

AR-127 ARCHITECTURAL DESIGN-I :: C-16

Subject Title	:Architectural Design-I
Subject Code	:AR-127
Studio/Drawing Periods/Week	:9
Studio/Drawing Periods/Semester	:162
Credits	:9
Internal Assignments & Mids	:200 Marks
External Examinations	:200 Marks
Total Marks	:400 Marks
Duration of Exam	:6 (3+3) Hrs (University Drawing Exam)

TIME SCHEDULE

Sl. No	Major Topics	No. of periods	Weightage of Marks	Short Question	Essay Question
			End Exam	End Exam	End Exam
	Unit-I (Anthropometrics)	18	5	1	-
	Unit-II (Study of functional spaces)	36	10	2	-
	Unit-III Study of the human considerations (a) Introduction to design process. (b) Design Response	36	10	2	-
	Unit-IV Introduction to design process. (a) pre design studies (b) Design Response	72	175	-	1
TOTAL		162	162	5	1

Note: (a) For internal assessment:

1. There should be assignments from Major Topics: Unit-I – 1 Question, Unit-II – 2 Questions & Unit-III – 2 questions evaluation is same as End Exam Weightage
2. From Unit-IV - At least two major exercises and two minor design/time problems should be given. The final submission shall necessarily include a model for at least one of the two main problems.

(b) For External/End examination:

3. Duration of End examination is for 6 hours (two sessions)
4. No choice in Part A and B (there will be a question in Part-B on the conceptual plan drawn in single line or double line to be traced and submitted at the end of 1st Session of the examination.
5. **Part-A:** 5 short answer questions- each carries 5 marks is to be answered on separate drawing sheet which is to be collected at the end of first session.

Part B: 1 question – i.e., 6th question for 175 marks from one of the topics from Unit-IV.

The tracing of the conceptual plan for question no-6 is to be submitted at the end of the 1st session only and there should not be any alteration in the plan to be submitted finally at the end of 2nd session ie. There should not be major deviations from the conceptual plan submitted through tracing.

Course Overview:

This course is intended to provide framework for understanding design as a process.

Objectives of the Course:

To impart knowledge related to design process and introduce various problem solving approaches.

Expected Skills / Knowledge Transferred:

To understand principles of design. To develop the ability to translate abstract principles of design into architectural solutions for small problems.

Course Contents:**Unit - I**

Anthropometrics: Basic -average measurements of human body in different postures-its proportion and graphic representation, application in the design of simple household and street furniture. Use of mannequins in defining spatial parameter of design.

Unit – II**Study of functional spaces**

(a) Functional spaces issues like clearances, lighting and ventilation, furniture arrangements;

(b) Minimum and optimum areas for various functional spaces;

(c) Detailed study of spaces such as living, drawing, family hall, home office, study, dining, master bedroom, children bedroom, parents bedroom, guest bedroom, kitchen, grain store room, utility space, lobby, home theatre, home zim/yoga room, puja/prayer room, attached toilet (wash room), common toilet (wash room) etc.

(d) out house and toilet, Servant room and toilet.

Unit - III

Study of the human considerations like, privacy, convenience, comfort, etc.; Case study of a house and a critical appraisal of the spaces.

Unit - IV**Introduction to design process.**

(a) Pre- Design Studies: Preparation of design brief, the user requirement and their implications, Study of the site and the context;

(b) Design Response: Development of concept, Graphic tools like circulation diagrams, Figure Ground studies, etc. Integration of form and function in the design of bus shelter, milk booth, watchman's cabin, traffic police kiosk, flower stall, ATM Center, etc.

Reference books:

Chiara Joseph de and Others. Time Savers Standards of Building Types. McGraw – Hill, 1980.

Kirk, Paul Hayden and Sternberg, D. Eugene. Doctors Offices and Clinics, 2nd ed. Reinhold Pub., USA, 1960.

Neufert, Ernst. Ernst Neufert Architects Data, Granada Pub. Ltd., London, 1970.

Pevsner, Nikolaus. A History of Building Types. Thames and Hudson, London, 1976.

Shah, S. Charanjit. Architects Hand Book Ready Reckoner. Galogotia Pub. Co., New Delhi, 1996.