

Department of Architecture	
LESSON PLAN	
Program Name	Architecture Assistantship
Subject Name	BUILDING ESTIMATION
Subject Code	ARPC – 6002
Semester	Sixth
Subject Teacher Name	Rajinder Kumar

Evaluation Scheme

Sr. No	Subject Name	Study scheme (Hrs/Week)		Marks in Evaluation Scheme					
				Internal Assessment			External Assessment		
		Th	Pr	Th	Pr	Total	Th	Pr	Total
1	BUILDING ESTIMATION	4	0	40		40	60		60

Reference Books	Town Planning by Rangwala ,Charotar Publishing House Pvt. Ltd
	Fundamentals of Town Planning by G.K. Hiraskar & Town Planning by M Pratap Rao.

Course Outcomes (COs)

CO – 1	The student will be able to develop the basic knowledge of measurements and payment of different items of the work.
CO – 2	The student will be able to write detailed specification with the help of schedule of rates.

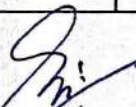
Teaching Plan

Chapters	Name of Topic	Proposed Date	Actual Date	Remarks
UNIT- I (Introduction)	Introduction to Estimating –Definition and Types of Estimates,	28-01-2026		
	Introduction to Estimating –Definition and Types of Estimates,	30-01-2026		
	Introduction to Estimating –Definition and Types of Estimates,	31-01-2026		
	Introduction to Estimating –Definition and Types of Estimates,	02-02-2026		
	Various performas used in estimates - measurement form, abstract of cost and material statement form.Units of measurement and units of payment of different items of work including building services	04-02-2026		
	Various performas used in estimates - measurement form, abstract of cost and material statement form.Units of measurement and units of payment of different items of work including building services	06-02-2026		
	Various performas used in estimates - measurement form, abstract of cost and material statement form.Units of measurement and units of payment of different items of work including building services	07-02-2026		
	Calculation of Quantities and Statement: Calculation of quantities of different Items of Work. Material statements.	09-02-2026		
	Calculation of Quantities and Statement: Calculation of quantities of different Items of Work. Material statements.	11-02-2026		
	Calculation of Quantities and Statement: Calculation of quantities of different Items of Work. Material statements.	13-02-2026		
	Calculation of Quantities and Statement: Calculation of quantities of different Items of Work. Material statements.	16-02-2026		
	Calculation of Quantities and Statement: Calculation of quantities of different Items of Work. Material statements.	18-02-2026		
	Thumb rule methods of calculating steel in RCC. (ASSIGNMENT-I)	20-02-2026		
	Thumb rule methods of calculating steel in RCC.	21-02-2026		
	Study of Schedule of rates for different Items of Work.	23-02-2026		
UNIT-II (Analysis of Rates)	Study of Schedule of rates for different Items of Work.	25-02-2026		
	Study of Schedule of rates for different Items of Work.	27-02-2026		
	Calculation of rates of the main items of construction including the calculation of carriage of materials	28-02-2026		
	Calculation of rates of the main items of construction including the calculation of carriage of materials	02-03-2026		
	Calculation of rates of the main items of construction including the calculation of carriage of materials	06-03-2026		
	Calculation of rates of the main items of construction including the calculation of carriage of materials	07-03-2026		
	Calculation of rates of the main items of construction including the calculation of carriage of materials	09-03-2026		
	Calculation of rates of the main items of construction including the calculation of carriage of materials	11-03-2026		
	CLASS TEST-I	13-03-2026		
	Calculation of rates of the main items of construction including the calculation of carriage of materials	16-03-2026		
	Calculation of rates of the main items of construction including the calculation of carriage of materials	18-03-2026		
	Calculation of rates of the main items of construction including the calculation of carriage of materials	20-03-2026		

