# M G UNIVERSITY
## B. ARCH COURSE - NINTH SEMESTER (S9)
## 2011 AR 901 ARCHITECTURAL DESIGN – VI
## 0-0-10 Credits – 5

## Objective

To make the students understand the role of architecture in shaping the urban fabric and to create architecture which fits into a specific urban context.

There are three streams of which the supervising design team may choose any one for that particular academic year. The streams are as follows:

**A. Institutional Design in urban context**

**B. Housing**

**C. Urban Design**

Emphasis shall be on Institutional/ housing/ urban design studies focusing finally upon architectural design and detailing, socio-economic and environmental conservation and aspects, behavioral studies: Survey techniques, conservation and architectural design.

**A. Institutional Design in urban context**

Study and design of Urban Institutions, context and character

Design Parameter will be Inter-relationship to urban context, statement of institutional character, abstraction, integration of building systems design development and detail..

Focus - Urban block models, urban structure analysis, Building in Urban Context

Projects

**Main Project** - Institutional complex/ building projects involving Campus planning in defined or definable urban context such as Design of commercial plazas / markets /Bus terminals/cultural centers/performing art centers/sports stadiums etc

**Minor Project** - Detailed Design resolution of part in urban characteristics

**B. Housing**

Defining the urban sector and its character

Design Parameters will be dwelling community and neighborhood. The sector in the present, urban scales, social institutional and infrastructure, nature of urban space and their occupation. Urban neighborhoods traditional and present day composition, structure, density, land use coverage, building controls, urban infrastructure and services, Housing surveys, generalizations, overlays of various determinants, user evaluation.

Focus- Urban Neighborhood, defining its character.

**Main project** - Urban housing sector, Low income or mixed income implying characteristics of varied living patterns.

**Mini Project** - detail of any unit/ component

**C. Urban Design**

Urban Conservation, Reuse and Building in Context.

Design Parameters - Urban sector or Block its structure and composition. Principles of Urban Conservation, Issues of Reuse of Buildings, Issue of building in context, within historical areas and relationship of new building to existing urban form.

Study should focus on Urban sector, issues of structure, composition, infrastructure, laws of building, co-relation of part to whole, Typology, morphology, principles of conservation and reuse of buildings in context, expressions of relationship to tradition and expression of our times.

Focus - Urban insert, relationship of building to urban character

**Main Project** - Part urban sector, of varied components, conservation, reuse and building in context, overall structure and defined part character. Design of plazas, city square, redevelopment of historic city centre, revitalization of traditional urban cores

**Mini Project** – Urban design detailing.

**References:**


1. National Building Code
2. Kerala Municipal Building Rules
3. Callendar et al, “Time Saver Standards”, Mc Graw Hill
4. Paul D. Spreinegar, “Urban Design, the Architecture of Towns and Cities”, Mc Graw Hill.
5. Gorden Culen, “Townscape”.
6. Edurand Bacon, “Design of Cities”.
7. Edward D. Mills, “Planning the Architects Handbook”.
8. Julius Panero & Zeluik, “Human Decision and Interior Space”, Whitney Library of Design Publication, 1989.


**No University examination. Evaluation conducted as per manual**

# M G UNIVERSITY
## B. ARCH COURSE - NINTH SEMESTER (S9)
## 2011AR902 DESIGN FOR DISASTER MITIGATION AND MANAGEMENT
## 0-1-2 Credits - 3

**Objective**

To prepare and equip the students in disaster mitigation, preparedness and management

**Outcome**

The students become aware of the various disasters and its mitigation measures, and will help them in future to guide and manage the hazardous situation.

**Module 1**

Hazard, Disaster, Risk, Vulnerability; Disaster – an over view; Disaster – the Indian Perspective; Typology of disasters and increased understanding.

Natural hazards and Disasters -Earthquake, cyclone, floods, droughts, landslides, lightning. – Causes, hazardous effects, mitigation measures. Man induced hazards & disasters- soil erosion-causes, conservation measures; nuclear explosion-environmental problems, corrective measures; fire mitigation measures; terrorism.

**Module 2**

Preparedness and mitigation - Preparing hazard zonation maps, Predictability/ forecasting &warning, Community preparedness, retrofitting, Population reduction in vulnerable areas, Awareness, Capacity building.

