, A.M Sheikh: S.Chand and company

2. English Grammar Composition and Effective Business Communication By M.A. Pink,
S.E.Thomas : S.Chand
3. Contemporary English Grammar Structures and Compositions by David Green
Macmillan Publication
4. Reflections on Vital issues Edited by P.J. George
5. Publication Orient Black Swan
6. Presentations (The Business Skills Series) by Anne Laws Orient Black Swan
7. Fifty ways to improve your Presentation Skills in English By Bob Dignen Publication
Orient Black Swan

**INTERIOR DESIGN
SEMESTER- I
PAPER VI
1T6 MATHEMATICS – I**

Theory: 40
Sessional: 10
Total Marks: 50

Passing Marks: 20

AIM:

- To understand elementary principles of mathematics.
- To apply mathematics in practical problems.
- To obtain accuracy in calculations and results of various mathematical experiments.

CONTENTS:

UNIT I

- Sets, Relations and Functions
 - Definition
 - Domain
 - Range
 - Cartesian Product
 - Even-Odd Functions
 - Inverse Functions

UNIT II

- Logarithms
 - Product
 - Division
 - Use of Log Tables
 - Simple Calculations using Log Tables

UNIT III

- Trigonometry
 - Trigonometric Ratios
 - Ratios of Sum and Differences of Angles
 - Multiple Angles and Half Angles

UNIT IV

- Plane Co-ordinate Geometry
 - Distance Formula
 - Equation to a Line
 - Section Formula and their applications

UNIT V

- Angle between the Lines
 - Parallel Lines
 - Perpendicular Lines
 - Length of Perpendicular

SESSIONAL WORK

Two unit tests per semester and assignments

REFERENCES

1. Algebra by K P Basu
2. Set Theory Schaum Series
3. Trigonometry by S L Loney
4. Plane Co-ordinate Geometry by S L Loney

INTERIOR DESIGN
SEMESTER I
1T7 PRESENTATION TECHNIQUES I
SESSIONAL

Sessional - 25

Passing Marks - 10

Total Marks - 25

AIM :-To improve drawing and sketching skills. To transfer the design ideas. With visual aid from designer to the client.

UNIT - I

Introduction to various tools used for sketching such as pencil, charcoal , crayons , water colour etc.

UNIT - II

Line drawing of nature by using various techniques as shades of pencil. Introduction of light and shade in nature drawing. Line drawing of exterior of building. Building drawing in perspective.

UNIT - III

Landscape elements by using various mediums. Introduction of colour in the same i.e. poster , pencil & water colour.

SESSIONAL WORK:

- Assignments based on sketching technique
- Assignments based on perspective of exterior buildings.
- Assignments based on exterior & interior Landscape.

REFERENCES:

1. Rendering with Pen and Ink by Gill

INTERIOR DESIGN
SEMESTER I
1T8 PRODUCT WORKSHOP I
SESSIONAL

Sessional – 25
Passing Marks - 10
Total Marks - 25

UNIT - I CLAY WORKSHOP

- Introduction to mud and clay as a material. Process and techniques of forming and decorating using clay as a material. Having feel of materials and creating innovative products. Interior finishes with mud.

UNIT - II COLOUR WORKSHOP

Aim :-Colour as an important part of our environment and its importance in design and colour as a scientific base.

- Study of colour as science. Light and the spectrum. Different Wave lengths of coloured light.
- Colour as a system and its application.
- How colour is perceived. Harmony in vision and basic principles of Harmony.
- Colour and textures of various natural materials.
- Modifying factors to colours, namely, light, ability to reflect / absorb, surface quality, distance and scale.
- Manifestation of colours in various cultures. Colours symbolism basic characteristic of various hues.

UNIT – III CERAMIC WORKSHOP

Aim :- Understanding of ceramic products by working with materials, having feel of material and creating innovative products.

- A brief study of ceramics of various cultures.
- Process and techniques of forming and decorating.
- Colour pigments and design qualities.
- Site visits to ceramic product factories, sample collection, documentation, display of creative work.

INTERIOR DESIGN
SEMESTER II
2T1 INTERIOR DESIGN II
PAPER I

Theory- 80
Sessional: 20
Total Marks: 100
Passing Marks - 40

AIM: Space making in order to understand elements and organization. Visual perception of Interior spaces by creating Comfortable, functional and arithmetically appearing harmonious Interior Environment.

UNIT I

Introduction to concept of space. Elements of enclosed form- Combinations, resultant configurations & Characters.

UNIT II

Man and his basic living activity. Relationship of space with that of function for basic living activity. Organizational types and their correlation to linkages, types of routes and movement.

UNIT III

Functional analysis, minimum space requirements, anthropometrics, space planning for living activity.

UNIT IV

Quantitative and qualitative aspects of space through case studies and design exercise. Functional efficiency and qualitative aspects of relation to space.

UNIT V

Analysis of existing spaces and built forms, materials and structural systems, built form and its expression. Lighting, air views & issue.

SESSIONAL WORK: The exercises shall be based on:

- 1) Analysis of space and in relation to function.
- 2) Data collection: Survey and analysis of existing space.

REFERENCES:

1. Time Saver Standards
2. Visual Arts: A Basic Study by Bhagwat Desai
3. Form Space and Order by D.K.Ching

INTRIOR DESIGN
SEMESTER II
2T2 MATERIAL AND CONSTRUCTION TECHNIQUES – II
PAPER II

Theory - 40
Sessional – 10
Total Marks: 50
Passing Marks - 20

AIM: Understanding timber and timber joinery and its application. Understanding wood products and derivatives.

UNIT I

Material –timber – classification of trees, characteristics of good timber, sawing methods, tools and techniques of basic timber joinery.

UNIT II

Application of timber to openings like doors and windows, Timber paneled, partly paneled and partly glazed and fully glazed doors including hardware, design standards and criteria of opening.

UNIT III

Application of timber to partition and paneling.

UNIT IV

Material –Reconstituted wood, plywood, block boards, particle boards, fiber boards, cement fiber board's etc- their properties, process of manufacturing, tools and techniques of joinery.

Surface finishes to reconstituted wood like laminates, veneer, and other proprietary material.

SESSIONAL WORK:

1. Plates, Site visit reports, tutorials, notes, sketches and market surveys.

REFERENCES:

4. Building Construction by Sushil Kumar
5. Building Construction by Rangwala
6. Building Construction by Barry and Mckay

**INTERIOR DESIGN
SEMESTER II
2T3GRAPHICS II
PAPER III**

Theory: 40
Sessional ;10
Total Marks: 50
Passing Marks -20

AIM: drawing skills as tools to design thinking and visualization to enable the students to understand and express Composite three-Dimensional objects as perspective views. to understand objects formed by additive and interpenetrated solids using various graphical projection systems including sections and rendering suitably to understand materials , tones and textures.

UNIT I:

Development of Surfaces: development of simple geometrical shapes, cut solids / complex forms using the conventional methods viz.. Unfold, unroll and radial. Model making using two dimensional materials like paper etc.

UNIT II:

Orthographic projections: drawing orthographic projections of cut solids, true sections etc. of single or combination solids .simple and complex cuts i.e. single plane cutting an object and two planes cutting an object.

UNIT III:

Interpenetration of solids: using projections to derive lines, curves and planes formed by the intersection of planes with solids and solids with solids.

UNIT IV:

Geometrical Drawing of special and complex curves: Geometrical construction of Sine curve, Geometrical mean, Golden Section, Archimedean Spiral, Logarithmic Spiral. Geometrical construction of Ellipse, Parabola, Hyperbola Hyperbolic paraboloid, Ellipsoid, Elliptic Paraboloid, Hyperboloid – Hypers etc.

UNIT V:

Introduction to perspective drawing: types of perspective drawing. Importance and relevance of Vanishing point, picture plane and eye level, difference between isometric view and perspective view. Parallel and angular perspective views of objects

SESSIONAL WORK:

1. Sessional work should be planned to cover all the units mentioned in course outline with thrust on skill development, accuracy and understanding of the topic.
2. Maximum weight age of 10 percent in assessment should be given to the assignments of development of surfaces and model making skills based on them using the methods taught.
3. Manually drafted assignments to cover the course outline based on above units.

REFERENCE:

1. Ching Francis D.K.: Architectural Graphics
2. Leslie Martin: Architectural graphics:
3. Jolhe D A : Engineering Graphics , Tata McGraw Hill , New Delhi
4. Bhat N D, “Elementary Engineering Drawing-Plane and Solid Geometry”, ChartotarPublishing House, Anand (1988)
5. M.S.Kumar : Engineering Drawing, DD publications, Chennai
6. I.H. Morris : Geometrical Drawing for Art Students, Orient Longman Chennai

**INTERIOR DESIGN
SEMESTER II
2T4 CULTURAL ANTHROPOLOGY II
PAPER IV**

Theory – 40
Sessional – 10
Total Marks– 50
Passing Marks – 20

AIM :Students of design have to be sensitized to various cultural aspects such as traditions , fine arts and the performing arts of a particular country and have to understand the symbolism, patterns and forms that manifest themselves in the architecture of that place.

UNIT I – Vastushastra : History of VastuShastra ,Scientificness of VastuShastra, Use of VastuShastra in Interior Design.

UNIT II: Traditions in arts & crafts – space, function and climate responsiveness

UNIT III: Evolution of forms and spaces during various eras and regions influences etc.

UNIT IV: Symbolism, patterns and forms that manifest themselves in the architecture of that place.

UNIT V: Significance of cultural aspects and traditions.

