

॥ अंतरी पेटवू ज्ञानज्योत ॥



'A' Grade
NAAC Re-Accredited
(3rd Cycle)

**NORTH MAHARASHTRA UNIVERSITY,
JALGAON**

**Syllabus of
First Year Architecture**

Faculty of Science and Technology

W.E.F. 2017 - 2018

NORTH MAHARASHTRA UNIVERSITY, JAGAON
(M.S.)

Revised Syllabus of
FIVE YEAR DEGREE COURSE IN ARCHITECTURE, B.Arch.
(F.Y. B. Arch Sem –I & II)
To be introduced from the academic year 2017-18
(i.e. from June 2017) Onwards
(Subject to the modifications will be made from time to time)

STRUCTURE FOR FIRST YEAR B.ARCH COURSE (Semester Wise)

Code No	Name Of The Subject	Teaching Scheme			Examination Scheme			
		Lectur es Per Week	Studios Per Week	Duratio n Of Theory Papers In Hrs.	Sessional Work (Internal)	Theor y Paper	Oral	Tota l
STAGE –I								
F.Y.B.ARCH								
SEMISTER-I								
AR01-01	Architecture Design - I	1	7	-	100	-	-	100
AR01-02	Graphics -1	1	4	-	50	-	-	50
AR01-03	Building Construction & Material-I	2	5	3	50	50	-	100
AR01-04	History of Architecture & Human settlement -I	2	-	2	50	50	-	100
AR01-05	Theory of Structures-I	4	-	3	20*	80*	-	100
AR01-06	Aesthetics & Visual Arts-I	1	4	-	100	-	-	100
AR01-07	Workshop-I	-	3	-	50	-	-	50
AR01-08	Communication Skills-I	2	-	-	50	-	-	50
AR01-09	Computer Technology in Architecture-I	1	2	-	50	-	-	50
	Total	14	25		520	180		700
SEMISTER-II								
AR02-01	Architecture Design-II	1	7	-	100	-	-	100
AR02-02	Graphics -II	1	4	-	50	-	-	50
AR02-03	Building Construction & Material-II	2	5	3	50	50	-	100
AR02-04	History of Architecture & Human settlement -II	2	-	2	50	50	-	100
AR02-05	Theory of Structures-II	4	-	3	20*	80*	-	100
AR02-06	Aesthetics & Visual Arts-II	1	4	-	100	-	-	100
AR02-07	Workshop-I	-	3	-	50	-	-	50
AR02-08	Communication Skills-II	2	-	-	50	-	-	50
AR02-09	Computer Technology in Architecture-II	1	2	-	50	-	-	50
	Total	14	25		520	180		700

*Means combine passing for Sem. paper & Sessional work (Int.)

Syllabus for First semester

ARCHITECTURE DESIGN I (AR01-01)

Lectures –15

Studio -- 105

Sessional work (Int.)100

Theory ---

Total 100

Discussion and write up on –

What is Architecture? What does an Architect do? Scope, types of services rendered by an Architect.

Understanding of elements and principles of design through creative work

1. Elements and principles --- 1 sheet
2. Creative work/product design --- 2 sheets

Study of basic human needs, various requirements, standard measurements of human activities and allocation of spaces.

Study of single units like living spaces, sleeping and cooking spaces---

1. Study of living and cooking spaces (up to 30sqm)
 - a. Study of anthropometry --- sheets
 - b. Case studies --- sheet for each space
 - c. Design of spaces --- plan and sections
 - d. Model
 - e. Role of interior design in planning and Architecture

GRAPHICS – I (AR01-02)

Lectures - 15

Sessional Work(Int.) - 50

Studio - 60

Theory ---

Total 50

The purpose of this subject is to develop ability to present all the elements of design in graphic forms to enhance the potential of a student in presenting concepts and ideas in terms of drawing using different techniques.