**Module 3**

Disaster Management; Community health and casualty management; Disaster Management – role of various agencies; Relief measures; Post disaster- Recovery Reconstruction and Rehabilitation. Remote- sensing and GIS applications in real time disaster monitoring.

**Text Books**

**References**

1. Goel.S.L, 'Encyclopaedia of Disaster Management'
2. Government of India, (2004), 'Disaster Management in India' – A Status Report, Ministry of Home Affairs (Disaster Management Division), New Delhi.
3. Zebrowski, Ernest Jr, (1997)-, 'Perils of a Results Planet: Scientific Perspectives on Natural Disasters', Cambridge University Press, Cambridge.
4. Guha-Sapir D., Hargitt, D and Hoyois P. (2004), 'Thirty Years of Natural Disasters: 1974- 2003', The Numbers, UCL Presses, De Lou vain.

5. Ministry of Home Affairs (MHA), (2004)-, 'National Programme for Capacity Building of Architects in Earthquake Risk Management (NPCBAERM)', National Disaster Management Division (Government of India), New Delhi.
6. Hewitt, K (1983), 'Interpretation of a Calamity', Allen & Unwin Inc., London.
7. Heide, Auf der E (1989)-, 'Disaster Response: Principles of Preparation and Coordination',C.V.Mosby, Baltimore.
8. Amarnath Chakrabarti, Devdas Menon, Amlan K. Sengupta, 'Handbook on Seismic retrofit of buildings'

**University Examination Pattern**

PART-A

8 short questions 5 marks each from all modules, 40 marks

3 questions of 10 marks each from Module I, II & III, with choice to answer any two – 20 Marks

PART B

3 questions of 20 marks each from Module I, II, & III with choice to answer any two – 40 Marks

# M G UNIVERSITY
## B. ARCH COURSE - NINTH SEMESTER (S9)
## 2011AR903 SUSTAINABLE ARCHITECTURE
## 0-1-2 Credits - 3

**Objectives:**

To make students aware of (1) the environmental, Energy and Water scenario of our planet in general and Kerala in particular (2) to appraise them of the urgent need of making all future buildings sustainable and (3) to equip them with the capacity to design and construct Sustainable building.

**Learning Outcomes**

Understanding (1) the importance in creating sustainable planning while conceiving building/ development projects and become environmentally responsive to construction requirements (2) Critical awareness of existing environmental rating systems (3) Practical application possibilities sustainable construction practices in regional context

**Module 1**

Basics of Sustainability, Needs of Sustainable Outlook, State of the Art, Sustainable Development, Concept of Renewable/Non-renewable, Global warming, Space-Ship-Earth concept, Natural resources, Objectives of Sustainable/ Green Buildings, Different Green rating systems; LEED India rating & TERI GRIHA rating,

Examples of Green buildings (Case Studies, Analysis and Architectural design of Sustainable buildings as Tutorials).

**Module 2**

Energy Efficiency, Reasons for the Energy Crisis, State of the Art, Need for the Energy Conservation, Conventional and non-conventional sources, renewable, non-renewable energy sources, ECBC rules, Energy and buildings, Concept of embodied energy & Transportation energy, Total Energy assessment in buildings, Relation between Energy Efficiency and Sustainable development, Energy Scenario of Kerala. (Case studies, Redesign of Own house to make it Energy Efficient as Tutorial)

**Module 3**

Water, Water cycle, Water Conservation, Waste recycling, Waste water, Methods and techniques for water conservation in buildings, Rain data of Kerala, Calculation of tank sizes for storage of rain water in Kerala, Green buildings and water conservation. (Case studies, Design of Rain Water tanks for buildings as Tutorials)

## References


1. 'A Water Harvesting Manual; for Urban Areas; Case Studies from Delhi', Centre for Science and Environment, New Delhi, 2003.
2. Baker Nick and Steemers Koen, "Energy and Environment in Architecture", E& FN, Spon. London, 1999.
3. Goulding, John, R, Lewis, Owen J and Steemers, Theo C., "Energy in Architecture", Bastford Ltd., London, 1986.
4. Bansal Naveendra K., Hauser Gerd and Minke Gernot, "Passive Buildings Designs : Handbook of Natural Climatic Control", Elsevier Science, Amsterdam 1997.
5. Energy Conservation Building Code, Government of India.
6. Websites of TERI, LEED India, ECBC, etc.