SESSIONAL WORK:

1. Project
2. Assignment

REFERENCEBOOKS –

3. NadeemHasnain, 2011, Indian Anthropology
4. Mohd. Irfan, 2012 , Social Exclusion And Muslim Ethnograph, Neha Publishers & Distributors

INTERIOR DESIGN
SEMESTER II
2T5 COMMUNICATIONSKILLS II
PAPER V

Theory : 40
Sessional: 10
Total Marks: 50
Passing Marks: 20

AIM : To prepare students for participation in seminars, group discussions, paper presentation and general personal interaction at the professional level

UNIT I : Book review

UNIT II : 1) Technical report writing , Official Report Writing , Progress Report , Industrial Visit Report , Travel Report , Workplace Report , Inventory Report , 2) Stress Management

UNIT III : Dialogue writing , Group Discussion , Role Playing , *Health and Hygiene*

UNIT IV : Seminar Presentation Techniques

UNIT V : Professional Manners and Etiquettes , Personal Interview Techniques , Meeting Agendas and minutes writing

SESSIONAL WORK:

1. Presenting a seminar on a selected topic
2. Book Reading and Reviews (Discussing the various books read).
3. Mock personal interviews
4. Report Writing
5. Mock Professional situations
6. Dialogue writing
7. Group Discussion Role Playing

REFERENCES:

1. Professional Communication Skills : By Pravin S.R. Bhatia, A.M Sheikh: S.Chand and company
2. English Grammar Composition and Effective Business Communication By M.A. Pink, S.E. Thomas : S.Chand
3. Contemporary English Grammar Structures and Compositions by David Green Macmillan Publication
4. Reflections on Vital issues Edited by P.J. George ,Publication Orient Black Swan
5. Presentations (The Business Skills Series) by Anne Laws Orient Black Swan
6. Fifty ways to improve your Presentation Skills in English By Bob Dignen Publication Orient Black Swan

**INTERIOR DESIGN
SEMESTER- II
2T6 MATHEMATICS – II
PAPER VI**

Theory: 40

Sessional: 10

Total Marks: 50
Passing marks: 20

AIM

- To understand elementary principles of mathematics.
- To apply mathematics in practical problems.
- To obtain accuracy in calculations and results of various mathematical experiments.

UNIT I

- Limits
 - Definition
 - Standard forms
 - Special Cases as : Limit tends to Infinity

UNIT II

- Derivatives (I)
 - Derivatives from definition
 - Standard forms
 - Product rule, Quotient rule
 - Parameter form, Logarithmic derivatives
 - Implicit functions

UNIT III

- Derivatives (II)
 - Rate measuring
 - Maxima-minima

UNIT IV

- Integration (I)
 - Standard forms
 - Substitution Method, Integration by parts
 - Algebraic forms, Partial fractions

UNIT V

- Integration (II)
 - Definite Integrals
 - Area by definite integration

SESSIONAL WORK

Two unit tests per semester

REFERENCES

1. Differential Calculus by Gorakh Prasad
2. Integral Calculus by Gorakh Prasad

INTERIOR DESIGN
SEMESTER II
2T7 PRESENTATION TECHNIQUES II
SESSIONAL

Sessional - 25

Total Marks - 25

Passing Marks - 10

AIM: To understand colour as a media of representation, conceptual and preoperational skills & techniques.

UNIT I :

Sketching of transport elements. Human figures studies in line, drawings, shade & sculptural mass.

UNIT II:

Conceptual sketches using different media. Rendering techniques for architectural & interior drawings as plans & elevations.

UNIT III:

Perspective of formal geometric solids and spaces and informal geometrics, rendering techniques and use of colour.

**INTERIOR DESIGN
SEMESTER II
2T8 PRODUCT WORKSHOP II
SESSIONAL**

Sessional - 25

Total Marks - 25

Passing Marks: 10

UNIT – I PLASTER OF PARIS WORKSHOP

Aim: Introduction to Plaster of Paris material, having feel of material and by creating products for interior spaces.

- Introduction to plaster as material.
- Process of mixing and its use in reproduction.
- Mould making and casting.
- Use for plaster with other materials like cloth, thread, wires etc.

UNIT – IIBAMBOO AND CANE WORKSHOP

Aim :- Understanding of materials and preventive measures for bamboo and cane.

- The processing on bamboo (seasoning, treatment)
- Tools for working on bamboo
- Precautions for safety in workshops.
- Cutting, Joinery details, strength, finishes, Application to construction and furniture Interior.

Assignments based on transfers elements

1. Assignments based on human figures
2. Assignments based on perspective of solids & spaces.

REFERENCES:

2. Rendering with Pen and Ink by Gill

BACHELOR OF INTERIOR DESIGN
SEMESTER III
3T1 INTERIOR DESIGN – III
PAPER I

Sessional- 100
Total Marks- 100
Passing Marks- 40

AIM: To understand architectural spaces and its functional and formal aspects.

UNIT I

Understanding the architectural elements of the structure and enclosure i.e. floor, wall, column, roof and openings-exploring in different permutation and combinations to understand how they give a building its form.

UNIT II

Spatial organization and their correlation within living spaces.

UNIT III

Understanding the spatial character through volume, light qualities, circulation patterns etc. through case studies.

UNIT IV

Developing design skills through modulation of space with respect to function and user.

UNIT V

Conceptual abstraction through relationship of function and spatial quality.

SESSIONAL WORK:

1. Analytical study of small enclosures to understand the structural system and evolution of building form.
2. Spatial organization in living spaces like small residence
3. Volume study through case studies.
4. Study of 3D forms through case studies with emphasis on concept building
5. Study of modulation of space and its application to complex activities.

REFERENCES:

4. Time Saver Standards
5. Form Space and Order by D.K.Ching

INTERIOR DESIGN
SEMESTER III
3T2 MATERIAL AND CONSTRUCTION TECHNIQUES - III
PAPER II

Theory - 40
Sessional - 10
Total Marks - 50

Passing Marks - 20

AIM: The aim of the subject is to impart detail knowledge of materials, their characteristics and their application to built form and interiors. Study of horizontal and vertical plane construction.

UNIT I

Case studies to understand existing methods of construction with reference to timber floors and modern materials for floors. Design parameters for construction of floors and partitions.

UNIT II

Introduction to glass as a material, manufacturing process, types of glass, tools and techniques, bending, fusion, sand blasting, etching etc.

UNIT III

Application of glass to openings, partitions, ceilings, floorings, furniture and other interior elements. Hardware and fixing details of glass.

UNIT IV

Application of timber for special type of openings like doors. Construction, fixing, joinery details and hardware for doors.

UNIT V

Application of timber for special type of openings like windows. Construction, fixing, joinery details and hardware for windows.

SESSIONAL WORK:

1. Assignments based on floors, partitions, glass in interiors.
2. Assignments based on special types of doors and windows.

REFERENCES:

1. Building Construction by Rangwala and Sushil Kumar
2. Building Construction by Barry and McKay

**INTERIOR DESIGN
SEMESTER III
3T3 FURNITURE DESIGN I
PAPER III**

Theory: 40

Sessional: 10

Total: 50

Passing marks: 20

AIM:To develop competency for designing, critical thinking and thereby developing furniture forms in relation to human forms to make it functional for various needs generating innovative design ideas. The students will have knowledge of ergonomics and its applications in design including designing for the handicapped and the elderly.

UNIT I

Correlation between furniture and spaces – human movements w.r.t. human comfort, Function, materials and methods of construction. Factors influencing furniture designs: user types, Climate, social, economic, material availability, skill and construction techniques (emphasis on wood / timber as a material.) Types of woods and wood based products used in Furniture, care and maintenance issues, economics of furniture, durability and usability. Terms and terminology used in furniture: Types of furniture and furniture systems. Movable components and fixed components.

UNIT II

Relevance of Anthropometric data in relation to various furniture, measurements for static and dynamic work including maximum capacity, Muscles and work physiology, use of percentile and averages in design. Diagrammatic representation of data through charts. Overview of ergonomics and design relevance's; Application and relevance of ergonomics while designing furniture. Hardware and mechanisms study, its application.

UNIT-III

Design process involving ergonomics considerations and ergonomic design evaluation and Participatory ergonomics as aspects. Man as the prime system component; Man, machine-environment interaction system and user-friendly design practice; Human compatibility, comfort and adaptability; Fundamentals of ergonomics: Physical (anthropometrics, human body-structure and function, posture, Postural Stress, movement and biomechanics), Physiological (work physiology) and Psychological aspects (behaviour, cognitive aspects and mental workload). Design for the differently abled people.

UNIT-IV

FURNITURE AS A PRODUCT; Design process and stages, Understanding the methods and techniques involved in furniture components. Analysing existing pieces of furniture in its functional aspects, technical aspects, skills required, materials, flexibility, comfort, ergonomic and aesthetic considerations, transportation and economic factors..

UNIT V:

“Measure Drawing” of simple furniture items – plan, elevation and detail drawing on full scale. Understanding Measurement of quantity of material used in furniture (e.g.: measurement of Cubic feet of wood to be used in a wooden chair). Deriving cost of material. power tool demonstration, machinery demonstration, jig-making, wood bending, table saw introduction, joinery, turning, routing, mortising, shaping, sanding, and finishing.

SESSIONAL WORK:

4. Sessional work should be planned to cover all the units mentioned in course outline with thrust on critical thinking ability , technical detailing and accurate depiction as per standards and understanding of processes.
5. An exercise has to be done where actual measurements have to be taken in relation to various furniture presentations in report form.
6. Manually drafted assignments to cover the course outline based on above units giving constructional details , sizes and specificationsetc from time to time..

