

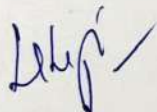
Government Polytechnic Lahaul Spiti at Udaipur Camp at Sundernagar Distt Mandi (H.P) -175018

Department of Civil Engineering

Lesson Plan for Public Health Engg. (Semester-6th) Session: (Jan-May) 2026

S. No.	MONTH	WEEK	Date	CONTENTS	REMARKS
1	January	Week 5	27,28	Water supply schemes - Objectives, components, Sources of water: Surface and Subsurface sources of water, Intake Structures, Definition and types, Factors governing the location of an intake structure, Types of intakes.	
2	February	Week 1	2,3,4	Demand of water: Factors affecting rate of demand, Variations of water demands, forecasting of population, Methods of forecasting of population, (Simple problems on forecasting of population), Design period, estimating of quantity of water supply required for city or town.	
		Week 2	9,10,11	Quality of water: Need for analysis of water, Characteristics of water- Physical, Chemical and Biological tests.	
		Week 3	16,17,18	Purification of Water: Objectives of water treatment, Aeration- objects and methods of aeration, Plain sedimentation, Sedimentation with coagulation,	
		Week 4	23,24,25	Filtration - mechanization of filtration, classification of filters: slow sand filter, rapid sand filter, pressure filter.	
3	March	Week 1	2,3	Construction and working of slow sand filter and rapid sand filter, operational problems in filtration.	
		Week 2	9,10,11	Disinfection: Objects, methods of disinfection, Chlorination Application of chlorine, forms of chlorination, types of chlorination practices, residual chlorine	Class Test-I
		Week 3	16,17,18	Conveyance: Types of Pipes used for conveyance of water, choice of pipe material, Types of joints & Types of valves- their use, location and function on a pipeline	
		Week 4	23,24,25	Distribution of water: Methods of distribution of water- Gravity, pumping, and combined system, Service reservoirs - functions and types, Layouts of distribution of Water-Dead end system,	
		Week 5	30	grid iron system, circular system, radial system; their suitability, advantages, and disadvantages	
		Week 1	1	Building Sanitation: Necessity of sanitation, Necessity to treat domestic sewage,	
		Week 2	6,7,8	Definitions - Sewage, Sullage, types of sewage. Definition of the terms related to Building Sanitation- Water pipe, Rainwater pipe, Soil pipe, Sullage pipe, Vent pipe	Class Test-II

4	April	Week 3	13	Systems of Sewerage and Sewer Appurtenances:	
		Week 4	20,21,22	Types of Sewers, Systems of sewerage, self- cleansing velocity and non-scouring velocity, Laying, Testing and maintenance of sewers, Manholes and Drop Manhole-component parts, location, spacing, construction details, Sewer Inlets, Street Inlets.	
		Week 5	27,28,29	Analysis of sewage: Characteristics of sewage, B.O.D., C.O.D. and its significance. Central Pollution Control Board Norms for discharge of treated sewage, Objects of sewage treatment and flow diagram of conventional sewage treatment plant.	
5	May	Week 2	4,5,6	House Test	
		Week 3	11,12,13	Treatment of Sewage: Screening, Types of screens, Grit removal, Skimming, Sedimentation of sewage,	
		Week 4	18,19,20	Aerobic and anaerobic process, Sludge digestion, trickling filters, Activated sludge process, Disposal of sewage, Oxidation Pond, Oxidation ditch. Septic tank	
		Week 5	25,26	Septic tank	



Signature of Teacher
(Er Nawang Negi)



Signature of H.O.D
(Dr. Lalit Goel)

Government Polytechnic Lahaul Spiti at Udaipur Camp at Sundernagar Distt Mandi (H.P) -175018

Department of Civil Engineering

Lesson Plan for Steel Structure and Design (Semester-6th) Session: (Jan-May) 2026

