

R.G. Government Polytechnic Banikhet, Distt. Chamba (H.P)-176303

Department of Civil Engineering

Lesson Plan

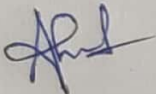
Name of Faculty	Er. Abhishek Patial
Discipline	Civil Engineering
Semester	4 th
Subject	Concrete Technology (L-4 Hrs./Week)
Lesson Plan Duration	February – June 2023

Week	Topic	Theory
1 st (14 Feb. – 21 Feb.)	1. Introduction 2. Ingredients of Concrete	1.1 Definition of concrete, uses of concrete in comparison to other building materials 2.1 Overview of OPC & PPC only (Properties and uses only) 2.2 Aggregates: 2.2.1 Classification of aggregates according to size and shape
2 nd (22 Feb. – 28 Feb.)	2. Ingredients of Concrete	2.2.2 Characteristics of aggregates: Particle size and shape, surface texture, specific gravity of aggregate; bulk density, water absorption, surface moisture, bulking of sand, deleterious materials soundness 2.2.3 Grading of aggregates: coarse aggregate, fine aggregate; All-in aggregate; fineness modulus
3 rd (01 Mar. – 07 Mar.)	2. Ingredients of Concrete 3. Water Cement Ratio	2.3 Water: Quality requirements as per IS:456-2000 3.1 Hydration of cement principle of water-cement ratio, Duff Abram's Water cement ratio law: Limitations of water-cement ratio law and its effects on strength of concrete
4 th (09 Mar. – 16 Mar.)	4. Workability	4.1 Workability factors affecting workability 4.2 Measurement of workability: slump test, compacting factor and Vee Bee consistometer; Recommended slumps for placement in various condition as per IS:456-2000/SP-23
5 th (17 Mar. – 23 Mar.)	5. Properties of Concrete	5.1 Properties in plastic state: Workability, Segregation, Bleeding and Harshness.
Class Test – 1		In Third Week of March 2023.

6th (24 Mar. – 31 Mar.)	5. Properties of Concrete	5.2 Properties in hardened state: Strength, Durability, Impermeability, Dimensional changes
7th (01 Apr. – 10 Apr.)	6. Proportioning for Normal and Controlled Concrete	6.1 Objectives of mix design, introduction to various grades as per IS:456-2000; proportioning for nominal mix design as prescribed by IS456-2000 6.2 Adjustment on site for: Bulking of fine aggregate, water absorption of aggregate, workability
8th (11 Apr. – 19 Apr.)	6. Proportioning for Normal and Controlled Concrete 7. Storing & Batching of Concrete Ingredients	6.3 Difference between nominal and controlled concrete. 7.1 Storing of Cement: 7.1.1 Storing of cement in a warehouse 7.1.2 Storing of cement at site 7.1.3 Effect of storage on strength of cement 7.1.4 Determination of warehouse capacity for storage of Cement
9th (20 Apr. – 27 Apr.)	7. Storing & Batching of Concrete Ingredients	7.2 Storing of Aggregate: Storing of aggregate on site 7.3 Batching 7.3.1 Batching of Cement 7.3.2 Batching of aggregate by: Volume, using gauge box (farma) selection of proper gauge box. 7.3.3 Weight spring balances and by batching machines 7.3.4 Measurement of water
Class Test – 2		In Third Week of April 023.
10th (28 Apr. – 04 May)	8. Mixing, Transportation & Placement of Concrete	8.1 Hand mixing 8.2 Machine mixing -types of mixers 8.3 Transportation of concrete: Transportation of concrete using pans, wheel barrows, transit mixers, chutes, belt conveyors, pumps, tower crane and hoists etc.
11th (06 May – 12 May)	8. Mixing, Transportation & Placement of Concrete	8.3 Transportation of concrete: Transportation of concrete using pans, wheel barrows, transit mixers, chutes, belt conveyors, pumps, tower crane and hoists etc. 8.4 Placement of concrete: Checking of form work, shuttering and precautions to be taken during placement
House Test		In Second Week of May 2023.

