

Lesson Planning for the semester started w.e.f. Jan'18-June'18

Name of Institute : ACEM FARIDABD
 Name of teacher with designation : ER. DK JAISWAL ASSISTANT PROFESSOR
 Department : CIVIL ENGINEERING, 4th sem
 SUBJECT : DESIGN OF CONCRETE STRUCTURE –I(CE-206-F)

Month	Class	Topic/Chapter covered	Academic activity	Test/Assignment
		SECTION-A		
JANUARY	1	Introduction Elementary treatment of concrete technology: Physical requirements of cement, aggregate,		
	2	Admixture and reinforcement, Strength and durability, shrinkage and creep		
	3	Design of concrete mixes,		
	4	Acceptability criterion, I.S. Specifications		
	5	Design Philosophies in Reinforced Concrete: Working stress and limit state methods		
	6	Limit state v/s working stress method, Building code		
	7	Normal distribution curve, characteristic strength and characteristics loads		
	9	Design values, Partial safety factors and factored loads		
JANUARY	10	Strain relationship for concrete and steel.		
		TEST		TEST
		SECTION-B		
FEBRUARY	11	Working Stress Method: Basic assumptions, permissible stresses in concrete and steel		
	12	Design of singly reinforced rectangular beams		
	13	Design of singly reinforced rectangular beams		
	14	Design of Doubly reinforced rectangular beams		
	15	Design of Doubly reinforced rectangular beams	Site visit on working construction site	
	16	flanged beams		
	17	Design of L-beams		
	18	Design of T- Beams		
	19	Steel beam theory, inverted flanged beams		
MARCH	20	Limit State Method: Basic assumptions,		
	21	Analysis and design of singly beams rectangular		
	22	Analysis and design of Doubly reinforced rectangular		
	23	Design of T- Beams		
	24	Design of L-beams		

	25	Analysis and Design of Sections in shear		
	26	Analysis and Design of Sections in shear		
	27	Bond and Torsion -Diagonal tension		
	28	Shear reinforcement, development length, Anchorage and flexural bond		
	29	Torsional, stiffness, equivalent shear, Torsional reinforcement		
	30	Torsional reinforcement		
		TEST	SESSION AL -I	TEST
		SECTION-C		
	31	Concrete Reinforcement and Detailing-Requirements of good detailing, cover to reinforcement		
	32	Spacing of reinforcement, reinforcement splicing, Anchoring reinforcing bars in flexure and shear		
	33	Curtaiment of reinforcement, Serviceability Limit State - Control of deflection, cracking		
MARCH	34	Deflection and moment relationship for limiting values of span to depth, limit state of crack width,		
APRIL	35	One way and Two Ways Slabs-General considerations		
	36	Design of one way slab		
	37	Design of one way slab		
	38	Design of two way slab		
	39	Design of two way slab		
	40	Non-rectangular slabs		
	41	openings in slabs		
		TEST		TEST
		SECTION-D		
	42	Design of Columns		
	43	Design of Columns with ecentricity		
	44	short columns under axial compression		
	45	Design of Uniaxial and biaxial bending column		
	46	slender columns		
	47	Design of Isolated		
	48	Retaining Walls-Classification, Forces on retaining walls		
	49	design criteria, stability requirements		
	50	Design of Retaining walls		
APRIL	51	Design of counter fort wall		
			SESSIONA L -II	

Lesson Planning for the semester started w.r.f Jan'18-June'18

Name of Institute : Aravali College of Engineering and Management, Faridabad
 Name of teacher with designation : Abhisar Malik (Asst. Proff, CE)
 Department : Civil Engineering 4th Semester
 Subject : CONSTRUCTION & CONCRETE TECHNOLOGY (CE-210-F)

