

# RAJIV GANDHI PROUDYOGIKI VISHWA VIDYALAYA, BHOPAL (M.P.)

## SCHEME OF EXAMINATION - BACHELOR OF ARCHITECTURE

### FOURTH YEAR – EIGHTH SEMESTER

#### SEMESTER – VIII

S. No.	Course Code	Subjects	Period Per Week		Total Teaching Hours	Distribution of Marks												Grand Total	Total Credits
						Theory Block					Theory Exam Duration (Hrs.)	Practical Block							
						End Sem exam	MST	Quiz Assignment	Total theory block	Credits		End Sem	Term work/ Sessional	Continuous Assessment	Total Practical block	Credits			
			L	STUDIO / T	Total Contact Hour	I						II					I+II		
1	AR421	Thesis Project	-	23	23	-	-	-	-	-	-	300	200	120	620	23	620	23	

**AIM:** All the four years of learning architectural design and allied subjects culminate in design thesis project to motivate a student in investigative attitude individual methodology, thus to train in handling projects independently. The Architectural Thesis is the culmination of the development of the student's knowledge, attitudes and skills over the course of studies in architecture. It is an occasion for exercising conscious choices in the field, based on the student's personal abilities and inclinations, and for testing out his commitment.

#### **Course Content:**

#### **Thesis Project:**

Each student will select a subject of an architectural interest in consultation with the committee appointed by the Head / Principal of the Dept. /Institution. The subject will have to be approved at the beginning of the eighth semester. The evolution of the thesis project will be continuous and the student will have to give at least three seminars/ submissions before the final submission. The thesis project shall be submitted in the form of bound report, drawings, models etc. in a manner as stipulated in THESIS MANUAL on the date prescribed by the Department. The student, in consultation with the faculty, is expected to demonstrate through an imaginative approach, his expertise in effecting positive changes in our built environment.

**Note:** Architecture work programme and Architecture thesis manual shall be supplied by the department.

Final Scheme of Examination, (4+1) for Bachelor of Architecture (B. Arch.), RGPV, Bhopal, w. e. f. July 2010 batch.

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### **LIST OF TEXT AND REFERENCE BOOKS:**

#### **AR 421 - Thesis Project**

1. Thesis manual: SOA Publications (for private circulation only)
2. Instruction Manuals on report writing.
3. Relevant Books as per topic
- 4 - "Planning by E. & O.E". Liffé book Ltd., London.
5. D.E. CHIRAIRA & CALLENDAR, "Times Saver Standard for Building Types".
6. RUDOLF HERGE, "Nuferts Architects Data", Cross By Lockwod & Sons Ltd.
7. EDWARD D. MILLS, "Planning The Architects Hand Book".
8. National Building Code.

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2	AR422	Urban Design	3	2	05	50	20	10	80	03	03	25	20	10	55	02	135	05

**Aim:** The objective is to develop an understanding of Urban Design through their evolution in history and it being an integral part of the architecture at bigger level. It is seen as a course that addresses issues of urban environment and sustainability. The studio will also look at the further development of the first term architectural design project in urban peripheries context to understand the overall impact of architecture..

**Course content:**

- Definition of Urban Design, scope of urban design in Indian context and its integration with urban planning.
- Historical development and approaches to Urban Design, spatial design, classical, functional, ornamental etc. space orders.
- Urban form and its elements, visual order of forms, sequence, scale, visual space dynamics. Various surveys needed to document visual aspects of environments.
- Urban design concepts of Doxiadis, Sarinen, Kelvin Linch, Le Corbusier and others.
- Urban structure and design rational inter- relationship economic activities, public organization, communication systems. Urban conservation and land use structure.
- Review and designing of urban renewal and redevelopment projects for old and new towns.

**Note:** Sessional will be in the form of drawings and reports on the study on any area, identification of the problem areas and proposals in the form of drawings for the same.

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### **LIST OF TEXT AND REFERENCE BOOKS:**

#### **AR422 - URBAN DESIGN**

1. GALLION "Urban Pattern:, CBS Publishers & Distributors.
2. S. PAUL D., "Urban Design and Architecture".
3. PETER KATZ, "The new Urbanism", McGraw Hill.
4. ZURICH GOLDERTAL, "Space Time and Architecture", Printed in U.S.A.
5. GORDEN CULLEN, "Town Scape".
6. BACON, EDMUND N., "Design of Cities", Thames.

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3	AR423	Professional Practice	2	1	03	50	20	10	80	02	03	-	20	10	30	01	110	03

AIM: The objective of this subject is to equip the students with sufficient knowledge of professional practice, code of conduct and ethics. Along with the students shall be well equipped with the knowledge of valuation and arbitration

#### Course Contents:

1. Introduction to Architectural Profession, Role of Professional Bodies, the Architects Registration Act, 1972.
2. The duties, liabilities and relationships of client, contractor and other technicians. The code of professional conducts and conditions of engagement of Architects. Scale of remuneration for Architectural services and mode of payments.
3. Types of tenders, tendering process, Execution of contract, Problems in operation of contract.
4. Architectural competitions, office organisation, administration & management, documentation & maintenance of accounts, Arbitration, Easement and laws relating works, Dilapidation and waste.
5. Office organization and administration, nature of partnership, registration and dissolution of firms. Statutory obligations, office managements, filing of documents and drawings, accounts and audits, staff personals, their salaries, incentives etc.
1. Valuation: Importance of valuation for rental, income/wealth tax, selling/ purchasing. Values, sinking fund, capitalized cost year purchase, methods of depreciation and valuation tables Mortgage/ lease, fixation of rent of private/ Govt., residential, commercial buildings etc. Different methods of valuation. Valuation reports, duties and responsibilities as registered government valuer
2. Arbitration: Role and qualities of an arbitrator. Arbitration act-1940 with amendment till date Arbitration with reference to competitions, valuation, contract, land disputes and legal implications.