1. Introduction of drawing instruments such as drawing board set-squares tee square french curve, stencils, different types of pencils and pens and their uses.
2. Lettering, size and notation of drawing, symbolic representation of building elements and material, other features as per I.S.I and standard practice.
3. Introduction of various media of drawing and presentation such as pencil, charcoal crayon, water colour, sketch pens, inks etc. and exercise using all these media.
4. Freehand sketching using different media mentioned above. • Scale drawing, construction of various metric scales, normally used scale, use of metric scale for various purposes.
5. Introduction and understanding of plain elevation and section.
6. Measured drawing of small objects, such as building elements, pieces of furniture and small built forms.
7. Solid geometry to explain the need of solid geometry in architectural drawings such as techniques of presenting three dimensional drawing into two dimensional objects. Exercise Involving geometrical forms, presented in different positions of individual object and then in group.
8. Principles of orthographic projection, projection on points, lines, planes, solids.

BUILDING CONSTRUCTION AND MATERIAL – I (AR01-03)

Lectures - 30

Sessional Work(Int.) – 50

Total – 100

Studio - 60

Theory – 50 Duration - 3 hrs

Marks weightage: Materials 25%, construction 75%

Note : For theory exams, Separate sections for materials and construction should be allotted (Materials 25%, construction 75%)

MATERIALS :

- 1. Soil :** Different types and their origin, Physical properties and effect of weather, water, temperature etc. on different soil types, bearing capacity of commonly met soil and their role in building foundations, angle of repose (introductory only)
- 2. Brick :** Composition of earths, standard market and I.S.I. size properties as per I.S.I. Brick manufacturing Processes, sun dried brick, special types of bricks, Different uses of brick in construction.
- 3. Sand :** Pit, river sea sand, gravel, I.S.I. standards use in mortar and concrete, bulk age of sand, impurities in sand their removal, different grades of sand with respective size and their application I.S.I. standard uses in construction

CONSTRUCTION :

1. General introduction: structure load bearing structure

2. Foundation: simple foundation for masonry load bearing walls, piers pillars; in brick and stones load bearing foundation; foundation in black cotton soil; masonry retaining wall.

3. Superstructure

Brick masonry: tools and equipments bonding and its principles; types of brick like headers stretchers king and queen closer etc and their use, English and Flemish bond in straight line for stopped end, corner tee and cross junctions up to thickness on two brick thick wall and its combinations; attached and detached piers, buttresses, pilasters, brick on edge wall, sundried brick construction in mud mortar, soil-cement block, expansion joint in masonry compound wall.

Stone masonry : various types of stone dressing, various types stone joint such as plain, beveled, rebated dowel, clamp joint monolithic construction of columns, quoins, header bond of through stones, various types of stone masonry such as ashlars and rubble with their different types, composites wall in brick and stone, compound walls.

Lintels and Chajjas.

Hollow, solid concrete block wall.

Brick and stone paving

Finishes: plastering, sand faced, neeru finish and other finishing types, various types of pointing. Use of scaffolding, single and double scaffolding for masonry work, bamboo, timber and tubular scaffolding.

REFERENCE BOOKS:

- 1.ENGG.MATERIALS – K.S.RANGWALA**
- 2.ENGG.MATERIALS – B.K.AGARWAL**
- 3.BUILDING.MATERIALS – S.K.DUGGAL**
- 4.BUILDING CONSTRUCTION TECHNOLOGY –R.CHUDLEY**
- 5.BUILDING CONSTRUCTION –SUSHIL KUMAR**
- 6.BUILDING CONSTRUCTION –W.B.MACKAY**
- 7.BUILDING CONSTRUCTION –BINDRA ARORA**

HISTORY OF ARCHITECTURE AND HUMAN SETTLEMENT- I(AR01-04)

Lectures –30

Studio - ---

Sessional work (Int.) 50

Theory --- 50 Duration of paper 2 hrs

Total 100

Study of basic history of evolution of human settlement from ancient till today in Western countries and in India.

Following topics to be covered---

- Human settlement, what is civilization?, Relation between culture and civilization, relation between man and environment, role of river in the development of civilization, prehistoric period.
- Factors responsible for human settlement
- Aspects responsible for human settlement
- Egyptian civilization
- Greek civilization
- Roman civilization
- Byzantine civilization
- Mesopotamian civilization
- Indus valley civilization
- Natural and man made environment

Reference books ---

- 1.An outline history of world architecture by H.A.Davies, M.A.
- 2.A history of world architecture, James Edgar Swain, PhD
- 3.Town planning by G.K. Hiraskar
- 4.Town planning by Abir Bandopadhyay

THEORY OF STRUCTURE –I (AR01-05)

Lectures - 60	Studio - ---	
Sessional Work(Int.) - 20 *	Theory - 80*Duration - 3Hrs.	Total – 100

Note: The passing in this subject requires min. 40% marks for theory paper , 50% for internal assessment and combined 50% of Total internal and theory paper.