<p style="text-align: center;">12th (15 May – 20 May)</p>	<p>9. Compaction, Finishing & Curing of Concrete</p>	<p>9.1 Hand compaction 9.2 Machine compaction - types of vibrators, internal screed vibrators and form vibrators 9.3 Selection of suitable vibrators for different situations 9.4 Finishing concrete slabs -screeding, floating and trowelling</p>
<p style="text-align: center;">13th (23 May-29 May)</p>	<p>9. Compaction, Finishing & Curing of Concrete</p>	<p>9.5 Curing: Objective, methods of curing like ponding, membrane curing, steam curing, chemical curing 9.6 Duration for curing and removal of form work</p>
<p style="text-align: center;">14th (30 May-05 June)</p>	<p>10. Admixtures 11. Special concrete</p>	<p>10.1 Types of admixtures along with their suitability (Specify types of admixtures) 11.1 Fibre reinforced concrete, Ready Mix concrete, High fly ash concrete</p>
<p style="text-align: center;">15th (06 June-09 June)</p>	<p>Revision and doubt clearance</p>	<p>Revision and doubt clearance.</p>

NOTE: - Lesson Plan is Tentative, subject to availability of Time, Students & Faculty.



Signature of Teacher
(Er. Abhishek Patial)



Signature of HOD/OIC
(Er. Amandeep Singh)

R.G. Government Polytechnic Banikhet, Distt. Chamba (H.P)-176303

Department of Civil Engineering

Lesson Plan

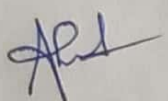
Name of Faculty	Er. Abhishek Patial
Discipline	Civil Engineering
Semester	4 th
Subject	Water Supply and Waste Water Engineering (L-4 Hrs./Week)
Lesson Plan Duration	February – June 2023

Week	Topic	Theory
1 st (14 Feb. – 21 Feb.)	1. Introduction 2. Quantity of Water	1.1 Necessity and brief description of water supply system. 2.1 Water requirement 2.2 Rate of demand and variation in rate of demand 2.3 Per capita consumption for domestic, industrial, public and firefighting uses as per BIS standards (no numerical problems)
2 nd (22 Feb. – 28 Feb.)	2. Quantity of Water 3. Quality of Water	2.4 Methods of Population Forecasting (Numerical Problems) 3.1 Meaning of pure water and methods of analysis of water
3 rd (01 Mar. – 07 Mar.)	3. Quality of Water	3.2 Physical, Chemical and bacteriological tests and their significance. 3.3 Standard of potable water as per Indian Standard
4 th (09 Mar. – 16 Mar.)	4. Water Treatment	4.1 Sedimentation -purpose, types of sedimentation tanks 4.2 Coagulation flocculation - usual coagulation and their feeding 4.3 Filtration -significance, types of filters, their suitability
5 th (17 Mar. – 23 Mar.)	4. Water Treatment	4.4 Necessity of disinfection of water, forms of chlorination, break point chlorine, residual chlorine, application of chlorine 4.5 Flow diagram of different treatment units, functions of (i) Aeration fountain (ii) mixer (iii) flocculator, (iv) classifier
Class Test – 1		In Third Week of March 2023.

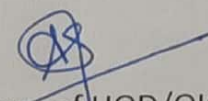
<p align="center">6th (24 Mar. – 31 Mar.)</p>	<p>5. Conveyance of Water</p>	<p>5.1 Different types of pipes – cast iron, G.I. pipes and PVC and uses 5.2 Appurtenances: Sluice, Air, Reflux valve, Relief valves and Scour valve. Fire Hydrants, Water Meters their working & uses</p>
<p align="center">7th (01 Apr. – 10 Apr.)</p>	<p>5. Conveyance of Water 6. Building Water Supply</p>	<p>5.3 Distribution Systems: Gravity, Pumping, Combined Gravity & pumping 5.4 Layout of distribution systems along with their suitability 6.1 Water supply fixtures and installations and terminology related to plumbing</p>
<p align="center">8th (11 Apr. – 19 Apr.)</p>	<p>6. Building Water Supply 7. Introduction</p>	<p>6.2 The House Water Connection 7.1 Purpose of sanitation 7.2 Necessity of systematic collection and disposal of waste 7.3 Definition of terms in sanitary engineering</p>
<p align="center">9th (20 Apr. – 27 Apr.)</p>	<p>7. Introduction 8. Sewerage System</p>	<p>7.4 Collection and conveyance of sewage 7.5 Conservancy and water carriage systems, their advantages and disadvantages. 8.1 Types of sewerage systems, materials for sewers, their sizes and joints</p>
<p align="center">Class Test – 2</p>		<p align="center">In Third Week of April 2023.</p>
<p align="center">10th (28 Apr. – 04 May)</p>	<p>8. Sewerage System 9. Laying and Construction of Sewers</p>	<p>8.2 Appurtenance: Location, function and construction features. Manholes, catch basin, flushing tanks, oil & grease traps, ventilating shafts etc. 9.1 Setting out/alignment of sewers</p>
<p align="center">11th (06 May – 12 May)</p>	<p>9. Laying and Construction of Sewers 10. Sewage Characteristics</p>	<p>9.2 Excavations, checking the gradient with boning rods, preparation of bedding, handling, jointing, testing and back filling of sewers/pipes. 10.1 Properties of sewage and BIS standards for analysis of sewage 10.2 Physical, chemical and bacteriological parameters</p>
<p align="center">House Test</p>		<p align="center">In Second Week of May 2023.</p>