Month	Class	Topic/Chapter covered	Academic activity	Test/Assignment
Section A				
Jan	1	CPM - Project Management, Bar Chart and Milestone Charts,		
Jan	2	Elements of network, development of network, network analysis.		
Jan	3	Numericals on CPM		
Jan	4	Numericals on cpm		
Jan	5	Numericals on cpm		
Jan	6	Numericals on pert		
Jan	7	Numericals on pert		
Jan	8	Numericals on pert		
Feb	9	Numericals on cpm		Assignment of section A with deadline of 1 week
Feb	10	Numericals on cpm	Presentation on CPM	
Feb	11	Numericals on cpm		
Feb	12	Test		Test
Section B				
Feb	13	Concrete Technology - Concrete making materials: cements, aggregates,		
Feb	14	water, admixtures, properties of fresh and hardened concrete,		
Feb	15	variability of concrete strength, extreme weather concreting,		
Feb	16	Testing of concrete mixes,		
Feb	17	Testing of concrete mixes,		
Feb	18	Testing of concrete mixes,		
Feb	19	prestressed concrete.	Presentation on concrete materials and prestressed concrete	
Feb	20	prestressed concrete.		
Feb	21	Test		Test

Section C				
Feb	22	Mix Design-Principles of concrete mix design,		
Feb	23	basic considerations,		
Feb	24	Factors in the choice of mix design,		
			Sessional 1	
March	25	outline of mix design procedure,		
March	26	ACI mix design practice,		
March	27	USBR method,	Presentation on Mix design	
March	28	British mix design method.		
March	29	IS guidelines		Assignment of section B & C with deadline of 1 week
March	30	Test		Test
Section D				
March	31	Heavy Construction - Construction of large structures, dams,		
March	32	bridges, multi-storeyed buildings etc.		
March	33	bridges, multi-storeyed buildings etc.		
March	34	bridges, multi-storeyed buildings etc.		
			Sessional 2	
April	35	bridges, multi-storeyed buildings etc.		
April	36	bridges, multi-storeyed buildings etc.		
April	37	Test		Test
April	38	Construction Equipments - Introduction to heavy construction equipment.		
April	39	construction equipment		
April	40	, crushers, hot mix, plants, dozers etc		
April	41	construction equipment	Presentation on construction equipments	Assignment of section D with deadline of 1 week
April	42	construction equipment		
April	43	construction equipment		
April	44	Test		Test

Lesson Planning for the semester started w.r.f Jan'18 to Jun'18

Name of Institute : ACEM ,FARIDABAD
 Name of teacher with designation : PANKAJ KAUSHIK ASSISTANT PROFESSOR
 Department : CIVIL ENGINEERING, 4TH SEM
 Subject : FLUID MECHANICS-II (CE-204-F)

Month	Class	Topic/Chapter covered	Academic activity	Test/Assignment
Section A				
J A N U A R Y	1	Turbulent flow: Introduction to turbulent flow, mixing length theory,		
	2	velocity distribution in turbulent flow,		
	3	Commercial pipes, aging of pipes.		
	4	fittings and valves, concepts of equivalent length of pipe,		
	5	pipes in series, pipes in parallel		Test 1
	6	branching of pipes, pipe network siphon, water Hammer (only quick closure case)		
	7	Transmission of power through pipelines.	Assignment 1	
	8	resistance of smooth and artificially roughened pipes,		
	09	hydraulic and energy gradient lines,		
	10	Losses due to sudden expansion and contraction, losses in pipe		
Section-B				
F	11	Flow in open channels: Uniform flow Basic concepts		Test 2
E	12	Resistance equations (Chezy's and Manning's formulae), Uniform flow computations		
B	13	Efficient channel section,		
R	14	Flow in open channels: Non-uniform flow gradually	Assignment-2	