1. Introduction: aim and object, scope of study.
2. Concept of simple load bearing, framed structure & composite structure.
3. Loads : Dead load, live load, wind load, snow load, seismic load ,conceptual idea and their impact on building as a whole, relevant IS Code.
4. Force: definition, characteristics and classification of forces. System of forces, composition and resolution of forces. Resultant and equilibrant of coplanar concurrent and non concurrent force systems by analytical & graphical method.
5. Moments: moment of force, moment of couple, effect of couple, concept of static equilibrium. Lami's theorem, Equations of static equilibrium, free body diagram.
6. Support reactions: Types of beams, Loading and support conditions and their significance.
7. Friction: Types of friction, laws of dry friction, problems on block, wedge and ladder.

Sessional work: Minimum Six assignments based on above topics.

REFERANCE BOOKS:

1. Engineering Mechanics – RK Bansal and Sanjay Bansal , Laxmi publications, New Delhi.
2. Engineering Mechanics - F.L. Singer, Harper Collins publications.

AESTHETICS AND VISUAL ARTS – I (AR01-06)

Lectures - 15
Sessional Work(Int.) – 100

Studio - 60
Total – 100

OBJECTIVE: To give an artistic orientation to the students to develop fundamental artistic skills.

1. Aesthetics as part of LIFE, relation of all fine arts like painting, sculpture, music dance etc. to each other in every day life ,beauty in human activities and movements, good ,mediocre and bad taste expression of Artists personality.
2. Understand and relationship of surface from space masses, point, line, light, and shade, aesthetics in motion, sound, touch and smell. Aesthetics as part of mind.
3. Colour theory, colour circle, various colour schemes and their combinations, general psychological effects of colours.
4. Elements of design such as line, form & shape, colour & texture, patterns etc.

WORKSHOP – I (AR01-07)

Lectures - -
Sessional Work(Int.) – 50

Studio - 45
Total – 50

1. Introduction of masonry tools.
2. Demonstration of brickwork, stonework, demonstration of plaster and textured finishes.
i) Mud ii) Cement iii) Lime.
3. Study tours to sources of local building materials and to local building under construction to study their actual use.
4. Models for basic design and Architecture design studio work.
5. Introduction to modeling with paper, paper board, plastics, plaster of Paris, wood and clay.
6. Basic model making technique, different types of material and their techniques.
7. Introduction to modeling with paper, paper board, plastics, plaster of Paris, wood and clay.

COMMUNICATION SKILLS – I (AR01-08)

Lectures - 30
Sessional Work(Int.) – 50

Studio - -
Total – 50

- 1) **Communication**
 - 1.1 Introduction to Communication
 - Definition, need & importance
 - Process of Communication
 - 1.2 Types of Communication
 - Forms of Communication
 - barriers to Communication
- 2) **Techniques of Communication**
 - 2.1 Verbal Communication: Techniques of GD & Interview
 - 2.2 Non-Verbal Communication: Body Language
- 3) **Essay Writing**
 - Descriptive (Current Topics)
- 4) **Rapid Review of Grammar**
 - 4.1 Tenses
 - 4.2 Active/Passive voice
 - 4.3 Direct –Indirect
 - 4.4 Affirmative, Negative , Assertive , Exclamatory ,Interrogative.
 - 4.5 Q-Tag, Remove “too”
- 5) **Correction of Common Errors**

Note : The internal marks will be based on tutorials and individual performance.

COMPUTER TECHNOLOGY IN ARCHITECTURE -I (AR01-09)

Lectures - 15

Sessional Work(Int.) – 50

Studio - 30

Total – 50

MICROSIFT WINDOWS

1. Introduction to windows use and importance
2. Comparison with dos application
3. Use of pointing devise style types parts of windows.
4. Concept of dialogue boxes
5. Window application
6. Concept of tab work in windows.
7. Concept of data interchange

Syllabus for Second semester

ARCHITECTURE DESIGN II (AR02-01)

Lectures –15

Studio -- 105

Sessional work (Int.)100

Ext. –100marks

Total 200

Study of single units which includes – sleeping spaces

Study of anthropometry --- sheet required

Case study --- sheet required

Design of spaces ---- plan and sections

Model

Role of interior design

Study of spaces like snack bar, ice cream parlor, week end cottage, etc.