Sr. No.	MONTH	WEEK	Date	CONTENTS	REMARKS
1	January	Week 5	27,28,29	Terminology, Properties of structural steel as per IS Code, grades of steel, Designation of structural steel sections as per IS handbook and IS: 800. Classification of sections in Limit State Method.	
2	February	Week 1	2,3,4,5	Hot Rolled and Cold Formed, advantages and applications Types of Bolts (Theory only), Forces in Bolts, Types of Bolted joints with Sketches (Butt Joint and Lap Joint),	
		Week 2	9,10,11,12	Terminology & IS 800 Provisions for Gauge, Pitch, End & Edge Distance, Patterns of Bolting (Chain, Diamond, Staggered).	
		Week 3	16,17,18,19	Gross and net cross-sectional area of bolted members. Design of bolted connections & Efficiency of a joint. (Numerical problems on Ordinary Bolts only).	
		Week 4	23,24,25,26	Introduction, advantages, and disadvantages of welded joint, defects in welds, Types of welds and their symbols.	
3	March	Week 1	2,3,5	Terminology & IS 800 provisions for Size, Throat Thickness, End Returns etc. Longitudinal, Transverse & Intermittent welds.	
		Week 2	9,10,11,12	Design of fillet weld (Plate section, Single & Double Angle Section) and butt weld subjected to axial load. (Descriptive No numerical on plug and slot welds).	Class Test -I
		Week 3	16,17,18,19	Introduction to tension members, Types of section used in axial tension., Gross and net cross-sectional area of tension members (Numerical problems on Plate & Angles Sections only).	
		Week 4	23,24,25	Analysis & Design of tension member with welded and bolted connections (Plate, Single & Double Angle Sections only).	
		Week 5	30,31	Introduction to Lug Angle and Tension splice. (Theory only)	
4	April	Week 1	1,2	Types of sections used, Effective length, Radius of gyration, slenderness ratio and its limit, Buckling Class, Effective length.	
		Week 2	6,7,8,9	Analysis and Design of axially loaded welded connections using tables and Equations of IS 800 (I-Section, Double Angle Section and Single angle section).	Class Test -II
		Week 3	13,16	Analysis and Design of axially loaded bolted connections using tables and Equations of IS 800 (I-Section, Double Angle Section and Single angle section).	

5	May	Week 4	20,21,22,23	Introduction, Different steel sections used, Simple and built-up sections,	
		Week 5	27,28,29,30	Plastic Hinge, Plastic section Modulus, Class of Section.	
		Week 2	4,5,6,7	House Test	
		Week 3	11,12,13,14	Design of simple I section -Check for shear only (Low Shear & High Shear).	
		Week 4	18,19,20,21	Revision	
		Week 5	25,26	Revision	



Signature of Teacher

(Er R.S.Chandel)



Signature of H.O.D

(Dr. Lalit Goel)

GOVT POLYTECHNIC LAHAUL & SPITI AT UDAIPUR

Camp at Sundernagar, Distt. Mandi(HP)

Entrepreneurship and Start-Ups

Gopal Dass

Lesson Plan :

Name of the Teacher :

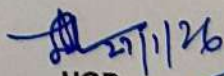
Branch : Civil. Engg.

Semester: 2nd

Session : (Jan 2026-May2026)

Month	Week	Date	Name of the Chapter	Contents to be taught	Remarks
Jan	1st	29,30,31	Introduction to Entrepreneurship and Start-Ups	Definitions, Traits of an entrepreneur	
				Intrapreneurship,	
				Motivation.	
Feb	2nd	2,5,6,7,	Business Ideas and their implementation	Types of Business Structures, Similarities/differences between entrepreneurs and managers.	
	3rd	9,13		Discovering ideas and visualizing the business	
	4th	16,19,20		Activity map	
	5th	23,26,27, 28		,Business Plan	
March	6th	2,5,6,7	Management	Market Analysis—Identifying the target market, Competition evaluation and Strategy Development	
	7th	9,12,13		Marketing and accounting,	
	8th	16		Class test-1	
		19,20		Risk analysis	
	9th	23,27,28		Company's Organization Structure, Recruitment and management of talent. Financial organization and management	
April	10th	30 March,2, 4	Financing and Protection of Ideas	Financing methods available for start-ups in India	
	11th	6,9,10		Class Test – 2	
		13,16,17, 18		Communication of Ideas to potential investors—Investor Pitch	
	12th	20,23,24, 25		Communication of Ideas to potential investors—Investor Pitch	
	13th	27,30,2 may		Exit strategies for entrepreneurs,	
May	14th	4,7,8	Exit strategies for entrepreneurs	bankruptcy,	
	15th	11,14,15, 16		succession	
	16th	18,21,22, 23,27		harvesting strategy	

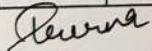
Subject Teacher:- Gopal Dass

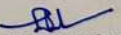

HOD
Civil Engg

Government Polytechnic Lahaul Spiti at Udaipur Camp at Sundernagar Distt Mandi (H.P) -175018
Department of Civil Engineering