**University Examination Pattern**

PART-A

8 short questions 5 marks each from all modules, 40 marks

3 questions of 10 marks each from Module I, II & III, with choice to answer any two – 20 Marks

PART B

3 questions of 20 marks each from Module I, II, & III with choice to answer any two – 40 Marks

# M G UNIVERSITY
## B. ARCH COURSE - NINTH SEMESTER (S9)
## 2011 AR 904 ARCHITECTURAL CONSERVATION
## 0-2-0 Credits – 2

## Objectives:

To introduce the importance of understanding the tangible and intangible heritage of our country.
To have an understanding of the concepts of conservation philosophies existing all around the world.
To trace the developments in conservation techniques and to illustrate the role of technology in preserving heritage.
To create an understanding and appreciation of heritage in cities towns at urban scale.

**Module I**

**Introduction to Conservation** - Definition, Need, Objectives and Scope of Architectural Conservation/ Urban conservation, values in conservation. Beginning of the Conservation movement - Contributions of John Ruskin & William Morris

Definitions: Cultural heritage, Natural heritage, Built heritage - Ancient Monument.

Agencies involved in conservation - ICCROM, ICOMOS, ASI, State departments of Archaeology, Town Planning departments, State Art and Heritage Commission & INTACH. Charters such as Venice charter (1964), Burra charter (1979) etc. Ethics of Conservation practice. Authenticity & Integrity in Conservation practice.

**Module II**

**Architectural Conservation** – Causes of decay in materials and structure - Climatic causes – Thermal movements, rain, frost, snow, moisture, wind. Botanical, biological and micro biological causes such as Animals, birds, insects, fungi, moulds, lichens. Natural disasters – Fire, earthquakes, flood, lightning. Manmade causes – Wars, pollution, vibration, vandalism and neglect

**Seven Degrees of intervention** - Prevention of deterioration, Preservation, Consolidation, Restoration, Rehabilitation, Reproduction, Reconstruction.

**Technique of Conservation** - Preparatory procedures for conservation

- Identification of the 'values' in the object, monument or site: 'emotional', 'cultural' and 'use' values. Preparation of Inventories, Initial inspections, Documentation - Research, Analysis and recording (Reports). Examples of Heritage building conservation.

**Module III**

**Urban Conservation** - Morphology of historic towns, introduction to the concept of heritage zones, methodology and analysis of character of heritage zones. Broad concepts of terms such as Reuse, Revitalization, Rehabilitation, Regeneration, Renewal, Up-gradation, Redevelopment of historic areas. Scope, parameters of Integrated Conservation and its role/ link with development planning and environmental design.

**References**


1. Bernard M. Fielden- 'Conservation of Historic Buildings' –, Architectural Press, 2003
2. Ashurst, J. and Dimes, F.G. Conservation of Building and Decorative Stone, Butterworth-Heinemann, London. -1990.
3. Jukka Jokilehto, Butterworth - Heinemann – 'A History of Architectural Conservation' - ,1999
4. ICOMOS, Earthen Architecture: The conservation of brick and earth structures. A handbook.(1993)
5. Poul Beckmann and Robert Bowles – 'Structural Aspects Of Building Conservation', Elsevier Butterworth-Heinemann, 2004
6. Roger Kain, Planning for Conservation.
7. Alan Doby, Conservation and Planning.
8. Roy Worskett, Character of Towns.


**University Examination Pattern**

PART-A

8 short questions 5 marks each from all modules, 40 marks

3 questions of 10 marks each from Module I, II & III, with choice to answer any two – 20 Marks

PART B

3 questions of 20 marks each from Module I, II, & III with choice to answer any two – 40 Marks

## M G UNIVERSITY

## B. ARCH COURSE - NINTH SEMESTER (S9)

## 2011 AR 905 RESEARCH METHODOLOGY

## 0-4-0 Credits - 3

**Objective:**

This course is designed to explore and generate understanding about the importance of research, different process involved and methods in conducting studies for different projects. This will help the students to undertake the research work in Architecture, planning and allied fields.

