

JMIETI, Radaur

Lesson Planning of Civil Engg. Deptt. 3RD Semester

Name of Teacher : Karan Vadhera

Designation : Assistant Professor

Subject with code : Building Construction Materials and Design (CE-205)

S.NO	Topic/Chapter covered	MONTH
1.	Masonry Construction, various terms used	August
2.	Stone masonry-Dressing of stones, Classifications of stone masonry	August
3.	Brick masonry-bonds in brick work, Defects in brick masonry	August
4.	laying brick work, structural brick work-cavity and hollow walls	August
5.	Composite stone and brick masonry, glass block masonry, Reinforced brick work	August
6.	Cavity and Partition Walls Advantages, position of cavity	August
7.	Types of non-bearing partitions, constructional detail of cavity wall	August
8.	Foundation and its Functions, types of shallow foundations	August
9.	General feature of shallow foundation, foundations in water logged areas,	August
10.	Design of masonry wall foundation, introduction to deep foundations	August
11.	Pile and pier foundations	August
12.	Sub-surface investigations, Geophysical methods	August
13.	Damp-Proofing and Water-Proofing:	September

14.	Defects and causes of dampness, prevention of dampness	September
15.	Materials used, damp-proofing treatment in buildings,	September
16.	Water proofing treatment of roofs including pitched roofs.	September
17.	Roofs and Floors, Types of roofs	September
18.	Various terms used, roof trusses-king post truss	September
19.	Queen post truss etc., Floor structures	September
20.	Ground floor, basement and upper floors,	September
21.	Various types of floorings	September
22.	Doors and Windows, Locations, ,	September
23.	Sizes, Types of doors and windows	September
24.	Fixures and fastners for doors and windows.	September
25.	Brick and Tiles, Classification of bricks	October
26.	Constituents of good brick earth, harmful ingredients,	October
27.	Manufacturing of bricks, testing of bricks.	October
28.	Tiles: Terra-cotta, manufacturing of tiles	October
29.	Types of terra-cotta, uses of terra-cotta.	October
30.	Lime, Classification of lime,	October
31.	Types of cement, manufacturing of ordinary Portland cement,	October
32.	Cements composition, testing of cement, Storage of cement	October
33.	Mortars, cement mortars, mortars for masonry and plastering.	October
34.	Pozzolona, testing of lime, storage of lime,.	October
35.	Manufacturing, artificial hydraulic lime	October

36.	Stones, Classification of stones.	October
37.	Requirements of good structural stone, quarrying,	November
38.	Blasting and sorting out of stones, dressing	November
39.	Sawing and polishing, prevention and seasoning of stone	November
40.	Timber, Classification and structure of timber,	November
41.	Seasoning of timber, defects in timber, fire proofing of timber	November
42.	Plywood, fiberboard, masonite and its manufacturing	November
43.	Important Indian timbers.	November
44.	Paints, Basic constituents of paints	November
45.	Types of paints	November
46.	Painting of wood	November
47.	Varnishes, constituents of varnishes,	November
48.	Characteristics and types of varnishes.	November

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Lesson Planning of Civil Engg. Deptt. 3rd Semester

Name of Teacher : RITU KAUSHIK

Designation : Assistant Professor

Subject with code : Environment Science(CE-B24-MAC-201)

S.NO.	Topic / Chapter covered	MONTH
1	Multidisciplinary nature of Environmental Studies	AUGUST
2	Definition, Scope, Importance, Need for Public Awareness	AUGUST
3	Forest resources: Use & Over-exploitation	AUGUST
4	Deforestation, Timber extraction, Mining	AUGUST
5	Dams and their effects	AUGUST
6	Water resources: Use & over-utilization	AUGUST
7	Conflicts over water, Dams – benefits & problems	AUGUST
8	Mineral resources: Use & environmental effects	AUGUST
9	Food, Energy & Land resources	AUGUST
10	renewable & non-renewable energy, land degradation, desertification)	AUGUST
11	Concept, Structure & Function of Ecosystem	AUGUST
12	Energy flow in Ecosystem	SEPTEMBER
13	Ecological Succession	SEPTEMBER
14	Food chains, Food webs, Ecological pyramids	SEPTEMBER
15	Forest & Grassland Ecosystem	SEPTEMBER
16	Desert & Aquatic Ecosystem	SEPTEMBER
17	Biodiversity: Definition (genetic, species, ecosystem)	SEPTEMBER
18	Bio geographical classification of India	SEPTEMBER
19	Value of biodiversity (consumptive, productive, social, ethical, aesthetic, option values)	SEPTEMBER