<p align="center">12th (15 May – 20 May)</p>	<p>10. Sewage Characteristics 11. Sewage Treatment</p>	<p>10.2 Physical, chemical and bacteriological parameters 11.1 Meaning and principle of primary and secondary treatment, aerobic & anaerobic treatment, activated sludge process with their flow diagrams</p>
<p align="center">13th (23 May-29 May)</p>	<p>11. Sewage Treatment</p>	<p>11.1 Meaning and principle of primary and secondary treatment, aerobic & anaerobic treatment, activated sludge process with their flow diagrams</p>
<p align="center">14th (30 May-05 June)</p>	<p>11. Sewage Treatment</p>	<p>11.2 Introduction and uses of screens, grit chambers, detritus tanks, skimming tanks, primary clarifiers, secondary treatment and clarifiers, trickling filters, sludge treatment and disposal, oxidation ponds, introduction to tertiary treatment 11.3 Disposal by dilution 11.4 Self-purification of stream</p>
<p align="center">15th (06 June-09 June)</p>	<p>12. Smart Water & Waste Water Management for Smart Cities 13. Revision and doubt clearance</p>	<p>12.1 Concept and components, ICT, smart devices 13 Revision and doubt clearance.</p>

NOTE: - Lesson Plan is Tentative, subject to availability of Time, Students & Faculty.



Signature of Teacher
(Er. Abhishek Patial)



Signature of HOD/OIC
(Er. Amandeep Singh)

R.G. Government Polytechnic Banikhet, Distt. Chamba (H.P)-176303

Department of Civil Engineering

Lesson Plan

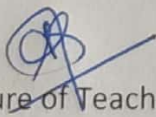
Name of Faculty	Sh. Amandeep Singh
Discipline	Civil Engineering
Semester	4 th
Subject	Soil Engineering (L-4 Hrs./Week)
Lesson Plan Duration	February – June 2023

Week	Topic	Theory
1 st (14 Feb. – 21 Feb.)	1. Introduction	1.1 Importance of soil studies in Civil Engineering 1.2 Geological origin of soils with special reference to soil profiles in India: residual and transported soil, alluvial deposits, lake deposits, local soil found in H.P., dunes and loess, glacial deposits, conditions in which above deposits are formed and their engineering characteristics.
2 nd (22 Feb. – 28 Feb.)	2. Physical properties of Soil	2.1 Constituents of soil and representation by a phase diagram 2.2 Definitions of void ratio, porosity, degree of saturation, water content, specific gravity, unit weight, dry unit weight of soil grains and correlation between them. 2.3 Simple numerical problems with the help of phase diagrams.
3 rd (01 Mar. – 07 Mar.)	3. Classification and Identification of Soils	3.1 Particle size, shape and their effect on engineering properties of soil, particle size classification of soils 3.2 Gradation and its influence on engineering properties 3.3 Relative density and its use in describing cohesionless soils Atterberg's limit - definitions, use and practical significance 3.4 Field identification tests for soils
4 th (09 Mar. – 16 Mar.)	3. Classification and Identification of Soils 4. Flow of water through Soils	3.5 Soil classification system as per BIS 1498; basis, symbols, major divisions and sub divisions, groups, plasticity chart; procedure for classification of a given soil. 4.1 Concept of permeability and its importance 4.2 Darcy's law, coefficient of permeability, seepage velocity and factors affecting permeability
5 th (17 Mar. – 23 Mar.)	4. Flow of water through Soils	4.3 Comparison of permeability of different soils as per BIS 4.4 Methods of finding out permeability- Constant Head & Falling Head Test (No Derivation only simple numerical problems)