## Module I

**Aims & Search -** The nature and function of research, scientific research, meaning of research in the field of architecture, pure and applied research, traditional and potential areas/types.

## Module II

**Research Process -** Research Hypothesis, the stages of research, research methodology, various techniques of data collection in general, specific techniques in architectural research. Literature search and review, the use of libraries and data bases, aim and structure of a literature review.

## Module III

**Analysis and writing -** methods of analysis, concluding research, communication of research reporting, the structure of a report, the necessity for the development of writing skills, technical data about formal writing the use of visuals, the qualities of research, the use of primary and secondary references, bibliography, notation, cross reference etc. Introduction to scholarly writing and publishing a paper, writing and presenting a conference paper, presentation of scientific research.

(Focus on making the student aware of the nature of an undergraduate thesis, its structure and

other requirements, research in the fields of environment, community structure, architectural history and theory, urban structure, building type studies, etc. Behavioural studies and user evaluation. The student is required to make a short research on any of the topics given above and submit a paper by the end of the semester)

## References

Groat, Linda; Architectural Research, John Wiley and sons, USA, 2002

Giere R.N. “Understanding Scientific Reasoning”, Holt Rinehart & Winston, U.K., 1991.

Moroney M.J., “Facts from Figures”, Penguin, 1990.

Day R.A., “How to Write and Publish a Scientific Paper”, Cambridge University Press, R.K. 1991.

Yin, R.K. (1994). Case Study Research- Design and Methods, Applied Social Research Methods Series. Vol V. Sage Publications. California.

Krishnaswami, O.R. (1993).Methodology of Research in Social Sciences. Himalaya Publishing House. Bombay.

Creswell John. W. (1994). Research Design – Qualitative and Quantitative Approaches. SAGE Publications. California.

Thakur, N. (1998). "Building Knowledge through a Holistic Approach towards Architectural Education and Research". Proceedings of the seminar on Architecture and Interdisciplinarity.

Turabian Kate. L. (1982). A manual for Writers. The University of Chicago Press. Chicago.

Bockman, J., R., and Couture, B. (1984). *The Case Method in Technical Communication: Theory and Models.* Texas: Association of Teachers of Technical Writing.

**University Examination Pattern**

PART-A

8 short questions 5 marks each from all modules, 40 marks

3 questions of 10 marks each from Module I, II & III, with choice to answer any two – 20 Marks

PART B

3 questions of 20 marks each from Module I, II, & III with choice to answer any two – 40 Marks

# M G UNIVERSITY
## B. ARCH COURSE - NINTH SEMESTER S9
## 2011 AR 906 HOUSING
## 0-2-0 Credits – 2

## Objective

To introduce the students into the field of housing-to make them understand its significance in the context of both global and national scenario, and thereby to make them sensitive to the critical

social and economic issues related to housing especially in developing countries like India and Kerala in particular, with emphasis on the analytical study of relevant housing initiatives.

**Module I**

Introduction to housing in early settlements with emphasis on the evolution of settlement pattern in Kerala.
Nature and magnitude of the housing problem in India-Housing Shortage as a result of Population Explosion.
Urbanisation and Poverty issues in the Indian context. Role of Housing in the National level with a study on the changing priorities in the housing policies and the major housing programmes carried out in the various five year plans in India.
National Housing and Habitat Policy and its need, objectives and role in the field of housing in the present day context.

**Module II**

Study of Urban and Rural Housing -Housing design and standards conforming to the local climatic and socio economic conditions.
Important earlier Housing Schemes in India for various categories like HIG, MIG, LIG, EWS etc

Study of Slums as a consequence of rapid urbanization and industrialization, and its impact on the urban housing scenario in India and abroad. Literature case studies of the some of the major Slum clearance and Slum Improvement Schemes successfully carried out in India.

**Module III**

Concept of Aided Self Help-Housing the poor through the NGO's and through mass involvement of the beneficiaries on the basis of illustrative case studies of relevant and innovative housing schemes or projects in India and Kerala in particular.

Housing Finance, Sources of Housing Finance and its essential characteristics. Major Housing Finance agencies at the National and State level like the NHB, HDFC, LICHFL, GIC, UTI, Commercial Banks
Etc. Role of the informal housing finance system as a major source of housing finance for the urban and rural poor.