Lesson Plan for Technical Communication (Semester- 6th) Session: (Jan-May) 2026

S.N.	MONTH	WEEK	Date	CONTENTS	REMARKS
1	January	Week 5	28,29,30,31	Unit 1: Fundamentals of Technical Communication : Language as a tool of Communication, Features of Technical Communication, Distinction between General and Technical Communication,	
2	February	Week 1	4,5,6,7	Channels of Communication at workplace: Downward, Upward, Lateral or Horizontal, Diagonal, Grapevine, Consensus	
		Week 2	11,12,13	Barriers to Communication and overcoming barriers.	
		Week 3	18,19,20,21	Unit 2. Technical Writing Types of Technical writing	
		Week 4	25,26,27,28	Drafting skills: Agenda and Minutes of Meetings,	
3	March	Week 1	5,6,7	Official and Business Correspondence	
		Week 2	11,12,13	Official and Business Correspondence	Class-I
		Week 3	18,19,20	Different formats of Report writing	
		Week 4	25,27,28	Basics of Grammar: Spotting errors in sentences (Noun, Pronoun, Verb, Adverb, Adjective, Preposition, Conjunction, Article, Modals, Tenses, Punctuation)	
4	April	Week 1	1,2,4	Basics of Grammar: Spotting errors in sentences (Noun, Pronoun, Verb, Adverb, Adjective, Preposition, Conjunction, Article, Modals, Tenses, Punctuation)	
		Week 2	8,9,10	Resume Writing and Covering letter	Class-II
		Week 3	16,17,18	Unit 3. Presentation Skills Concept and Significance of Presentation skills, Steps of an Effective Presentation,	
		Week 4	22,23,24,25	Elements of Effective Presentation skills, including public speaking Clarity of substance; Emotion, Humour, Overcoming Fear, Confident speaking, Audience Analysis and Retention of audience interest, How to improve Presentation Skills	
		Week 5	29,30	Unit 4. Speaking skills What are Speaking Skills and Characteristics of a Good Speech	
5	May	Week 1	2	What is Panel Discussion and its procedure	
		Week 2	6,7,8	HOUSE TEST	
		Week 3	13,14,15,16	Job Interview Skills: What to do Before, After and During Interview, Body Language Examples and their Meanings-Positive and Negative. Body language for interview	
		Week 4	20,21,22,23	Difference between Etiquettes and Manners ,Table Etiquettes , Business Etiquettes, Telephone Etiquettes, Dressing Etiquettes and Workplace Etiquettes, How to get along with opposite Gender. What are the elements of Voice Modulation (Quality, Pitch, Rhythm, Volume, Pace; Intonation; Pronunciation; Articulation; stress & accent); Tips for better Voice modulation	


Signature of Teacher
 (Prerna Shama)


Signature of HOD
 (Dr. Lalit Goel)

GOVT POLYTECHNIC LAHAUL & SPITI at Udaipur ,camp at Sundernagar,Distt. Mandi(HP)

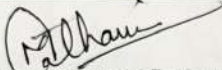
LESSON PLAN (BoM)


Name of the Teacher -Manisha Pathania

Branch: Civil. Engg. (Jan 2026 -May2026) Sem:-6th

Month	Week	Date	Name of the Chapter	Contents to be taught	Remarks
Jan	1st	27th,28th,30th	Introduction to Management	Definitions and concept of Management.Functions of management- planning, organizing, staffing,	
Feb	2nd	2nd,3rd,4th,6th	Introduction to Management	coordinating and controlling,Various areas of management.Structure of an Organization.	
	3rd	9th,10th,11th,13th	Self-Management and Development	Life Long Learning Skills. Concept of Personality Development, Ethics and Moral values.	
	4th	16th,17th,18th,20th	Self-Management and Development	Concept of Physical Development; Significance of health, hygiene, body gestures. Time Management Concept and its importance.	
March	5th	23rd,24th,25th,27th	Self-Management and Development	Intellectual Development: Reading skills, speaking, listening skills, writing skills (Note taking, rough draft, revision, editing and final drafting),	
	6th	2nd,3rd ,6th	Leadership and motivation	Concept of Critical Thinking and Problem Solving (approaches, steps and cases)	
	7th	9th,10th,11th,13th	Leadership and motivation	CT-1, Meaning and importance, types of leadership and qualities of a good leader	
	8th	16th,17th,18th,20th	Leadership and motivation	concept and importance of motivation drives and incentives, types of motivation	
April	9th	23rd,24th,25th,27th	Legal Environment and Business	Various labour Laws and its necessity, Salient features of Income tax act	
	10th	30th,31st,1st	Legal Environment and Business	Computation of income tax on salary income, Sales and Excise Tax Act-VAT and Excise duty and Factory Act. 1948	
	11th	6th,7th,8th,10th	Legal Environment and Business	CT-2 , Revision	
	12th	13th ,16th	Legal Environment and Business	Labour welfare schemes including wage payment-types, system of wage payment and incentives	
	13th	20th,21st,22nd,24th	Legal Environment and Business	Intellectual Property rights (IPR)-Concepts ,infringements, remedies related to patents	
	14th	27th,28th,29th	Legal Environment and Business	copy rights, trademarks and designs, Accident and safety - Meaning and concept of accident and safety	
	15th	4th,5th,6th,8th	Legal Environment and Business	cause ,safety precautions and various measures after accidents, meaning and concept of TQM	