Design of unit showing relationship with adjoining areas and other activities.

Study of climate, orientation, site conditions, circulation, etc.

Approximately area is in between (80—100sqm)

GRAPHICS –II (AR02-02)

Lectures - 15

Studio - 60

Sessional Work(Int.) - 50

Theory ---

Total 50

OBJECTIVE :

To introduce the students to the fundamental techniques of Architectural drawings and to enhance their visualization skills.

PART –I

- 1.1 Isometric and Axonometric projections.
- 1.2 Interpenetration of geometric solids, forms and section of solids.
- 1.3 Surface development of simple and complex objects.

PART –II

- 1.4 Application of subject Computer – I in Graphics – I

Drafting of measured building elements / small building units using computer.
Isometric and axonometric views using computer.

BUILDING CONSTRUCTION AND MATERIAL –II (AR02-03)

Lectures - 30

Sessional Work(Int.) – 50

Total – 100

Studio - 60

Theory – 50 Duration - 3 hrs

MATERIALS :

- 1. Stones :** Building stones, types of rocks, method of quarrying origin and composition of stones, properties of good stones natural bed, various types of stone dressings defects in stone, stones used in construction, uses in construction, aggregates.
- 2. Lime :** Lime ore stone, quarrying and collection composition and physical properties method of burning of lime ore, quick lime, fat lime , hydraulic lime mortar mix, method of preparation, neeru, plaster, efflorescence, peeling, flaking, blistering, use of surkhi, I.S.I. standards, lime wash, uses in construction.

CONSTRUCTION :

- 1.Types of Arches** in bricks, stones construction method & centering for Arch. Cornices, canopy and porch in brick and stones.
- 2.Doors and windows** such as ledged, braced, battened, false paneled door, simple glazed and wooden paneled.
- 3.Roof :** roof layout ridge, hip valley, gable eaves etc. types of simple pitched roof such as lean to couple, close couple and ,collar and, material and details of roof covering such as thatch Mangalore and other patent tiles country tiles and shingles.

REFERENCE BOOKS:

- 1. ENGG.MATERIALS – K.S.RANGWALA**
- 2. ENGG.MATERIALS – B.K.AGARWAL**
- 3. BUILDING.MATERIALS – S.K.DUGGAL**
- 4. BUILDING CONSTRUCTION TECHNOLOGY –R.CHUDLEY**
- 5. BUILDING CONSTRUCTION –SUSHIL KUMAR**
- 6. BUILDING CONSTRUCTION –W.B.MACKAY**
- 7. BUILDING CONSTRUCTION –BINDRA ARORA**

HISTORY OF ARCHITECTURE AND HUMAN SETTLEMENT-I I (AR01-04)

Lectures –30

Studio - ---

Sessional work (Int.) 50

Theory --- 50 Duration of paper 2 hrs

Total 100

Study of basic history of evolution of human settlement from ancient till today in Western countries and in India.

Following topics to be covered---

- Natural and man made environment
- India during medieval period
- Western medieval cities --- Baroque city planning
- India during renaissance --- Jaipur
- Evolution of cities
- Metropolitan cities
- Industrial revolution
- Impact of industrial revolution on town planning
- Different theories of town planning –
 1. Plan for community
 2. Petric Geddes
 3. Garden city
 4. Satellite town
 5. Modern town planning in India -- Chandigarh, Gandhinagar

Reference books ---

1. An outline history of world architecture by H.A.Davies, M.A.
2. A history of world architecture, James Edgar Swain, PhD
3. Town planning by G.K. Hiraskar
4. Town planning by Abir Bandopadhyay

THEORY OF STRUCTURE –II (AR02-05)

Lectures - 60	Studio - ---	
Sessional Work(Int.) - 20 *	Theory - 80*Duration - 3Hrs.	Total – 100

Note: The passing in this subject requires min. 40% marks for theory paper , 50% for internal assessment and combined 50% of Total internal and theory paper.