**References**

1. K. Thomas Poulose-'Innovative Approaches to Housing for the poor'
2. Dr. Misra and Dr.B.S. Bhooshan-'HabitatAsia'
3. Dr. Misra and Dr.B.S. Bhooshan-'Habitat India'
4. Arthur Gallion-'Urban Pattern'
5. Reading Material in Housing -Compiled by K. Thomas Poulose for ITPI students
6. Five Year Plans-Government of India Publications

**University Examination Pattern**

PART-A

8 short questions 5 marks each from all modules, 40 marks

3 questions of 10 marks each from Module I, II & III, with choice to answer any two – 20 Marks

PART B

3 questions of 20 marks each from Module I, II, & III with choice to answer any two – 40 Marks

# M G UNIVERSITY
## B. ARCH COURSE - NINTH SEMESTER S9
## 2011 AR 907 Elective III
**0-4-0 Credits – 3**

## 1. INTERIOR ART AND ARTIFACTS

**Objective**

Provides knowledge on traditional art form, innovations in art and influences on interior design. The course provides a framework in understanding the socio-cultural and historical aspects that influence the design of accessories and products based on their life style.

**Module – 1**

A brief history of the world Understanding various art forms, appreciation of art along with social and cultural influences on design.

Exploration of art forms – study of traditional and contemporary art forms – painting , sculpture, architecture, decorative arts, design arts, digital art.

Study of ornament in Interior Design. Different types of ornamentation in the interiors. Study and evaluation of artifacts and historic examples and their applicability.

**Module – 2**

Study of famous and influential Artists, Craftsmen and people who pioneered innovations in their own fields and their influence on design and other fields. For egg: Van Gogh, Dali, William Morris, Michelangelo, Leonardo da vinci, Henri Moore Rodin, Satish Gujral, Alexander Calder, MF Hussein etc.

**Module – 3**

Principles of accessories design in interiors. Insight of various products and lifestyle accessories in the interiors. Role of accessories in interiors. Integration of accessories in interior design. Design approaches in product and lifestyle accessories design with a focus on functionality, ergonomics, aesthetics, multiple usages etc. Study of materials and processes adopted in accessories design.

A detailed study involving all the design aspects of any of the following lifestyle accessories: luminary design, glassware, lighting, textiles, mirrors, clocks, wall coverings etc.

**References:**


1. Bayer Patricia, (1990), Art Deco interiors, Thames and Hudson, London.
2. Fry Charles Rahn;( 1977), Art decorating interiors in colors, New York.
3. Schofield Maria;( 1979), Decorative art and modern interiors, Studio Vista, London.
4. Human Behavior in the Social Environment: A Social Systems Approach, Gary Lowe, Irl Carter, Ralph Anderson, Aldine Transaction, 1999
5. Elizabeth. D. Hutchinson, Sage publications, Dimensions of Human Behavior, person and Environment, 2007.


**University Examination Pattern**

PART-A

8 short questions 5 marks each from all modules, 40 marks

3 questions of 10 marks each from Module I, II & III, with choice to answer any two – 20 Marks

PART B

3 questions of 20 marks each from Module I, II, & III with choice to answer any two – 40 Marks

## Elective III

## 2. Maintenance, Repair & Retrofit of Buildings

**Objectives**

- To establish the importance of maintenance and repairs of buildings.
- To understand causes and process of deterioration in buildings
- To understand about building failures and investigation methods
- To introduce the principles and practices of repairs and retrofitting techniques.

**Module-I**

**Study of Buildings and Durability**

Durability of buildings – Effects of environmental elements such as heat, dampness, frost and precipitation on buildings – Corrosion and natural deterioration of materials - Effect of chemical elements on building materials Effects of pollution on buildings – Damage by biological agents like termites, fungus, insects etc. - damage due to fire, earthquake and other natural disasters. Conservation of buildings – documentation – principles and methods of conservation – restoration of old building and monuments

**Module-II**

**Building Failures and Investigation Methods**

Failure and repair of buildings- Definition of building failure – functional, structural and aesthetical failures – Principles and Methodology of investigation of failures – background information – Diagnostic testing methods and equipments – radiography, thermograph etc.- nondestructive testing methods and equipments and measurements. Core testing, various non destructive tests, – Assessment of damages.