16th	11th, 12th, 13th, 15th	Legal Environment and Business/Total Quality Management	HT	
17th	18th, 19th, 20th, 22nd	Total Quality Management	various factors/measures to achieve TQM in an organization, Standards and codes-National and international	
18th	25th, 26th	Total Quality Management	Revision	

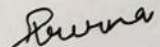

 Subject-Teacher:- Manisha Pathania



HOD
 Department of Civil Engg.

Government Polytechnic Lahaul Spiti at Udaipur Camp at Sundernagar Distt Mandi (H.P) -175018
Department of Civil Engineering

Lesson Plan for Indian Constitution (Semester- 6th) Session: (Jan-May) 2026

S.N.	MONTH	WEEK	Date	CONTENTS	REMARKS
1	January	Week 5	27	Unit 1. Introduction to Constitution: · History of making of the Indian Constitution.	
2	February	Week 1	2,3	Meaning and importance of the Constitution. · Fundamental rights- meaning and limitations.	
		Week 2	9,10	Salient features and Preamble of Indian Constitution.	
		Week 3	16,17	Directive principles of state policy and Fundamental duties -their enforcement and their relevance.	
		Week 4	23,24	Unit 2 .Union Government: · Structure of Union Government.	
3	March	Week 1	2,3	Union Executive- President, Vice-president, Prime Minister, Council of Ministers.	
		Week 2	9,10	Union Legislature- Parliament and Parliamentary proceedings	Class-I
		Week 3	16,17	Union Judiciary-Supreme Court of India – composition and powers and function.	
		Week 4	23,24	Unit 3. State and Local Governments: · Structure of State Government	
		Week 5	30,31	State Executive- Governor, Chief Minister, Council of Ministers.	
4	April	Week 2	6,7	State Legislature-State Legislative Assembly and State Legislative Council.	Class-II
		Week 3	13	State Judiciary-High court	
		Week 4	20,21	Local Government-Panchayat raj system with special reference to 73rd and Urban Local Self Govt. with special reference to 74th Amendment.	
		Week 5	27,28	Unit 4 .Election provisions, Emergency provisions, Amendment of the constitution	
5	May	Week 2	4,5	HOUSE TEST	
		Week 3	11,12	Election Commission of India-composition, powers and functions and electoral process.	
		Week 4	18,19	Types of emergency-grounds, procedure, duration and effects	
		Week 5	25,26	Amendment of the constitution- meaning, procedure and limitations.	


Signature of Teacher
 (Prerna Sharma)

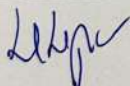

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 (Dr. Lalit Goel)

Government Polytechnic Lahaul Spiti at Udaipur Camp at Sundernagar Distt Mandi (H.P) -175018

Department of Civil Engineering

Lesson Plan for Public Health Engg. Lab G-I (Semester-6th) Session: (Jan-May) 2026

S. No.	MONTH	WEEK	Date	CONTENTS	REMARKS
1	January	Week 5	31	Determine pH value of given sample of water.	
2	February	Week 1	7	Determine the turbidity of the given sample of water.	
		Week 3	21	Determine residual chlorine in a given sample of water	
		Week 4	28	Determine suspended, dissolved solids and total solids of given sample of water.	
3	March	Week 1	7	Determine the dissolved oxygen in a sample of water	
		Week 4	28	Undertake a field visit to water treatment plant and prepare a report	
4	April	Week 1	4	Determine the optimum dose of coagulant in a given raw water sample by jar test.	
		Week 3	18	Checking of files and viva	
		Week 4	25	Draw sketches of various valves used in water supply pipeline	
5	May	Week 1	2	Draw a sketch of one pipe and two pipe system of plumbing	
		Week 3	16	Checking of files and viva	
		Week 4	23	Prepare a report of a field visit to sewage treatment plant	



Signature of Teacher
(Er Nawang Negi)