REFERENCES:

Bridger, RS: Introduction to Ergonomics, 2nd Edition, Taylor & Francis, 2003.

1. Dul, J. and Weerdmeester, B., Ergonomics for beginners, a quick reference guide, Taylor & Francis, 1993.
2. Green, W.S. and Jordan, P .W, Human Factors in Product Design, Taylor & Francis, 1999.
3. D. Chakraborti, Indian Anthropometric Dimensions for ergonomic design practice, National Institute of Design, Ahmedabad, 1997
4. G.Salvendy (edit), Handbook of Human Factors and ergonomics, John Wiley & Sons, Inc., 1998
5. Singh, S (Edt), Ergonomics Interventions for Health and Productivity, Himanshu Publications, Udaipur, New Delhi, 2007

INTERIOR DESIGN
SEMESTER III
3T4 HISTORY OF ART & ARCHITECTURE I
PAPER IV

Theory- 40
Sessional - 10

Total Marks - 50
Passing Marks- 20

AIM: Evolution of art & architecture, built form as a result of society, culture, climate, land and technology, manifested in attitudes to spatial and formal abstraction and schemata, attitudes of landscapes, spatial order, structural, constructional and material order, manner of articulation, symbols & meanings.

UNIT I

Introduction & survey of various sources of history. Introduction to Egyptian & Mesopotamian style of art & architecture.

UNIT II

Introduction to classical architecture of Greece & Rome. Ensemble of art, crafts like sculpture, pottery etc along with classical architecture of this era.

UNIT III

Works and design ideology of foreign designers belonging to various schools of thought & of their effects on the design movements and interior environment spaces.

UNIT IV

Forces of industrialization in structure, production systems, changes in technology & its impact on life style, scientific thought & on arts, development of the modern architectural movements.

Various art movements like Art Deco, Art Nouveau, Beaux Arts, Cubism, expressionism, Fauvism, impressionism, Realism, surrealism, Minimalism, etc.

UNIT V

Works and design ideas of the Renaissance giants like Raphael, Davinci, Michelangelo. The effects of their works in interior spaces, architecture.

SESSIONAL WORKS:

- 1) Note on sources of history: text + pics / sketches.
- 2) Egyptian civilization: Sketches (well labeled) along with the corresponding text.
- 3) Egyptian civilization: more sketches & texts.
- 4) Greek civilization: Greek orders sketches (labeled) with text.
- 5) Terminology for example: raking cornice pediment, entablature, cornice, triglyph, metope, frieze, architrave, abacus, echinus, volute, capital, necking, shaft, entasis, stylobate.
- 6) Techniques: notes + pictures for example: fresco, tempera, gilding, ormolu, etc. (almost S-10)
- 7) Techniques: notes + pictures of more similar techniques.

REFERENCES:

- 1) History by Edith of Tomery
- 2) History of art & architecture by tiraskar

**INTRERIOR DESIGN
SEMESTER III
3T5 STRUCTURE – I
PAPER V**

Theory –40
Sessional-10
Total Marks- 50
Passing Marks: 20

AIM: Introduction to basic structural systems.

UNIT I

Introduction to basic structure, aim and object, scope of study.

Basic elements of building : General introduction to various elements of buildings, introduction to load bearing, framed structure, composite structure and suitability-; Glossary of technical words related to reinforced concrete structure, primary and secondary forces acting on structure, gravitational force, live load, wind loads; conceptual idea and their impact on building as a whole, relevant IS Code.

UNIT II

Foundations of structures, bearing capacity of types of soils, principle of foundations, types of simple foundations, thumb rules for design of foundations.

UNIT III

Introduction to deep foundations, types of deep foundations.

UNIT IV

Shoring, types of shores, scaffolding, types of scaffolds and underpinning.

UNIT V

Stability of Structures, equilibrium of bodies, Lami's Theorem, conditions of equilibrium axioms of statics and basic concepts parallelogram law of forces, principles of transmissibility, superposition and law of action, rigid body.

SESSIONAL WORK:

1. Based on sessional work, numericals, sketches & sessional examinations.

REFERENCE:

1. Engineering Mechanics – R.K. Bansal and Sanjay Bansal, Laxmi
a. Publications, New Delhi.
2. Engineering Mechanics – R.S. Khurmi
3. Building Construction – Sushilkumar

INTERIOR DESIGN
SEMESTER III
3T6 INTERIOR ENVIRONMENT CONTROL I
PAPER VI

Theory- 40

Sessional-10
Total Marks-50

Passing Marks -20

AIM-To understand the importance of human comfort in built form and environment.

UNIT – I

Definition of climate and elements of climate.

UNIT - II

Built environment, impact and issues of climatic balance in traditional and contemporary built environments

UNIT- III

Effect of climate on human comfort

UNIT – IV

Solar orientation, sun control and shading devices. Use of sun path diagram and heliodon.

UNIT – V

Daylight factor, size of opening with reference to daylight, lighting in buildings, light and its sources, lighting criteria, artificial lighting levels for various activities, calculation for lighting levels, electrical layouts, science of wire distribution, types of wiring, luminaires available in the market.

SESSIONAL WORK:

1. Assignments based on above topics.
2. Drawings related to sun path diagram and shading devices.

REFERENCES:

1. Tropical climate by Koenigsberger.
2. Building Services and Equipment by Prof. A. L. Chatre

INTERIOR DESIGN
SEMESTER III
3T7 GRAPHIC DESIGN I
PAPER VII

Theory - 40
Sessional - 10
Total Marks -50
Passing Marks: 20

AIM:The aim of this subject is to equip students with the skill of presenting their designs through sketches, technical drawings, views, models

UNIT I

Representations of trees, foliage, human figures, furniture etc. their integration to presentation drawings.

Representation of building elements, openings, materials, accessories etc. terminology and abbreviation used in architectural presentation.

UNIT II

Measured drawing of an architectural space

UNIT III

Measured drawing of furniture in an interior space.

UNIT IV

Exercises on sketching to represent conceptual designs.

UNIT V

Model making

SESSIONAL WORKS:

1. Exercises on Calligraphy
2. Exercises on sketching and making technical drawing
3. Measured drawing of an architectural and interior space

**INTERIOR DESIGN
SEMESTER III
3T8 PRODUCT WORKSHOP – III
SESSIONAL**

Sessional – 25

Total Marks – 25

Passing Marks - 10

UNIT – I Photography

AIM:Develop basic sense of visual perception for designers through observation , colour composition and light interaction, shades and shadows and positive/ negative space relationship.

1. Developing ability to see things ,analyse them and express them in a string visual form.
2. Basic knowledge of the medium by introduction to the basic principles of photography, understanding of the camera , its various parts and introduction to dark room processing and equipment.
3. Introduction to different ideas and utilities in the field of photography and understanding aspects involved in making the ideas of meaning and composition.
4. Types of photography its relationship with various fields – architectural photography, fine arts photography,documentphotography,journalismphotography,fashion design photogr-phy.
5. Photography: Phototgrams, chemograms ,solarisation , low light photography , toning of prints , hand painting photographs, mixed media expression.

UNIT II: Weaving

AIM: Scientific understanding of fabrics as soft interior element of design, its various uses as art forms, wall hangings , upholstery forms , curtain and panel forms.

1. Introduction tofibres and yarns, table loom and floor loom, preparing warp , setting up loom for basic weaves and their variations.
2. Variations in weaves and design quality weaves and its quality, for upholstery, curtain and floor coverings.
3. Rugs and durries, motifs, design patterns and colour variations.
4. Extensive market survey of available fabrics for interior spaces, product specifications and manufacturers.
5. Colour pigments and design qualities.
6. Site visits to ceramic product factories , sample collection , documentation , display of creative work.

UNIT III: Textile Printing

AIM: Scientific base of printing and relationship with types of fabric , visual perception of printing principles and their applications and developing soft interior elements .

- Development of textile design in different culture from primitive art to contemporary design.
- Criteria of design , the elements and the principles of textile design. Analysis of motifs , developing repeat as a block, understanding, material used , colour types and their mixing process, various colour printing.
- Block printing, developing block, understanding, material used, colour types and their mixing process, various colour printing.
- Screen printing –design evolution for wall hanging, preparing screen and understanding the technique, printing on paper and fabric.

**INTERIOR DESIGN
SEMESTER IV
4T1 INTERIOR DESIGN IV
PAPER I**

Theory: 80
Sessional: 20
Total Marks: 100
Passing Marks: 40

AIM: Development of basic design shells and understanding nature of space and scale of space.

UNIT I

Approach to design through idea generation and applied to interior spaces

UNIT II

Relationship of space quality, scale and modulating transition spaces, gathering points and mediating spatial thresholds.

UNIT III

Influence of culture, climate, socio religious status etc. on spaces of today in Indian context.

UNIT IV

Application of art/craft at public level spaces like restaurants, lounges etc.

UNIT V

Understanding the influence and importance of services like air conditioning, illumination etc. in interiors.