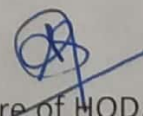
Class Test-1		In the Third Week of March
6 th (24 Mar. – 31 Mar.)	5. Effective Stress	5.1 Stresses in sub soil 5.2 Definition and meaning of total stress, effective stress and neutral stress 5.3 Principle of effective stress 5.4 Importance of effective stress in engineering problems 5.5 Quick sand Phenomenon
7 th (01 Apr. – 10 Apr.)	6. Deformation of Soils	6.1 Meaning, conditions/situations of occurrence with emphasis on practical significance of: a) Consolidation and settlement b) Creep c) Plastic flow d) Heaving e) Lateral movement f) Freeze and thaw of soil 6.2 Definition and practical significance of compression index, coefficient of consolidation, degree of consolidation
8 th (11 Apr. – 19 Apr.)	6. Deformation of Soils	6.3 Meaning of total settlement, uniform settlement and differential settlement; rate of settlement and their effects 6.4 Settlement due to construction operations and lowering of water table. 6.5 Tolerable settlement for different structures as per BIS
9 th (20 Apr. – 27 Apr.)	7. Strength Characteristics of Soils	7.1 Factors contributing to shear strength of soils, Coulomb's law 7.2 Determination of shearing strength by direct shear test, unconfined compression test and Tri-axial Test only along with their advantages & disadvantages 7.3 Drainage conditions of test and their significance 7.4 Stress and strain curve, peak strength and ultimate strength, their significance
Class Test – 2		In Third Week of April 2023.
10 th (28 Apr. – 04 May)	7. Strength Characteristics of Soils 8. Compaction	7.5 Examples of shear failure in soils 8.1 Definition and necessity of compaction and its differences with consolidation. 8.2 Laboratory compaction test (standard and modified proctor test as per IS) definition and importance of optimum water content, maximum dry density; moisture & dry density relationship for typical soils with different Compactive efforts

11 th (06 May – 12 May)	8. Compaction	8.3 Compaction control; Density control, measurement of field density by core cutter method and sand replacement method, moisture control, Proctor's needle and its use, thickness control, jobs of an embankment supervisor in relation to compaction.
House Test		In Second Week of May 2023.
12 th (15 May – 20 May)	9. Soil Exploration	9.1 Purpose and necessity of soil exploration 9.2 Reconnaissance, methods of soil exploration, Trial pits, borings (auger, wash, rotary, percussion to be briefly dealt) 9.3 Sampling; undisturbed, disturbed and representative samples; selection of type of sample; thin wall and piston samples; area ratio, recovery ratio of samples and their significance, number and quantity of samples, setting, sealing and preservation of samples.
13 th (23 May-29 May)	10. Bearing Capacity of Soil	10.1 Concept of bearing capacity 10.2 Definition and significance of ultimate bearing capacity, net safe bearing capacity and allowable bearing pressure 10.3 Guidelines of BIS (IS6403) for estimation of bearing capacity 10.4 Factors affecting bearing capacity, Concept of vertical stress distribution in soils due to foundation loads, pressure bulb
14 th (30 May-05 June)	10. Bearing Capacity of Soil	10.6 Plate load test and its limitations 10.7 Introduction and applications of Standard Penetration Test (SPT) 11.1 Types of retaining wall – Gravity, cantilevered, sheet piling, bored pile, anchored, soil nailing, soil-strengthened, Mechanical stabilized 11.2 Design of Gravity wall
15 th (06 June – 09 June)	Revision and doubt clearance	Revision and doubt clearance.

NOTE: - Lesson Plan is Tentative, subject to availability of Time, Students & Faculty.



