

Architects Act, 1972

Appendix 1 - APPENDIX A COURSES, PERIODS OF STUDY AND SUBJECTS OF EXAMINATION

Stage I-Basic Course Minimum No. of period Subjects of Examination of 50 to 60 minutes duration

1. Architectural Design ...	600
2. Building Construction	360
3. Building Materials and Sciences	60
4. Architectural Drawing and Graphics	360
5. History of Architecture	120
6. Workshop Practice	120
7. Landscape Design	60
8. Structural mechanics and Theory of	300
9. Surveying and Levelling	60
10. Building Services & Equipment ...	90
11. Humanities ...	60
12. Estimating & Costing ...	60
13. Principles of Human settlements ...	60

2310 NOTE:-1. The names given to the subjects of study are suggestive only. The same subjects pertaining to the architecture may be taught under different names. The emphasis on teaching various subjects may vary from institution to institution. New subjects may be introduced and certain subjects given less emphasis depending upon the requirement and educational philosophy of an institution. The subjects of Landscape Design, Humanities and Estimating and Costing may, if desired, be taught in the second stage of the course. 2. For the purpose of calculating the periods of study 30 periods per week per semester/term of class are considered to be adequate. For 3 years of study at the rate of 16 weeks per semester/terms, the total for first stage works out to be 2880 periods. 3. In order to give freedom to the Institutions to orient the Course as per their own philosophy, approx. 75 per cent of the total periods of study have been taken into account for calculating the minimum hours of study for each subject while the institutions may allot the balance approx. 25 per cent of the study periods to the subjects of their choice. 4. Minimum total contact periods should be 2880. Thus, 570 periods are to be allotted by the Institution to the subjects of their choice.

BRIEF DESCRIPTION OF THE SUBJECTS LISTED IN THE FIRST STAGE OF THE COURSE

1. Architectural Design:-Applying the knowledge gained in other subjects and to design buildings of medium complexity e.g. Schools, Colleges, Dispensaries, Shops and Houses etc., and present them in graphic form.
2. Building Construction:-Knowledge of various methods of building construction of medium complexity with timber, stone bricks, concrete etc., including foundation, walls roofs, staircase, joinery and finishes.
3. Building Materials and Sciences:-Knowledge of basic building materials and their behaviour such as bricks stones, metals and Timber and finishing materials. Effects of climate on built environment to be able to design for comfortable conditions.
4. Architectural Drawing and Graphics:-Ability to present in graphic form all elements of design-Study of shades and shadows, textures, tones, colours, geometrical form, perspectives and projections, free hand drawing and rendering.
5. History of Architecture:-Study of various styles of Architecture and methods of construction through the ages in the world with emphasis of Indian Architecture.
6. Workshop Practice:- Ability to make building models with various materials such as card-board, wood, plastics, plaster of paris and metals. Ability to make simple joints in timber, pipes and other, materials.
7. Landscape Design:-Understanding of Landscape elements like trees, shrubs, plants, water, rocks and development of landscape planning and application in architectural design.
8. Structural Mechanics and Theory of Structures:-Understanding the structural concepts and behaviour of structural elements, simple calculations for columns, beams, frames, footings, slabs walls in concrete, steel timber.
9. Surveying and Levelling:-Understanding of various survey and levelling instruments, carrying out surveys of land of medium complexity and preparation of survey plants.
10. Building Services & Equipment:-Study of and designing for water supply, drainage, sewage disposal, electricity supply, wiring and lighting for buildings.
11. Humanities:-Study of Sociology, Economic and Culture, as applicable for design of human settlements.
12. Estimating and Costing.-Systems of taking out quantities and estimating for all trades involved in construction of medium complexity.
13. Principles of Human Settlement:-Man and environment, biological and behavioural responses to human settlements. Design for living natural and built-environment. Ancient texts and treatises on settlement and area planning in India. Human settlements during ancient medieval and modern periods in India. Europe and other parts of the world. Characteristics of human settlements built by Muslim and Hindu rulers in India.