**Module-III**

**Maintenance, Repair and Retrofit Techniques**

Maintenance of buildings – routine maintenance of buildings – maintenance cost – specifications of maintenance work – damp proof course – construction details for prevention of dampness – corrosion protection, termite proofing – fire protection. Building repairs - Repair for foundation, masonry walls,

openings, floors and roof made of different materials Repair of concrete and masonry – repair of cracks, stitching, grouting and guniting. Repair techniques using Polymer materials – large volume repairs – surface coating - foundation repair and strengthening – leakage of roofs and methods of repair, leak sealing, damp proofing and termite proofing – underwater repairs. Strengthening and stabilization techniques – Modern repair and retrofitting techniques- column strengthening, jacketing, repair of slab and beam- post tensioning.

**References:**


1. Philip H Perki : "Concrete Structures" ,1978, E & FN Spon , London.
2. S Champion , "Failure and Repair of Concrete Structures",1961, Contractors record, London.
3. Jacob Feld "Construction Failures",1968, John Wiley.
4. Peter H Emmons, "Concrete Repair and Maintenance Illustrated"
5. Mathews M S, "Conservation Engineering".


**University Examination Pattern**

PART-A

8 short questions 5 marks each from all modules, 40 marks

3 questions of 10 marks each from Module I, II & III, with choice to answer any two – 20 Marks

PART B

3 questions of 20 marks each from Module I, II, & III with choice to answer any two – 40 Marks

# M G UNIVERSITY
## B. ARCH COURSE - NINTH SEMESTER S9
## 2011 AR 908 Elective IV
## 0-4-0 Credits – 3

## 1. Architectural Criticism

## Introduction

Architectural Criticism examines the theory and practice of criticism in the field of study. The subject explores the fundamental philosophical questions of what criticism actually is, its role and function (in architecture and other disciplines), and the relationship between criticism and judgment, discernment, discrimination etc. The subject approaches architectural criticism as a rhetorical or writerly practice – through analysis of specific texts and the work of exemplary architectural critics, it identifies the different modes of writing employed in different forums and for different audiences, and the different subject positions taken by critics on various issues. In this way

the subject also seeks to examine criticism critically – to read 'between the lines' of public criticism and probe the unspoken ideological positions and complicities held by critics, and also by the forums in which their work is disseminated. It notes the ways in which criticism is affected by its mode and method of presentation – in terms of its voice, vocabulary, projected audience, apparent level of objectivity and so on. Finally, the subject approaches architectural criticism in terms of its specific relationship with architectural practice, and questions the role that criticism plays in the profession, the academy, and in architectural culture more generally. In this way it opens a debate on whether architectural criticism does, and indeed whether it should, contribute to better buildings.

**Aim**

This subject intends to contribute to the development of graduates who are:

- able to reflect and engage in self critique and critical thinking in the field of architecture;
- to be critical thinkers with the ability to analyse, evaluate and question;
- able to communicate ideas effectively in a variety of ways including oral, written, visual, physical and digital;
- Experienced in engaging with, and contributing to, debate at the highest professional level;
- Aware of the significance of precedent and context in architecture;
- well-read with extensive knowledge of precedent and the ability to place architectural practice within a contextual framework;
- able to demonstrate initiative to seek out knowledge with a continuing commitment to personal and professional development;
- capable of undertaking independent investigative research.

**Objectives**

1. develop historical and critical arguments
2. analyze the content of critical arguments into their elements
3. effectively describe a building or environment
4. exercise critical judgment about building or environment descriptions
5. prepare a polished prose piece suitable for published
6. gain first hand experience of the dissemination of media
7. demonstrate competency in academic research procedures
8. develop a critical and reflective argument building on arguments through diagrams and publishable criticism
9. prepare arguments in the format of an academic essay
10. Demonstrate and develop formal skills in both writing and reasoning.