Signature of Teacher
(Er. Amandeep Singh)



Signature of MOD/OIC
(Er. Amandeep Singh)

R.G. Government Polytechnic Banikhet, Distt. Chamba (H.P)-176303

Department of Civil Engineering

Lesson Plan

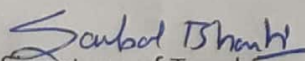
Name of Faculty	Sh. Saibal Bharti
Discipline	Civil Engineering
Semester	4 th
Subject	Surveying 2 (L-3 Hrs./Week)
Lesson Plan Duration	February – June 2023

Week	Topic	Theory
1 st (14 Feb. – 21 Feb.)	1. Contouring	Concept of contours, purpose of contouring, contour interval and horizontal equivalent, factors effecting contour interval, characteristics of contours, methods of contouring: Direct and indirect, interpolation of contours; use of contour map,
2 nd (22 Feb. – 28 Feb.)	1. Contouring	Drawing cross section from a contour map; alignment of a road on contour map, computation of earth work and reservoir capacity from a contour map.
3 rd (01 Mar. – 07 Mar.)	2. Theodolite Surveying	Working of a transit Vernier the odolite, axes of a the odolite and their relation; Temporary adjustments of a transit theodolite
4 th (09 Mar. – 16 Mar.)	2. Theodolite Surveying	Concept of transiting, swinging, face left, face right and changing face; measurement of horizontal and vertical angles.
	Class Test-1	In the Third Week of March

<p>5th (17 Mar. – 23 Mar.)</p>	<p>2. Theodolite Surveying</p>	<p>Prolonging a line (forward and backward) measurement of bearing of a line; traversing by included angles and deflection angle method; plotting a traverse; concept of coordinate and solution of omitted measurements (one side affected), errors in the theodolite survey. Height of objects – accessible and non-accessible bases</p>
<p>6th (24 Mar. – 31 Mar.)</p>	<p>3. Tacheometric surveying</p>	<p>Tacheometry, Instruments to be used in tacheometry</p>
<p>7th (01 Apr. – 10 Apr.)</p>	<p>3. Tacheometric surveying</p>	<p>Methods of tacheometry, stadia system of tachometry, general principles of stadia tachometry</p>
<p>8th (11 Apr. – 19 Apr.)</p>	<p>3. Tacheometric surveying 4. Modern Surveying Methods</p>	<p>Examples of stadia tachometry and Numerical problems Definition of GIS, Components of GIS, Application areas & advantages of GIS.</p>
<p>Class Test – 2</p>		<p>In Third Week of April 2023</p>
<p>9th (20 Apr. – 27 Apr.)</p>	<p>4. Modern Surveying Methods</p>	<p>Introduction, working principle and various application of GPS related to Civil Engg. Components of GPS – point positioning and differential positioning. Principles of electromagnetic remote sensing, remote sensing system classifications, imaging characteristics,</p>
<p>10th (28 Apr. – 04 may)</p>	<p>4. Modern Surveying Methods</p>	<p>Integration of remote sensing & GIS, Introduction of Total station instrument.</p>

<p style="text-align: center;">11th (06 May – 12 May)</p>	<p>5. Curves</p>	<p>5.1 Simple Circular Curve: * Need and definition of a simple circular curve Elements of simple circular curve - Degree of the curve, radius of the curve, tangent length, point of intersection (Apex point), tangent point, length - Setting out of simple circular curve (No derivations, only brief description): a) By linear measurements only: - Offsets from the tangent - Successive bisection of arcs - Offsets from the chord produced</p>
<p>House Test</p>		<p>In Second Week of May 2023.</p>
<p style="text-align: center;">12th (15 May – 20 May)</p>	<p>5. Curves</p>	<p>b) By tangential angles using a theodolite (with numerical problems) 5.2 Transition Curve: Need (centrifugal force and super elevation) and definition of transition curve;</p>
<p style="text-align: center;">13th (23 May-29 May)</p>	<p>5. Curves</p>	<p>Requirements of transition curve; length of transition curve for roads; by cubic parabola; calculation of offsets for a transition curve; 5.3 Vertical curve brief description only</p>
<p style="text-align: center;">14th (30 May-05 June)</p>	<p>6. Computation of Areas</p>	<p>By Graphical & Instrumental Methods Areas by use of field Notes</p>
<p style="text-align: center;">15th (06 June-09 June)</p>	<p>Revision and doubt clearance</p>	<p>Revision and doubt clearance</p>

NOTE: - Lesson Plan is Tentative, subject to availability of Time, Students & Faculty.