SESSIONAL WORK:

1. Exercises on semantics applied to small spaces
2. Study of hierarchy of linkages through case studies
3. Responsible and responsive attitude towards building up spaces with emphasis on climate and socio religious status.
4. Theme restaurants and lounges emphasizing on art, craft and culture.
5. Commercial interiors to understand the coordination of services and design

REFERENCES:

1. Time saver standards for building types, DeChiaraandCallender, McGrawhillcompany.
2. Neufert Architect's data, BousmahaBaiche& Nicholas Walliman, Blackwell science ltd.
3. National Building Code – ISI

INTERIOR DESIGN
SEMESTER IV
4T2 MATERIAL AND CONSTRUCTION TECHNIQUES - IV
PAPER II

Theory - 40
Sessional - 10
Total Marks - 50
Passing Marks - 20

AIM: The aim of the subject is to impart detail knowledge of materials, their characteristics and their application to built form and interiors. Study of horizontal and vertical plane construction.

UNIT I:

Case studies to understand existing methods of construction for wooden staircases and roof forms.

UNIT II

Thermal and acoustical insulation materials, their properties and application. Introduction to PVC, fiber glass and acrylic.

UNIT III

Adhesives classification and types, method of application, bond strength, material and workmanship specifications.

UNIT IV

Ceilings: Introduction to ceiling materials like PoP, gypsum board, PVC, fiber board. Method of construction and structural systems. Integration of different types of services in ceiling design.

UNIT V

Wall treatment: Finishes to walls, wall cladding, design considerations, materials and working details.

SESSIONAL WORKS:

1. Plates on above topics.

REFERENCES:

1. Building Construction by Sushil Kumar, Rangwala, Barry and Mckay

INTERIOR DESIGN
SEMESTER IV
4T3 FURNITURE DESIGN II
PAPER III

Theory –40
Sessional: 10
Total Marks: 50
Passing Marks --20

AIM : To familiarize the students about the evolution and development of furniture through a historical overview and use intoday's time. The aim of this subject is to develop a sense of appreciation for History of Interior with Furniturein relation to Interior Planning. Changing trends and lifestyles

UNIT I:

Techniques of finishing the wood Surfaces: Wood Paints, Polishes and varnishes etc. Decorative finishes to wood and wood based materials used conventional and historically. Craftsmanship in wood , basic properties , basic joiner,. basic fabrication techniques , finishing and construction techniques .Upholstery Materials: Types of foams, springs and other materials used for upholstering- Techniques of upholstering and various hardware used for the same. Wood & other materials used, familiarity with methods of guilding, Decoupage,embossing, moulding, stencilling , demonstration of marquetry, brass, ivory, mother of pearl, inlay, Wood etc

UNIT II

History of furniture developed; cultural, architectural & interior planning as a setting and context for its development from ancient to middle ages.Modern age covering period furniture style s. Concepts and characteristic explaining different factors. Influences, ornamentations and nomenclature , decorative and significant motifs used in furniture etc.

UNIT III:

Oriental furniture development ; influences , characteristics , nomenclature usage and materials etc. Wood & other materials used, familiarity with methods of guilding, embossing, moulding,stenciling , Demonstration of marquetry, Brass, Ivory, Mother of Pearl, Inlay, Wood etc. Difference in basic shapes, form & motifs of East and West

UNIT IV:

The furniture designs of Pierre Chareau, Carlo Scarpa, Eileen Gray, Le Corbusier, Ludwig Mies Van Der Rohe, Otto Wagner, Adolf Loos, George Nakashima, Jean Prouve, Charles And Ray Eames, Charlotte Perriand, Peter Pearce, Morphosis, Richard Meier, and Herman Miller among others will be studied. Sustainable and eco-friendly designing efforts in contemporary context.

UNIT V:

Designing of basic furniture items: Sitting furniture, Table furniture, Bed furniture, storage furniture - terminology, typology, ergonomics and construction principles viz. stools, cabinets, consoles, side tables, racks, shelving systems etc. from the systems above. Study on furniture for specific types of interiors like office furniture, children's furniture, residential furniture, display systems, etc. – Design Projects on Residential, Commercial and Office Interiors.

SESSIONAL WORK:

1. Study of market trends and assignments
2. Project on Design & Detailing of Single residential or Commercial Furniture wood, cane and metal.
3. Furniture to be designed freehand sketch files to be made topic wise covering each unit.
4. Plates on developed furniture forms and with analytical sketches to indicate brainstorming and mindmapping techniques used.

REFERENCES:

1. English Furniture Style (1500 – 18) by Ralph E
2. Indian Architecture by Satish Kumar
3. Interior Design by Ahmad Kasu

BACHELOR OF INTERIOR DESIGN
SEMESTER IV
4T4 HISTORY OF ART & ARCHITECTURE-II
PAPER IV

Theory- 40
Sessional - 10

Total Marks - 50
Passing Marks- 20

AIM: Evolution of art & architecture, built form as a result of society, culture, climate, land and technology, manifested in attitudes to spatial and formal abstraction and schemata, attitudes of landscapes, spatial order, structural, constructional and material order, manner of articulation, symbols & meanings.

UNIT I

Introduction to the early Christian Era with its distinct art & architecture conforming to the religious beliefs of the Christian Era. – Prominent works under the Byzantine Empire.

UNIT II

Architectural styles of Medieval Europe including the Romanesque and Gothic style of working principles, scientific developments & technology affecting the architecture.

UNIT III

Renaissance architecture in different regions of Europe demonstrating a conscious revival of various elements of previous styles.

- The age of Exuberance, demonstrated vividly by the Baroque architecture using the Renaissance elements in a new rhetorical & theatrical fashion.

UNIT IV

“Late Baroque” or more commonly Rococo & various other contemporary styles affecting many aspects of arts.

UNIT V

Works of various modern painters like Pablo Picasso, Rodin Van Gogh, Rodin, Ganglion, Pissarro, Monet etc.

SESSIONAL WORK:

- 8) Group activity: Assignment in groups for working on the renaissance painters.(making elaborate charts with pictures & appropriate text for the ease of understanding)
- 9) Greek sculptures: well- labeled pictures along with appropriate text.
- 10) Greek pottery with sketches & texts & a note on vaults (groin vault & barrel vault etc).
- 11) Roman sculptures: well labeled colored pictures with appropriate text alongside.
- 12) Notes on various ISMS like minimalism, impressionism, surrealism etc.
- 13) Group activity: similar to the previous activity, for designs like F.L wright, ward Benett, etc.
- 14) Power point presentations by various groups on the life & works of various modern painters like monet , Rodin, Picasso, Van, Gogh, Gauguin etc.

REFRENCES:

- 3) History by Edith of Tomery
- 4) History of art & architecture by Tiraskar

**INTRERIOR DESIGN
SEMESTER IV
4T5 STRUCTURE – II
PAPER V**

Theory –40
Sessional-10
Total Marks- 50
Passing Marks: 20

AIM: Introduction to basic structural systems.

UNIT I

Force: definition, Resolution and composition of forces, analytical method for concurrent, nonconcurrent, parallel and general forces systems, moment of force couple.

UNIT II

Resolution and composition of forces, graphical method for concurrent, non - concurrent, parallel and general forces systems, moment of force couple.

UNIT III

Types of supports to simply supported beams and trusses, general loading conditions, various types of loads and load taken by the supports.

UNIT IV

Centroids of laminae of various shapes, triangle, circle, semicircle, trapezium, built in sections.

UNIT V

Moment of Inertia of plane areas, second moment of area, radius of gyration about an axis, parallel and perpendicular axis theorems. Friction, Coefficient of friction, coulomb's law of friction, kinetic friction, static friction, limiting friction, numerical based on formulae.

SESSIONAL WORK:

1. Based on sessional work, numerical, sketches & sessional examinations.

REFERANCE BOOKS:

1. Engineering Mechanics – R.K. Bansal and Sanjay Bansal , Laxmi
2. Publications, New Delhi.
3. Engineering Mechanics – R.S. Khurmi
4. Building Construction – Sushilkumar

**INTERIOR DESIGN
SEMESTER IV
4T6 INTERIOR ENVIRONMENT CONTROLIV
PAPER VI**

Theory- 40
Sessional- 10
Total Marks- 50

Passing Marks-20

AIM: Understanding the requirement and design of built environment with respect to services.

UNIT I

Natural ventilation and its importance.Design of openings to achieve comfort.

UNIT II

Air cooling systems- passive and evaporative cooling, dessert coolers, ducting and air distribution.

UNIT III

Air-conditioning- functions and principles, refrigeration cycle, capacity of AC ,types of AC systems and their details, ducting and air distribution,

UNIT IV

AC layouts for office spaces-load calculations with details of ducting.

UNIT V

Communication distribution systems, intercom and EPABX systems, computer networking.wiring system as a part of design and methods of concealing.

SESSIONAL WORK:

1. Assignments and tests covering all units

REFERENCES:

2. Tropical climate and housing by Koenisberger
3. Building services and equipment by Prof.A.L.Chatre

BACHELOR OF INTERIOR DESIGN

SEMESTER IV 4T7 GRAPHIC DESIGN II

PAPER VII

Theory - 40
Sessional - 10
Total Marks -50
Passing Marks:20

UNIT I

One point and two point perspective views from varying eye levels of complex 3D compositions.

UNIT II

One point and two point perspective views of furniture.

UNIT III

One point and two point perspective views of interior spaces including all activities like residential spaces, commercial spaces, office spaces, recreational spaces etc. Rendering the above views in different media like pencils, ink, water colour oil pastels etc with proper foreground and background to represent different texture and finishes.

UNIT IV

Detail models of furniture & interior spaces using different materials.

SESSIONAL WORKS:

1. Perspective views of furniture and interior spaces
2. Model making

**INTERIOR DESIGN
SEMESTER IV
4T8 PRODUCT WORKSHOP – IV
SESSIONAL**

Sessional - 25

Total Marks - 25

Passing Marks - 10

UNIT - I Upholstery

AIM : Finishing of designed furniture forms by upholstering in various materials.

