

**B.Arch. Exam.
1st to Xth Semesters**

Prospectus No. 101721

**संत गाडगे बाबा अमरावती विद्यापीठ
SANT GADGE BABA AMRAVATI UNIVERSITY**

(FACULTY OF ENGINEERING & TECHNOLOGY)

PROSPECTUS

**PRESCRIBED FOR
DEGREE OF BACHELOR OF
ARCHITECTURE,
(FIVE YEAR DEGREE COURSE)
SEMESTER PATTERN**

1st to Xth Semesters Examinations, 2009-2010



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Prof. J.S.Deshpande
Registrar,
Sant Gadbe Baba
Amravati University

PATTERN OF QUESTION PAPER ON THE UNIT SYSTEM

The pattern of question paper as per unit system will be boradly based on the following pattern.

- (1) Syllabus has been divided into units equal to the number of question to be answered in the paper. On each unit there will be a question either a long answer type or a short answer type.
- (2) Number of question will be in accordance with the unit prescribed in the syllabi for each paper i.e. there will be one question on each unit.
- (3) For every question long answer type or short answer type there will be an alternative choice from the same unit. However, there will be no internal choice in a question.
- (4) Division of marks between long answer and short answer type question will be in the ratio of 40 and 60.
- (5) Each short answer type question shall Contain 4 to 8 short sub question with no internal choice.

**SYLLABUS PRESCRIBED FOR
FIVE YEAR DEGREE COURSE
BACHELOR OF ARCHITECTURE
SEMESTER PATTERN**

SEMESTER : FIRST

**1 SA 1 BASIC ARCHITECTURAL DESIGN-I
(SESSIONAL WORK)**

Aim: Study of elements of visual and aesthetical importance in two dimensions and three dimensions and relating these to architecture by preparing plates.

1. Basic elements : point, line, plane, size, and shape, volume, solid and voids.
 2. Design principals : scale and proportion, symmetry balance, harmony, rhythm, movement, contrast.
 3. Visual sensation : texture, perception, light visual tension.
 4. Composition of two dimensional elements.
- Viva Voce by internal Jury at the end of Semester.

1 SA 2 BUILDING CONSTRUCTION-I

Aim: While giving knowledge of building elements emphasis should be on reasoning so as to enable student to evolve and apply alternative materials of construction.

1. Elements of buildings : foundation, plinth, super structure, roof. General idea of load transfer.
 2. Simple foundation for load bearing walls, pillars in stone bricks.
 3. Timbering for trenches.
 4. Masonry : different types of bonds in stone masonry and brick masonry.
- Plates on above topics and internal Viva-Voce.

**1 SA 3 ARCHITECTURAL GRAPHICS-I
(SOLID GEOMETRY AND SCALE DRAWING)**

1. Different scales and their uses in drawings.
projections - orthographic, isometric.

2. Geometrical forms in different positions, interpenetration of solids, sections of solids.
 3. Complex forms, development of surfaces, viz-vaults, mouldings etc., different intersections.
 4. Problems on simple architectural presentation, architectural lettering, colouring and batching, various presentation techniques in pen, ink, colour and different medium.
- Plates and Viva-Voce by internal Jury at the end of Semester.

**1 SA 4 VISUAL ARTS-I
(SESSIONAL WORK)**

1. Brief historical review of development of fine arts, visual arts, sculpture and painting.
 2. Principles of visual arts - proportion, balance, contrast, texture and visual effects, optical illusion.
 3. Study of colours, combinations, visual properties, psychological effects.
 4. Study of shades and shadows.
 5. Sketching of natural and man made objects.
- Plates and Viva-Voce by internal Jury at the end of Semester.

1 SA 5 COMMUNICATION SKILLS

1. Improving word power and processes of expression.
 2. Architectural vocabulary, viz-various architectural terms - avenues, plazas, vistas, serial vision, barrier, etc.
 3. Business letters and office correspondence, inspection reports.
 4. Public speaking on topics related to architecture with audio-visual aids.
- (Assignments on above topic should be prepared.)

1 SA 6 STRUCTURE-I

1. Coplaner Statics :
 - i) Axioms of statics and basic concepts, parallelogram law of forces, equilibrium of two forces, principles of transmissibility, super position and law of action and reaction.
 - ii) composition and resolution of forces, concurrent parallel and general force systems, moment of force couple, equilibrium of bodies, force body diagram, conditions of equilibrium.

iii) types of support, reaction at support of simple supported beams and trusses.

2. Trusses :
Simple plane trusses, solution by method of joints, methods of section.
3. Properties of areas :
 - i) Centre of gravity, centre of gravity of plane figures, solid bodies, method of finding out centre of gravity.
 - ii) Moment of Inertia of plane area, methods of finding of M.I., principles of moment of inertia.

1 SA 7 BUILDING MATERIAL-I

Aim: Study of materials used commonly for building construction in rural and urban areas with their methods of manufactures, applications in building fixing methods, properties and behaviour in different atmospheric conditions.

1. Bricks : mud stabilized bricks, burnt bricks.
2. Stones of different types.
3. Different types of mortars.
4. Different types of timbers used in buildings.
(Assignment should be prepared on above topics.)

1 SA 8 HISTORY OF CULTURE-I

Aim: Relationship of Culture and Architecture.

1. Historical reviews, different arts, their developments and impact on growth of culture.
2. Study of Western Civilization in brief.
Mesopotamian, Egyptian, Greek, Roman etc.
3. Impact of religious and social factors on growth of Civilization and Architecture.
4. Study of Chinese Civilization, Indus Valley Civilization.
(Assignment should be prepared on above topics.)

1 SA 9 WORKSHOP-I (SESSIONAL WORK)

1. Introduction to various tools used in carpentry, modelling and plumbing etc.
2. Preparing the blocks and sculptures of P.O.P. and clay and planing and carving the surfaces, relief work and crafting various shapes.
3. Preparing the various carpentry joints.

SEMESTER : SECOND

2 SA 1 BASIC ARCHITECTURAL DESIGN-II (SESSIONAL WORK)

(Preparing plates on following topics and Viva-Voce at the end of Semester.)

1. Form and Composition : creation of three dimensional composition of different shapes and forms of architectural nature to understand design principles.
2. Introduction to space concept in relation to external and internal form, relation of space and volume.
3. Composition and aesthetical appeal.
4. Relationship between human activity and space circulation pattern and arrangement of furniture.

2 SA 2 BUILDING CONSTRUCTION-II

1. Different types of simple doors and windows in timber - panelled / glazed, joints in timber work, different fixtures and fastenings for doors and windows.
2. Timber roofs and floors for different spans with fixing of roofing materials.
3. Arches : different types in stone and brick, lintels, D.P.C. coping etc.
4. General idea of framed structures its advantages and suitability.
(Plates on above topics and internal Viva-Voce)

2 SA 3 ARCHITECTURAL GRAPHICS-II (STUDY OF ANTHROPOMETRY AND SPACE DESIGNING)

1. Study of anthropometry of different activities of human being, spaces required for them.
2. Measure drawings of furniture and building elements, like doors, windows, wardrobe, toilet etc.
3. Movement and circulation in different activities, furniture layout for different activities.
4. Designing small shelters for simple activities, like road, side kiosk, bus stop etc.
(Plates on above topic and internal Viva-Voce)

2 SA 4**VISUAL ARTS-II
(SESSIONAL WORK)**

1. Modelling : models with different materials, clay modelling, models of simple architectural buildings.
2. Photography of knowledge of camera and different accessories required in photography.
Photography of models and buildings to emphasise elements of visual importance.
(Assignment should be prepared on above topics.)

2 SA 5**BASICS OF COMPUTER GRAPHICS-I
(SESSIONAL WORK)**

Aim: This subject aims at making the students familiar with the computer application in Architecture.

1. Introduction to computers, Hardware, Software, components and devices, current trends etc.
2. Use of computer in architecture and architectural profession.
3. Introduction of various programmes like paint brush, words, excell, autocad etc.

Assignment : preparing mural and collage in paint brush, assignment in Microsoft Excell, basic AutoCad commands.

2 SA 6**STRUCTURE-II**

1. Graphic statics.
 - i) Force polygon and funicular of polygon for a coplaner force system, conditions of equilibrium.
 - ii) Reactions at the supports of simply supported beams and trusses.
 - ii) Simple trusses and Maxwell diagrams.
2. Shear force and bending moment.
 - i) for cantilever beams.
 - ii) for simply supported beams including over hangs.
3. i) Elementary dynamics of systems of units, rectilinear translation with uniform acceleration.
ii) Strusses and Strain : simple stress and strain, direct and shear strusses, Hook's law, stress-strain for stad concrete proportional limit, Yield point, ultimate stress, factor of safety.

2 SA 7**BUILDING MATERIAL-II**

1. Lime and lime mortar, cement and cement mortar, different types of concrete for different uses in buildings.
2. Types of concrete and its uses for different purposes.
3. Iron - W.I., C.I., Steel and its uses from ancient period to modern period in building constructions
4. Glass - different types of glass for different purposes in buildings.
(Assignment should be prepared on above topics)

2 SA 8**HISTORY OF CULTURE-II**

1. Indus valley civilization, culture and architecture of ancient India.
2. Effect of Persion and Greek, Islamic invasions on Indian culture and architecture.
3. Effect of religions on culture and architecture of India with respect to Buddhism and Jainism.
4. Effect of socio polytical and climatic conditions on development of culture and architecture in Northern and Sourthen part of India with reference to planning of villages, residences and places of woships etc.
5. Vandy movements in architecture, viz-Art-Novou, Bahaus, mechanization and industrial revolution.
(Assignment should be prepared on above topics.)

2 SA 9**WORKSHOP-II
(SESSIONAL WORK)**

1. Introduction to various building construction tools and equipments, viz. - plumb, trowel, mixers, vibrators etc.
2. Quality testing of various building materials like sand, brick, steel and cement.