	Calculation of rates of the main items of construction including the calculation of carriage of materials	23-03-2026		
	Calculation of rates of the main items of construction including the calculation of carriage of materials	25-03-2026		
	Market Survey of prevailing market rates of different items.	27-03-2026		
	Market Survey of prevailing market rates of different items.	28-03-2026		
UNIT-III (Contract & Tenders)	Types, Preparation of contract documents,	30-03-2026		
	Types, Preparation of contract documents,	01-04-2026		
	general conditions of contract, interim certificates defect liability period,	04-04-2026		
	general conditions of contract, interim certificates defect liability period,	06-04-2026		
	retention amount and virtual completion.	08-04-2026		
	retention amount and virtual completion.	10-04-2026		
	CLASS TEST-II	13-04-2026		
	retention amount and virtual completion.	17-04-2026		
	Articles of agreement, execution of work payment and Arbitration etc.	18-04-2026		
	Articles of agreement, execution of work payment and Arbitration etc.	20-04-2026		
	Types and the process of calling, security and selection system	22-04-2026		
	Types and the process of calling, security and selection system	24-04-2026		
	Pre- Tender qualifications and registration of contracts, earnest money, security money etc. (ASSIGNMENT-II)	25-04-2026		
	Pre- Tender qualifications and registration of contracts, earnest money, security money etc.	27-04-2026		
	Pre- Tender qualifications and registration of contracts, earnest money, security money etc.	29-04-2026		
UNIT-IV (Specifications Principles of specifications writing)	Writing brief and broad specifications of items of construction with special reference to two storey building.	02-05-2026		
	Writing brief and broad specifications of items of construction with special reference to two storey building.	04-05-2026		
	Writing brief and broad specifications of items of construction with special reference to two storey building.	06-05-2026		
	Writing brief and broad specifications of items of construction with special reference to two storey building.	08-05-2026		
	HOUSE TEST	11-05-2026		
	HOUSE TEST	13-05-2026		
	Writing brief and broad specifications of items of construction with special reference to two storey building.	15-05-2026		
	Writing brief and broad specifications of items of construction with special reference to two storey building.	16-05-2026		
	Writing brief and broad specifications of items of construction with special reference to two storey building.	18-05-2026		
	Explanation of ordinary terms used in book keeping, cash book, Ledger, work order, Measurement book, petty cash and imprest, receipts	20-05-2026		
	Explanation of ordinary terms used in book keeping, cash book, Ledger, work order, Measurement book, petty cash and imprest, receipts	22-05-2026		
	Explanation of ordinary terms used in book keeping, cash book, Ledger, work order, Measurement book, petty cash and imprest, receipts	23-05-2026		
	Explanation of ordinary terms used in book keeping, cash book, Ledger, work order, Measurement book, petty cash and imprest, receipts	25-05-2026		


Sig. of Teacher

(RAJINDER KUMAR)


Sig. of H.O.D.

Department of Architecture Assistantship
Dr. B. R. Ambedkar Govt. Polytechnic Ambota
Distt-Una(H.P)
Lesson Plan
Academic Session Jan -May 2026

Programme Name Diploma in Architecture Assistantship
Subject Name Major Project
Subject Code ARPC-6001
Semester Sixth
Subject Co-ordinator Name Ar. Rajeev Bhardwaj

Evaluation Scheme

Subject Name	Major Project	Study Scheme(Hrs/Week)		Marks in Evaluation Scheme		
		Internal Assessment		External Assessment		
Th	Pr	Th	Pr	Th	Pr	Total
	12		40		60	100

Reference Books


1. Chiara, J. D. (1984) Time Saver Standard for Site Planning, McGraw Hill Book Co., NY-49
2. Neufert, E. (2000) Neufert – Architect's Data, Crosby Lockwood and Sons, London


Coarse Outcomes		
	CO-1	The students would be familiarized with vernacular terminology
	CO-2	The emphasis will be construction details as applicable to Indian climatic conditions.
	CO-3	The design problem would induce students to experiment with built and open spaces.

