

Department of Civil Engineering
Government Millennium Polytechnic Chamba Distt Chamba (H.P) -176310

Lesson Plan for Public Health Engineering (Semester-6th) Session: (Feb-June 2025)

S.No.	MONTH	WEEK	CONTENTS	REMARKS
1	January	Week-5	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,	
		Week-2	Types of intakes 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. Quality of water: Need for analysis of water, Characteristics of water- Physical, Chemical and Biological tests.	
		Week-3	Purification of Water: Objectives of water treatment, Aeration- objects and methods of aeration, Plain sedimentation, Sedimentation with coagulation, principles of coagulation, types of coagulants, Jar Test, process of coagulation.	
		Week-4	Filtration - mechanization of filtration, classification of filters: slow sand filter, rapid sand filter, pressure filter. Construction and working of slow sand filter and rapid sand filter, operational problems in filtration.	
		Week-5	Disinfection: Objects, methods of disinfection, Chlorination Application of chlorine, forms of chlorination, types of chlorination practices, residual chlorine and its importance, Flow diagram of water treatment plants	
2	February	Week-1	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-2	Distribution of water: Methods of distribution of water- Gravity, pumping, and combined system, Service reservoirs - functions and types	
		Week-3	LAYOUTS of distribution of Water-Dead end system, grid iron system, circular system, radial system; their suitability, advantages, and disadvantages.	Class Test -I
		Week-4	Building Sanitation: Necessity of sanitation, Necessity to treat domestic sewage, Definitions - Sewage, Sullage, types of sewage.	
		Week-5	Definition of the terms related to Building Sanitation- Water pipe, Rainwater pipe, Soil pipe, Sullage pipe, Vent pipe.	
3	March	Week-1	Systems of Sewerage and Sewer Appurtenances: Types of Sewers, Systems of sewerage, self-cleansing velocity and non-scouring velocity,	
		Week-2	Laying, Testing and maintenance of sewers, Manholes and Drop Manhole-component parts, location, spacing, construction details, Sewer Inlets, Street Inlets.	
		Week-3	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	Class Test -II
		Week-4	Objects of sewage treatment and flow diagram of conventional sewage treatment plant.	
		Week-5	Treatment of Sewage: Screening, Types of screens, Grit removal, Skimming,	
4	April	Week-1	Sedimentation of sewage, Aerobic and anaerobic process, Sludge digestion, trickling filters,	
		Week-2	HOUSE TEST	
		Week-3	Activated sludge process, Disposal of sewage,	
		Week-4	Oxidation Pond, Oxidation ditch. Septic tank.	
		Week-5	Revision	
5	May	Week-1		
		Week-2		
		Week-3		
		Week-4		
		Week-5		

Signature of Teacher
 (Er Manoj Thakur)

Signature of H.O.D
 (Er Pawan Thakur)

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Lesson Plan for Steel Design (Semester-6th) Session: (Feb-June 2025)

S.No.	MONTH	WEEK	CONTENTS	REMARKS
1	January	Week-5	Terminology, Properties of structural steel as per IS Code, grades of steel, Designation of structural steel sections as per IS handbook and IS: 800.	
		Week-1	Classification of sections in Limit State Method.	
		Week-2	Types of Bolts (Theory only), Forces in Bolts, Types of Bolted joints with Sketches (Butt Joint and Lap Joint), Terminology & IS 800 Provisions for Gauge, Pitch, End & Edge Distance, Patterns of Bolting (Chain, Diamond, Staggered).	
		Week-3	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	Gross and net cross-sectional area of bolted members. Design of bolted connections & Efficiency of a joint. (Numerical problems on Ordinary Bolts only).	
2	February	Week-5	Introduction, advantages, and disadvantages of welded joint, defects in welds, Types of welds and their symbols. Terminology & IS 800 provisions for Size, Throat Thickness, End Returns etc. Longitudinal, Transverse & Intermittent welds.	
		Week-1	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).	
		Week-2	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).	
		Week-3	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).	Class Test -I
		Week-4	Analysis & Design of tension member with welded and bolted connections (Plate, 40 Single & Double Angle Sections only). Introduction to Lug Angle and Tension splice.	
3	March	Week-5	Analysis & Design of tension member with welded and bolted connections (Plate, 40 Single & Double Angle Sections only). Introduction to Lug Angle and Tension splice.	
		Week-1	Types of sections used, Effective length, Radius of gyration, slenderness ratio and its limit, Buckling Class, Effective length Analysis and Design of axially loaded welded and bolted connections using tables and Equations of IS 800 (I-Section, Double Angle Section and Single angle section)	
		Week-2	Double Angle Section and Single angle section)	
		Week-3	Analysis and Design of axially loaded welded and bolted connections using tables and Equations of IS 800 (I-Section, Double Angle Section and Single angle section)	Class Test -II
		Week-4	Introduction, Different steel sections used, Simple and built-up sections, Plastic Hinge, Plastic section Modulus, Class of Section	
4	April	Week-5	Design of simple I section -Check for shear only (Low Shear & High Shear).	
		Week-1	HOUSE TEST	
		Week-2	HOUSE TEST	
		Week-3	Design of simple I section -Check for shear only (Low Shear & High Shear).	
		Week-4	REVISION	
5	May	Week-5	REVISION	

