Faculty of Physical Planning and Architecture

SYLLABUS

FOR

INTERDISCIPLINARY COURSE IN ARCHITECTURE (UG)

Examinations: 2019-20



GURU NANAK DEV UNIVERSITY AMRITSAR

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$\begin{array}{c} 2\\ \text{INTERDISCIPLINARY COURSE IN ARCHITECTURE (UG)} \end{array}$

Scheme

Course Code	Course Title	Semester	Credits	L	Т	U	Duration Exam.	of
ARL-001	Residential Architecture	Autumn	04	3	1	0	3 hrs	
ARL-002	History of Architecture	Spring	04	3	1	0	3 hrs	

INTERDISCIPLINARY COURSE IN ARCHITECTURE (UG)

(Inter Disciplinary-Autumn Semester)

Course Code: ARL 001 Duration of Examination: 03 Hrs

Course Title: Residential Architecture Credits: 04 (L=03, T=1, U=0)

Time: 3Hrs.

Total Marks: 100

 $Mid\ Semester\ Examination:\ 20\%\ weightage\ (Marks:20)$

End Semester Examination: 80 % weightage (Marks: 80)

Instructions for the Paper Setters:

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Objective: To introduce the students to the concepts, designing and planning of a residence; functions and characteristics of residential architecture.

Course-contents:

SECTION-A

Residential planning: Building Bye-Laws: Role in the healthy development of Architecture. Study of local building bye-laws. Site planning: meaning, purpose and methodology; site surveys: types, relevance, components; functional and technical factors in site planning, Orientation, planning of a house, apartment: design-principles and methodology, use of a comprehensive-approach.

Interior designing: Definition of Interior Design, Interior Design and architecture, Interior Design Process, themes and Concepts; Introduction to various elements in interiors like floors, ceiling, walls, staircases, opening, etc. Use of materials and various methods of their treatment to obtain certain specific, functional, aesthetic and psychological effects. Other elements of interiors like accessories used for enhancement of interiors – paintings, objects de art, furnishing i.e. shades, blends, curtains etc.

SECTION-B

INTERDISCIPLINARY COURSE IN ARCHITECTURE (UG)

Vaastu shastra: Terminology of vaastu- shastra, fundamental concepts, elements of vaastu, The designs based on directional alignments, laws of nature. Residential vaastu planning for different-rooms.

SECTION-C

Landscaping: Principles and goals of landscape design; types of landscape styles - hard and soft landscape, wet and dry landscape. Landscape design elements: types, materials, uses and relevance. Plants: Functional, aesthetic and environmental aspects of plant; Types and forms of plants; criteria for plant selection; Indoor plants; characteristics (height, foliage, flowering etc.) of various plants, their common and botanical names.

SECTION-D

Building-materials: Types of building-material: Cement, sand, glass, wood, concrete, R.C.C., market –survey; technical-details: use of materials on site; chemical & physical properties, materials used for cladding: slate, tiles, stone.

Suggested Readings:

- 1. Rangwala ,S.C.; "Engineering Materials", Charotar Publishing House, Gujarat, 1999.
- 2. Punmia, B.C., "Building Construction", Laxmi Publications, New Delhi, 2010.
- 3. Lyons, Arthur; "Materials for Architects and Builders An introduction", Arnold, London, 1997.
- 4. "Time Saver Standards Building Services", Published by McGraw–Hill, New York, 2001.
- 5. Neufert, Ernst; "Architect's Data", 3rd Edition, Wiley–Blackwell, UK, 2002.
- 6. Kumar, Vijaya; "Vastushastra", Sterling Publishers Pvt Ltd., New Delhi, 2002.
- 7. Gautum, Jagdish; "Latest Vastu Shastra (Some Secrets)", Abhinav Publications, New Delhi, 2006.
- 8. Ching, Francis D.K.; "Interior Design Illustrated", V.N.R. Pub., New York, 1987.
- 9. Shah, Charanjit Singh; "Architects Handbook Ready Reckner" Published by Galgotia publishing company, New Delhi.
- 10. "National Building Code–2005", published by Bureau of Indian Standards, New Delhi.

INTERDISCIPLINARY COURSE IN ARCHITECTURE (UG)

(Inter Disciplinary-Autumn Semester)

Course Code: ARL 002 Duration of Examination: 03 Hrs Course Title: History of Architecture Credits: 04 (L=03, T=1, U=0)

Time: 3Hrs.

Total Marks: 100

Mid Semester Examination: 20% weightage (Marks:20) End Semester Examination: 80 % weightage (Marks: 80)

Instructions for the Paper Setters:

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Objective: To acquaint the students the development of Architecture in India from the Indus Valley Civilisation to Hindu Architecture, Buddhist Architecture, Islamic Architecture and Sikh Architecture.

SECTION-A

Indus Valley Civilisation: Development of Architecture in Indus Valley

Hindu Architecture: Development of Hindu Architecture, Gupta & the Chalukyan period, Dravidian Architecture through different phases (Pallavas, Cholas, Pandyas, Vijainagar & Madura), Indo-Aryan Architecture (Orissa, Khajuraho & Gujarat)

SECTION-B

Buddhist Architecture: Development of Buddhist Architecture, Characteristics of Buddhist Architecture, Development of Stupas, Chaitays and Viharas

SECTION-C

Islamic Architecture: Evolution of Islamic Architecture during various Muslim Dynasties in Imperial Delhi, Study of important Mughal structures in Delhi & Agra such as Purana Qila, Humayun's Tomb, Agra Fort & Taj Mahal, Shahjahanabad & Red Fort

SECTION-D

Sikh Architecture: Development of Sikh Architecture in Punjab with special focus on Golden Temple

Suggested Readings:

- 1. Grover, S; "Buddhist and Hindu Architecture In India", CBS Publishers & Distributors, New Delhi, 2003.
- 2. Grover, S.; "Islamic Architecture in India", CBS Publishers & Distributors, New Delhi, 2003.
- 3. Brown, P.; "Indian Architecture (Buddhist and Hindu Periods)", DB Taraporevala Sons & Co. Pvt Ltd., Bombay, 1971.
- 4. Brown, P.; "Indian Architecture (Islamic Period)", D.B Taraporevala Sons & Co. Private Ltd., Bombay, 1971.
- 5. Nath, R; "History of Mughal Architecture", Abhinav Publications. New Delhi, 1985.
- 6. Arshi, P.S.; "Sikh Architecture in Punjab", Intellectual Publishing House, New Delhi, 1985.