		varied flow-basic assumptions		
U	15	dynamic equations of gradually flow		
R	16	Types of slopes and their characteristics, analysis and computations of flow profiles		
2018	17	Specific energy concept critical flow channel transitions.		
	18	brink dept analysis, surges in open channels		
Section-C				
MARCH	19	Turbines: Classification definitions, similarly laws	Turbines study in lab	
	20	specific speed and unit quantities		Test 3
	21	Pelton turbines- their construction and settings, speed regulation Dimensions of various elements.	Industry visit	
	22	Action of jet, torque, power and efficiency for ideal Case, characteristic curves. Reaction turbines	Assignment 3	
	23	Construction & setting draft tube theory, runaway speed		
	24	Forces on immersed bodies: types of drag drag on a sphere, a flat plate,		Report submission on visit.
	Section-D			
APRIL	25	Pumps: Centrifugal pumps manometric		
	26	Various types and their important components		
	27	total head, net positive suction head,		Test 4
	28	specific speed, shut off head, cavitations		
	29	Principle of working and characteristic curves	Assignment 4	
	30	Priming and maintenance. Submersible pumps		
	31	Reciprocating pumps : principle of working,		
	32	coefficient of discharge		
	33	slip, single acting and double acting pump		
	34	Mano metric head, Acceleration head		Test 5
	35	Working of air vessels, simplex		
	36	Construction and discharge.	Assignment	

			5	
	37	duplex and three throw pumps		
	38	Air lift pump		

Lesson Planning for the semester started w.r.f Jan'18 to June'18

Name of Institute : ARAVALI COLLEGE OF ENGINEERING & MANAGEMENT

Name of teacher with designation : NEHA KAUSHIK(Assistant Professor)

Department : CIVIL ENGINEERING, 4th sem

Subject : STRUCTURE ANALYSIS-II(CE-202-F)

Month	Class	Topic/Chapter covered	Academic activity	Test/Assignment
SECTION-A				
J A	1	Statically Indeterminate Structures- Introduction, Static and Kinematic Indeterminacies		
	2	Castigliano`s theorems		
	3	Strain energy method		
	4	Analysis of frames with one or two redundant members using Castigliano`s 2 nd theorem		
	5	Analysis of frames with one or two redundant members using Castigliano`s 2 nd theorem		
	6	Concept of rolling load		
	7	Concept of rolling load		ASSIGNMENT-1
	8	Design of maximum bending moment		
	N	9	Shear force due to rolling load	Presentation on Statistically indeterminate and determinate structure
10		Concept of influence lines in beams		
11		I.L diagram for shear force ,B.M., deflection etc		
12		Analysis of continuous beams & portal frames		
13		Analysis of continuous beams & portal frames		
14		Portal frames with inclined members.		TEST-1
15		Portal frames with inclined members.		TEST-II
SECTION-B				
F E	16	Three hinged arch-horizontal thrust		
	17	Three hinged arch-horizontal thrust		
	18	Three hinged arch-horizontal thrust		
	19	Three hinged arch-horizontal thrust		
	20	Shear force and bending moment diagrams		
	21	Shear force and bending moment diagrams		
	22	Shear force and bending moment diagrams		
	23	Shear force and bending moment diagrams		
	24	Bending moment and shear force in determinate beams and frames		
	25	Bending moment and shear force in determinate beams and frames		ASSIGNMENT-2

B	26	Bending moment and shear force in determinate beams and frames		
	27	Definition and signs, conventions, axial force, shear force and B.M diagrams		TEST-III
	28	Definition and signs, conventions, axial force, shear force and B.M diagrams		TEST-IV
		SECTION-C		
M A R C H	29	Unsymmetrical Bending Introduction	SESSIONAL-I	
	30	Centroidal principal axes of sections		
	31	Bending stresses in beams subjected to unsymmetrical bending		
	32	Shear centre, shear centre for channel, Angles and Z sections		
	33	Shear centre, shear centre for channel, Angles and Z sections		
	34	Shear centre, shear centre for channel, Angles and Z sections		
	35	Shear centre, shear centre for channel, Angles and Z sections		
	36	Cable and suspension Bridges		
	37	Introduction, uniformly loaded cables, Temperature stresses		
	38	Three hinged stiffening Girder and two hinged stiffening Girder	Presentation on 3 hinged arches	ASSIGNMENT-3
	39	Three hinged stiffening Girder and two hinged stiffening Girder		
	40	Three hinged stiffening Girder and two hinged stiffening Girder		TEST-V
41	Three hinged stiffening Girder and two hinged stiffening Girder		TEST-VI	
		SECTION D		
A P R I L	42	Analysis of statically determinate trusses- Introduction	SESSIONAL-II	
	43	Various types and Stability		
	44	Analysis of plane trusses by method of joints and method of sections		
	45	Analysis of plane trusses by method of joints and method of sections		
	46	Analysis of plane trusses by method of joints and method of sections		
	47	Analysis of space trusses using tension coefficient method		ASSIGNMENT-4
	48	Analysis of space trusses using tension coefficient method		
	49	Analysis of space trusses using tension coefficient method	P.U.T	TEST-VII