**Directions to the Teacher**

The subject is to be run as a combination of workshop where class, seminar, write ups, discussion and debate should go hand in hand, the class is intended to be open-ended, loosely structured, and flexible. There should be specific lectures by the Teacher and invited guests who are architectural critics with proven track record. Students should be encouraged to direct the objects of discussion, to discuss and workshop their own critical writing, and to comment critically on the work of their peers. There will be an emphasis on writing as craft, and discussion will be centered on analysis of texts about criticism, as well as criticism itself.

## Syllabus

### Module I : Introduction to Architecture Criticism

Discussion of the fundamental philosophical questions of what criticism actually is, its role and function (in architecture and other disciplines), and the relationship between criticism and judgment, discernment, and discrimination, amongst other things. Introduction and need for architecture criticism in the academy of architects. Criticism in day-to-day transaction. Architecture criticism – a societal perspective.

Classification of Architecture Criticism

Types and characteristics of Architectural criticism, crux of normative criticism, interpretive criticism, description criticism, peer criticism

### Module II: Nature of Sub-Division of Criticism

Sub-divisions of normative criticism, interpretive criticism, descriptive criticism. Understanding the essence and purpose of each type and its contemporary usage, status-quo of Architectural criticism.

Rhetoric of Architecture Criticism

Theory and grammar and practice of Architecture criticism, its positive and negative impact on the society. Survey of literature, design magazines and journals, search for architecture criticism, etc. collection.

### Module III: Setting for Architecture Criticism

Identifying parameters or positive development in the society, educating people through criticism critical judgment about building or environment descriptions, critical and reflective argument building on arguments through diagrams and publishable criticism, analysis

**References**

Architectural Criticism is a very broad subject, requiring a wide range of reading. It is not necessary to read all the material, but students will benefit from broad reading. Students preparing an essay or presentation on a given topic should read more widely and thoroughly.

**Suggested reading**


- Atoe Wayne, "Architecture and critical imagination", John Wiley & sons, Ltd. 1978.
- Bohn, Richard, 'Vocabulary: A critical discussion of architectural criticism, Architecture Plus, vol. 2, no. 5, Sept-Oct 1974
- Charles Jencks, "Modern movements in Architecture", Anchor garden city, 1973.
- Collins, Peter, 'The Interrelated Roles of History, Theory and Criticism in the Process of Architectural Design,' in The History, Theory, and Criticism of Architecture: Papers from the 1964 AIA-ACSA teacher seminar, ed Marcus Whiffen, MIT Press, Cambridge, Mass., 1965, 1-9.
- Eisenman, Peter, 'Post-Functionalism', in Architecture Theory Since 1968, Cambridge, MIT Press, 1998
- Fisher, Thomas, 'A Call for Clarity: American architectural criticism should be less misleading and obscure',Architectural Record, July 1999
- Gusevich, Miriam, 'The Architecture of Criticism: A Question of Autonomy,' in Andrea Kahn (ed), Drawing Building Text, Princeton Architectural Press, New York, 1991
- Hogben, Paul, 'Maintaining an Image of Objectivity: reflections on an Institutional Anxiety', Architecture Theory Review, vol. 6, no. 1, 2001
- Huxtable Adaloci, "Kicked a Building lately", Quadrangle, New York, 1976.
- Meier, Richard, 'What good are critics? We need them to excite and provoke the public,' Architectural Record, March 2000

- Pevsner Nikolaus, "Canons of Criticism", Penguin, Harmonds worth, 1971.
- Schuly-Norberg & Chiristian, "Intentions in Architecture", MIT press, Cambridge, 1965.
- Sekler, Eduard, 'The Function of Architectural Theory and Criticism', Architectural Design, August 1968 vol. 38, 347-348.


**Magazines (all editions)**

- Architectural Review
- Domus India
- Architectural Record

**University Examination Pattern**

PART-A
8 short questions 5 marks each from all modules, 40 marks
3 questions of 10 marks each from Module I, II & III, with choice to answer any two – 20 Marks
PART B
3 questions of 20 marks each from Module I, II, & III with choice to answer any two – 40 Marks

## ELECTIVE – IV
## 2. TOURISM AND ARCHITECTURE

**Objective:**

This course is designed to explore and generate understanding about the importance of architecture, architectural tourism and the developmental processes involved in making of tourist destinations.

**Module I**

Define Tourism- Tourism as an Industry. Architecture as a tool as well as a setting for tourism. Tourism products, Characteristics of Tourism products. Brief history of tourism. Different types of tourism.