SEMESTER: THIRD**3 SA 1 ARCHITECTURAL DESIGN-I**

Study of horizontal circulation & furniture layouts for single and or double functions in consideration with following aspects :-

- 1) Climatic considerations
- 2) Composition and aesthetical considerations
- 3) Materials for construction and finishing w.r.t. colour, texture etc.
- 4) Study of spaces created and space organisation Simple design for :-
 - a) Residential building b) Lower level schools c) Dispensaries
 - d) Residence cum commercial activities, viz. Doctor residence and clinic, Architecture residence and studio etc.

3 SA 2 BUILDING CONSTRUCTION-III

- Unit I : Construction technology suitable to rural areas. Rammed earth construction (Adobe), stabilized mud block construction; Timber frame construction.
- Unit II : Different types of timber doors and windows. Different types of stair cases in timber construction.
- Unit III : Principles of load bearing construction and frame structure construction. Components of R.C.C. frame structure building, viz. Column, Beam, Lintel, Chajja, Column Foundation. Plates on above topics and internal viva.

3 SA 3 STRUCTURES-III

- Unit I : 1. Simple stresses and strains : introduction, shear stress, Poissons ratio, Modulus of Elasticity, modulus of rigidity, bulk modulus, bars of varying section, bars of uniform section, temperature stresses, Hoop stress, volumetric strain, rectangular block subject to normal stresses.
2. Strain Energy : in tension, compression and shear, tension member under impact load.
- Unit II : Stresses in Beams :
1. theory of bending of beams, distribution of bending and shearing stress on horizontal sections.
 2. slope and deflection for cantilever and simple supported beam.
- Unit III : Direct and Bending Stresses : eccentric loading on short column, earth pressure and wide pressure elementary theory, stability and stress distribution for retaining walls and chimneys, middle third rule.

SESSIONAL WORK : Assignment and class tests on above topics.

3 SA 4 HISTORY OF ARCHITECTURE-I

The study shall include planning considerations and organisation of spaces. Study of construction methods and evolution of building form. Study of architectural considerations. Impact of Socio Political conditions.

- Unit I : Western Historical examples from :-
- 1) Egypt 2) Greece 3) West Asiatic 4) Rom
 - 5) Byzantine 6) Romanesque and Renaissance 7) Gothic
- Unit II : Study of Indus Valley civilization and Vedic period. Study of ancient town planning and development in planning of buildings.
- Unit III : Study of Buddhist architecture : Stupas, Viharas and Chaitya Halls - Sachi, Amravati. Rock art architecture.

3 SA 5 APPLIED CLIMATOLOGY-I

- Unit I : Introduction to climatic environment and its components, effect on human comfort, heat balance and bio-climatic analysis.
- Unit II : Macro and Micro climatic conditions, study of World climatic zones and tropical zones in particular temperature, Rain fall humidity, wind, heat transfer etc.
- Unit III : Collection of climatic data, measurement of climatic factors, traditional and modern methods. Introduction to equipments for measurement. Presentation of the data, solar chart, Wind Rose diagrams and graphs.

3 SA 6 COMPUTER GRAPHICS-I

- Unit I : Introduction to computer language, software, hardware, CPU, elementary idea. Introduction to PASCAL.
- Unit II : PASCAL fundamentals - PASCAL character set, reserve words, identifier, numbers, strings, data types, constants, variables, expression and statement, procedure and functions.
- Unit III : Simple type data, integers, real character, Boolean data types, input and out put files. the READ statement, READ in statement EOC and E functions, WRITE statement and written statement formatted out put.

Assignments on Class Work.

3 SA 7**BUILDING MATERIALS-III**

- Unit I : Building cladding & finishing materials with their properties & behaviour in different climatic conditions-like curtain walls. Paints & paving materials - natural & artificial. Modern materials viz. fibre, polycarbonate etc.
- Unit II : Materials for 1) plumbing & sanitation as electrical installations for air cooling.
- Unit III : Materials for different types of partitions & ceiling viz. Aluminium & other modern materials. Materials for furnishing in interiors.”

3 SA 8**GRAPHICS-I
(PERSPECTIVE AND SCIOGRAPHY)**

- 1) One point perspective of simple blocks
- 2) Two point perspective of simple blocks
- 3) Sciography of simple building elements in plan and in elevation.

3 SA 9**SURVEYING AND LEVELLING-I**

- Unit I : Different types of Surveying methods : chain and compass survey method and the use of different instruments - Plotting and adjustment of closing error.
- Unit II : Plane Table Survey - equipments, methods of plane tabling, Theodolit - transit theodolit, temporary adjustments, setting out horizontal and vertical angle - Face left and Face right observations.

SEMESTER: FOURTH**4 SA 1****ARCHITECTURAL DESIGN-II**

In addition to considerations in the subject 3 SA 1 ARCHITECTURAL DESIGN-I :-

Study of Vertical circulations with respect to two storied buildings having single and or double functions. Building types

4 SA 2**BUILDING CONSTRUCTION-IV**

- Unit I : Timber, floors and trusses for different spans. Timber partitions and ceilings.
- Unit II : Steel trusses for different spans with fixing of sheels. Advantages of steel construction or R.C.C. and connections of different member.
- Unit III : Steel doors and windows of different types with fixing and fixture details.

4 SA 3**STRUCTURE-IV**

- Unit I : Long Columns : under axial load, Ruler's theories of long columns, limitation of Rulers formula, Rankines theory, Straight live formula.
- Unit II : 1. Fixed beams with concentrated and uniformly distributed loads.
2. Continuous beams (without settlement) with uniform section by three moment theorem.
- Unit III: 1. Types of welds, design of fillet welds for tension.
2. Plate girders, properties section of plate girder, size of intermediate stresses.

Sessional Work : Assignment and class tests on above topics.

4 SA 4**HISTORY OF ARCHITECTURE-II**

In addition to the aspects given in 3 SA 4 HISTORY OF ARCHITECTURE-I, student should study Regional influence on development of architecture.

- Unit I : Study of Temples from South India, under different with different styles, viz. Dravidian Temples, Chanakyan, Vijay Nagar etc.
Examples from :- Madurai, Rameshwaram.
- Unit II : Study of Temples from North India - Temples from Gujrat, Madhya Pradesh and Rajasthan. States ch. examples - Khajuraho.
- Unit III : Study of Jain Temples - from Gujrat, Mount Abu.

4 SA 5 APPLIED CLIMATOLOGY-II

- Unit I : Climate and its effects on structure and human beings. Effects of climatic factors on buildings design, choice of building materials.
- Unit II : Designing of different types of sun shading devices, horizontal, vertical and adjustable blinds, like ventilation, sky light glare, effects of clouds on atmosphere, day light factors, natural and artificial ventilations and cooling methods.
- Unit III : Use of solar charts, shadows, angle protractor, design of size and shape of window openings with respect to - surrounding. Plotting the shadow of building, trees, sun shading devices at specific time.

4 SA 6 COMPUTER GRAPHICS-II

- Unit I : Introduction to the role of computer in architectural engineering, basic of computers graphics, difference between AUTO CAD and computer language geometric modelling with AUTO CAD.
- Unit II : Control structure, the WHILE - DO - structure. The repeat UNTIL structure, Nested control structure, IF structure, CASE structure, GOTO structure.
- Unit III : Introduction to commands on AUTO CAD, different AUTO CAD versions, basic commands like points, line plane, circle arc, solid text, layers, style. UNDO, CLOSE, EDIT, OOPS etc. Project work on AUTO CAD.

4 SA 7 DESIGN FUNDAMENTALS

- Unit I : Reinterpretation of terminologies w.r.t. buildings and building facades.
- 1) Composition and balancing
 - 2) Fenestrations and aesthetical considerations.
 - 3) Difference between building and style.
- Unit II : Study of external circulation and spaces w.r.t. grouping of buildings. Study of terms - Monotony, sky line, build forms, focus.
- Unit III : Effect of Visual art on architecture.
Types of ornamentation viz. :-
- 1) Applied ornamentation
 - 2) Structural ornamentation
 - 3) Inherent ornamentation

Unit IV: Design considerations for physically handicapped senior citizens.

4 SA 8 GRAPHICS-II (PERSPECTIVE AND SCIOGRAPHY)

- 1) Perspective of composite blocks.
- 2) Birds eye view, Worm's eye view.
- 3) Sciography of building elements on object in perspective.

4 SA 9 SURVEYING AND LEVELLING-II

Unit I: Different methods of Levelling - reduction of levels and checks, different types of levelling instruments, temporary adjustment. Counters Plotting and use.

Unit II: Methods of repetition and refraction - prolonging of straight line setting out conditions of building.

PRACTICALS :

- 1) Chain and Compass Surveying.
- 2) Levelling
- 3) Plane Table Surveying
- 4) Use of Theodolite to find out the height of building or spire
- 5) Use of Planimeter, Abney level, Box Sextant Tangent
- 6) Setting out the foundation of a building.

SESSIONAL WORK :

Each student will have to submit reports on two projects consisting of imperial size sheet/ journals comprising of the exercise on the above referred "Practicals"

SEMESTER : FIFTH**5 SA 1 ARCHITECTURAL DESIGN-III**

Study of subject Architectural Design will continue further with emphasis on topography & climatic conditions.

Design process : literature study of impact of above aspects on designing, case study & building relevant to given design problems. Form to suit the purpose of building.

Types of problems : Duplex housing with sloping site, Hostel, Library, Club or Holiday Resort etc., Two major & one time problems.

Sessional assessment on presentation, seminar & submissions.

5 SA 2 APPROPRIATE TECHNOLOGY-I

Study of the subject will make student aware of different materials & construction methods appropriate to different situation, viz. rural/urban housing, temporary structures for natural calamities/exhibitions.

Unit I: Relevance of appropriate technology in present context, viz. energy saving, alternate resources of energy & materials suitable to it. Behaviour building form materials in natural calamities (Earthquake, Cyclone & Floods)

Unit II: Innovative construction methods, reinforced brick panels for roof & different types of roofs, viz. Vaults, Domes using bricks etc.