1. Analysis of trusses: Definition of perfect, deficient & redundant trusses. Analysis of determinate trusses by method of joints, sections and graphical method.
2. Simple Stresses and strains: concept, definitions, units, types of stresses and. strains. Stress strain curve, safe stresses, factor of safety, different types of safe stress as per ISI code for different materials like timber, steel. Hook’s law, typical stress strain behavior for steel and concrete.
3. Elastic constants: modulus of elasticity, Poisson’s ratio, modulus of rigidity, bulk modulus, shears modulus and their relations.
4. Properties of sections: centre of gravity, moment of inertia, modulus of section, radius of gyration of simple symmetrical and unsymmetrical sections including built up sections.
5. Bending Moment & Shear force: concept of shear force and bending moment. BMD & SFD for statically determinate simply supported and cantilever beams subjected to combinations of concentrated, uniformly distributed, uniformly varying loads. Point of contra flexure in simply supported beams with overhang.

Sessional work: Minimum Six assignments based on above topics.

REFERANCE BOOKS:

- 1 Strength of Materials – R.K. Bansal, Laxmi publications, New Delhi.
- 2 Strength of Materials - R.S. Khurmi, S. Chand & company , New Delhi.

AESTHETICS AND VISUAL ARTS – II (AR02-06)

Lectures - 15
Sessional Work(Int.) – 100

Studio - 60
Total – 100

OBJECTIVE : The purpose of this subject is to create awareness about principle of good design to develop good aesthetic taste understand of Architecture and different fine arts and their application to study the principle of arts and their examples as seen in familiar day to day objects works of arts and architecture , interior design , house design, advertising, city planning etc. In each of these fields, one works with the sizes, shapes, colours and texture etc. which are created and arranged in accordance with the principles of aesthetics.

- 1.** Study of texture.
- 2.** Definition of design, functional and decorative design requirements of good design. Principle of design such as harmony & unity, proportions, contrast, scale, balance, rhythm, emphasis expression and character.
- 3.** Composition of group of objects, forms positive and negative spaces.
- 4.** Approach to Architecture and design and space.
- 5.** Planning for different activities building for them.
- 6** Function – planning from in side out
- 7** Forms development from the above.

The sessional work shall consist of study of models photographs. Project report writing and seminar on any one selected project based on this subject

WORKSHOP – II (AR02-07)

**Lectures - -
Sessional Work(Int.) – 50**

**Studio - 45
Total – 50**

OBJECTIVE :

To develop the ability to appreciate the three dimensional implications of design and to introduce the students to the techniques of model making.

1. Introduction of carpentry tools and machines.
2. Different types of joints and their function.
3. Clay work, brick, cob, wattle and daub, rammed earth Masonry construction- walls, arches and corbel.
4. Marking of geometrical forms on the ground.
5. Study tours to sources of local building materials and to local building under construction to study their actual use.
6. Introduction to modeling with paper, paper board, plastics, plaster of Paris, wood and clay.

COMMUNICATION SKILLS – II (AR02-08)

Lectures - 30
Sessional Work(Int.) – 50

Studio - -
Total – 50

1) Paragraph Writing

- Techniques of Paragraph Writing

2)Soft Skills

- Definition, need & significance
- Types of Soft Skill

3) Techniques of Professional Correspondence

- Importance
- Techniques
- Types-Enquiry , Order, Complaint, & Invitation letters with replies
- Application Letters with Resume .

4) Precise Writing

- Importance
- Techniques

5) Presentation Skills

Note : The internal marks will be based on tutorials and individual performance.

COMPUTER TECHNOLOGY IN ARCHITECTURE -II (AR02-09)

Lectures - 15
Sessional Work(Int.) – 50

Studio - 30
Total – 50

CAD AND ADVANCED APPLIATION

- 1.Creating and organizing 2-d drawing
- 2.All 2 Dimensional drawing commands.
- 3.All 2 Dimensional edit commands.
- 4.Inquiry commands.
- 5.Setting for drawing
- 6..Concept of layer, line types,
- 7.Dimensions
- 8.Introduction to block and application
- 9.Textd and fonts
- 10.Out put of the drawing through printer or plotters
- 11.Different setting of drawing snap mode etc.
- 12.Hatch its patterns.
- 13.Isometric drawing

Minimum one drawing showing plan, elevation., section of a project be submitted as sessional work.