Signature of Teacher
(Er. Saibal Bharti)

Signature of HOD/OIC
(Er. Amandeep Singh)

Department of Civil Engineering

Lesson Plan

Name of Faculty	Sh. Saibal Bharti
Discipline	Civil Engineering
Semester	4 th
Subject	Structural Mechanics (L-4 Hrs./Week)
Lesson Plan Duration	February – June 2023

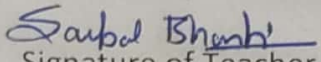
Week	Topic	Theory
1 st (14 Feb. – 21 Feb.)	1. Properties of Materials 2. Simple Stresses and Strains	1.1 Classification of materials, elastic materials, plastic materials, ductile materials, brittle materials.. 2.1 Concept of stress, normal and shear stresses
2 nd (22 Feb. – 28 Feb.)	2. Simple Stresses and Strains	2.2 Concept of strain and deformation, longitudinal and transverse strain, poisson's ratio, volumetric strain 2.3 Hooke's law, moduli of elasticity and rigidity, Bulk modulus of elasticity, relationship between the elastic constants. 2.4 Stresses and strains in bars subjected to tension and compression. Extension of uniform bar under its own weight, stress produced in compound bars (two or three) due to axial load.
3 rd (01 Mar. – 07 Mar.)	2. Simple Stresses and Strains 3. Shear Force and Bending Moment	2.5 Temperature stresses and strains 3.1 Concept of a beam and supports (Hinges, Roller and Fixed), types of beams: simply supported, cantilever, propped, overhang, and continuous beams (only concept). 3.2 Types of loads (dead load, live load, snow load, wind load seismic load as per IS Codes etc) and types of loading (point, uniformly distributed and uniformly varying loads)
4 th (09 Mar. – 16 Mar.)	3. Shear Force and Bending Moment	3.3 Concept of bending moment and shear force, sign conventions 3.4 Bending Moment and shear force diagrams for cantilever, simply supported and overhanging beams subjected to concentrated, uniformly

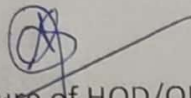
		distributed, uniformly varying load
5 th (17 Mar. – 23 Mar.)	3. Shear Force and Bending Moment	3.5 Relationship between load, shear force and bending moment, point of maximum bending moment, and point of contraflexure 3.6 Influence Line Diagrams
Class Test-1		In the Third Week of March
6 th (24 Mar. – 31 Mar.)	4. Moment of Inertia	Concept of moment of inertia and second moment of area and radius of gyration, theorems of parallel and perpendicular axis, second moment of area of common geometrical sections: rectangle, triangle, circle (without derivations).
7 th (01 Apr. – 10 Apr.)	4. Moment of Inertia 5. Bending Stresses in Beams	Second moment of areas for shapes made of simple rectangle (L, T, Channel and I sections) only, section modulus. 5.1 Concept of pure/simple bending
8 th (11 Apr. – 19 Apr.)	5. Bending Stresses in Beams	5.2 Assumptions made in the theory of simple bending, derivation and application of bending equation to circular cross-section, I section, T and L sections only 5.3 Moment of resistance & modulus of rupture (bending strength)
9 th (20 Apr. – 27 Apr.)	5. Bending Stresses in Beams 6. Combined Direct and Bending Stresses	5.4 Calculations of bending stresses in simply supported beam 6.1 Concentric and eccentric loads single axis eccentricity only

