

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING AND EXAMINATION

VII SEMESTER B Arch (Five Years Degree Course)

S. N.	Subject Code	Board of Studies	Subject	Periods per Week			Scheme of Examination			Total Marks	Credit [L+(T+P)/2]
				L	T	P	ESE	CT	TA		
01.	316711 (16)	Arch.	Building Construction -VII	3	0	0	80	20	75	175	3
02.	316712 (20)	Civil Engg.	Structure- VII	3	2	0	80	20	20	120	4
03.	316713 (16)	Arch.	Town Planning	3	1	0	80	20	40	140	4
04.	316714 (16)	Arch.	Professional Practice	2	1	0	80	20	20	120	3
05.	316715 (16)	Arch.	Estimation	2	1	0	80	20	20	120	3
06.	316716 (16)	Arch.	Design-VII	2	6	0	---	---	150	150	5
07.	316721 (16)	Arch.	Design-VII (Studio)	0	0	2	50	---	---	50	1
08.	316722 (16)	Arch.	Building Construction –VII (Studio)	0	0	6	25	---	---	25	3
09.	316723 (16)	Arch.	Architectural Documentation	0	0	6	25	---	75	100	3
TOTAL				15	11	14	500	100	400	1000	29

L- Lecture T- Tutorial P- Practical ESE- End Semester Exam TA- Teacher's Assessment

Note: 1. ESE and TA (Both Theory and Practical) are required to be passed separately.

2. For a the subjects having Practical (i.e. Studio work) will be divided in sections at the rate of maximum 15 students per teacher, though studio of all the sections will be held simultaneously in the same studio hall.

Chhattisgarh Swami Vivekanand Technical University, Bhilai (C.G.).

Semester : **VII**

Subject: **BUILDING CONSTRUCTION - VII**

Total Theory Periods: **40**

Total Marks in End Semester Exam: **80**

Minimum number of Class tests to be conducted: **02**

Branch: **ARCHITECTURE**

Code: **316711 (16)**

Total Tut Periods: **Nil**

Unit 1: North Light roof trusses in steel.

Unit 2: Monitor type steel trusses and Industrial roofing in R.C.C.

Unit 3: Tubular trusses and built- in trusses in steel. Industrial glazing patented glazing, industrial cladding.

Unit 4: Canopies in timber, steel and R.C.C. covered ways in steel & R.C.C.

Unit 5: Pile, raft, grillage foundations.

- Note:
1. There shall be regular site visits to buildings, under construction or Constructed, to explain the above topics. Use of audio-visuals should be Stressed.
 2. Submission of Sessional work shall be done as scaled drawings on drawing Sheets and freehand drawings along with occasional visits to construction Sites.
 3. In theory examination there will be a separate question from each unit with choice within the unit/question. All units/questions will be compulsory.

Chhattisgarh Swami Vivekanand Technical University, Bilai (C.G.).

Semester : **VII**

Subject: **STRUCTURE-VII**

Total Theory Periods: **40**

Total Marks in End Semester Exam: **80**

Minimum number of Class tests to be conducted: **02**

Branch: **ARCHITECTURE**

Code: **316712 (20)**

Total Tut Periods: **24**

The course will include structural design of two to four storied building in RCC framed structure, consisting of halls, basements etc. along with detailed drawings and/ or steel structures such as industrial buildings, godowns etc. with detailed structural report file.

Regular site visits may be arranged to R.C.C. buildings to explain the project. The use of audiovisuals may be made for explanation.

- Note:
1. All the relevant I.S. codes shall be permitted in examination.
 2. Submission of the Sessional work should include the analysis and design of buildings along with the drawings.
 3. This subject would be **single unit subject** and hence only **one question** with 100% choice shall be asked in examination and would be in form of structural design of a small building or elements of building, viz. Foundation, beams, columns etc

Chhattisgarh Swami Vivekanand Technical University, Bhilai (C.G.).

Semester: **VII**

Subject: **TOWN PLANNING**

Total Theory Periods: **40**

Total Marks in End Semester Exam: **80**

Minimum number of Class tests to be conducted: **02**

Branch: **ARCHITECTURE**

Code: **316713 (16)**

Total Tut Periods: **12**

This course is intended to give elementary knowledge of subject pertaining to history, scope and general principles of town planning including the Acts and byelaws.

Unit 1: Meaning and level of planning based on scope and objective, development of planning thought, **a brief historical review** of town and cities planned in various periods of world history with special references to development & growth of towns in India.

Unit 2: **General principles of planning**, Elements of city plans (communication, open spaces, land use etc.), neighborhood, garden city movement.

Unit 3: **Planning Acts**, Building byelaws, State byelaws, Land Acquisition Act, Urban land ceiling Act and other important State Acts.

Unit 4: Study of **New towns**: Chandigarh, Gandhinagar, Industrial townships etc.

Unit 5: Introduction to various **planning processes**. Surveys for planning. Master plan and its components. Zoning: need and advantages.

Note: 1. There shall be visits to office of town and country planning to understand the process and problems.

2. Submission of sessional work shall be done as plan proposal for small town planning scheme, housing, site layout of urban or rural sites drawn to scale.

3. In theory examination there will be a separate question from each unit with choice within the unit/question. All units/questions will be compulsory.

Chhattisgarh Swami Vivekanand Technical University, Bhilai (C.G.).

Semester : **VII**

Subject: **PROFESSIONAL PRACTICE**

Total Theory Periods: **28**

Total Marks in End Semester Exam: **80**

Minimum number of Class tests to be conducted: **02**

Branch: **ARCHITECTURE**

Code: **316714 (16)**

Total Tut Periods: **12**

Unit 1: Introduction to Architectural profession regarding its status and importance. Role of Professional bodies like Indian institute of Architects and Council of Architecture. Architects' Registration Act 1972 and formation of C.O.A.