NORTH MAHARASHTRA UNIVERSITY, JAGAON

(M.S.)

Rules of structure for First to Fifth year B.Arch.Degree Course

Rule no.1: ELIGIBILITY FOR ADMISSION.

Eligibility Criteria: Students seeking admission to First year of Bachelor's degree course in Architecture must fulfill the eligibility criteria laid down by North Maharashtra University / Govt. of Maharashtra / Council of Architecture as applicable from time to time.

Rule no.2: SCHEME OF ASSESSMENT.

A candidate to be eligible for the degree of Bachelor of Architecture will be required to appear for and pass examinations as under:

Examination Consisting of

STAGE I

1. First Examination in Architecture (I B.Arch.) Term I & II
2. Second Examination in Architecture (II.B.Arch.) Term III & IV
3. Third Examination in Architecture (III.B.Arch.) Term V & VI

STAGE II

4. Fourth Examination in Architecture (IV B.Arch.) Term VII & VIII
5. Bachelor of Architecture (V B.Arch.) Term IX & X

Rule no. 3: GRANTING OF TERM.

Academic year shall consist of two terms of 90 teaching days each. Sessional work completed by the students shall be continuously assessed by the teacher during the term and assessed at the end of the academic term jointly by the internal and external examiners.

The candidate will be permitted to appear for annual examination **only if** he/she keeps term for that part at a College affiliated to the University and produces testimonials from the Principal of the College for :

1. 75% attendance in each head of passing of theory and/ or sessional work as prescribed by the University.
2. Satisfactory completion of the sessional work prescribed for each subject and securing at least 50% marks in the Internal assessment for the same.
3. Good Conduct.

Rule no. 4: PREREQUISITES FOR ADMISSION TO HIGHER CLASSES.

A student shall be promoted to higher class only if he has scored minimum 45 % marks in each theory head and 50 % marks in each sessional / sessional and viva-voce head.

For admission to Stage II of the course:

- Candidates admitted to the course shall complete the first stage within **five** years of admission to the course.
- The pass percentage shall not be less than 50% in the aggregate marks of F.Y, S.Y., and T.Y. at the end of Stage I.

Rule no. 5 : RULES OF A.T.K.T.

As a general rule a student shall be allowed to keep term for the next year of study of the course if he/she has a backlog of not more than **FOUR HEADS** of passing in the preceding year.

- a) A student shall be allowed to keep term for Second Year B.Arch.course if he/ she has a backlog of not more than **FOUR HEADS** of passing in Theory / sessional / Viva-voce examination at First Year B.Arch.
- b) A student shall be allowed to keep term for the Third Year B.Arch. Course, if he/she has no backlog of First Year B.Arch. and if he/she has a backlog of not more than **FOUR HEADS** of passing in Theory /Sessional / Vivavoce examination at Second Year B.Arch.
- c) A student shall be allowed to keep term for the Fourth Year B.Arch.Course, if he/she has no backlog of Second Year B.Arch. and if he/she has a backlog of not more than **FOUR HEADS** of passing in Theory /Sessional / Vivavoce examination at Third Year B.Arch.
- d) Fourth Year and Final Year are considered as integrated Stage II of the course and hence students will be allowed to take admission to Fifth year irrespective of the number of subjects in which they are failing at Fourth Year.The pass percentage shall not be less than 50% in the aggregate marks of Fourth Year and Fifth Year at the end of Stage II.

Rule no. 6: EXAMINATIONS.

At each examination,

i. Paper

ii. Sessional / Sessional and Viva-voce based on sessional work, as prescribed in the subjects, for both the terms together, shall constitute one head of passing.

Rule no. 7: CONDUCT OF EXAMINATIONS.

The examinations for First , Second , Third, Fourth and Fifth Year B.Arch shall be conducted by North Maharashtra University. The results shall be declared within 45 days of completion of the examination.