Unit III: Different types of R.C.C. foundations, viz. pile foundation, raft & strip foundation. Rolling shutters, sliding doors, collapsible gates.

Sessional Work : Plates / Assignments on above topics & internal viva.

5 SA 3 STRUCTURE-IV

Unit I: 1) design of steel columns of single and composite sections.

2) design of roof truss members.

3) stability of masonry retaining walls.

Unit II: 4) Reinforced Cement Concrete : introductory and general, material, proportions & principles

of cement concrete, workability, w/c ratio, testing of concrete.

5) design of rectangular sections for moment and shear.

Unit III: 6) moment of resistance of doubly reinforced R.C.C. rectangular sections.

7) moment of resistance of RCC T beams.

8) Two way slabs with various edge conditions.

Sessional Work : Assignments & class test on above topics.

5 SA 4 HISTORY OF ARCHITECTURE-III

Study of the subject proceeds further with influence of Islam on Indian Architecture with reference to construction techniques, new forms of architectural features.

Unit I: Study of imperial style & provincial style, study of regional styles such as Jampur, Ahmedabad & Bijapur, Bengal with reference to above mention points. Colonial Period (British & Portuguese) architecture.

Unit II: Study of Moghal architecture through examples from Delhi, Agra, Fatehpur Sikri, Shrinagar & other places. Palaces of Rajasthan.

Unit III: Study of Asian architecture - through examples from - Srilanka, Malasiya, Bali, China, Japan & Pakistan.

Sessional Work : Sketches on above units & test / assignments.

5 SA 5 BUILDING SERVICES & EQUIPMENTS-I

In this part knowledge of sewage disposal & equipments used for low rise buildings is given to take appropriate decision in design of building.

Unit I: Principles of sanitation, conservancy of water carriage systems. Different sanitary fittings & fixtures of fixing methods.

Unit II: Disposal of waste matter from buildings including sewage disposal from basement. Layout of simple drainage system for small houses. Various types of sanitary pipes of their joining, manholes, inspection chambers.

Unit III: Sewage disposal systems in unseward localities, viz. septic tanks, soak pits, aqua privy, cesspool, dry pits etc. for individual buildings of urban & rural areas.

Sessional : Assignments & tests on above topics.

5 SA 6**SPECIFICATIONS-I**

- Unit I: Importance of specification writing in building construction activity. Types of specifications & method of writing specification. Use of I.S. codes, P.W.D. specifications.
- Unit II: Specifications for load bearing construction with basic building materials, viz. bricks, stones, cement, aggregate, steel & timber.
- Unit III: Specifications for fixtures & fittings, carpentry, glazing etc., specifications for roofing & roof coverings, viz. tiles, sheets etc.

Sessional : Assignments & tests on above topics.

5 SA 7**ESTIMATING**

- Unit I: Types of estimates, procedures in taking out quantities and mode of measurements as per I.S. 1200, abstract of estimate, bill of quantities, schedule of rates, general methods of executing work, estimates of small residential building (load bearing construction)
- Unit II: Estimates of R.C.C. members, viz. slab, beams, columns, quantities of steel in R.C.C. member. Estimate of electrification, sanitary and water supply works for a small residential building.
- Unit III: Rate analysis, factors affecting the rate of an item, estimate of R.C.C. building with services. Rule and specification, working out rates as per specification.

Sessional : Assignments & tests on above topics.

5 SA 8**HUMAN SETTLEMENT**

- Unit I: Human settlements in India during pre-historic, Vedic, Buddhist, Mughal & British rules.
- Unit II: Planning as a team work & role of architect planner in the team. Planning during Medieval & Reonissance period. Effect of Industrial revolution in planning thought.
- Unit III: Principles of human settlements & development of planning thoughts & process. Land use planning, Urban & regional surveys, effect of regional development on planning.

Sessional : Assignments & tests on above topics.

5 SA 9**WORKING DRAWING-I**

- 1) Preparation of submission drawings as per building byelaws for a small single storied residential building with working

drawings - Foundation, L.plan, floor plan, lintel level plan, terrace plan, sections & elevation, details of doors, windows, flooring, kitchen & architectural features.

SEMESTER : SIXTH**6 SA 1****ARCHITECTURAL DESIGN-IV**

Study of subject Architectural Design will continue further with emphasis on services provided to building and use of solar energy (active/passive)

Types of problems : Multi-storied apartments, office blocks, small hospital, restaurant etc.

One major & two minor problems.

6 SA 2**APPROPRIATE TECHNOLOGY-II**

Unit I: Different types of R.C.C. roofs, viz. grid beams, flat plate slab etc. for medium span. Water proofing methods, expansion joints. North light roofing & sky light in R.C.C. roof.

Unit II: Steel structures for different spans - including foundation & roofing methods. Composite structures.

Different types of ceilings, under pinning to foundation.

Unit III: Behaviour of different building shapes (plan & elevation) in case of earthquake. Construcional aspects for earthquake resistant buildings, viz. foundations, columns & beam joints, openings, staircases etc.

Sessional Work : Plates, Assignments on above topics & internal viva.

6 SA 3**STRUCTURE-V**

Unit I: 1) design of slab - beam combination in R.C.C.

2) Design of R.C.C. columns.

3) design of signle footing in R.C.C. columns.

Unit II: 4) design of vertical walls of R.C.C. cylindrical water tanks.

Unit III: 5) seismic design principles : concept of seismic design, stiffness, strength, ductility, centre of mass, centre of gravity, torsion, importance of planning in earthquake resistance design, importance of bonds in case of load bearing buildings, seismic zoning map of India.

Sessional Work : Assignments & class test on above topics.

6 SA 4 HISTORY OF ARCHITECTURE-IV

- Unit I : Impact of modern movements and origin of modern architecture. New construction methods, materials & its impact on contemporary Indian architecture.
- Unit II : Study of works & philosophies of modern architects & its influence on contemporary architecture.
- Unit III : Post independence architecture in India, in public & private sectors. Study with the help of examples from Delhi, Chandigarh.

Sessional Work : Plates on above topics.

6 SA 5 BUILDING SERVICES & EQUIPMENTS-II

In this part of the subject information of water supply & electrical supply is given.

- Unit I : General idea of types of water impurities. Domestic water supply system (storage & distribution, treatment plants). Computing demands & supply to high rise buildings, design of storage tanks.
- Unit II : Hot water supply in high rise buildings, solar water heaters, geysers. Computing special demands for swimming pools, A.C. plants, fire fighting, gardens & fountains with schematic layout.
- Unit III : Electrical services with wiring systems. Load calculations & distribution. Electrical fittings & appliances.
Layout of electrical services in a residence. I.S.I. codes.
Modern energy saving methods.

Sessional : Assignments & tests on above topics.

6 SA 6 SPECIFICATIONS-II

- Unit I : Specifications for R.C.C. framed buildings & steel structures. Specifications for demolition work.
- Unit II : Specifications for flooring, ceilings & partitions, specifications for cladding & finishing (paints & modern materials)
- Unit III : Specifications for services, viz. drainage, water supply & electrical installation. Specifications for insulation of water proofing.

Sessional : Assignments & tests on above topics.

6 SA 7 INTERIOR DESIGN-I

- Unit I : Understanding the terms - Interior decoration & interior design. Interiors : changing concepts of interiors due to modern available materials.
- Unit II : Study of elements of interiors, viz. colour / texture of finishing materials, flooring, ceiling. Lighting schemes & colour schemes & its impact on interiors.
- Unit III : Materials of furniture, its layout, dropanes & its impact on interior. Climatic conditions & colour schemes, function of building & suitable colour scheme.

Sessional : Assignments on interiors of residential / commercial premises.

6 SA 8 COMPUTER APPLICATIONS

- Unit I : Use of computer in Architecture & in architectural profession. Computer as a tool for design. Various packages & their applications, using point-brush, 3-D Homes etc.
- Unit II : Introduction to computer aided drawing (CAD), various softwares, viz. AUTOCAD, Auto architect, 3-D studio.
- Unit III : Basics of 2-D drawing, 3-D objects.
- Sessional** : 2-D composition & computer graphics, 3-D composition, Drawing simple plans & small buildings.

6 SA 9 WORKING DRAWING-II

In continuation with previous semester, students shall be required to handle projects of greater magnitude in this semester, like R.C.C. frame structure, multistoried buildings & shall prepare following working drawings :-

- 1) All planes
- 2) Sections, Elevation
- 3) Details - Toilet, staircase, interesting features of the plans
- 4) Site plan showing land scaping, drainage layout
- 5) Water supply & electrical layout.

SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI
*** ORDINANCE NO. 42 OF 2005**

Examination in Environmental Studies leading to Bachelor Degree, Ordinance, 2005

Whereas it is expedient to frame an Ordinance relating to Examination in Environmental Studies leading to Bachelor Degree level, hereinafter appearing, the Management Council is hereby pleased to make the following Ordinance.

1. This Ordinance may be called "Examination in Environmental Studies leading to Bachelor Degree, Ordinance, 2005."
2. This Ordinance shall come into force from the Academic session 2005-06.
3. In this Ordinance and in other ordinances relating to the examination, unless there is anything repugnant in the subject or context :-
 - (i) "Academic session" means a session commencing on such date and ending with such date of the year following as may be appointed by the Management Council.
 - (ii) "Admission to an examination" means the issuance of an admission card to a candidate in token of his having complied with all the conditions laid down in the relevant ordinance, by a competent officer of the University.
 - (iii) "Applicant" means a person who has submitted an application to the University in the form prescribed for admission to an examination.
 - (iv) "Candidate" means a person who has been admitted to an examination by the University.
 - (v) "Regular Candidate" means an applicant who has applied for admission to a University examination through an affiliated college, Department or Institute in which he/she has prosecuting a regular course of study.
 - (vi) "Examinee" means a person who present himself/herself for an examination to which he/she has been admitted.
 - (vii) "Examination" means an examination prescribed by the University under the relevant Ordinance.
 - (viii) "External Candidate" means a candidate who is allowed to take a University examination in accordance with the provision of Original Ordinance No. 151.