- Upholstering materials and their specific qualities , property of stretching and compressing types of joinery, stitching devices, details of horizontal, vertical and curved surfaces.
- Special effects to furniture form by upholstery , decorative ways of upholstering by various stitches and materials.
- Leather as a upholstering material, real leather, artificial leather, their properties and usage in various purposes.
- Craft of leather work and its innovative use in built form and interior product.
- Leather and its use with other materials like wood, ceramics, metals, bamboo etc.
- Details of design parameters.

UNIT – II GLASS

AIM: Understanding of glass as a material and its various application and finishes .

- Various finishes to glass like engraving, bevelling , grinding, textile, staining.
- Glass in furniture design.

UNIT III - TIMBER

AIM: Working with wood and wood products to understand material parameters.

- Wooden joinery and its strength
- Wood polishes , other finishes , colour and surface quality.
- Carving in wood.

**INTERIOR DESIGN
SEMESTER V
5T1 INTERIOR DESIGN V
PAPER I**

Sessional Work – 100

Total Marks --100

Passing Marks -40

AIM:To create commercial and public interior spaces responding to needs of the users and society in general . To apply knowledge of various streams like behaviour ,user and customer psychology , building technology , services , acoustics etc. in giving design solutions to enhance the qualitative aspects of life / usage.

COURSE CONTENT: The course for the semester will be focused on commercial spaces , institutional spaces , eateries , hospitals hostels etc. Based on this the following units will be dealt with for each project however emphasis could vary for assessment for every design project .

UNIT I: Developing floor plans with facilitation and clearances with all relevant details with specifications .Generating reflected ceiling plan/s and its detailing with specification and finishes

UNIT II:Developing wall elevations and relevant sections with materials and finishes and specifications

UNIT III: Generating working drawings of furniture designed furniture and other relevant components

UNIT IV: Integrating services in interiors ,; electrification , AC , lighting plan etc.

UNIT V: Generating views sketch views and perspectives.

SESSIONAL WORK :

1. At least two major projects and two short problems need to be done in a semester for better exposure to various nuances of designing better and quality spaces.
2. Designing of majorly non-residential projects , Developing floor plans , detailing , writing specifications and generating working drawings of furniture , applying digital output methods .
3. Understanding typical non-residential building types .human scale and dimension as applied to public spaces . reflected ceiling plans advanced powerpoint presentations ,
4. Field trips – to be determined by faculty.

REFERENCES:

4. Time saver standards for building types, DeChiaraandCallender, McGrawhillcompany.
5. Neufert Architect's data, BousmahaBaiche& Nicholas Walliman, Blackwell science ltd.
6. National Building Code – ISI

7. Time saver standards for landscape architecture – Charles W Harris – McGraw Hill
8. New Metric Handbook – Patricia Tutt and David Adler – The Architectural Press
9. Scott-Webber. Programming: A Problem Solving Approach for Users of Interior Spaces. Thomson Learning, 1998. ISBN: 0-873-93674-4 2. Karlen, Mark, Ruggeri, Kate, & Hahn, Peter. Space Planning Basics. New York: John Wiley and Sons, Incorporated, 2003. ISBN: 0-471-43439-6.
10. Sherrill, Whiton, and Abercrombie, Interior Design & Decoration, Fifth edition. Upper Saddle River, New Jersey: Prentice-Hall, 2002 ISBN: 0-13-030748-3
11. Additional relevant books, journals, and magazines may be identified and included by the faculty.

BACHELOR OF INTERIOR DESIGN
SEMESTER V
5T2 MATERIAL AND CONSTRUCTION TECHNIQUES - V

Theory - 40

Sessional - 10

Total Marks - 50

Passing Marks - 20

AIM: The aim of this subject is to acquaint students with the different materials used in interiors, their properties and application to interiors.

UNIT I

Different types of ferrous metals, properties, sizes and forms of availability in market , methods of working with metals , fixing and joinery in ferrous metals , finishing and treatment to metals , Application of ferrous metals to built form and interior.

UNIT II

Different types of proprietary materials- commercial and technical names, sizes, wastages, BIS and codes for materials, testing, fabrication, commercial methods of pricing, billing etc.

UNIT III

Different types of finishes for vertical surfaces, composition, surface preparation and application methods , defects in Workmanship.

UNIT IV

Study on site, execution of complex interior projects and systems in terms of design origination, site execution sequences, and methodology

UNIT V

Application of ferrous metals to built form and interior.

SESSIONAL WORKS

1. Plates and tutorials / seminars on above topics.
2. Details of application of ferrous sections to grills, gates, railings, accessories, structural applications like trusses, stanchions, etc.
3. Details of application of aluminum sections to windows, doors, partitions, kitchen platform etc.
4. Details of application of stainless steel to grills, railings, furniture, interior accessories, etc.
5. Details of all special doors etc.

REFERENCES: Building Construction by Barry and Mckay

**INTERIOR DESIGN
SEMESTER V
5T3 FURNITURE DESIGN III
PAPER III**

Theory- 40
Sessional- 10
Total Marks- 50
Passing Marks- 20

AIM: Understanding and conceptualizing furniture forms.

UNIT I

Understanding simple furniture forms like table etc with respect to its function.

UNIT II

Designing furniture forms in relation to each other in a given space.

UNIT III

Designing elements of living units, with interface of its correlation to space. Understanding harmony through material and through details-evolving coordinated system for entire space.

UNIT IV

Multiple use of furniture forms

UNIT V

Exploration of various materials and hardware and their use in combination.

SESSIONAL WORK:

- 1) Use of various forms in simple furniture designs like tables etc. giving different situations and uses.
- 2) Evolving furniture forms using various materials.
- 3) Coordinated furniture in a reference frame like living units with details of material , hardware.
- 4) Multiutility furniture forms for small spaces.
- 5) Presentation of market surveys for new materials and hardware.

INTERIOR DESIGN
SEMESTER V
5T4 HISTORY OF ART & ARCHITECTURE III
PAPER IV

Theory - 40
Sessional – 10
Total Marks- 50

Passing Marks – 20

AIM: To understand the progression of historical development of interiors in India & its application to interior design Impact of socio-cultural, political, religious, climatic, geological etc on evolution of a style of elements of style.

UNIT I:

Introduction to the basic understanding of the Bronze Age civilization also known as the Harappan civilization followed by the Vedic period (or vedic Age)

UNIT II:

Transitioning smoothly into the iron Age with the emergence of the Mauryan Empire. Moving onto the Gupta Empire constituting the Golden age of India.

UNIT III:

The substantial contributions made by Buddhist & Jain Art & Architecture mainly associated with the religious structures i.e.viharas, stupas&Chaityas. Emergence of the Hindu temple architecture alongside.

UNIT IV:

Work & design ideology of Indian designers belonging their effects on the design movements & interior environment spaces.

UNIT V:

Understanding of the Islamic architecture brought along with the Mughals to India & its amalgamation with the various existing Indian architecture styles thus forming the XXXX Indo- islamicarchitecture style.

- 1) Sketches of Harappan civilization (includes architectural sketches, sculptures, seals, toys etc).
- 2) Terminology to find out: Wharf, berthing, sluice gates , moat, dock etc.
- 3) Sketches of stambha, stupa, toranas, vedikas.

- 4) Development of stupas through sketches & texts (well labeled)
- 5) Making process of chaityas. Terminology: coffer, amalka, apse, vestibule, fakhshas etc.
- 6) Various caves given from the topic of rock-cut architecture + sketches or pictures.

REFERENCES:

- 1) History of art by Edith Tomory
- 2) History of art & architecture by Hiraskar

INTERIOR DESIGN
SEMESTER V
5T5 STRUCTURE – III
PAPER V

Theory - 40
Sessional - 10
Total Marks – 50
Passing Marks - 20

AIM: Introduction to strength of different materials used in interiors & building construction.

UNIT I

Structural properties of basic materials like brick, stone, concrete, steel aluminum, timber. Factor of safety, relationship between strength of brickwork & strength of individual bricks & mortar. Types of steel, iron. Effect of temperature on different metals & stones used in interior.

UNIT II

Concrete Technology. I.S.456 – Different Grades of Concrete. Different Grades of Cement and Steel Used. Study of Cement, Sand, Aggregate and Water. Process of Concreting, Curing, Form Work and Stripping, Water Cement Ratio, and various other details, tests in brief.

UNIT III

Simple stresses & strains, different types of stresses and strains, volumetric strain, safe stresses, factor of safety, different types of safe stress as per ISI code for different materials like timber, steel. Hook's law, typical stress strain behavior for steel and concrete.

UNIT IV

Simple bending, assumptions & reality. Deflection of simply supported beams, cantilevers, maximum limit of deflection.

UNIT V

Analysis of Columns, Concept of buckling and crushing in Columns. Direct and bending stresses, short columns & long columns. End conditions, Euler's assumptions, limitations. Calculation of Euler's crippling load.

SESSIONAL WORK:

1. Assignments on above topics.

REFERENCES:

2. S. Ramamrutham , Strength of Materials

INTERIOR DESIGN
SEMESTER V
5T6 INTERIOR SERVICES I
PAPER VI

Theory - 40

Sessional – 10

Total Marks - 50

Passing Marks: 20

AIM:To understand the basic principles of drainage and water supply in building.

UNIT - I

Basic principles of sanitations and disposal of waste materials from buildings; Water carriage systems; Standard sanitary , fittings , traps, pipes and their jointing ; Flushing systems ; Manholes & inspections chambers , drains below buildings, self cleansing velocity, drains on slopping sites.