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Note: The students shall prepare the presentation on these topics and present on ppt.

### **LIST OF TEXT AND REFERENCE BOOKS:**

#### **AR423 - PROFESSIONAL PRACTICE**

1. R. H. NAMAVATI, "Professional Practice", Lakhani Book Depot.
2. H. H. TURNER, "Architectural practice and Procedure", B.T. Batsford Ltd.
3. I.I.A Publications (Articles of Agreement, scale of professional charges, competitions).

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4.	AR424	Elective I *	3	2	05	50	20	10	80	03	03	25	20	10	55	02	135	05

AR424 - Elective I–(Any One): 1. Interior Design 2. Sustainable Architecture 3. Disaster Management & Earthquake Resistant Structures

1. Intelligent Building Systems 5. Architectural journalism 6. GIS & Remote sensing

#### 1. AR-424 ELECTIVE – I - INTERIOR DESIGN

- Understanding the need for design of interiors. Effect of build spaces/interior spaces on human psyche. Historical background of interior design and international perspective.
- Interior space character, classification categories and quality. Elements of interior space. The built environment, the living interiors in today's context.
- Space, form, colour, abstract, spatial expression. The base plane, the overhead plane, the verticals, the intermediates. Visual aspects, visual control, illusions. Visual art appreciation: A brief look of Major Art Movements that have affected design.
- Interior climate, orientation of interior space with respect to outdoor climatic forces. Outdoor climate study, study of micro climate. Spatial layout for best comfort in doors with respect to natural climate. Air movement, natural illumination, natural heating/cooling, artificial interior environment-artificial illumination, artificial climate, air conditioning etc.
- Elements of interior design: A study of the latest available, materials, furniture/fittings, past, present and future and international perspective. Water and plants in interior design. Drainage, plant species, plant care etc. Sound modulation in interior spaces. Practical examples and exercise for all the above.

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Note: Design problems in interior design to bring out the originality, innovativeness, and the best of imagination from the students, preparation of scrap books.

LIST OF TEXT AND REFERENCE BOOKS:

### **AR-424 ELECTIVE – I (INTERIOR DESIGN)**

1. T.S.S. for Interior design.
2. AHMED A. KASUR, “Interior Design”, Iqura Pub.
3. JOHN CULLEN, “The lighting handbook” Pelham Books.

### **1. AR-424 ELECTIVE – I - DISASTER MANAGEMENT & Earthquake Resistant Structures**

Aim: The objective is to develop an understanding of disaster and its management at pre and post disaster conditions, knowledge gained through the study of history of various types of disaster and their management. It is seen as a course that addresses issues of disaster and their management.

**Course content:**

#### **DISASTER MANAGEMENT**

- Types of disaster, meanings and related definitions.
- Causes and effects of natural hazards.
- Disaster profile of India.
- Disaster preparedness and response and rehabilitation.
- Roles and responsibilities of different agencies.

#### **Earthquake Resistant Structures:**

Note: Sessional will be in the form of report on the above topics and prepare a report for disaster management for a given hypothetical / real site/ building.

### **4. AR-424 ELECTIVE – I Intelligent Buildings Systems**

1. Introduction & Origins of the Intelligent Building Concept:  
Definition and characteristics of Intelligent Buildings, A brief history of the Development of I.B. Concept through recent times highlighting.  
Automated buildings (1981-1985)  
Responsive buildings (1986-1991)  
Effective Buildings (1992-1997)



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2. Study of Concepts of Building Management (facility management), Effective Space Management, Business management and the various models of Building Intelligence.
3. Technology Evolution and the IT market place: Present technological context, Exploration of user IT systems, IT demands on building and services, Building Control systems, study of development of Computer Integrated Building from single function systems to integrated solutions.
4. Key Issues for Intelligent Buildings: Multiple activity settings, Generic analysis of space utilization, Models for shared space use. The development of briefing process including design activity and building element life- cycles, the match between organizational requirements and building technologies, A brief study related to Site issues, Shell issues, Skin issues, Building services and technology issues.
5. Managing the Building: Study and importance of facility management planning & operation techniques.
6. Intelligent Design & Construction: Client expectations, use of IT for effective communication of architectural ideas to clients, locating people and information, introduction to building efficiency studies with respect to life cycle costs.

NOTE: There will be study assignments given to students on various Units.

### **LIST OF THE REFERENCE BOOKS:**

#### **AR 424 – ELECTIVE – I (Intelligent Buildings Systems)**

“Payne, F. William, “Strategies for energy efficient Plants and intelligent buildings” Fairmont Press, USA, Distributor Prentice Hall India, New Delhi.

#### **5. AR 424 – ELECTIVE – I - ARCHITECTURAL JOURNALISM**

- Journalism in general
- Theories of journalism
  - Techniques and processes
- Contemporary Architectural journalism
- Digital Journalism
- Architecture, Arts and Journalism / Media

Note: There will be study assignments given to students on the above mentioned course.