20	India as mega-diversity nation, Hot-spots, Threats, Endangered & endemic species, Conservation	SEPTEMBER
21	Air pollution – Causes, effects, control	SEPTEMBER
22	Water pollution – Causes, effects, control	SEPTEMBER
23	Soil pollution & Marine pollution	SEPTEMBER
24	Noise pollution	OCTOBER
25	Nuclear hazards	OCTOBER
26	Solid Waste Management: Urban & Industrial wastes	OCTOBER
27	Disaster Management: Floods	OCTOBER
28	Disaster Management: Earthquake	OCTOBER
29	Disaster Management: Cyclone & Landslides	OCTOBER
30	Sustainable development	OCTOBER
31	Water conservation & Rainwater harvesting	OCTOBER
32	Resettlement & Rehabilitation of people	OCTOBER
33	Population growth & Population explosion	OCTOBER
34	Environment & Human health	OCTOBER
35	Human Rights & Value education	NOVEMBER
36	HIV/AIDS	NOVEMBER
37	Women & Child welfare	NOVEMBER
38	Role of Information Technology in environment & human health	NOVEMBER
39	Drugs: Useful & harmful, abuse	NOVEMBER
40	stimulants & depressants, de-addiction & legal aspects	NOVEMBER

JMIETI RADAUR

Lesson Planning of Civil Engg.Deptt. 3rd Semester

Name of Teacher : Er. Pankaj Goyal
Designation : Assistant Professor
Subject with code : Fluid Mechanics-I (B24-CE-207)

S.No.	Description	Month
1	Introduction and Kinematics of Fluid Flow: Introduction: Fluid properties,	AUGUST
2	mass density, specific weight, specific volume, specific gravity,	AUGUST
3	surface tension, capillarity, pressure inside a droplet and bubble due to surface tension,	AUGUST
4	compressibility, viscosity, Newtonian and Non-Newtonian fluids, real and ideal fluids.	AUGUST
5	Numerical Practice	AUGUST
6	Kinematics of Fluid Flow: Steady & unsteady, uniform and non-uniform, laminar & turbulent flows,	AUGUST
7	one, two & three-dimensional. flows, stream lines, streak lines and path lines	AUGUST
8	continuity equation in differential form, rotation and circulation,	AUGUST
9	elementary explanation of stream function and velocity potential,	SEPTEMBER
10	rotational and irrotational flows, graphical and experimental methods of drawing flow nets.	SEPTEMBER
11	Assignment work	SEPTEMBER
12	Fluid Statics: Pressure-density-height relationship, gauge and absolute pressure	SEPTEMBER
13	simple differential and sensitive manometers, two liquid manometers	SEPTEMBER
14	pressure on plane and curved surfaces, center of pressure,	SEPTEMBER
15	Buoyancy, stability of immersed and floating bodies,	SEPTEMBER
16	determination of metacentric height, fluid masses subjected to uniform acceleration,	SEPTEMBER

17	free and forced vortex.	SEPTEMBER
18	Dynamics of Fluid Flow: Euler's equation of motion along a streamline and its integration,	SEPTEMBER
19	limitation of Bernoulli's equation, Pitot tubes, venturimeter,	SEPTEMBER
20	Numerical on venturimeter	OCTOBER
21	Class Test	OCTOBER
22	Orifice meter, flow through orifices & mouth pieces,	OCTOBER
23	sharp crested weirs and notches	OCTOBER
24	Numericals practice on notches	OCTOBER
25	Assignment work	OCTOBER
26	Boundary layer analysis and Dimensional Analysis: Boundary layer analysis:	OCTOBER
27	Boundary layer thickness, boundary layer over a flat plate, laminar boundary layer,	OCTOBER
28	turbulent boundary layer, laminar sub-layer,	OCTOBER
29	smooth and rough boundaries, local and average friction coefficient,	OCTOBER
30	separation, and its control.	OCTOBER
31	Dimensional Analysis and Hydraulic Similitude:	OCTOBER
32	Dimensional analysis, Buckingham theorem,	OCTOBER
33	important dimensionless numbers and their significance	NOVEMBER
34	geometric, kinematic,	NOVEMBER
35	Numerical on boundary layer	NOVEMBER
36	dynamic similarity, model studies,	NOVEMBER
37	Numericals on dynamic similarity	NOVEMBER
38	physical modeling, similar and distorted models.	NOVEMBER
39	Revision	NOVEMBER
40	Class Test	NOVEMBER