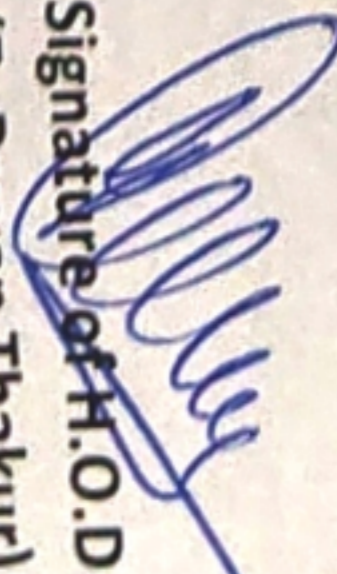
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(Er Pawan Thakur)

Department of Civil Engineering
Government Millennium Polytechnic Chamba Dist Chamba (H.P) -176310
Lesson Plan for Entrepreneurship and Start-ups (Semester-6th) Session: (Feb-June 2025)

Lesson Plan for Entrepreneurship and Start-ups			CONTENTS	REMARKS
S.No.	MONTH	WEEK		
1	January	Week-5	Definitions, Traits of an entrepreneur, Intrapreneurship, Motivation.	
		Week-2	Types of Business Structures, Similarities/differences between entrepreneurs and managers.	
2	February	Week-3	Business Ideas and their implementation	
		Week-4	Discovering ideas and visualizing the business	
		Week-5	Activity map, Business Plan	
		Week-2	Market Analysis-Identifying the target market, Competition evaluation and Strategy Development,	
		Week-3	Marketing and accounting, Risk analysis	Class Test -I
3	March	Week-4	Management : Company's Organization Structure,	
		Week-5	Recruitment and management of talent.	
		Week-1	Financial organization and management	
		Week-2	Financing and Protection of Ideas D17	Class Test -II
		Week-3	Financing methods available for start-ups in India	
4	April	Week-4	Communication of Ideas to potential investors-Investor Pitch	
		Week-2	Exit strategies for entrepreneurs, bankruptcy, and succession and harvesting strategy.	
		Week-3	HOUSE TEST	
		Week-4	Exit strategies for entrepreneurs, bankruptcy, and succession and harvesting strategy.	
		Week-5	Revision	
5	May	Week-4	Revision	
		Week-5	Revision	


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Lesson Plan for Open Elective - II (Technical Communication) (Semester-6th) Session: (Feb-June 2025)