Teaching Plan

	Unit	Name of Topic	Proposed Date	Actual Date	Signature	Remarks
1	Site Zoning Macro level understanding of site and surrounding (disaster, resources, infrastructure, CRZ/heritage site, etc) Micro level understanding of the site (Horizontal zoning at site level and Vertical zoning at building/block level) Design Approach Conceptual interlinking of spaces (Bubble diagram at site/building/floor/block level), Conceptual block model of project.	Introduction	28-01-2026			
		Introduction	29-01-2026			
		Site Zoning	30-01-2026			
		Site Zoning	31-01-2026			
		Macro Level site understanding	02-02-2026			
		Macro Level site understanding	03-02-2026			
		Macro Level site understanding	04-02-2026			
		Macro Level site understanding	05-02-2026			
		Macro Level site understanding	06-02-2026			
		Macro Level site understanding	07-02-2026			
		Macro Level site understanding	09-02-2026			
		Macro Level site understanding	10-02-2026			
		Macro Level site understanding	11-02-2026			
		Macro Level site understanding	12-02-2026			
		Macro Level site understanding	13-02-2026			
		Macro Level site understanding	16-02-2026			
		Micro Level site understanding	17-02-2026			
		Micro Level site understanding	18-02-2026			
		Micro Level site understanding	19-02-2026			
		Micro Level site understanding	20-02-2026			
		Micro Level site understanding	21-02-2026			
		Micro Level site understanding	23-02-2026			
		Design Approach Concept	24-02-2026			
		Design Approach Concept	25-02-2026			
		Design Approach Concept	26-02-2026			
		Design Approach Concept	27-02-2026			
		Bubble diagram at site/building/floor/block level	28-02-2026			
		Bubble diagram at site/building/floor/block level	02-03-2026			
		Bubble diagram at site/building/floor/block level	03-03-2026			
		Bubble diagram at site/building/floor/block level	05-03-2026			
		Bubble diagram at site/building/floor/block level	06-03-2026			
		Bubble diagram at site/building/floor/block level	07-03-2026			
		Bubble diagram at site/building/floor/block level	09-03-2026			
		Bubble diagram at site/building/floor/block level	10-03-2026			
		Bubble diagram at site/building/floor/block level	11-03-2026			
		Bubble diagram at site/building/floor/block level	12-03-2026			
		Bubble diagram at site/building/floor/block level	13-03-2026			
		Conceptual block model of project	16-03-2026			

		Conceptual block model of project	17-03-2026			
		Conceptual block model of project	18-03-2026			
		Development of Design	19-03-2026			
		Development of Design	20-03-2026			
		Development of Design	23-03-2026			
		Development of Design	24-03-2026			
		Development of Design	25-03-2026			
		Development of Design	27-03-2026			
		Development of Design	28-03-2026			
		Development of Design	30-03-2026			
		Development of Design	31-03-2026			
		Development of Design	01-04-2026			
		Development of Design	02-04-2026			
		Development of Design	04-04-2026			
		Development of Design	06-04-2026			
		Development of Design	07-04-2026			
		Development of Design	08-04-2026			
		Development of Design	09-04-2026			
3	Design Proposal Stage-II Pre-final design proposal, project estimate and detailed drawings along with any two of the following Services: Landscape, Structure, plumbing, electrical or any other detail.	Prefinal Design Proposal	10-04-2026			
		Prefinal Design Proposal	13-04-2026			
		Prefinal Design Proposal	16-04-2026			
		Prefinal Design Proposal	17-04-2026			
		Prefinal Design Proposal	18-04-2026			
		Prefinal Design Proposal	20-04-2026			
		Prefinal Design Proposal	21-04-2026			
		Prefinal Design Proposal	22-04-2026			
		Prefinal Design Proposal	23-04-2026			
		Prefinal Design Proposal	24-04-2026			
		Prefinal Design Proposal	25-04-2026			
		Prefinal Design Proposal	27-04-2026			
		Prefinal Design Proposal	28-04-2026			
		Prefinal Design Proposal	29-04-2026			
		Prefinal Design Proposal	30-04-2026			
		Prefinal Design Proposal	02-05-2026			
		Prefinal Design Proposal	04-05-2026			
		4	Design Proposal Stage-III Final submission along with final report (Incorporating improvements suggested in the earlier Report submitted in Major Project of V sem, Design Criteria and explanatory sketches of Evolution of Design). Computer Aided Presentations Drawings /Views along with detail model clearing the concept.	Final Submission Preparation	05-05-2026	
Final Submission Preparation	06-05-2026					
Final Submission Preparation	07-05-2026					
Final Submission Preparation	08-05-2026					
Final Submission Preparation	11-05-2026					
Final Submission Preparation	12-05-2026					
Final Submission Preparation	13-05-2026					
Final Submission Preparation	14-05-2026					
Final Submission Preparation	15-05-2026					
Final Submission Preparation	16-05-2026					
Final Submission Preparation	18-05-2026					
Final Submission Preparation	19-05-2026					
Final Submission Preparation	20-05-2026					
Final Submission Preparation	21-05-2026					
Final Submission Preparation	22-05-2026					
Final Submission Preparation	23-05-2026					
Final Submission Preparation	25-05-2026					
Final Submission Preparation	26-05-2026					
House Test/Class Test						
Name of Test	Contents of Syllabus Covered	Proposed Date	Actual Date	Signature	Remarks	
Class Test 1	Unit 1	As Per HPTSB				
Class Test 2	Unit2	As Per HPTSB				
House Test	Unit 1 , Unit 2	As Per HPTSB				


 27.01.26
 (Signature of Teacher)

Checked

 27.01.26
 (Signature of H.O.D)