UNIT II

layout of simple drainage systems and testing of drain ; Septic tanks , soak pits , aquaprivy ; Single and double stack system ; rain water harvesting and disposal , sub – soil drainage, Toilet interior details for public and residential applications.

UNIT - III

General idea sources of water supply; Domestic water systems; Suction, storage tanks and the capacity, types of pipes , their sizes & joints ; downtake supply of water to various fittings.

UNIT – IV

Security systems – access control systems, burglar alarms, CCTV network ; gas

Piping for LPG and medical gases.

Different forms of refuse; Collection, storage and transport; garbage disposal refuse chutes.

SESSIONAL WORK:

1. Layout for fire protection, CCTV, medical gas distribution, LPG distribution.

REFERENCES:

1. Building Services by Rangwala

INTERIOR DESIGN
SEMESTER V
5T7 ESTIMATION & COSTING I
PAPER VII

Theory - 40
Sessional - 10
Total Marks – 50
Passing Marks - 20

AIM :-To develop the necessary skills in understanding quantities and costs for estimation of basic civil works of buildings and interior works.

UNIT I

Market survey for rates of materials in interior. Current schedule of rates (CSR) of local PWD, mode and units of measurement, General rules for measurement, degree of accuracy.

UNIT II

Approximate methods of costing, Estimate and estimating, necessity of approximate estimates, principle of the approximate methods of costing, approximate methods of costing for various structures.

UNIT III

Types of estimates; methods of taking out quantities; Prime costs and provisional sums, provisional quantities, day work, Financial implications accompaniments of an estimate, Uses of an estimate.

UNIT IV

Preparation of schedule of quantities and estimates for basic civil works of brickwork and plaster of buildings.

UNIT V

Preparation of schedule of quantities and estimates for plumbing systems and electrical fittings.

SESSIONAL WORK:

1. Based on estimates of projects & sessional exams.

REFERENCES:

1. Estimating & Costing in Civil Engineering Theory & Practice”, B.N. Dutta, UBS Publishers’ Distributors Ltd., New Delhi, 1995.
2. Elements of Estimating & Costing, Rangwaala, Publishing House.

INTERIOR DESIGN
SEMESTER V
5T8 DIGITAL APPLICATION
SESSIONAL

Sessional – 50
Total Marks: 50
Passing Marks: 20

UNIT – I

Basics of Autocad , creating first drawing , editing, command prompts , layouts .

UNIT – II

Dimensioning , adding text.

UNIT III

3D object drawing , theory behind 3D modeling , construction of 3D models and surface

**INTERIOR DESIGN
SEMESTER VI
6T1 INTERIOR DESIGNVI
PAPER I**

Theory --80
Sessional Work – 20
Total Marks -- 100
Passing Marks- 40

AIM: To establish the linkages between the culture and traditional ethos and its manifestation in the built environment / architecture , arts , crafts and interiors of that region. Students of design need sensitizing to various cultural manifestations in built spaces and need to understand the symbolism , patterns and forms that exist and existed in the interiors to make them unique as opposed to mass producing of spaces viz. contemporary residential and housing developments for lower income group

COURSE CONTENT: The course for the semester will be focused on styles (viz. period , historic and regional.) and corporate / contemporary interiors Based on this the following units will be dealt with for each project however emphasis could vary for assessment for every design project .

UNIT I

Developing floor plans with facilitation and clearances with all relevant details with specifications .Generating reflected ceiling plan/s and its detailing with specification and finishes

UNIT II:

Developing wall elevations and relevant sections with materials and finishes and specifications

UNIT III:

Generating working drawings of furniture, designed furniture and other relevant components and interior finishes.

UNIT IV:

Integrating services in interiors ,; electrification , AC , lighting plan etc.

UNIT V:

Generating views sketch views and perspectives

SESSIONAL WORK:

1. At least two major projects and two eskeys need to be done in a semester for better exposure to various nuances of designing better and quality spaces.
2. Designing of majorly non-residential projects , Developing floor plans , reflected ceiling plans ,detailing , writing specifications and generating working drawings of furniture , applying digital output methods .

3. Understanding typical non-residential building types. Reference to human scale and dimension as applied to various spaces. Advanced powerpoint presentations ,
4. Field trips – to be determined by faculty.

REFERENCES:

1. Time saver standards for building types, DeChiara and Callender, McGrawhillcompany
2. Neufert Architect's data, Bousmaha Baiche& Nicholas Walliman, Blackwell science ltd.
3. National Building Code – ISI
4. Time saver standards for landscape architecture – Charles W Harris – McGraw Hill
5. New Metric Handbook – Patricia Tutt and David Adler – The Architectural Press
6. Interior Design – Ahmed Kasu
7. Journals, and magazines may be identified and included by faculty.

INTERIOR DESIGN
SEMESTER VI
6T2 MATERIAL AND CONSTRUCTION TECHNIQUES VI
PAPER II

Theory - 40
Sessional - 10
Total Marks -50
Passing Marks - 20

AIM: The aim of this subject is to acquaint students with the different materials used in interiors projects, their design management and specifications, their properties and application to interiors. Students should be acquainted with understanding complex and composite interior projects, the technique of using the materials and make working drawings related to those.

UNIT I

Study on site, execution of complex interior projects and systems in terms of design origination, site execution sequences, and methodology

UNIT II

Different types of non ferrous metals , properties , sizes and forms of availability in market, methods of working with metals, fixing and joinery in non ferrous metals, finishing and treatment to metals,

UNIT III

Application of non ferrous metals to built form and interiors.

UNIT IV

Different types of finishes for vertical surfaces, composition, surface preparation and application methods , defects in Workmanship.

UNIT V

Sliding doors, sliding folding doors, revolving doors, pivoted doors, rolling shutter, collapsible gate, hardware for doors.

SESSIONAL WORKS:

1. Plates and tutorials, seminars on above topics.

REFERENCES:

1. Building Construction by Sushil Kumar, Rangwala, Barry and Mckay,

**BACHELOR OF INTERIOR DESIGN
SEMESTER VI
6T3 FURNITURE DESIGN IV
PAPER III**

Theory-40
Sessional-10
Total Marks-50
Passing Marks-20

AIM –System design approach and space planning through furniture as element of design.

UNIT I

Introduction to modular system of furniture design-its relationship to human ergonomics. Survey of various modular system available for different functions in market.

UNIT II

Modular approach to furniture design-design parameters and various form evolution applied to living units.

UNIT III

Modular approach to furniture design in office and institutional spaces.

UNIT IV

Devising furniture systems for urban use

UNIT V

Development of a program for a target user to conceptualise through case studies or implications and develop a suitable furniture.

SESSIONAL WORK:

1. Market survey presentation
2. Modular system of storage elements-closets,kitchencabinets,display,partitions etc.
3. Modular systems for office spaces.
4. Exhibition display panels, kiosks etc.
5. Design of working prototype model with the cost criteria.

INTERIOR DESIGN
SEMESTER VI
6T4 HISTORY OF ART AND ARCHITECTURE IV
PAPER IV

Theory - 40
Sessional – 10
Total Marks: 50
Passing marks: 20

AIM: To understand the progression of historical development of interiors in India & its application to interior design Impact of socio-cultural, political, religious, climatic, geological etc on evolution of a style of elements of style.

UNIT I

Understating and covering the vast expanse of the regional style of southern India.

UNIT II

Understanding the regional style of architecture of eastern India.

UNIT III

Understanding the regional style of architecture of Western India.

UNIT IV

Work of various famous Indian painters and the effect of their paintings on the masses. Also exploring the various distinct styles of vernacular arts existing in the different regions of India. Understanding the role of arts & crafts in man's life.

UNIT V

Tracing the development of Colonial Architecture (mainly British) in India and understanding the mixture of various India & foreign elements in it.

SESSIONAL WORK:

1. Indo- Islamic structures for ex: QutubMinar, TajMahal etc. sticking pictures and labeling the various elements by hand, also writing in text appropriately about that structure.
2. Note on :Squinch system. Terminology: sihn, siwan, mihrab, Quiblah , member, hujra, Zarih, Gumbad, eidgah, madresa, khana, cupola, kiosk etc.
3. Notes along with labeled pictures of the Mukteswara temple, Tingaraja Temple VaitalDeul, Parasuramesvara Temple, etc.
4. Terminology : Angashikhara, Anuraha- paga, anuratha- paga, ardhaMansapa, BhogaMandapa, Bhumi, BhumiAmla , Amla, amalka, bisama, Garba- grehaGandi, bada, bandhana, beki. Bhadras, Ghantha. Jagmohana ,Jagati, Rahapagas, Pista etc.
5. Note on Colonial influences (British) on art & architecture of India.
6. Glossary (to be hand written) including all the terminologies done throughout the year with additions of certain more difficult terms.

REFFRENCES:

- 3) History of by Edith Tomory
- 4) History of art & architecture by Hiraskar.

**INTERIOR DESIGN
SEMESTER VI
6T5 STRUCTURE IV
PAPER V**

Theory - 40
Sessional - 10
Total Marks – 50
Passing Marks - 20

AIM: To understand basic principles of RCC construction. To study components of a building project.

UNIT I

Shear force & bending moment, application to cantilevers, simply supported beams, concept of hogging and sagging moments, and interrelation between S.F. and B.M. diagrams.