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Lesson Planning of Civil Engg.Deptt. 3rd Semester

Name of Teacher : Dr. Ankit Sharma
 Designation : Assistant Professor
 Subject with code : Organizational Behaviour (B24-HSM-201)

Total no. of Lectures available for the course: 40 sessions

S.No	Description	Month
1	Introduction to Organizational Behavior – Concept, Scope and Importance	August
2	Role of Managers in OB	August
3	Challenges and Opportunities for OB	August
4	Foundation of Individual Behavior – Biographical characteristics	August
5	Abilities – Concept and types (intellectual, physical, emotional)	August
6	Values and Attitudes – Concepts	August
7	Types of attitudes; Attitude and workforce diversity	August
8	Personality – Definition, meaning, and determinants	August
9	Personality traits influencing OB (Big Five, Locus of control, etc.)	September
10	Emotions – Nature, meaning, and dimensions	September
11	Emotional Intelligence – concept and importance	September
12	Perception – meaning, importance, and influencing factors	September
13	Decision making – Rational process and bounded rationality	September
14	Leadership – trait and behavioral approaches	September
15	Leadership – situational and emerging approaches	September
16	Motivation – Concept and importance	September
17	Maslow’s hierarchy of needs and Herzberg’s Two-factor theory	September
18	Theory X & Y, ERG theory	September
19	McClelland’s theory of needs and Goal setting theory	September
20	Application of motivation theories; Linkage between MBO and goal setting	September
21	Group behavior – Defining, classifying groups, and stages of group development	October

22	Formal and informal groups – group dynamics	October
23	Conflict management – causes of conflict, negotiation	October
24	Managing intergroup conflict – strategies and resolution	October
25	Organizational communication – meaning, process, importance	October
26	Effective communication in organizations	October
27	Organizational stress – meaning and sources	November
28	Types of stress and impact on performance	November
29	Stress management techniques	November
30	Organizational culture – meaning and nature	November
31	Types of organizational culture	November
32	Managing cultural diversity in organizations	November
33	Organizational change – meaning, importance	November
34	Resistance to change – causes and handling	November
35	Models of managing organizational change (Lewin’s model)	November
36	Kotter’s model of change and applications	November
37	Case study/discussion – OB fundamentals (Intro, Individual behavior)	November
38	Case study/discussion – Personality, Perception, Leadership	November
39	Case study/discussion – Motivation, Group behavior, Conflict	November
40	Case study/discussion – Communication, Stress, Culture, Change + Revision	November

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Lesson Planning of Civil Engg.Deptt. 3rd Semester

Name of Teacher : Gaurav Vats
 Designation : Assistant Professor
 Subject with code : Strength of materials (B24-CVE-201)

Total no.of Lectures available for the course: 40 Session

S.no.	Description	MONTH
1	Review of Equilibrium of forces	August
2	moment of Inertia	August
3	Centre of Gravity and centroid	August
4	Different types of stresses	August
5	Analysis of simple states of stresses and strains	August
6	elastic constraints	August
7	Principle stresses and strains	August
8	stresses and strains in cylindrical shells	August
9	Revision	August
10	Bending moment and shear force in determinate beams and frames	September
11	Definitions and sign conventions,	September
12	axial force, shear force and bending moment diagrams for different types of loading and different types of beams	September
13	Theory of simple bending: Bending stresses	September
14	flexure formula, composite beams	September
15	shear stresses and flexural shear stresses	September