**Module II**

Tourism and development. Need for accommodations, choices of accommodations.
Traditional architecture and tourist accommodations. Hill resorts, Sea side resorts, Lake Side resorts, House boats ,conventional hotels etc. Traditional and Vernacular architecture and its relevance on promoting tourism.

**Module III**

Tourism environment and Society. Tourism and natural environment. Tourism destination development.
Architectural impacts of tourism. Historic towns of India - Impacts on their architecture. and their tourism development. Impacts on eco-sensitive areas heritage sites.
Eco -tourism, Sustainable tourism . Need for sustainable tourism development.
Tourism and Resort architecture in Kerala- Case studies (its
architecture and environmental impacts)

**References**


1. Alen A. Lew & Michael Hall – 'A companion to Tourism', Blackwell Publishing.
2. Martin Opperman & Kye-Sung Chon-'Tourism in developing countries'
3. Roy A Cook,Laura.J Yale. 'Tourism the Business of Travel '.
4. Stephen .J Page- 'Tourism Management ,Managing for Change',
   Elselver Publishers- NewDelhi.
5. Sunil Gupta- 'Tourism towards 21st century'.
6. Anu Rowe,John D. Smith- 'Travel and Tourism, Cambridge press'.
7. P.C.Sinha- 'Tourism Management'.
8. Puspinder S. Gill- 'Dynamics of Tourism', Anmol Publishing Pvt Ltd
9. Salah Wahab- 'Tourism development and growth'


**University Examination Pattern**

PART-A

8 short questions 5 marks each from all modules, 40 marks

3 questions of 10 marks each from Module I, II & III, with choice to answer any two – 20 Marks

PART B

3 questions of 20 marks each from Module I, II, & III with choice to answer any two – 40 Marks

## Elective IV

## 3. SERVICES IN TALL BUILDINGS.

## Objective:

To understand the complexity in design of services in tall buildings and to provide safe and efficient services.

**Module -I**

Introduction-High rise buildings-definition. Services in High Rise Buildings – Standards - integration of Services – Relative costs -aspects of Service Design – Concepts of Intelligent Architecture- Building Service Automation.

**Module II**

Water Supply, Drainage and Fire safety in tall buildings-Water Supply and waste water system planning-collection systems – Water storage and distribution systems –Rain water harvesting – Sewage treatment-Recycling and reuse of water.

Fire Safety in high rise buildings- Planning and Design for fire safety- Fire Detection and Fire alarm systems –Provisions in the NBC

**Module –III**

Lighting, Ventilation and Air-Conditioning in tall buildings

Natural lighting systems – Energy efficiency in lighting systems – Load and Distribution – Planning for intelligent lighting system.

Natural and Mechanical Ventilation Systems – Air-conditioning systems and load estimation –Planning and Design –Automation and energy Management.

Planning of vertical transportation in tall buildings-Planning of surveillance system

**References**


1. 'National Building Code of India'2005– Bureau of Indian Standards, 2005.
2. Manual on Water Supply and Treatment (1991) third Edition, Central Public Health and Environmental Engineering Organization, Ministry of Urban Development, New Delhi.
3. W.G. McGuiness and B.Stein 'Mechanical and Electrical equipment for buildings, John Wiley and sons Inc., N.Y.
4. Riley Shuttleworth,(1983)'Mechanical and electrical Systems for Construction', McGraw Hill BookCo. U.S.
5. ASHRAE: Handbook–HVAC Systems and Equipment (1992), HVAC Applications (1991) ASHRAE, Inc. Atlantla.
6. Energy Conservation building code-2007-Bureau of Energy Efficiency-Govt. of India.
7. ISHRAE the Hand Book on Green Practices.


Note: Site Visit of different construction stages of Air conditioning, Water supply, Drainage, Firefighting and Vertical transportation systems shall be incorporated and students shall submit a report as part of their field study.

**University Examination Pattern**

PART-A

8 short questions 5 marks each from all modules, 40 marks

3 questions of 10 marks each from Module I, II & III, with choice to answer any two – 20 Marks

PART B

3 questions of 20 marks each from Module I, II, & III with choice to answer any two – 40 Marks