* As amended vide Ord. Nos. 7/2006 and 10/2007.

- (ix) " Non-Collegiate Candidate" means a candidate who is not a collegiate candidate.
 - (x) An "Ex-student" is a person who having once been admitted to an examination of this University, is again required to take the same examination by reason of his failure or absence thereat and shall include a student who may have joined a college, Department or Institute again in the same class.
 - (xi) "Bachelor Degree Examination" means a examination leading to Bachelor Degree of the University.
 - (xii) "Previous Year" means a year following by final year of Bachelor Degree.
4. Save as otherwise specifically provided, the conditions prescribed for admission to the examination under this Ordinance shall apply to all persons who wish to take the examination to the Degrees of the University mentioned in para 5 below.
 5. The conditions prescribed for admission to examination under this Ordinance shall apply to following degrees of the University :-
 - 1) Bachelor of Arts
 - 2) Bachelor of Performing Arts
 - 3) Bachelor of Fine Arts
 - 4) Bachelor of Mass Communication
 - 5) Bachelor of Social Work
 - 6) Bachelor of Commerce
 - 7) Bachelor of Business Administration
 - 8) Bachelor of Science
 - 9) Bachelor of Computer Science
 - 10) Bachelor of Computer Applications
 - 11) Bachelor of Pharmacy
 - 12) Bachelor of Science (Home Science)
 - 13) Bachelor of Technology (Cosmetics)
 - 14) Bachelor of Engineering
 - 15) Bachelor of Engineering (Part Time) (Civil)
 - 16) Bachelor of Textile
 - 17) Bachelor of Technology (Chemical Technology)
 - 18) Bachelor of Technology (Chemical Engg.)
 - 19) Bachelor of Architecture, and
 - 20) Bachelor of Laws (Five Year Course)
 6. i) Environmental Studies shall be a compulsory subject for a previous year examination of the following Bachelor Degrees of the University,
 - 1) Bachelor of Arts

- 2) Bachelor of Performing Arts
 - 3) Bachelor of Fine Arts
 - 4) Bachelor of Mass Communication
 - 5) Bachelor of Social Work
 - 6) Bachelor of Commerce
 - 7) Bachelor of Business Administration
 - 8) Bachelor of Science
 - 9) Bachelor of Computer Science
 - 10) Bachelor of Computer Applications
 - 11) Bachelor of Pharmacy
 - 12) Bachelor of Science (Home Science)
 - 13) Bachelor of Technology (Cosmetics)
 - 14) Bachelor of Engineering (Part Time) (Civil)
- ii) Environmental Studies shall be a compulsory subject for IIIrd & IVth Semester of the following Bachelor Degrees of the University,
- 1) Bachelor of Engineering
 - 2) Bachelor of Textile
 - 3) Bachelor of Technology (Chemical Technology)
 - 4) Bachelor of Technology (Chemical Engineering)
 - 5) Bachelor of Architecture, and
- iii) Environmental Studies shall be a compulsory subject for Vth & VIth Semester of the Degree of Bachelor of Laws (Five Year Course)
- iv) Students admitted to Second Year/Third Year/IVth Semester/ VIth Semester of various degree examination courses in different Faculties in the academic session 2005-06 or thereafter shall have to appear for examination in the subject Environmental Studies.
7. The main examination leading to Environmental Studies shall be held in Summer and supplementary examination in Winter every year, at such places and on such dates as may be appointed by Board of Examinations.
Explanation:- Examination shall be conducted on the basis of one common question paper for all Bachelor Degree Examination courses irrespective of annual or semester pattern.
8. Scope of the subject for annual pattern examination and or semester pattern examination shall be as provided under the syllabus.
9. Common question paper for all courses covered under this Ordinance alongwith answer books shall be supplied by the University to the Colleges, Departments and Institutes for conducting the examination of the subject.

10. Valuation of the answer books relating to this subject shall be done at College/Department/Institution level only. Remuneration for valuation of answer books shall not be paid by the University.
Provided that prescribed evaluation fee for evaluation of each answer book/s of an external examinee/s appeared from the examination centre shall be paid to each examination centre.
11. It shall be obligatory on the part of the College/Department/Institute to submit candidate wise following information to the University on or before the date as may be prescribed by the University :-

Sr. No.	Grade/Category	Marks secured
1.	“A”	- 60 and above
2.	“B”	- 45 to 59
3.	“C”	- 35 to 44
4.	“D”	- 25 to 34
5.	“Fail”	- 24 and below
6.	“Absent”	

12. For the purposes of teaching, learning and examination, the Committee consisting of three teachers shall be appointed by the Principal/ Head of the Department/Head of the Institution under his/her Chairmanship/ Chairpersonship. While appointing three teachers on the said committee, the Principal shall take care that the teachers to be appointed on the committee, if necessary, shall be from different faculty.
13. i) Duration of theory examination of this subject shall be three hour.
ii) For all Bachelor Degree examinations, common question paper of 100 marks shall be provided by the University.
iii) Distribution of these 100 marks shall be as follows :-
- | | | |
|---|---|----------|
| a) Part-A, Short Answer Pattern | - | 25 Marks |
| b) Part-B, Essay type with inbuilt choice | - | 50 Marks |
| c) Part-C, Essay on Field Work | - | 25 Marks |
14. Medium of instruction shall be English or Marathi or Hindi. Question paper shall be supplied in English and Marathi and Hindi. A candidate shall have option to write answers in English or Marathi or Hindi.
15. Examination for the subject Environmental Studies shall be compulsory for external candidates appearing as a fresh candidate at Winter and/or summer examination.

16. For teaching of the subject, there shall be atleast two hour per week.
For teaching the subject to the regular candidates, a full time approved teacher of the University and or a person having Postgraduate Degree in any faculty with second class shall be considered elligible.
17. For teaching of the subject, additional fee to be charged to regular candidate shall be as prescribed by the University.
18. Every College/ University Teaching Department shall charge additional fee of Rs. 100/- to every Student of the subject Environmental studies.
Out of this Rs. 100/-, the College/University Teaching Department shall have to pay Rs. 25/- to the University as an examination fee of each candidate for the subject environmental studies.
19. The Grade secured by an examinee in the examination of this subject shall not be considered for providing the facility of A.T.K.T. in next higher class.
20. The provisions of Ordinance No. 18/2001 shall not be applicable for securing a grade or higher grade in the examination of this subject.
21. Result of the Final Year of the respective Degree shall not be declared of an examinee unless he/she secures any one of the grade in the examination of subject.

Provided an examinee admitted to Five Year LL.B. course desiring not to continue his/her education beyond Sixth Semester of the said course shall have to secure any one of the grade in the examination of the subject otherwise his/her result of Sixth Semester for awarding B.A. degree shall not be declared.

22. Certificate shall be issued, to the successful examinees in the subject Environmental Studies, after the examination.

ENVIRONMENTAL STUDIES**Total Marks : 100****PART-A****SHORT ANSWER PATTERN****25 Marks****1. The Multidisciplinary nature of environmental studies**

- . Definition, scope and importance.
- . Need for public awareness.

(2 lecture hours)

2. Social Issues and the Environment

- . From Unsustainable to Sustainable development
- . Urban problems related to energy
- . Water conservation, rain water harvesting, watershed management
- . Resettlement and rehabilitation of people; its problems and concerns. Case studies.
- . Environmental ethics : Issues and possible solutions.
- . Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies.
- . Wasteland reclamation.
- . Consumerism and waste products.
- . Environment Protection Act.
- . Air (Prevention and Control of Pollution) Act.
- . Water (Prevention and Control of Pollution) Act.
- . Wildlife Protection Act.
- . Forest Conservation Act.
- . Issues involved in enforcement of environmental legislation.
- . Public awareness.

(7 lecture hours)

3. Human Population and the Environment

- . Population growth, variation among nations.
- . Population explosion - Family Welfare Programme.
- . Environment and human health.
- . Human Rights.
- . Value Education.
- . HIV / AIDS.
- . Women and Child Welfare.
- . Role of Information Technology in Environment and human health.
- . Case Studies.

(6 lecture hours)

PART-B**ESSAY TYPE WITH INBUILT CHOICE****50 Marks****4. Natural resources :****Renewable and non-renewable resources :**

- . Natural resources and associated problems.
 - Forest resources : Use and over exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people.
 - Water resources : Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.
 - Mineral resources : Use and exploitation, environmental effects of extracting and using mineral resources, case studies.
 - Food resources : World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer - pesticide problems, water logging, salinity, case studies.
 - Energy resources : Growing energy needs, renewable and non renewable energy sources, use of alternate energy sources, Case studies.
 - Land resources : Land as a resource, land degradation, man induced landslides, soil erosion and desertification.
- . Role of an individual in conservation of natural resources.
- . Equitable use of resources for sustainable lifestyles.

(8 lecture hours)

5. Ecosystems

- . Concept of an ecosystem.
- . Structure and function of an ecosystem.
- . Producers, consumers and decomposers.
- . Energy flow in the ecosystem.
- . Ecological succession.
- . Food chains, food webs and ecological pyramids.
- . Introduction, types, characteristic features, structure and function of the following ecosystem :-
 - Forest ecosystem
 - Grassland ecosystem
 - Desert ecosystem
 - Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)

(6 lecture hours)

6. Biodiversity and its conservation

- . Introduction - Definition : genetic, species and ecosystem diversity.
- . Biogeographical classification of India.
- . Value of biodiversity : consumptive use, productive use, social, ethical, aesthetic and option values.
- . Biodiversity at global, National and local levels.
- . India as a mega-diversity nation.
- . Hot-spots of biodiversity.