Unit 2: The duties, liabilities of Architect with reference to relationship with client, builder/contractor and other consultants. The code of conduct and conditions of engagement of architects. Scale of Charges for Architectural services and mode of payment.

Unit 3: Architectural competitions and norms. Working of public bodies e.g. Types of tenders, Process of tendering, Execution of Contracts etc. and role of an architect in the same.

Unit 4: Office management including various acts regarding registration of firms, partnership, dissolution of the firms etc. Office administration including staff structure, liabilities towards staff, funds, account keeping, taxes, patents, documentation of records and drawings etc.

Unit 5: Introduction to Arbitration, Laws pertaining to arbitration and property matters like Right of easements, passage, ancient light etc.

Note: 1. In theory examination there will be a separate question from each unit with choice within the unit/question. All units/questions will be compulsory.

2. Sessionals shall be in form of exemplary assignments to be submitted as notes, and collection of cases regarding professional practice in the field.

Chhattisgarh Swami Vivekanand Technical University, Bhilai (C.G.).

Semester : **VII**

Subject: **ESTIMATION**

Total Theory Periods: **28**

Total Marks in End Semester Exam: **80**

Minimum number of Class tests to be conducted: **02**

Branch: **ARCHITECTURE**

Code: **316715 (16)**

Total Tut Periods: **12**

Unit 1: Introduction to Quantity Survey, Methods of preparing estimates, Data required for making an estimate, Types of estimates.

Unit 2: Mensuration, Standard Mode of measurements, Schedule of rates, Commercial abbreviations, Methods and procedure of taking off abstractions; working up and Billing; Examples and exercises for above from excavations to finishing.

Unit 3: Rate analysis, Cost of materials and labour for various works, Measurement of work for interim and final certificates for payment to contractors.

Unit 4 General terms: Administrative approval, Technical sanction, Competent authority, Deposit work, Issue rates, Payment on accounts, Suspense account, Imprest, Indent of Stores, Muster roll, Measurement book, Materials site account, Establishment charges etc.

Unit5: Methods and Contents of technical report and proposals for obtaining administrative/technical/financial approval/sanction.

Note: Sessional assignments would in the form of exercises and reports on above topics.

Chhattisgarh Swami Vivekanand Technical University, Bhilai (C.G.).

Semester : **VII**

Subject: **DESIGN - VII**

Total Theory Periods: **28**

Total Marks in End Semester Exam: ---

Minimum number of Class tests to be conducted: ---

Branch: **ARCHITECTURE**

Code: **316716 (16)**

Total Tut Periods: **72**

1. In the design studio stress shall be given on building design with use of modern technology. Multistoried building with use of lifts, escalators, air conditioning etc. Stress is also to be given on detailing of the services, parking and fire fighting.
2. Problem should be of different nature in terms of scale, site potentials and constraints. E.g. Factories, Film Studios, Computer Centers, Hotel, Multistoried offices, Apartments. Commercial Centers etc.

One time problem, in addition to regular studio assignment shall be given.

Note: Submission of the sessionals will be in the form of drawings and models along with Technical report for the design dealt. The evaluation shall be done in intermediate reviews consisting of internal and external experts. There should be regular site visits to buildings, dealt in studio problems, so as to document them with the help of photographs, slides, videocassettes etc.

Chhattisgarh Swami Vivekanand Technical University, Bilai (C.G.).

Semester : **VII**

Subject: **DESIGN - VII (STUDIO)**

Total Practical Periods: **24**

Total Marks in End Semester Exam: **50**

Minimum number of Class tests to be conducted: --

Branch: **ARCHITECTURE**

Code: **316721 (16)**

The subject is a lab (studio) oriented subject and hence, the syllabus as specified in Design - VII [316716-(16)] will be the same. The works done as sessionals will be evaluated by internal and external examiners at the end semester examination. For conduction of the Practical (viva-voce) examination one external and one internal examiner may be appointed for a group of 15-20 students.

**Chhattisgarh Swami Vivekanand Technical University, Bilai
(C.G.).**

Semester : **VII**

Subject: **BUILDING CONSTRUCTION - VII (STUDIO)**

Total Practical Periods: **75**

Total Marks in End Semester Exam: **25**

Minimum number of Class tests to be conducted: --

Branch: **ARCHITECTURE**

Code: **316722 (16)**

The subject is a lab (studio) oriented subject and hence, the syllabus as specified in Building Construction - VII [316711-(16)] will be the same. The works done as sessionals will be evaluated by internal and external examiners at the end semester examination. For conduction of the Practical (viva-voce) examination one external and one internal examiner may be appointed for a group of 15-20 students.

Chhattisgarh Swami Vivekanand Technical University, Bilai (C.G.).

Semester : **VII**

Subject: **ARCHITECTURAL DOCUMENTATION**

Total Practical Periods: **75**

Total Marks in End Semester Exam: **25**

Minimum number of Class tests to be conducted: --

Branch: **ARCHITECTURE**

Code: **316723 (16)**

The subject has been introduced to build up an archive of architectural heritage in the region. This will be done by selecting a building/s of architectural and historical importance and giving the assignment to groups of students to make a report which will include measured drawings and details along with analytical report regarding its space organization, construction techniques, materials, structural system, climatological, thermal, environmental, acoustical and aesthetical aspects and relation ship with the surrounding man-made and natural environment. The building selected may also be a contemporary but trend-setting building. The works done as sessionals will be evaluated by internal and external examiners at the end semester examination. For conduction of the Practical (viva-voce) examination one external and one internal examiner may be appointed for a group of 15-20 students.