Rule no. 8: SESSIONAL WORK ASSESSMENT.

a. In respect of Sessional work at F. Y. B.Arch., S. Y. B.Arch., T. Y. B.Arch.Fourth Yr. B.Arch and Fifth Year B.Arch. target date shall be fixed for the completion of each assignment and the same shall be collected on the target date. All assignments shall be continuously assessed by the teacher during Term I and Term II.

b. At the end of each Term sessional work shall be assessed jointly by the internal and external examiners from amongst the panel approved by the University for the subject. If the student fails in the First Term Sessional assessment, he / she will have to make up in the second term assessment and have to pass in the combined marks obtained by the candidate in the particular subject in both terms taken together as it is considered as one subject head.

c. Performance of Sessional / Viva-voce Examination shall be assessed on the basis of the depth of understanding of the principles involved and not on the basis of mere correctness or results of ornamental or colorful presentation. d. Students may use computers for preparing sessional work where nature of work is unique to an individual and stress is on content rather than skill. For common form of work, drawings and reports/ notes shall be manually prepared.

e. At First, Second, Third, Fourth and Final, year examination, external assessment shall be carried out by the examiner external to the college. i.e. teacher from college other than one whose students are being examined.

f. Internal Examiner : Internal Examiner is one who is teaching that particular subject in the same/any other college under North Maharashtra University.

g. External Examiner: For First, Second, Third, Fourth & Fifth year, External Examiner at a center means a teacher who is not teaching in the college for which the examination is being conducted

h. An Examiner for any of the subjects of examination from 1st year to 3rd Year Architecture, shall have a minimum of 3 years teaching / professional experience in his/her field of study.

i. To qualify for the External Examiner at Fourth and Fifth year examination, the professional shall have a minimum of five years professional experience.

Rule no. 9 : CRITERIA FOR PASSING.

To pass the F.Y. / S.Y. / T.Y. / Fourth Yr. / Fifth Yr B.Arch. Examination, candidate must obtain minimum 45% marks in each paper and 50% marks in each sessional / sessional and Viva-voce head.

Rule no. 10: GRADING SYSTEM.

The class at the end of each Year should be awarded to the student on the aggregate marks obtained by him. The award of class shall be as follows:-

- a) Aggregate 66% or more marks : First class with Distinction
- b) Aggregate 60% or more marks : First class but less than 66%
- c) Aggregate 55% or more marks : Higher Second class but less than 60%
- d) Aggregate 50% or more marks : Second class but less than 55%
- e) Aggregate less than 50% : Pass class subject to criteria of passing

The pass percentage shall not be less than 50% in the aggregate marks of F.Y., S.Y., and T.Y., Fourth Year at the end of Stage I. CLASS OF STAGE II EXAMINATION SHALL BE AWARDED ON THE BASIS OF PERFORMANCE OF FIFTH YEARS TAKEN TOGETHER.

Rule no. 11: EXEMPTIONS & SUPPLEMENTARY EXAMINATION.

In case a candidate fails in an examination but desires to appear again,

- a) He/She may be exempted from appearing in the head/s of passing in which he/she has passed.
- b) Supplementary examination will be held in Oct./Nov.
- c) Only those candidates who appeared but failed / failed with A.T.K.T. in the combined result of Term I and Term II examination taken together will be allowed to appear for the supplementary

examination. The candidate failing in sessional / sessional and viva-voce head shall have to improve upon and present the sessional work of term I and term II both at the time of supplementary examination

Rule no. 12: INTRODUCTION OF THIS CURRICULUM.

The new curriculum for the Degree course in Architecture B.Arch will be introduced gradually as under:

- a) First Yr. B. Arch. course from June 2017
- b) Second Yr. B. Arch. course from June 2018
- c) Third Yr. B. Arch. course from June 2019
- d) Fourth Yr. B. Arch. course from June 2020
- e) Final Yr. B. Arch. course from December 2021.

Rule no. 13 : DEGREE OF BACHELOR IN BUILDING SCIENCES

A Degree of Bachelor in Building Sciences shall be awarded to candidates after successful completion of Stage I in case he / she is unable to complete the first stage within five years of admission to the course and / or wants to opt out of the course at this stage. Completion of only Stage I shall not qualify the candidates for registration as an Architect.

Rule no. 14: OTHER RULES.

University / affiliated colleges may frame additional rules and regulations or modify these regulations if needed and once approved by the North Maharashtra University. they would be binding on the students.