UNIT II

Introduction to reinforced concrete structures. Thumb rule for design of lintels, R.C.C. parapet, chajja, distribution of loads through elements of buildings, load transfer through lintels, slabs, beams, columns, floating columns. Basic R.C.C section and terms like Effective depth, covers, Overall Depth. Covers for different R.C.C members. Balanced, Under Reinforced, Over Reinforced Sections.

UNIT III

Perfect frames – Analysis of trusses, distribution of load using method of joints and graphical method.

UNIT IV

Drawing the typical reinforcement details in lintels, slabs and beams.

UNIT V

Typical reinforcement details in columns, column footings, staircases.

SESSIONAL WORK:

1. Structural systems and their layout for a small building and assignments on above topics.

REFERENCE:

2. S. Ramamrutham, Strength of Materials.
3. Shah and Kale, Design of R.C.C.

**INTERIOR DESIGN
SEMESTER VI
6T6 INTERIOR SERVICES II
PAPER VI**

Theory - 40
Sessional – 10
Passing Marks - 20
Total Marks - 50

AIM: Understanding the behaviour of sound in enclosed spaces and creating acoustically comfortable and functional interior environments. Understanding the role of different services like garbage disposal, security systems, fire protection, gas distribution.

UNIT – I

Properties of sound, process of hearing, behaviour of sound, room acoustics, noise control-outdoor and indoor ; sound insulation ; Noise criteria of building materials, interior elements and finishes.

UNIT II

Interior elements and finishes, various materials and sound insulation. Partition, Walls, floors and ceilings for acoustical insulation, reverberation time and auditorium design.

UNIT III:

Building Management systems.

UNIT IV:

Fire safety and preventive measures. Fire fighting regulations with reference to National Building code. Fire escape stairways and escape routes, dry and wet risers, Water demand for fire fighting, storage tanks, fire hydrants etc.

UNIT V

Fire – causes and spread of fire , Design consideration for fire safety ; Devices for fire detection and fighting. Services for multistoried buildings like Lifts, Staircases etc.

SESSIONAL WORK:

1. Drainage layout, drainage layout with septic tank , rainwater harvesting / disposal layout , watersupply layout, for residential applications, toilet details for public & residential applications.

INTERIOR DESIGN
SEMESTER VI
6T7 ESTIMATION AND COSTING II
PAPER VII

Theory - 40
Sessional – 10
Total Marks- 50
Passing Marks: 20

AIM:To develop the necessary skills in understanding quantities and costs for estimation of interior works.

UNIT I

Preparation of schedule of quantities and estimates for flooring and ceiling of various kinds.

UNIT II

Preparation of schedule of quantities and estimates for coloring and treatment to walls.

UNIT III

Taking out quantities and estimates of material required for wardrobes in interior works.

Preparing cutting plans for plywood and laminates.

UNIT IV

Rate analysis, definition, purpose of rate analysis, importance of rate analysis, essential of rate analysis, task works per day rate analysis of preliminary items of civil work .

UNIT V

Rate analysis of items of interior works.

UNIT VI

Coordination of various agencies involved in work of interior during execution; Accounting and book keeping.

SESSIONAL WORK:

1. Based on estimates of projects & sessional exams.

REFERENCES:

1. Estimating & Costing in Civil Engineering Theory & Practice”, B N Dutta, UBS
2. Publishers’ Distributors Ltd., New Delhi, 1995.
3. Elements of Estimating & Costing, Rangwaala, Publishing House.

INTERIOR DESIGN
SEMESTER VI
6T8 DIGITAL APPLICATION II
SESSIONAL

Sessional – 50
Total Marks - 50
Passing Marks - 20

UNIT I

Basic concepts of 3D modeling

UNIT II

Modeling tools , techniques and commands

UNIT III

Extrusion of solids, solid editing

UNIT IV

3D object drawing , theory behind 3D modeling , construction of 3D models and surface models.walkthrough

UNIT V

Intoduction to graphic creation and image editing software like COREL package, Adobe photoshop, Adobe illustrator etc

**INTERIOR DESIGN
SEMESTER VII
7T1 INTERIOR DESIGNVII
SESSIONAL**

Sessional- 100
Total Marks- 100
Passing Marks- 40

AIM- To understand the urban context in which the individual design project is set and to aid in understanding the complexities and fundamentals of all design dimensions

UNIT – I

Exhibition display-urban level national level.

UNIT – II

Interior of ports-airports,bus stops, railway station etc.

UNIT – III

Urban interiors-shopping malls,streets,town squares etc.

UNIT- IV

Automobile interiors-bus, caretc

SESSIONAL WORK:

1. Exercises to understand urban space like exhibitions.
2. Design for stalls in exhibitions
3. Developing kiosks and other elements like street furniture in context to the development around squares etc.

**INTERIOR DESIGN
SEMESTER VII
7T2 INTERIOR LANDSCAPE I
PAPER II**

Theory -40

Sessional Work – 10

Total Marks – 50

Passing Marks -- 20

AIM: Exposure to various concepts, ideas and techniques prevalent in landscape architecture

Landscape design is a vital component of architecture and interiors through its ability to transform the spatial characteristics and make them aesthetics since it predominantly deals with the planning of open Space .

UNIT I

Elements of Landscape Design ,Hardscape and Softscape Elements. Elements of landscape – land elements, land forms etc. Their use and importance in landscape .

UNIT II

Basic principles of landscape design; importance and relevance of aesthetic , functional, social ,climatic and economic considerations. Types of landscapes , their characteristics and suitability.

UNIT III

Structures in landscapes , water bodies and their built forms like fountains and ponds etc. containers for soil and water and their construction details.Landscape foundations, grading, drainage, paved and unpaved surfaces, roads and paths, their types, natural landforms, its advantages, retaining walls and slope retention,

UNIT IV

Plants and planting in various land types .Characteristics and classification of plant materials ,Use Of plant materials for enhancing landscapes . (Horticultural study of plants, shrubs, climbers soil suitability , climate , growth , foliage , maturity and diseases and maintenance issues in in various climate type and environment etc.)

UNIT V

Services in landscapes andtheir integration in landscape design . viz. water supply , drainage , lighting etc. in interiors. Factors to be considered, problems and issues .types of lighting.and suitability.

SESSIONAL WORK:

1. Plant identification platesand reports.
2. Sketching assignments and term papers.

REFERENCE BOOKS

1. T S S for Landscape Architecture, McGrawHill, Inc, 1995
2. Grant W Reid, From Concept to Form in Landscape Design, Van Nostrand Reinhold
a. Company, 1993
3. Brian Hacket, Planting Design
4. T.K. Bose and Chowdhury, Tropical Garden Plants in Colour, Horticulture And Allied
a. Publishers, Calcutta, 1991
5. Motloch, J.L., Introduction to Landscape Design", Van Nostrand Reinhold Publishing
a. Co., New York, 1991.
6. Bring, M, "Japanese Gardens: "design & Meaning
7. Simonds, J.O., "Earthscape: A Manual of Environmental planning", McGraw Hill Book
a. Co., New York, 1978.
8. • Motloch, J.L., "Introduction to Landscape Design", Van Nostrand Reinhold
Publishing Co., New York, 1991.., McGraw Hill Book Co., New York, 1981.
9. Michael Laurie, An Introduction to Landscape Architecture, Elsevier, 1986
10. Geoffrey And Susan Jellicoe, The Landscape of Man, Thames And Hudson, 1987

INTERIOR DESIGN
SEMESTER VII
7T3 ENVIRONMENTAL PSYCHOLOGY
PAPER III

Theory – 40
Sessional – 10
Total Marks – 50
Passing Marks - 20

AIM: Reflection of behavior patterns of human being into space planning. Relationship of man and space.

UNIT I:

Analysis of human mind and his/her image of the world. Influence of social behavior patterns, traditions in thinking and behaving and their reflections on physical environment.

UNIT II:

To understand theory of social behavior and space conditions behavior.

UNIT III:

To study influence of spatial role of space making elements and how this assembly affects space perception. To understand their impact on spatial experience.

UNIT IV:

Understand cognitive theory and gestalt principle of psychology. These principles are to be related in the field of space making to develop an understanding of place making.

UNIT V:

Relationship of spatial elements like floor, column, wall, window, door steel roof and spatial parameter like illuminations spatial organization, furniture, IAQ, colour to the psychology and perception of space.

SESSIONAL WORK:

Select all existing buildings, analyze and abstract it out in terms of basic constituent space making elements, which are key to the architectural assembly. Submit the analysis in a form of report containing analytical diagrams and graphic sketch. Create design showing better spatial experience and its desired effect.

REFERENCES:

1. Lang, J.:Creating Architectural Theory, Van Nostrand Reinhold Company, New York (1991).Bartuska, T. J. The Built Environment Definition and Scope. In T. J. Bartuska, Introduction: Definition, Design and Development of Built Environment

**INTERIOR DESIGN
SEMESTER VII
7T4 STRUCTURE V
PAPER IV**

Theory - 40
Sessional: 10
Total Marks – 50
Passing Marks: 20

UNIT I

Fixed Beam as a statically in-determinate structure. Concept of negative bending moment at supports. Fixed end reactions (No derivations). Simple Problems with full uniformly distributed load and one or two point loads.

UNIT II

Continuous beams. Concept of continuity over supports and typical B.M.D to explain the negative B.M.D over supports.

UNIT III

Renovation of load bearing & framed structures. Removing walls, strengthening foundations, creating supports using steel / concrete, columns/ beams. Adding lintels, creating openings.

UNIT IV

Causes and prevention of cracks in buildings, investigations relating to cracks, causes of occurrence of cracks, severity of cracks.