SECOND

STAGE Subjects of Examination Minimum No. of Periods of 50 to 60 minutes duration 1. Architectural design, planning and ... 570 Thesis 2. Building construction & materials ... 210 & Specifications 3. Building Sciences and Services ... 60 4. Town Planning theory ... 60 5. Professional Practice ... 90 6. Building Bye-laws ... 15 7. Structural System ... 45 8. Elective such as (i) Housing (ii) Urban Design (iii) Interior Design (iv) Building Management (v) Landscape Design (vi) Urban Planning ... 60 _____ 1110

NOTE- 1. The names given to the subjects of study are suggestive only. The same subjects pertaining to the architecture may be taught under different names. The emphasis on teaching various subjects may vary from institution to institution. New subjects may be introduced and certain subjects given less emphasis depending upon the requirement and educational philosophy of an institution. Teaching in the second stage may be a lot more flexible. Students may obtain employment and may come back to complete the prescribed course later. It may also be possible to complete the second stage of the course as a part time course depending upon the facilities available in an institution. 2. For the purpose of calculating the periods of study, 30 periods per week per semester/term of class are considered to be adequate for 1 1/2 years of study at the rate of 16 weeks per semester/term, the total for second stage work out to be 1440 hours. 3. In order to give freedom to the institutions to orient the course as per their own philosophy, approx. 75 per cent of the total periods of study have been taken into account for calculating the minimum period of study for each subject while the Institutions may allot the balance approx. 25 per cent of the study periods to the subjects of their choice. 4. Minimum total contact periods should be 1440. Thus, 360 periods are to be allotted by the Institution to the subjects of their choice. BRIEF DESCRIPTION OF THE

SUBJECTS LISTED IN THE SECOND STAGE OF THE COURSE 1. Architectural Design, Planning and Thesis:-Design of complicated buildings and campuses involving analytical studies of buildings and spaces from sociological. Economic and Cultural points of view, such as Universities, Industrial Estates, housing Schemes etc. Thesis on a subject requiring detailed analytical study to lay down validity and design criteria presented in graphic form, models and report. Thesis may also be on research projects presented as a written report. 2. Building Construction Materials and Specifications:-Study of Advanced building construction methods with new materials such as plastics, metals, Synthetic boards and latest techniques in the use of concrete. 3. Building Sciences & Services:-Study of Accoustics, Air-Conditioning, Heating, Cooling Mechanical installations, fire-Control, water supply and drainage systems for complicated buildings. 4. Town Planning Theory:-A general understanding of Town Planning principles as they have evolved through the ages. 5. Professional Practice:-The examination in professional practice is designed to assess the knowledge, skill and maturity which fit the architect to fulfil his professional duties and his understanding of the management of an of office organisation of such as a purpose. The syllabi should cover the following areas of study:- General principles of Indian Contract Act; Building Contracts generally, conditions and form of contract, administration of contracts, Principles of arbitration, Arbitration And Conciliation Act, 1996-; Valuation of properties, architectural competitions; Easements of properties; Report writing; Codes of Practice; Conditions of Engagement; duties and responsibilities of an architect in relation to owner contractor, related professional and public; Indian Standards & Codes of Practice. (Planning and Building legislation etc. has been omitted because this is covered under building Bye-lawsitem 6) 6. Building Bye-Law:-Study of building regulations to enable to design and prepare drawings for submission to concerned bodies. 7. Structural Systems:-Study of new structural technology such as space frames prestressing, shells and understanding of the limitations and scope of these techniques. Calculations for these techniques are not expected. Electives Such as:- (a) Housing (b) Urban Design (c) Interior Design (d) Building Management (e) Landscape Design (f) Urban Planning Intensive study of one or more of the subjects offered as elective depending upon the expertise available to an institution. The list of the subjects may be enlarged but they should be related to Architecture.