<p>10th (28 Apr. – 04 May)</p>	<p>6. Combined Direct and Bending Stresses</p>	<p>6.2 Effect of eccentric load on the section stresses due to eccentric loads,</p>
<p>Class Test – 2</p>		<p>In Third Week of April 2023.</p>
<p>11th (06 May – 12 May)</p>	<p>6. Combined Direct and Bending Stresses 7. Shear Stresses in Beams</p>	<p>Numerical in the case of short columns. 7.1 Concept of shear stresses in beams</p>
<p>12th (15 May – 20 May)</p>	<p>7. Shear Stresses in Beams</p>	<p>Shear stress distribution in rectangular, circular sections Shear stress distribution in I, T, L sections (Formula to be stated, no derivation)</p>
<p>House Test</p>		<p>In Second Week of May 2023.</p>
<p>13th (23 May-29 May)</p>	<p>8. Slope and Deflection</p>	<p>8.1 Necessity for determination of slope and deflection Moment area theorem (no derivation, simple numerical problems)</p>
<p>14th (30 May-05 June)</p>	<p>9. Columns</p>	<p>9.1 Theory of columns 9.2 Eulers and Rankine Formula</p>

<p>15th (06 June – 09 June)</p>	<p>Revision and doubt clearance</p>	<p>Revision and doubt clearance.</p>
--	---	--------------------------------------

NOTE: - Lesson Plan is Tentative, subject to availability of Time, Students & Faculty.


Signature of Teacher
(Er. Saibal Bharti)


Signature of HOD/OIC
(Er. Amandeep Singh)

R.G. Government Polytechnic Banikhet, Distt. Chamba (H.P)-176303

Department of Civil Engineering

Lesson Plan

Name of Faculty	Er. Abhishek Patial & Er. Saibal Bharti
Discipline	Civil Engineering
Semester	4 th
Subject	Public Health Engineering Drawing (P-4 Hrs./Week)
Lesson Plan Duration	February – June 2023

Week	Topic	Drawing
1 st (14 Feb. – 21 Feb.)	1. Sewers	1.1 Cross section of earthen ware and RCC sewer pipes
2 nd (22 Feb. – 28 Feb.)	1. Sewers	1.1 Cross section of earthen ware and RCC sewer pipes
3 rd (01 Mar. – 07 Mar.)	1. Sewers	1.2 Cross sections of masonry sewers (circular and egg shaped)
4 th (09 Mar. – 16 Mar.)	1. Sewers	1.2 Cross sections of masonry sewers (circular and egg shaped)
5 th (17 Mar. – 23 Mar.)	2. Manhole and Inspection Chamber	2.1 Detailed plan and section of an inspection chamber
Class Test – 1		In Third Week of March 2023.
6 th (24 Mar. – 31 Mar.)	2. Manhole and Inspection Chamber	2.1 Detailed plan and section of an inspection chamber
7 th (01 Apr. – 10 Apr.)	2. Manhole and Inspection Chamber	2.2 Detailed plan and section of a manhole (Square only)
8 th (11 Apr. – 19 Apr.)	2. Manhole and Inspection Chamber	2.2 Detailed plan and section of a manhole (Square only)
9 th (20 Apr. – 27 Apr.)	3. Septic Tank and Soak Pit	3.1 Detailed plan and cross sections of a domestic septic tank with soak pit for 5-10 users
Class Test – 2		In Third Week of April 2023.
10 th (28 Apr. – 04 May)	3. Septic Tank and Soak Pit	3.1 Detailed plan and cross sections of a domestic septic tank with soak pit for 5-10 users

11 th (06 May – 12 May)	3. Septic Tank and Soak Pit	3.1 Detailed plan and cross sections of a domestic septic tank with soak pit for 5-10 users
12 th (15 May – 20 May)	4. Pipe and Sanitation System	Draw sectional elevation of a two storeyed building showing details of one pipe and two pipes' systems with sanitation system
House Test		In Second Week of May 2023.
13 th (23 May-29 May)	4. Pipe and Sanitation System	Draw sectional elevation of a two storeyed building showing details of one pipe and two pipes' systems with sanitation system
14 th (30 May-05 June)	4. Pipe and Sanitation System	Draw sectional elevation of a two storeyed building showing details of one pipe and two pipes' systems with sanitation system
15 th (06 June-09 June)	Revision and doubt clearance	Revision and doubt clearance.

NOTE: - Lesson Plan is Tentative, subject to availability of Time, Students & Faculty.

Signature of Teacher

1. (Er. Abhishek Patial)



2. (Er. Saibal Bharti)

Saibal Bharti

Signature of HOD/OIC

(Er. Amandeep Singh)