S.No.	MONTH	WEEK	CONTENTS	REMARKS
1	January	Week-5	Introduction tool of Communication	Language as a
		Week-2	Features of Technical Communication	
		Week-3	Distinction between General and Technical Communication	
		Week-4	Channels of Communication at workplace: Downward, Upward, Lateral or Horizontal, Diagonal, Grapevine, Consensus.	
		Week-5	Barriers to Communication and overcoming barriers	
2	February	Week-2	Types of Technical writing	
		Week-3	Drafting skills: Agenda and Minutes of Meetings, Official and Business Correspondence. Different formats of Report writing	
		Week-4	Basics of Grammar: Spotting errors in sentences (Noun, Pronoun, Verb, Adverb, Adjective, Preposition, Conjunction, Article, Modals, Tenses, Punctuation)	
		Week-5	Resume Writing and Covering letter. Concept and Significance of Presentation skills	
		Week-1	Steps of a Effective Presentation. Elements of Effective Presentation skills, including public speaking Clarity of substance; Emotion, Humour, Overcoming Fear, Confident speaking, Audience Analysis and Retention of audience interest	
3	March	Week-2	How to improve Presentation Skills	Class Test -II
		Week-3	What are Speaking Skills and Characteristics of a Good Speech. What is Panel Discussion and its procedure	
		Week-4	Job Interview Skills: What to do Before, After and During Interview Body Language Examples and their Meanings-Positive and Negative. Body language for interviews	
		Week-5	Difference between Etiquettes and Manners, Table Etiquettes, Business Etiquettes, Telephone Etiquettes Dressing Etiquettes and Workplace Etiquettes, How to get along with opposite Gender	
		Week-1	What are the elements of Voice Modulation (Quality, Pitch, Rhythm, Volume, Pace; Intonation; HOUSE TEST	
4	April	Week-2	HOUSE TEST	
		Week-3	Pronunciation; Articulation; stress & accent); Tips for better Voice modulation	
		Week-4	Revision	
		Week-5	Revision	
		Week-1	Revision	
5	May	Week-2	Revision	
		Week-3	Revision	
		Week-4	Revision	
		Week-5	Revision	
		Week-1	Revision	


 Signature of Teacher
 (Kanan Upadhyay)


 Signature of H.O.D
 (Er Pawan Thakur)

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Lesson Plan for Open Elective - III (Basics of Management) (Semester-6th) Session: (Feb-June 2025)

S.No.	MONTH	WEEK	CONTENTS	REMARKS
1	January	Week-5	Definitions and concept of Management	
		Week-2	Functions of management- planning, organizing, staffing, coordinating and controlling, Various areas of management, Structure of an Organization.	
		Week-3	Life Long Learning Skills, Concept of Personality Development, Ethics and Moral values,	
		Week-4	Concept of Physical Development; Significance of health, hygiene, body gestures,	
		Week-5	Time Management Concept and its importance, Intellectual Development: Reading skills, speaking, listening skills, writing skills (Note taking, rough draft, revision, editing and final drafting),	
2	February	Week-2	Concept of Critical Thinking and Problem Solving (approaches, steps and cases).	
		Week-3	Meaning, importance, types of leadership and qualities of a good leader.	
		Week-4	Concept and importance of motivation-drives and incentives, types of motivation.	Class Test -I
		Week-5	Various labour laws and its necessity. Salient features of Income Tax Act – computation of income tax on salary income, Sales and Excise Tax Act-VAT& Excise duty and Factory Act. 1948.	
		Week-1	-----Do-----	
3	March	Week-2	Labour Welfare Schemes including wage payment-types, system of wage payment and incentives.	
		Week-3	Intellectual Property Rights(IPR)- Concepts, infringements and remediesrelated to patents, copy rights, trademarks and designs.	Class Test -II
		Week-4	Accident and Safety- Meaning and concept of accident and safety, causes, safety precautions and various measures after accidents	
		Week-5	Meaning and concept of Total Quality Management	
		Week-1	various factors/measures to achieve TQM in an organization.	
4	April	Week-2	HOUSE TEST	
		Week-3	Standards and Codes-National & International.	
		Week-4	Revision	
		Week-5	Revision	
		Week-1	Revision	
5	May	Week-2		
		Week-3		
		Week-4		
		Week-5		
		Week-1		

Signature of Teacher

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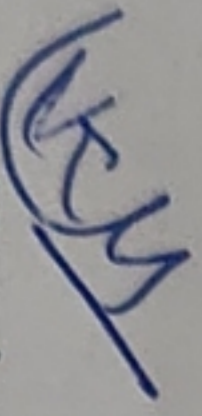
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Lesson Plan for Indian Constitution (Semester-4th) Session: (Feb-June 2025)