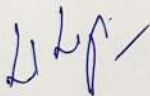
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(Dr. Lalit Goel)

Government Polytechnic Lahaul Spiti at Udaipur Camp at Sundernagar Distt Mandi (H.P) -175018

Department of Civil Engineering

Lesson Plan for Public Health Engg. Lab G-II (Semester-6th) Session: (Jan-May) 2026

S. No.	MONTH	WEEK	Date	CONTENTS	REMARKS
1	January	Week 5	29	Determine pH value of given sample of water.	
2	February	Week 1	5	Determine the turbidity of the given sample of water.	
		Week 2	12	Determine residual chlorine in a given sample of water	
		Week 3	19	Checking of files and viva	
		Week 4	26	Determine suspended, dissolved solids and total solids of given sample of water.	
3	March	Week 1	5	Determine the dissolved oxygen in a sample of water	
		Week 2	12	Undertake a field visit to water treatment plant and prepare a report	
		Week 3	19	Checking of files and viva	
4	April	Week 1	2	Determine the optimum dose of coagulant in a given raw water sample by jar test.	
		Week 2	9	Draw sketches of various valves used in water supply pipeline	
		Week 3	16	Checking of files and viva	
		Week 4	23	Draw a sketch of one pipe and two pipe system of plumbing	
		Week 5	30	Prepare a report of a field visit to sewage treatment plant	
5	May	Week 2	7	House Test	
		Week 3	14	Reperform	
		Week 4	21	Reperform	



Signature of Teacher
(Er Nawang Negi)



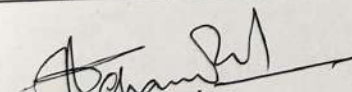
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(Dr. Lalit Goel)


Government Polytechnic Lahaul Spiti at Udaipur Camp at Sundernagar Distt Mandi (H.P) -175018

Department of Civil Engineering

Lesson Plan for Steel Structure Design & Drawing (Semester-6th) Session: (Jan-May) 2026

S.No.	MONTH	WEEK	Date	CONTENTS	REMARKS
1	January	Week 5	27	Draw any five commonly used rolled steel sections and five built up sections.	
2	February	Week 1	2,3	Checking & Viva	
		Week 2	9,10	Summarize the provisions of IS 800 required for the design of tension member in report form.	
		Week 3	16,17	Checking & Viva	
		Week 4	23,24	Compile relevant clauses from IS 800 required for design of a compression member and submit it in report form.	
3	March	Week 1	2,3	Details of splicing for steel columns of Same width & Different widths	Class Test-I
		Week 2	9,10	Beam to beam connections	
		Week 3	16,17	Checking & Viva	
		Week 4	23,24	Beam to column, Seated Connections 1. Framed Connections	
		Week 5	30,31	Column bases, Slab base, Gusseted base	
4	April	Week 2	6,7	Steel roof truss with details of joints, 1. Heel Joint 2. Ridge Joint	Class Test-II
		Week 3	13	Checking & Viva	
		Week 4	20,21	Draw sketches for battening of given built up column	
		Week 5	27,28	Draw Sketches for single and double lacing of given built up Column	
5	May	Week 2	4,5	House Test	
		Week 3	11,12	Checking & Viva	
		Week 4	18,19	Revision	
		Week 5	25,26	Revision	

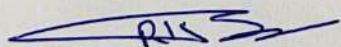

Signature of Teacher
 (Er R.S.Chandel)


Signature of H.O.D
 (Dr. Lalit Goel)

Govt. Polytechnic Lahaul And spiti at Udaipur, Camp at Sundernagar, Mandi (H.P)

LE SSON PLAN 6TH SEMESTER (CIVIL ENGG.)

	DATE	WEEK	ACTIVITIES	NAME OF TEACHER	REMARKS
January,2026	28,30	5 th week	Paper Reading		
February ,26	4,6	1 st week	Sports Activities		
	11,13	2 nd week	Sports Activities		
	18,20	3 rd week	Campus Cleanliness		
	25,27	4 th week	Sports Activities		
March,26	6	1 st week	GK Competition		
	11,13	2 nd week	GK Competition		
	18,20	3 rd week	Painting Practices		
	25,27	4 th week	Sports Activities		
April,26	1	1 st week	Essay Writing		
	8,10	2 nd week	Essay Writing		
	17	3 rd week	Sports Activities		
	20,24	4 th week	Culture activities		
May,26	6,8	1 st week	Quiz competition		
	13,15	2 nd week	Quiz competition		
	20,22	3 rd week	Declamation		



Signature of Teacher



Signature Of H.O.D