- . Threats to biodiversity : habitat loss, poaching of wildlife, man-wildlife conflicts.
- . Endangered and endemic species of India.
 - . Conservation of biodiversity : In-situ and Ex-situ conservation of biodiversity. (8 lecture hours)

7. Environmental Pollution

- . Definition
 - . Causes, effects and control measures of :-
 - Air pollution
 - Water pollution
 - Soil pollution
 - Marine pollution
 - Noise pollution
 - Thermal pollution
 - Nuclear hazards
- . Solid Waste Management : Causes, effects and control measures of
 - . Role of an individual in prevention of pollution.
 - . Pollution case studies.
 - . Disaster management : floods, earthquake, cyclone and landslides. (8 lecture hours)

PART-C ESSAY ON FIELD WORK 25 Marks

8. Field work

- . Visit to a local area to document environmental assets - river / forest / grass land / hill / mountain
- . Visit to a local polluted site - Urban / Rural / Industrial / Agricultural
- . Study of common plants, insects, birds.
- . Study of simple ecosystems - pond, river, hill slopes, etc. (5 lecture hours)

- (Notes :**
- i) Contents of the syllabys mentioned under paras 1 to 8 shall be for teaching for the examination based on Annual Pattern.
 - ii) Contents of the syllabys mentioned under paras 1 to 4 shall be for teaching to the Semester commencing first, and
 - iii) Contents of the syllabys mentioned under paras 5 to 8 shall be for teaching to the Semester commencing later.

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- 21) Trivedi R.K. and P.K. Goel, Introduction to Air Pollution, Techno-Science Publications (TB)
- 22) Wagner K.D., 1998, Environmental Management, W.B.Saunders Co., Philadelphia, USA 499p.
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- 25) R.Rajagopalan : Environmental Studies, Oxford University Press, New Delhi, 2005 (R)

(M) Magazine
(R) Reference
(TB) Textbook

SEMESTER: SEVENTH**7SA1 ARCHITECTURE DESIGN - V**

Major Problem – 1 : Multistoried Complex Building like mass housing Residential Building Project 200 to 300 tenements with study of open spaces and circulation with community facilities.

Minor Problem -2 : Emphasis on Earthquake Resistance Structure/wind pressure, allied services.

7SA2 ADVANCED BUILDING CONSTRUCTION-I

Study of this subject is aimed to gain the knowledge of appropriate construction techniques in relevance with the complexity of the construction aspects.

Unit – 1 : Study and analysis of different types of foundation as per loading and soil conditions. Study of load bearing capacity of soils.

Construction of swimming pools, industrial structures, waterproofing for basement.

Unit – 2 : a) Study of R.C.C. and steel space frame structures.
b) Study of shell structures and its construction techniques from historical perspective.
c) Shell structures such as Geodesic, Schwedeler and Gitter kuppel and its construction aspects.

Unit – 3 : Earthquake Resistant Structures –
a) Failure mechanism of structures in earthquake .
b) Earthquake resistant building construction, retrofitting that is repairs of earthquake affected buildings.
c) Remedial measures in terms of planning, designing techniques for Earthquake resistant structures.

Unit – 4 : Folded plate structures in R.C.C., its types and construction aspects, merits and demerits.

Unit – 5 : Temporary structures, material and techniques.

Unit – 6 : General study of standardization of building elements its uses for various construction aspects.
Study of Modular co-ordination and its multipurpose functional applications.

Sessional - Notes , Sheets and Internal Viva-Voce on above topics.

INTERIOR DESIGN - II**7SA3**

Unit – 1 : Advance Building Interior Construction Methods, Innovative Architectural Interior Detailing with new materials like foam, carbon fiber, ceiling grids, flexicombs, hex cell plastic pannels.

Unit – 2 : Building Services Like H.V.A.C., Electric, Water Supply, Acoustical Lighting Related to Complex Building Interior .

Unit – 3 : Study of Interior spaces from sociological , economic cultural point of view, Exercises of Complex Buildings, Industrial Buildings, Universities etc.

Sessional : Assignments (Plates and Sheets) on above topics .

7SA4 ENVIRONMENTAL SANITATION & SERVICES

Unit – 1 : Drainage, water supply, Layouts for neighborhoods, Computations of requirement, Water reservoirs and water supply system.

Unit – 2 : Water Collection, Treatment and distribution of water from various sources. Storm water disposal.

Unit – 3 : Sewage disposal, location of disposal plants, Oxidation ponds Garbage disposal, Water pollution, Sources of pollution , Methods adopted to avoid pollution.

7SA5 URBAN PLANNING – I (HOUSING)

Unit – 1 : Introduction to hierarchy of planning, planning levels and their impact on Architecture. Interrelation between urban planning and Architecture, Density, F.S.I.

Unit – 2 : Housing surveys, Methodology of surveys, Factors affecting Housing, Housing Demands and Policies. .

Unit – 3 : Housing Typologies, National Housing policy, Housing Case studies, slums, rehabilitation schemes.

Sessional - Notes and Home assignments on above topics.

7SA6 THEORY OF ARCHITECTURE

Architecture encompasses many subjects and Design is its core subject Theory of Architecture covers theoretical aspect of design under following types.

Unit – 1 a) : Reinterpretation of Architectural terms Viz. Compositions, Scale and balancing in terms of space and spatial organization of buildings forms in Design.

- b) : Characters of Building - Historical Examples from east and west .
- c) : Difference between Characters and Style .
- d) : Different Styles .
- e) : What is Ornamentation Types of Ornamentation
 1) Applied Ornamentation Effect of Visual Art on
 2) Structural Ornamentation Architecture
 3) Inherent Ornamentation
- f) : Study of Vernacular Architecture, Modern and Post Modern Architecture Styles.
- g) : Different movements and its influence on Architecture Viz. Bahaus, Art Nouveau, Art- Deco etc. (Indian response to modern)
- h) : Study of Renaissance Theories - Architecture as Mathematics Translated in to special units.

Study of Indian Temples to understand space and spetial organization, Temples as symbols , Ornamentation in Temples, Design Philosophy of great Architects – Le – Carbusier , F. L. Wright, Frank Gehry, Geoffrey Bawa, Balkrushna Doshi , Mies Vanderohe, Charles Coria etc.

Sessional - Assignments on the works of above Architects.

7SA7 ARCHITECTURAL ACOUSTICS

- Unit – 1 : Acoustics and need to study acoustics, pioneering works in building acoustics, origin and propogation of sound, propeties, behaviour of sound in an enclosed space and open air. Sabines' formula.
- Unit – 2 : Origin of theatre, Greek, Roman theatre, modern theatres. Noise and its control. Study of air borne and structure borne noise and control. Echo and sound shadows and its prevention.
 Various types of constructions, continuous and discontinuous floating floors, various types of acoustical materials, special constructions, reflectors, room shapes & co-relations.
- Unit – 3 : Design of an open air theatre.
 Acoustical design for little & legitimate theatres, schools, school auditoriums, lecture halls, cinema theatres, libraries, sound recording studies.
 Noise control in ventilating system.

Sessional - Notes , sketches , Plates and Home assignments on above topics.

7SA8 PROFESSIONAL PRACTICE & REAL ESTATE LEGISLATION

- Unit – 1 : Office management, preparation of documentation and drawings , Brief from client & its interpretation, filling & correspondence. Architect as a coordinator of different consultants.
- Unit – 2 : Types of tenders , Tender documents and procedure of tendering. Types of contract and contract documents, Articles of agreement as per I.I.A. responsibilities of architects.
- Unit – 3 : Architects Act of 1972, Maharashtra Land Revenue Act , Land Acquisition Act, Apartment Ownership Act and Owners Housing Society, their rights and duties, Land and Estate Sale deed Procedure.

Sessional - Notes and Home assignments on above topics.

7SA9 WORKING DRAWING- III

Working Drawing of R.C.C. and Steel Structure Building type like Commercial Building, Public Building, Recreational Building , Club House, Museums, Tourists Center.

- Detail plans at all level with due consideration to setting works .
- Sections through building showing important characteristic features.
- Elevations showing the details of Architectural treatment like Colours, Texture, Cladding.
- Important Details of the buildings and services details like drainage, water supply, air conditioning, electrical cables runs through trenches, curtain walling, architectural glass system, point supported glass system, architectural mesh.

SEMESTER : EIGHTH**8SA1 ARCHITECTURE DESIGN-VI**

Major Problem – 1 – Multistoried / Multifunctional Commercial Complex like Hotel / Hospital / Auditorium with Basement Parking
Emphasis on Services, Energy Efficient Construction

Minor Problem -2 – Emphasis on Acoustics, Thermal Insulation.

8SA2 ADVANCED BUILDING CONSTRUCTION-II

Unit – 1 : a) General introduction of large span structures and High rise structures and its construction aspects..

b) Study of various structural Frameworks for large spans such as lamella and laminated portal frame and R.C.C. and steel portal frames and its appropriate uses for various structures.

Unit – 2 : Study of latest materials used in curtain wall, structural glazing, its construction techniques.

Unit – 3 : a) Study of various cost effective/eco effective techniques in construction by considering energy efficient material.

b) Study of Ferro Crete and Ferro cement Techniques and its appropriate uses for construction.

Unit – 4 : Introduction of pre-cast building elements, comparative study with cast in situ construction.

Appropriate use of various types of precast building elements and its construction details.

Unit – 5 : General study of form work for construction and its details. Study and uses of shoring, underpinning, its types and constructional aspects. Architectural glass system, point supported glass system, architectural mesh, garage doors and building automation systems.

Unit – 6 : General study of tensile structures, pneumatic structures types and techniques.

Study of pre-stressed concrete, principle and method of pre-stressing, advantages and disadvantages.

Construction details of sound and heat insulation of concert hall, recording studio and cold storage.

Sessional - Notes, Sheets and Internal Viva-Voce on above topics.

8 SA 3 LANDSCAPE DESIGN

Unit – 1 : 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.

Unit – 2 : Principles of garden design, aesthetic & functional considerations, historical developments in landscape architecture.