Lesson Planning for the semester started w.r.f Jan'18-June'18

Name of Institute : Aravali College of Engineering and Management

Name of teacher with designation : Ishrat Sultana (H.O.D, CE)

Department : Civil Engineering- 4th sem

Subject : SURVEYING -II (CE-208-F)

Month	Class	Topic/Chapter covered	Academic activity	Test/Assignment
Section A				
Jan	1	Introduction to Trigonometric Leveling,		
Jan	2	height and distances, base of object inaccessible		
Jan	3	geodetical observation, refraction and curvature, axis signal correction,		
Jan	4	difference in elevation between two points by single observation, numerical		
Jan	5	difference of elevation of two stations by reciprocal observation,		
Jan	6	determination of coefficient of refraction, numericals		
Jan	7	Numericals		
Jan	8	Test		Test
Feb	9	Triangulation systems, classification, strength of figure,		
Feb	10	selection of triangulation stations,		
Feb	11	grade of triangulation, field work of triangulation,		
Feb	12	triangulation computations,		
Feb	13	introduction to E.D.M. instruments. Numericals based on each topics.		Assignment of section A with deadline of 1 week
Feb	14	Numerical		
Feb	15	Test		Test
Section B				
Feb	16	Survey Adjustment and Treatment of Observations: Definite weight of an observation, Numerical		
Feb	17	most probable values, type of error,		
Feb	18	principle of least squares, numerical		
Feb	19	adjustment of triangulation figures by method of least squares. Numericals based on each topics.	Presentation on EDM	
Feb	20	Numerical		
Feb	21	Numerical		
Feb	22	Test		Test
			Sessional 1	

March	23	Astronomy: Definitions of astronomical terms, star at elongation,		
March	24	star at prime vertical star at horizon,		
March	25	star at culmination, celestial coordinate systems,		
March	26	Napier`s rule of circular parts,		
March	27	various time systems: sidereal, apparent, solar and mean solar time, equation of time-its cause,effect,		
March	28	determination of longitude, inter-conversion of time,		
March	29	determination of time,		
March	30	azimuth and latitude by astronomical observations. Numericals based on each topics.	Presentation on Astronomy terms	Assignment of section B with deadline of 1 week
March	31	Numerical		
March	32	Numerical		
March	33	Test		Test
Section C				
April	34	Elements of Photogrammetry: Introduction: types of photographs, Terrestrial and aerial photographs aerial		
April	35	camera and height displacements in vertical photographs,		
April	36	stereoscopic vision and stereoscopies,		
April	37	height determination from parallax measurement, flight planning,		
April	38	plotting by radiline method, principle of photo interpretation and		
April	39	photogram metric monitoring in Civil Engineering.		
April	40	Numericals on photography of different types.		
April	41	Numerical		
April	42	Numerical		
April	43	Test		Test
Section D				
April	44	Introduction of remote sensing and its systems .		
April	45	Analysis /measurements On remote sensing analysis. and interrelation of data.	Presentation on Remote sensing	Assignment 3 from section C with deadline 1 week
April	46	Numerical		
April	47	Numerical		
April	48	Test		Test
May	49	Concept of G.I.S and G.P.S-Basic Components,		
May	50	data input, storage & output.		
May	51	Numerical		
May	52	Test		Test
			Sessional 2	