UNIT V

Anti termite treatment: Types of anti-termite treatment, pre-constructional and post-constructional treatments.

SESSIONAL WORK:

Case study of renovation of a small building plan, drawings and assignments based on above topics.

REFERENCES:

1. S. Ramamrutham, Strength of Materials.
2. Vazirani – Rathwani, Design of steel structures.

**INTERIOR DESIGN
SEMESTER VII
7T5 DESIGN MANAGEMENT I
PAPER V**

Theory-40
Sessional – 10
Total Marks – 50
Passing Marks- 20

AIM:Introduction to professionalism, design practice, working of a design organization. Understanding the responsibility of a designer and the technicalities of the profession.

UNIT I

Issues of Professional Practice courses, Nature of Profession. Types of Interior Design practice. Types of design office organization.

UNIT II

Nature of relationship between a client and the professional. Taking instruction from the client, its interpretation.

UNIT III

Design process and its stages. Scope of services.

UNIT IV

Scale of professional change, types of fees, Process of fee negotiation.

UNIT V

Professional code of conduct and ethics.

SESSIONAL WORK:

1. Assignments based on all above topics.

REFERENCES:

1. A guide to business principles and practices for Interior Designers by Harry Siegel

**BACHELOR OF INTERIOR DESIGN
SEMESTER VII
7T6 INTERIOR DETAILING I
SESSIONAL**

Sessional Work – 100
Total Marks: 100
Passing marks: 40

AIM: Ability to prepare working details of interior design projects.

UNIT I

Preparation of working details for:

Furniture with Specification

Flooring with specification.

UNIT II

Preparation of working details for:

Ceiling with specification.

Wall treatment with specification.

UNIT III

Service Layouts

- a) Electrical layout with specification
- b) Illumination layout with specification
- c) AC layout with specification
- d) Fire fighting system – layout with specification
- e) Computer networking – layout with specification.
- f) Communication cabling – layout with specification

UNIT IV

Product details.

INTERIOR DESIGN
SEMESTER VIII
8T1 INTERIOR DESIGN VIII
PAPER I

Theory-80

Sessional - 20

Total Marks – 100

Passing Marks- 40

AIM: To understand the urban context in which the individual design project is set and to aid in understanding the complexities and fundamentals of all design dimensions

Ability to prepare working details of interior design projects.

UNIT I

Drawing media management: Drawing paper opaque and tracing sheets, paper sizes, A0 toA6 and B0 toB6, folding ammonia prints for filing and unfolding in filed form.

Orientation and position of titles: Detail contents, location of main view, part details, key plan, common specification, linkages to previous and following sheets. Titles for main and sub drawings, highlighting the titles by bold lettering, underlining, boxing etc. mentioning scale, indicating graphical scale and other information likely to be reduced or enlarged in size

UNIT II

Preparation of working details for Furniture with Specification

UNIT III

Preparation of working details for Flooring with specification.

UNIT IV

Preparation of working details for ceiling with specification.

UNIT V

Preparation of working details for Wall treatment with specification.

**INTERIOR DESIGN
SEMESTER VIII
8T2 INTERIOR LANDSCAPEII
PAPER II**

Theory-40

Sessional- 10

Total Marks- 50

Passing Marks- 20

AIM :Creating awareness of the need for green design and imparting knowledge of designingsustainably , advocating of the application of passive and active use of renewable energy system and the promotion of efficient use of water, materials and waste through the sustainable concept .project handling and preparation

UNIT I

Methodology and process of site analysis, data collection, compilation, presentation and analysis techniques. Preparation, interpretation and evolution of landscape plans, site planning and landscape elements. Project management and use of CPM and PERT.

UNIT II

Study ofHistorical developments in landscape architecture and types in the west . Ancient period to renaissance period gardenstyles. Europe and the American.

UNIT III

Study of Historical garden developments and landscape types in the east (India, China ,Japan etc.). Their characteristics , influences and conditions which evolved them .

UNIT IV:

Environmental Science Ecology and concept of Ecosystem, Environmental deterioration, Environment protection measures.Environmental Issues.Understanding urban landscape design road landscaping, waterfront development, landscaping of residential areas, Industrial Landscaping. Concept of public gardens and private gardens.

UNIT V:

Interior landscape principles and consideration . Bio climatic design concepts , innovative green technologies in landscaping , Concept of sustainable development and case studies.

SESSIONALWORK:

1. Case study / studies of landscape design for sustainable use of resources
2. Landscape DESIGN Exercise FOR A GIVEN open space (area of 2000 to 3000 sq. metres)

3. Sketching assignments and term papers.
4. Plates on above topics.

REFERENCES:

1. T S S for Landscape Architecture, McGrawHill, Inc, 1995
2. Grant W Reid, From Concept to Form in Landscape Design, Van Nostrand Reinhold Company, 1993
3. Brian Hacket, Planting Design
4. T.K. Bose and Chowdhury, Tropical Garden Plants in Colour, Horticulture And Allied publishers, Calcutta, 1991
5. Motloch, J.L., "Introduction to Landscape Design", Van Nostrand Reinhold Publishing Co., New York, 1991.
6. Bring, M, "Japanese Gardens: "design & Meaning
7. Simonds, J.O., "Earthscape: A Manual of Environmental planning", McGraw Hill Book Co., New York, 1978.
8. Motloch, J.L., "Introduction to Landscape Design", Van Nostrand Reinhold Publishing Co., New York, 1991., McGraw Hill Book Co., New York, 1981.
9. Michael Laurie, An Introduction to Landscape Architecture, Elsevier, 1986
10. Geoffrey And Susan Jellicoe, The Landscape of Man, Thames And Hudson, 1987

**INTERIOR DESIGN
SEMESTER VIII
8T3 GREEN BUILDING TECHNOLOGY
PAPER III**

Theory –40
Sessional-10
Total Marks- 50
Passing Marks –20

AIM: To have an increased awareness among students on issues in areas of green building technology.

UNIT I

Introduction to green building technology, definition, need and concept, challenges Global, Regional and Local environmental issues, natural resources and their pollution, Carbon credits, Zero waste concept, benefits of green buildings, considerations of green buildings.

UNIT II

Parameters to be considered for making buildings green, basic concepts of building design, systems design and controls.

UNIT III

Materials used in green building construction and green interiors.

UNIT Methods of reducing use of natural resources to make buildings green.

UNIT V

Rating systems of green buildings, green buildings certification, carbon credits.

SESSIONAL WORK: Based on assignments and presentations.

REFERENCES:

1. Climate responsive Architecture by Anant Krishnan
2. ECBC Code 2007, Bureau of Energy Efficiency, New Delhi Bureau of Energy Efficiency Publications – Rating System, TERI Publications – GRIHA Rating System.

**INTERIOR DESIGN
SEMESTER VIII
8T4 STRUCTURE – VI
PAPER IV**

Theory -	40
Sessional -	10
Total Marks –	50
Passing Marks -	20

UNIT I

Different ways of covering large span areas, basic economics of large span structures, knowledge of material requirements, Light supported space structures, integrated display system, structural elements. Structural systems of fair grounds and exhibition spaces. Structural systems for false ceilings and furniture forms. Effect of simple geometric forms on the overall structural behavior.

UNIT II

Preliminary design criteria & thumb rule for sizes of steel columns and steel girders. Steel Tables- Different Sections Available and their applications. Reading of Steel Tables. Study and relative strengths of beams as 'I', '[' and 'L' sections. Introduction to I.S.800 (W.S. Method). Different grades and properties of Steel and teel sections.

UNIT III

Connections of steel structures bolted/riveted/welded. Basics of welded connections, types of welds, strength of welds, size of welds.

UNIT IV

Roof Trusses – Preliminary design of roof truss tension, compression members.

UNIT V

Introduction to general principles of earthquake proof buildings. Load Transfer in Arches – Different Kinds of hinged Arches.

SESSIONAL WORK:

1. Assignments and presentations on above topics.

REFERENCE BOOKS:

2. S. Ramamrutham, Strength of Materials.
3. Vazirani – Rathwani, Design of steel structures.

**INTERIOR DESIGN
SEMESTER VIII
8T5 DESIGN MANAGEMENT II
PAPER V**

Theory - 40
Sessional – 10
Total Marks – 50
Passing – 20

AIM: To professional attitude in students work and understanding relevance of various types of documents.

UNIT I

Tenders, types of tenders, tender document, work order.

UNIT II:

Contract, types of contracts, contract documents, arbitration.

UNIT III:

Billing methods, tax liabilities, actual estimation, introduction of different tary and other estimates.

UNIT IV

Other aspects of design creation and its management, design methodologies, problem solving, fore-casting, decision making information systems, finance etc.

UNIT V

CPM and PERT, Brief introduction to building byelaws.

SESSIONAL WORK:

1. Assignments based on all above topics.

REFERENCES:

1. A guide to business principles and practices for Interior Designers by Harry Siegel

INTERIOR DESIGN

SEMESTER VIII

8T6 PROJECT

Viva voce - 100

Total Marks - 100

Passing Marks: 40

AIM: Research – Thesis.

- The area of work chosen by the student with the guidance of a faculty member could be in any of the following areas :-
- History and theory of interior spaces, interior design language of various culture , art and craft from its relevance in to interior spaces , mass production of various interior elements, material search, urban interiors , graphics and space psychology and human behaviour or any other issue accepted by the institution as relevant to the field of interior design.

EVALUATION

- The study would be presented as a written document with supporting illustration periodically reviewed and examined by an external examiner.