Landscape foundations, grading, drainage, paved and unpaved surfaces, roads and paths, their types, natural land forms, its advantages, retaining walls and slope retention, garden lighting.

Unit – 3 : Climate and micro-climate consideration in landscape design, social and psychological factors in Landscape design architecture. Horticultural study of plants, shrubs, climbers in tropical climate.

Sessional - Assignments on

a) Landscape design for small project like residential building/ club houses/restaurants etc.

b) Plant identification and report.

8SA4 ADVANCED SERVICES

Unit – 1 : Ventilation natural and artificial, Air conditioning, Exhaust, blower, dial flow fans, ducts for lifts, escalator, public passage ways, roads and fly-overs. .

Unit – 2 : General idea about electrical supply form power house to individual building, Use of Solar energy. Electric layouts, lightening conductors, Special lighting viz. Swimming pools, Airports, Stage of a Theatre, Pavilion etc.

Unit – 3 : Gas plants, application and services. Plumbing for high rise building, their problems, Service floors, precautions against fires and fire refuge floor, fire detection sprinkler system etc.

Sessional - Notes, Sketches and Home assignments.

8SA5 URBAN PLANNING - II

Unit – 1 : Introduction to Regional Plan, Master Plan, Town Planning Schemes.

Unit – 2 : Planning Theories by C. A. Dioxides, Patric Geddes, Levis Mumfird, Ebmzer Howard. Need and study of urban planning, study of example with respect to urban redevelopment.

Unit – 3 : Different Acts - Urban Land Ceiling Act, Urban Acts Commutation Act, Environmental Protection Act, Slum Redevelopment Act, Urban Redevelopment and introduction about different Planning Authorities Viz. MHADA, CIDCO, Traffic and Transportation.

Sessional - Notes and Home assignments on above topics.

8SA6 CONSTRUCTION MANAGEMENT

- Unit – 1 : Objectives of Construction Management, Factors affecting construction cost and cost analysis.
- Unit – 2 : Project Finances, Quality Control, Inspection, Safety in Construction Equipments and Methods.
- Unit – 3 : Management Tools, PERT, CPM & other Scientific Methods, Labour Laws and Building Bye-Laws. .

Sessional – Notes and Home Assignments on above topics

8SA7 ARCHITECTURAL ILLUMINATION

- Unit – 1 : Characteristics & comparison of various light sources viz. incandescent lamps, fluorescent lamps, mercury lamps, and cold cathod lamps, light control & distribution, reflection, transmission and absorption, control & grading.
- Unit – 2 : Method of lighting, direct, mounted, suspended, portable and light fixtures on wiring channels, comparative study of integrated lighting, concealed or recessed lighting, suspended, grid, luminous or from louvered ceiling.
- Unit – 3 : Lighting equipment design – general principles, functions, installation and maintenance.
Artificial lighting, calculation method viz. cosine law, point by point method, live source and lumens method, flood lighting etc.

Sessional - Notes , sketches , Plates and Home assignments on above topics .

8SA8 PROFESSIONAL PRACTICE & VALUATION

- Unit – 1 : Arbitration , Easement Right, Dilapidation .
- Unit – 2 : Value and Cost purpose of valuation , Factors which affect the value of property. Understanding the terms Viz. Market Value, Scrap Value, Salvage Value, Book Value , Sentimental Value, Monopoly Value etc.
- Unit – 3 : Different methods of valuation Viz. Rental Method, Profit Method Valuation, Development Method, Standard Rent Calculation.

Sessional - Notes and Home assignments on above topics.

8SA9 WORKING DRAWING – IV

Working Details of -

- Building type like multiple basement, Multilevel car parking.
- High rise building with seismic and wind pressure consideration.
- Details of Artificial ventilation systems for large span structures like Industrial building..
- Plan showing service duct, fire fighting layouts viz. sprinkler systems etc.
- Specialized building features like Architectural glass systems, point supported glass systems.
- Acoustical lighting and other service details.

SANT GADGE BABA AMRAVATI UNIVERSITY
REGULATION NO 39 OF 2007

Examinations leading to the Degree of Bachelor of Architecture (Five Year Degree Course Semester Pattern) Regulation, 2007.

Whereas it is expedient to frame the Regulation in respect of Examinations leading to the Degree of Bachelor of Architecture (Five year Degree course.... Semester Pattern) for the purposes hereinafter appearing the Management Council is hereby pleased to make the following Regulation.

1. This Regulation may be called “Examinations leading to the Degree of Bachelor of Architecture (Five year Degree course.... Semester Pattern) Regulation, 2007”.
2. This Regulation shall come into force from the Academic sessions :-
 - i) 2006-2007 for Ist to VIth Semesters B.Arch. examinations,
 - ii) 2007-2008 for VIIth & VIIIth Semesters B.Arch. examinations, and
 - iii) 2008-2009 for IXth & Xth Semesters B.Arch. examinations.
3. Schemes of teaching & examinations of Ist to Xth Semesters of Bachelor of Architecture (Five Year Degree Course Semester Pattern) shall be as per Appendices “A”, “B”, “C”, “D”, “E”, “F”, “G”, “H”, “I”, “J”, “K”, and “L” appended with this Regulation.
4. Regulation Nos. 2 of 2005, 10 of 2005, 24 of 2005 and 13 of 2007 relating to Examinations leading to the Degree of Bachelor of Architecture (Five Year Degree Course Semester Pattern) Regulation, 2005 and 2007 shall stand repealed from the date of commencement of this Regulation in force.

APPENDIX-A
FIVE YEAR DEGREE COURSE
BACHELOR OF ARCHITECTURE
(SEMESTER PATTERN)
FIRST SEMESTER

L : THEORY/LECTURE
T : TUTORIAL
D : DRAWING/DESIGN STUDIO

ABBREVIATIONS
S-SEMESTER
A-ARCHITECTURE

Sr. No.	Sub Code No.	SUBJECT	TEACHING SCHEME				EXAMINATION SCHEME							
			L	T	D	Total Hours/week	THEORY (University)			SESSIONAL		GRAND TOTAL		
							Duration of paper Hr.	Max. Marks Theory Paper	Max. Marks College Assessment	T O T A	Min. Pass Marks	Max. Marks College Assessment	Min. Pass Marks	
1.	1SA1	Basic Arch.Design-I	-	-	4	4	-	-	-	-	-	50	25	
2.	1SA2	Building Construction-I	1	-	3	4	3	60	-	60	30	20	10	
3.	1SA3	Architectural Graphics-I	1	-	3	4	3	40	10	50	25	-	-	
4.	1SA4	Visual Arts	-	-	4	4	-	-	-	-	-	50	25	
5.	1SA5	Communication Skill	2	-	-	2	2	40	10	50	25	-	-	
6.	1SA6	Structure-I	2	1	-	3	3	50	20	70	35	-	-	
7.	1SA7	Building Materials-I	2	1	-	3	2	40	10	50	25	-	-	
8.	1SA8	History of Culture-I	2	-	-	2	2	40	10	50	25	-	-	
9.	1SA9	Workshop-I	1	-	3	4	-	-	-	-	-	50	25	
TOTAL			11	2	17	30				330	170			500

APPENDIX-B
FIVE YEAR DEGREE COURSE
BACHELOR OF ARCHITECTURE
(SEMESTER PATTERN)
SECOND SEMESTER

L : THEORY/LECTURE
T : TUTORIAL
D : DRAWING/DESIGN STUDIO

ABBREVIATIONS
S-SEMESTER
A-ARCHITECTURE

Sr. No.	Sub Code No.	SUBJECT	TEACHING SCHEME				EXAMINATION SCHEME							
			L	T	D	Total Hours/week	THEORY (University)			SESSIONAL		GRAND TOTAL		
							Duration of paper Hr.	Max. Marks Theory Paper	Max. Marks College Assessment	T O T A L	Min. Pass Marks	Max. Marks College Assessment	Min. Pass Marks	
1	2SA1	Basic Architectural Design-II	-	-	4	4	-	-	-	-	-	50	25	
2	2SA2	Building Construction-II	1	-	3	4	3	60	-	60	30	20	10	
3	2SA3	Architectural Graphics-II	1	-	3	4	3	40	10	50	25	-	-	
4	2SA4	Visual Arts-II	-	-	4	4	-	-	-	-	-	50	25	
5	2SA5	Basic of Computer Graphics	1	-	1	2	-	-	-	-	-	50	25	
6	2SA6	Structure-II	2	1	-	3	3	50	20	70	35	-	-	
7	2SA7	Building Materials-II	2	1	-	3	2	40	10	50	25	-	-	
8	2SA8	History of Culture-II	2	-	-	2	2	40	10	50	25	-	-	
9	2SA9	Workshop-II	1	-	3	4	-	-	-	-	-	50	25	
TOTAL			10	2	18	30				280		220		500

APPENDIX-C
FIVE YEAR DEGREE COURSE
BACHELOR OF ARCHITECTURE
(SEMESTER PATTERN)
THIRD SEMESTER

L : THEORY/LECTURE
T : TUTORIAL
D : DRAWING/DESIGN STUDIO

ABBREVIATIONS
S-SEMESTER
A-ARCHITECTURE

Sr. No.	Sub Code No.	SUBJECT	TEACHING SCHEME				EXAMINATION SCHEME							
			L	T	D	Total Hours/ week	THEORY (University)			SESSIONAL		GRAND		
				Duration of paper Hr.	Max. Marks Theory Paper	Max. Marks College Assessment	T O T A L	Min. Pass Marks	Max. Marks College Assessment	Min. Pass Marks	TOTAL			
1	3SA1	Architectural Design-I	2	-	4	6	-	-	-	-	-	100	50	
2	3SA2	Building Construction-III	1	-	3	4	3	50	-	50	25	25	12	
3	3SA3	Structure-III	2	1	-	3	3	40	10	50	25	-	-	
4	3SA4	History of Architecture-I	2	1	-	3	2	40	10	50	25	-	-	
5	3SA5	Applied Climatology-I	2	1	-	3	2	40	10	50	25	-	-	
6	3SA6	Computer Graphics-I	-	-	2	2	-	-	-	-	-	50	25	
7	3SA7	Building Material-III	2	1	-	3	2	40	10	50	25	-	-	
8	3SA8	Graphics-I (Perspective & Sciography)	1	-	3	4	3	50	25	75	37	-	-	
9	3SA9	Surveying & Leveling-I	-	-	3	3	-	-	-	-	-	50	25	
TOTAL			12	4	15	31				325		225	550	