16	Revision	September
17	Deflections in beams: Introduction	September
18	slope and deflections in beams	September
19	differential equations concept	October
20	strain energy, Strain energy under bending	October
21	Strain energy under axial force, under torsion, and shear	October
22	Revision	October
23	Theory of Columns	October
24	analysis of statically determinate trusses	October
25	Theory of Columns: Slenderness ratio	October
26	end connections,	October
27	short columns	October
28	Euler's critical buckling loads	October
29	eccentrically loaded short columns	October
30	cylinder columns subjected to axial	November
31	eccentric loading	November
32	Revision	November
33	Analysis of statically determinate trusses: Introduction	November
34	various types,	November
35	stability,	November
36	analysis of plane trusses	November
37	method of joints	November
38	method of sections,	November
39	analysis of space trusses	November

40	tension coefficient method	November
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Lesson Plan Civil Engg. Deptt. (3rd Semester)

Name of Teacher : Dr. Komal
Designation : Assistant Professor
Subject with code : Survey and Geomatic Engineering
(B24-CVE-209)

Serial No.	Topic / Description	Month
1	Introduction to Surveying & Linear Measurement; Principles of Chain Survey	August
2	Types of Chains & Accessories; Use & Adjustment of Chain Survey Instruments	August
3	Chaining on Level and Sloping Grounds; Ranging	August
4	Offsets, Types, Errors & Corrections; Obstructions in Chaining	August
5	Chaining Angles; Introduction to Advanced Linear Measuring Instruments	August
6	Field Book Entry & Plotting; Combined Tutorial	August
7	Prismatic & Surveyor's Compass: Construction, Use, Adjustment	August
8	Methods of Compass Surveying: Open & Closed Traverse	August
9	Magnetic Declination & Variation; Local Attraction & Its Correction	August
10	Errors in Compass Survey & Their Adjustment	August
11	Plotting of Compass Survey & Distribution of Closing Error	August
12	Tutorial & Practice Exercise	August
13	Levelling Instruments: Parts, Dumpy & Tilting Level; Principle of Levelling	September
14	Temporary & Permanent Adjustments; Establishment of Benchmarks	September
15	Longitudinal & Cross-section Levelling	September
16	Fly Levelling & Reciprocal Levelling	September
17	Booking Methods: Rise & Fall, Height of Instrument; Reduction of Levels	September
18	Errors in Levelling; Curvature & Refraction Correction	September
19	Advanced Levelling Instruments (Automatic & Digital Level)	September
20	Tutorial / Mini Test (Unit I Wrap-Up)	September
21	Study of Theodolite – Parts, Functions, Adjustments	September
22	Measurement of Horizontal Angles (Repetition & Reiteration Methods)	September

23	Measurement of Vertical Angles; Advanced Electronic & Laser Theodolites	September
24	Tutorial on Angle Measurement	September
25	Practical Examples & Problem Solving	
26	Mini Test / Review	September
27	Definition, Contour Interval, Characteristics; Direct Method	September
28	Indirect Method; Uses & Applications in Civil Engineering	September
29	Volume Estimation Using Contours; Grade Contours	September
30	Topographic Maps & Practical Exercise	October
31	Introduction, Stadia Principle, Fixed Hair Method	October
32	Tangential System, Subtense Bar, Instrument Constants	October
33	Direct Reading Tachometer, Analytic Lens	October
34	Tutorial & Problem Solving (Tacheometry)	October
35	Plane Table Equipment, Setting Up, Levelling & Orientation Methods	October
36	Methods of Plane Table Survey; Two-point and Three-point Problems	October
37	Contouring with Clinometer	October
38	Errors, Advantages & Disadvantages of Plane Tabling	October
39	Principle, Classification, Selection of Baseline	October
40	Triangulation Figures, Scaffold & Signals	October
41	Intervisibility & Height of Stations	November
42	Baseline Measurement & Corrections, Introduction to Adjustment	November
43	Types of Curves & Elements of a Simple Curve	November
44	Methods of Setting Out Simple Curves	November
45	Introduction to Compound, Reverse, Transition & Vertical Curves	November
46	Total Station, GPS & Modern Survey Instruments Overview	November
47	Revision of Unit I & II	November
48	Revision of Unit III & IV	November