S.No.	MONTH	WEEK	CONTENTS	REMARKS
1	January	Week-5	Introduction to Constitution	
		Week-2	History of making of the Indian Constitution. Meaning and importance of the Constitution	
		Week-3	Salient features and Preamble of Indian Constitution.	
		Week-4	☑ Fundamental rights- meaning and limitations. Do.....	
		Week-5	Directive principles of state policy and Fundamental duties -their enforcement and their relevance	
2	February	Week-2	Structure of Union Government.	
		Week-3	☑ Union Executive- President, Vice-president, Prime Minister, Council of Ministers	
		Week-4	Union Legislature- Parliament and Parliamentary proceedings.	
		Week-5	Union Judiciary-Supreme Court of India – composition and powers and function.	Class Test -I
		Week-5	Structure of State Government.	
3	March	Week-1	☑ State Executive- Governor, Chief Minister, Council of Ministers.	
		Week-2	State Legislature-State Legislative Assembly and State Legislative Council.	
		Week-3	State Judiciary-High court.	
		Week-4	Local Government-Panchayat raj system with special reference to 73rd and Urban	
		Week-5	Local Self Govt. with special reference to 74th Amendment.	Class Test -II
4	April	Week-1Do....	
		Week-2	Election Commission of India-composition, powers and functions and electoral process	
		Week-3	Types of emergency-grounds, procedure, duration and effects.	
		Week-4	HOUSE TEST	
		Week-5	Amendment of the constitution- meaning, procedure and limitations.	
5	May	Week-1	Revision	
		Week-2	Revision	
		Week-3	Revision	
		Week-4	Revision	
		Week-5	Revision	

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 (Kanan Upadhyay)



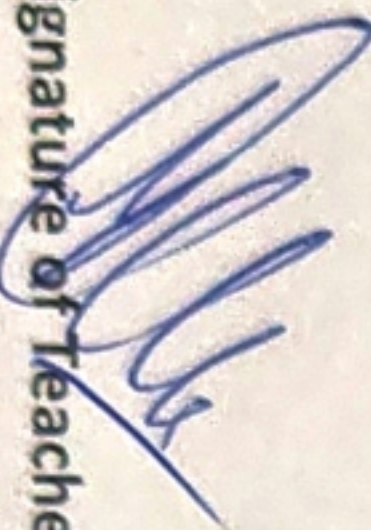
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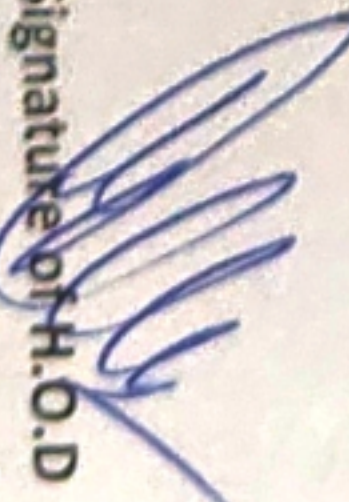


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Lesson Plan for Steel Drawing (Semester-6th) Session: (Feb-June 2025)

S.No.	MONTH	WEEK	CONTENTS	REMARKS
1	January	Week-5	Draw any five commonly used rolled steel sections and five built up sections.	
		Week-2	Details of splicing for steel columns of Same width	
		Week-3	Details of splicing for steel columns of Different width	
		Week-4	Details of splicing for steel columns of Different width	
		Week-5	Beam to beam connections Seated Connections	
2	February	Week-1	Beam to beam connections Seated Connections	
		Week-2	Beam to beam connections Framed Connections	
		Week-3	Beam to beam connections Framed Connections	
		Week-4	Beam to beam connections Framed Connections	
		Week-5	Beam to beam connections Framed Connections	
3	March	Week-1	Beam to beam connections Framed Connections	
		Week-2	Beam to beam connections Framed Connections	
		Week-3	Beam to beam connections Framed Connections	Class Test -I
		Week-4	Beam to Column connections Seated Connections	
		Week-5	Beam to Column connections Seated Connections	
4	April	Week-1	Beam to Column connections Framed Connections	
		Week-2	Beam to Column connections Framed Connections	
		Week-3	Column Base: Slab Base	Class Test -II
		Week-4	Column Base: Slab Base	
		Week-5	Column Base: Gusseted Base	
5	May	Week-1	Column Base: Gusseted Base	
		Week-2	HOUSE TEST	
		Week-3	Steel roof truss with details of joints Heel Joint	
		Week-4	Steel roof truss with details of joints Ridge Joint	
		Week-5	Revision	


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(Er Pawan Thakur)


Signature of H.O.D
(Er Pawan Thakur)