APPENDIX-D
FIVE YEAR DEGREE COURSE
BACHELOR OF ARCHITECTURE
(SEMESTER PATTERN)
FOURTH SEMESTER

L : THEORY/LECTURE
 T : TUTORIAL
 D : DRAWING/DESIGN STUDIO

ABBREVIATIONS
S-SEMESTER
A-ARCHITECTURE

Sr. No.	Sub Code No.	SUBJECT	TEACHING SCHEME				EXAMINATION SCHEME							
			L	T	D	Total Hours/week	THEORY (University)			SESSIONAL		GRAND TOTAL		
							Duration of paper Hr.	Max. Marks Theory Paper	Max. Marks College Assessment	T O T A L	Min. Pass Marks	Max. Marks College Assessment	Min. Pass Marks	
1	4SA1	Architectural Design-II	2	-	4	6	12	100	-	100	50	50	25	
2	4SA2	Building Construction-IV	1	-	3	4	3	50	-	50	25	25	12	
3	4SA3	Structure-IV	2	1	-	3	3	40	10	50	25	-	-	
4	4SA4	History of Architecture-II	2	1	-	3	2	40	10	50	25	-	-	
5	4SA5	Applied Climatology-II	2	1	-	3	2	40	10	50	25	-	-	
6	4SA6	Computer Graphics-II	-	-	2	2	-	-	-	-	-	50	25	
7	4SA7	Design Fundamentals	2	1	-	3	-	-	-	-	-	50	25	
8	4SA8	Graphics-II (Perspective & Sciography)	1	-	3	4	3	50	25	75	37	-	-	
9	4SA9	Surveying & Leveling -II	-	-	3	3	-	-	-	-	-	50	25	
TOTAL			12	4	15	31				375		225		600

APPENDIX-E
FIVE YEAR DEGREE COURSE
BACHELOR OF ARCHITECTURE
(SEMESTER PATTERN)
FIFTH SEMESTER

L : THEORY/LECTURE
T : TUTORIAL
D : DRAWING/DESIGN STUDIO

ABBREVIATIONS
S-SEMESTER
A-ARCHITECTURE

Sr. No.	Sub Code No.	SUBJECT	TEACHING SCHEME				EXAMINATION SCHEME							
			L	T	D	Total Hours/week	THEORY (University)			SESSIONAL		GRAND TOTAL		
							Duration of paper Hr.	Max. Marks Theory Paper	Max. Marks College Assessment	T O T A L	Min. Pass Marks	Max. Marks College Assessment	Min. Pass Marks	
1	5SA1	Architectural Design-III	2	-	4	6	-	-	-	-	-	100	50	
2	5SA2	Appropriate Construction Technology-I	1	-	3	4	3	50	-	50	25	25	12	
3	5SA3	Structure-V	2	1	-	3	3	40	10	50	25	-	-	
4	5SA4	History of Architecture-III	2	1	-	3	2	40	10	50	25	-	-	
5	5SA5	Building Services & Equipment-I	2	1	-	3	2	40	10	50	25	-	-	
6	5SA6	Specification-I	2	-	-	2	2	40	10	50	25	-	-	
7	5SA7	Estimating	2	1	-	3	2	40	10	50	25	-	-	
8	5SA8	Human Settlement	2	1	-	3	2	40	10	50	25	-	-	
9	5SA9	Working Drawing -I	-	-	4	4	-	-	-	-	-	50	25	
TOTAL			15	5	11	31				350		175		525

APPENDIX-F
FIVE YEAR DEGREE COURSE
BACHELOR OF ARCHITECTURE
(SEMESTER PATTERN)
SIXTH SEMESTER

L : THEORY/LECTURE
T : TUTORIAL
D : DRAWING/DESIGN STUDIO

ABBREVIATIONS
S-SEMESTER
A-ARCHITECTURE

Sr. No.	Sub Code No.	SUBJECT	TEACHING SCHEME				EXAMINATION SCHEME							
			L	T	D	Total Hours/week	THEORY (University)			SESSIONAL		GRAND TOTAL		
							Duration of paper Hr.	Max. Marks Theory Paper	Max. Marks College Assessment	T O T A L	Min. Pass Marks	Max. Marks College Assessment	Min. Pass Marks	
1	6SA1	Architectural Design-IV	2	-	4	6	18	100	-	100	50	100	50	
2	6SA2	Appro. Const. Tech.-II	1	-	3	4	3	50	-	50	25	25	12	
3	6SA3	Structure-VI	2	1	-	3	3	40	10	50	25	-	-	
4	6SA4	History of Architecture-IV	2	1	-	3	2	40	10	50	25	-	-	
5	6SA5	Bld. Services & Equ.-II	2	1	-	3	2	40	10	50	25	-	-	
6	6SA6	Specification-II	2	-	-	2	2	40	10	50	25	-	-	
7	6SA7	Interior Design - I	1	-	2	3	2	25	-	25	12	25	12	
8	6SA8	Computer Application	-	-	2	2	-	-	-	-	-	50	25	
9	6SA9	Working Drawing -II	-	-	4	4	-	-	-	-	-	50	25	
Total			12	3	15	30	-	-	-	375	-	250	-	625

APPENDIX-G
FIVE YEAR DEGREE COURSE
BACHELOR OF ARCHITECTURE
(SEMESTER PATTERN)
SEVENTH SEMESTER

L : THEORY/LECTURE
T : TUTORIAL
D : DRAWING/DESIGN STUDIO

ABBREVIATIONS
S-SEMESTER
A-ARCHITECTURE

Sr. No.	Sub Code No.	SUBJECT	TEACHING SCHEME				EXAMINATION SCHEME							
			L	T	D	Total Hours/week	THEORY (University)				SESSIONAL		GRAND TOTAL	
							Duration of paper Hr.	Max. Marks Theory Paper	Max. Marks College Assessment	T O T A L	Min. Pass Marks	Max. Marks College Assessment		Min. Pass Marks
1	7SA1	Architectural Design-V	2	-	4	6	-	-	-	-	-	100	50	
2	7SA2	Advanced Building Construction-I	1	-	3	4	3	60	-	60	30	25	12	
3	7SA3	Interior Design - II	1	-	2	3	2	40	-	40	20	25	12	
4	7SA4	Environmental Sanitation and Services	2	-	-	2	2	40	10	50	25	-	-	
5	7SA5	Urban Planning-I (Housing)	2	1	-	3	2	40	10	50	25	-	-	
6	7SA6	Theory of Architecture	-	-	2	2	-	-	-	-	-	50	25	
7	7SA7	Architectural Acoustic	2	1	-	3	2	40	10	50	25	-	-	
8	7SA8	Professional Practice & Real Estate Legislation	2	1	-	3	2	40	10	50	25	-	-	
9	7SA9	Working Drawing-III	-	-	4	4	-	-	-	-	-	50	25	
TOTAL			12	3	15	30				300		250	550	

L : THEORY/LECTURE
T : TUTORIAL
D : DRAWING/DESIGN STUDIO

APPENDIX-H
FIVE YEAR DEGREE COURSE
BACHELOR OF ARCHITECTURE
(SEMESTER PATTERN)
EIGHTH SEMESTER

ABBREVIATIONS
S-SEMESTER
A-ARCHITECTURE

Sr. No.	Sub Code No.	SUBJECT	TEACHING SCHEME				EXAMINATION SCHEME							
			L	T	D	Total Hours/week	THEORY (University)			SESSIONAL		GRAND TOTAL		
							Duration of paper Hr.	Max. Marks Theory Paper	Max. Marks College Assessment	T O T A L	Min. Pass Marks	Max. Marks College Assessment	Min. Pass Marks	
1	8SA1	Architectural Design-VI	2	-	4	6	24	150	-	150	75	100	50	
2	8SA2	Advanced Building Construction-II	1	-	3	4	3	60	-	60	30	25	12	
3	8SA3	Landscape Design	1	-	2	3	2	40	-	40	20	25	12	
4	8SA4	Advanced Services	2	-	-	2	2	40	10	50	25	-	-	
5	8SA5	Urban Planning -II	2	1	-	3	2	40	10	50	25	-	-	
6	8SA6	Construction Management	2	-	-	2	2	40	10	50	25	-	-	
7	8SA7	Architectural Illumination	2	1	-	3	2	40	10	50	25	-	-	
8	8SA8	Professional Practice & Valuation	2	1	-	3	2	40	10	50	25	-	-	
9	8SA9	Working Drawing-IV	-	-	4	4	-	-	-	-	-	50	25	
TOTAL			14	3	13	30				500		200		700

L : THEORY/LECTURE
T : TUTORIAL
D : DRAWING/DESIGN STUDIO

**APPENDIX-I
FIVE YEAR DEGREE COURSE
BACHELOR OF ARCHITECTURE
(SEMESTER PATTERN)
NINTH SEMESTER**

ABBREVIATIONS
S-SEMESTER
A-ARCHITECTURE

Sr. No.	Sub Code No.	SUBJECT	TEACHING SCHEME				EXAMINATION SCHEME				
							SESSIONAL		VIVA-VOCE		GRAND TOTAL
			Max.Marks College Assessment	Min. Pass Marks	Max. Marks University Exam.	Min. Pass					
1	9SA1	Practical Training	Practical Center at the Center approved by the Institution for six months				300	150	100	50	400

Note : The Breakup of marks for practical training shall be as details in Appendix-D, Appended herewith.

L : THEORY/LECTURE
T : TUTORIAL
D : DRAWING/DESIGN STUDIO

**APPENDIX-J
FIVE YEAR DEGREE COURSE
BACHELOR OF ARCHITECTURE
(SEMESTER PATTERN)
TENTH SEMESTER**

ABBREVIATIONS
S-SEMESTER
A-ARCHITECTURE

Sr. No.	Sub Code No.	SUBJECT	TEACHING SCHEME				EXAMINATION SCHEME			
							SESSIONAL		VIVA-VOCE		GRAND TOTAL
			L	C	D	Total	Max.Marks College Assessment Exam.	Min. Pass Marks	Max. Marks University	Min. Pass
1	10SA1	Project	-	3	15	18	200	100	200	100
2	10SA2	Seminar	-	3	3	6	100	50	-	-
3	10SA3	Dissertation	-	3	3	6	100	50	-	-
TOTAL			-	9	21	30	400		200	600

Note : Topics for dissertation shall be such as given in Appendix-E, appended herewith.

APPENDIX-K
Practical Training Report
(Period 6 Months)

Each candidate shall have to prepare a detail report alongwith necessary drawing, sketches, measurement, record, reading, observations, survey analysis, log sheets and models, if necessary on the following six aspects which are concerned with the practical training. This report shall be submitted for the Viva-Voce examination duly certified by the Principal of the College.

1. Critical appraisal - of any building that he/she or his/her employer has designed and executed. The building shall be used and the students may record the reactions of the users to support his/her appraisal in addition to photographs, drawing etc.
 Marks (Sessional) - 50
2. Site Supervision and Practice - A detail report of any major part of a small building that has been personally supervised by the candidate. It may include checking site measurement preparation of a bill, site instructions and checking of the executed work.
 Marks (Sessional) - 50
3. Field Observation - A report on architectural use of the site conditions. For example, Electric poles, Water tanks, slope of the site etc.
 Marks (Sessional) - 50
4. Log sheet and office certificate - A student shall fill the log sheets as a record of his every day work and shall submit the same along with the certificate from his/her employer.
 Marks (Sessional) - 50
5. Working drawing and complete estimate of small project - A student shall submit all the working details prepared by him/her during his/her practical training alongwith estimate of small project.
 Marks (Sessional) - 100
6. Viva-Voce Each candidate shall be individually interviewed and questioned on any of the subject mentioned above by a Principal, Head of Department of Architecture and external examiner appointed by the University.
 Marks (Viva-Voce) - 100

Total Marks - 400
 Pass Marks - 200

APPENDIX-L
DISSERTATION

Dissertation on any one of the following topics :

- 1) Computer in Architecture.
- 2) Hotel Services & Equipment.
- 3) Architectural context in relation to Region.
- 4) Tantras as related to Architecture.
- 5) Vernacular Architecture
- 6) Energy performance of building.
- 7) Building management.
- 8) Passive Solar - Architecture.
- 9) Building Byelaws.
- 10) Illumination of Buildings.

SANT GADGE BABA AMRAVATI UNIVERSITY

ORDINANCE NO. 9 OF 2006

Examinations leading to the Degree of Bachelor of Architecture (Five Year Degree Course Semester Pattern) Ordinance, 2006

Whereas it is expedient to frame an Ordinance relating to Examinations leading to the Degree of Bachelor of Architecture (Five year Degree course.... Semester Pattern), hereinafter appearing, the Management Council is hereby pleased to make the following Ordinance.

1. This Ordinance may be called Ordinance relating to the "Examinations leading to the Degree of Bachelor of Architecture (Five year Degree course.... Semester Pattern) Ordinance, 2006."
2. This Ordinance shall come into force from the date of its approval by the Management Council.
3. In this Ordinance the letters, words and figures :
Subject to the conditions prescribed by the Government from time to time for admission to First B.Arch.course the candidates shall be considered eligible :-
Passing XII standard examination of the new pattern means the XII standard new pattern (10+2) Examination of the Maharashtra State Board of Secondary and Higher Secondary Education/Statutory Body with the subjects :-
 - I. 1. English (Higher or lower)
 2. Modern Indian Language (Higher or lower)
 3. Mathematics and Statistics.
 4. Chemistry
 5. Physics.
4. Any other optional subject from out of the list prescribed by the said Secondary and Higher Secondary Education Board.

OR

- II. 1. English (Higher or lower)
2. Mathematics and Statistics.
3. Chemistry.
4. Physics.
5. Vocational course (Defined by the said Board as Technical) Carrying 200 Marks.

OR

- III (a) An Examination recognised by Sant Gadge Baba Amravati University as equivalent to the above.
5. (i) The duration of the course shall be of five Academic years. The final year i.e. 5th year will consist of (a) Practical training

and (b) Project work and Dissertation. Practical training will for the first six months followed by Project work and Dissertation for next six months.

- (ii) There shall be ten main examinations. The main examination of first, third, fifth, seventh and ninth semester B.Arch. shall be held by the University in winter & supplementary examination in summer every year. And main examination of second, fourth, sixth, eighth and tenth semester B.Arch. will be held in summer & the supplementary examination in winter every year.
6. For the purpose of instruction and examination the student shall study sequentially.
7. The period of academic year term shall be such as may be notified by the University.
8. The examination referred to in para (1) above shall be held at such places and so such dates as may be notified by the University.
9. Subject to his/her compliance with this Ordinance & other Ordinances pertaining to Examination in force from time to time, the applicant for admission, at the end of the course of study of a particular semester/ session, to an Examination specified in column (1) of the table below, shall be eligible to appear if :-
 - i) he/she satisfies with the conditions in the table and the provisions thereunder.

TABLE

Name of Exam	The student should have passed the Exam. of	The Student should have satisfactorily completed the following session/semester	The student should have passed the following examination.
1.	2.	3.	4.
First Semester B.Arch.	XII standard Examination or equivalent	.....	.....
Second Semester B.Arch.	..... B.Arch.	I Semester	.....
Third Semester B.Arch.	.....	II Semester B.Arch.	2/3rd heads of I & II Sem. combined together
Fourth Semester B.Arch.	.....	III Semester B.Arch.	- do -
Fifth Semester B.Arch.	I & II Sem. B.Arch.	IV Semester B.Arch.	2/3rd heads of III & IV Sem.

			combined together
Sixth Semester - do - B.Arch.	V Semester B.Arch.	- do -	
Seventh Semester III & IV Sem. B.Arch. B.Arch.	VI Semester B.Arch..	2/3rd heads of V & VI Sem. combined together	
Eight Semester - do - B.Arch.	VII Semester B.Arch	- do -	
Nineth Semester V & VI Sem. B.Arch. B.Arch.	VIII Semester B.Arch..	2/3rd heads of VII & VIII Sem. combined together	
Tenth Semester - do - B.Arch.	IX Semester B.Arch	- do -	

10. An examinee who has passed 2/3 rd heads of passing shall be allowed to keep term in the next higher class.
Explanation :
- i) While calculating 2/3 rd heads of passing, fraction if any shall be ignored
- ii) For considering the heads of passing, every theory and every sessional shall be considered as separate head of passing, as per scheme of examinations. The subjects having combined passing shall be treated as one head.
11. The subject prescribed for the various examinations, theory and sessional in the subject maximum marks which each subject carries and the minimum marks which an examinee must obtained in order to pass the examinations shall be as detailed in the scheme.
12. The examination fees for each B.Arch.examination shall be as prescribed by the University form time to time.
13. (i) An examinee who is successful at any of the first, second, third, fourth, fifth, sixth, seventh, eighth, ninth and tenth semesters B.Arch. Examination taken together under this Ordinance and who obtains not less than 70% of the marks in the aggregate shall be declared to have passed the examination in first division with Honours, those obtaining less than 70 % but not less than 60 % of such marks shall be placed in the First division and all other successful examinees in the Second division. Division at the B.Arch.Degree will be declared considering the marks of the seventh, eighth, and tenth semesters B.Arch.examinations taken together.
- (ii) A successful examinee who passes the whole examination

- one attempt and who obtain not less than 75 % of the aggregate marks prescribed in any subject shall be declared to have passed the examination with Distinction in that subject.
14. (i) The scope of the subjects shall be as indicated in the syllabus.
(ii) The medium of instructions and examinations shall be English.
15. The provisions of Ordinance No.18 of 2001 relating to condonation of deficiency of marks for passing an examination shall apply to the examinations under this provisions except that these shall not apply for first Division with Honours.
16. (i) An unsuccessful examinee who obtain minimum pass marks in a subject (Paper or sessional) may, at his/her option be exempted from appearing in the subject (Paper or sessional) at a subsequent Examination if he/she passes in the remaining subjects he/she shall be declared to have passed the examination and shall be awarded a division by virtue of addition of fresh marks obtained by him/her.
(ii) An examinee who fails in the sessional work or any subject or in sessional subject and submit fresh sessional work in the subject in the manner directed by the Principal of the College, the principal shall forward the fresh sessional marks to the University.
17. An examinee who does not pass or who fails to present himself/ herself for the examination shall be eligible for readmission to the same examination on payment of a fresh fees and such other fees as may be prescribed, without prosecuting the same course of study.
18. A student shall acquire Practical Training of atleast sixmonths after completing terms of eighth semester B.Arch Examination, to the satisfaction of the Principal of the College.
19. As soon as possible after the Examination, the Board of Examiantions shall publish a list of successful examinees.The result of all the examinations (except seventh, eighth, and tenth semesters) shall be classified and Merit list for B.Arch.Degree shall be notified taking marks together obtained in seventh, eighth, and tenth semesters examinations under provision of Ordinance No.6
20. Notwithstanding anything to the contrary in this Ordinance, no one shall be admitted to an examination under this Ordinance, if he/she has already passed the same examination or an equivalent examination of any Statutory University.
21. The examinees who have passed in all the subjects prescribed for the first to tenth semesters B.Arch.examination shall be eligible for award of the Degree of Bachelor of Architecture, in the prescribed form signed by the Vice-Chancellor.