

DRONACHARYA

College of Engineering

KHENTAWAS, FARRUKHNAGAR, GURGAON, HR

Department: Civil Engineering

Academic Session: 2017-18 (Jan-June 2018)

Lesson Plan for the Semester started w.e.f 08.01.2018

Subject with code: Transportation Engineering II (CE-310)

Name of Faculty with designation : Ms. Ifrah Kathwari (Asst. Professor)

S.No.	Month	Date & Day	Sem-Class	Section/Unit	Topic/Chapter covered	Academic activity	Test / assignment
1	January	15 – JAN	VI-CE	A	Types of pavements. Flexible and rigid pavements components of a pavement and their functions.	.....	Assignment of 02 Ques. given
2	January	17 – JAN	VI-CE	A	Factors affecting design of pavements. Design of thickness of a flexible pavement by Group Index method	.....	Assignment of 02 Ques. given
3	January	29 – JAN	VI-CE	A	CBR method (including latest IRC guidelines). Triaxial method and Burmister's method.	Assignment of 02 Ques. given
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5	January	31 – JAN	VI-CE	A	Westergaard's theory, critical locations of loading, load and temperature stresses. Critical combination of stresses. IRC guidelines for determination of thickness of a rigid pavement.	Assignment of 02 Ques. given
6	January	5-Feb	VI-CE	A	Joints: requirements, types, patterns. Spacing of expansion and contraction joints. Functions of dowel and tie bars.	.....	Assignment of 02 Ques. given
7	February	7-Feb	VI-CE	B	Brief introduction to earthwork machinery: shovel, hoe, clamshell, dragline, bulldozers. Principles of field compaction of subgrade. Compacting equipments. Granular roads	.....	Assignment of 02 Ques. given
8	February	19-Feb	VI-CE	B	Construction steps of WBM. WMM. Construction of cement concrete pave	.....	Assignment of 02 Ques. given
9	February	21-Feb	VI-CE	B	Basic concepts of the following: soil stabilized roads, use of geo-synthetics, reinforced cement concrete pavements, prestress concrete pavements, roller compacted concrete pavements and fibre reinforced concrete pavements.	Assignment of 02 Ques. given

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10	February	26-Feb	VI-CE	B	Various types of bituminous constructions. Prime coat, tack coat, seal coat and surface dressing.	Assignment of 02 Ques. given
11	February	28-Feb	VI-CE	B	Construction of BUSG, Premix carpet, BM, DBM and AC.	.....	Assignment of 02 Ques. given
12	February	5-Mar	VI-CE	B	Brief coverage of machinery for construction of bituminous roads: bitumen boiler, sprayer, pressure distributor, hot-mix plant, cold-mix plant, tipper trucks, mechanical paver or finisher, rollers	.....	Assignment of 02 Ques. given
13	March	7-Mar	VI-CE	B	Mastic asphalt. Introduction to various IRC and MOST specifications.	.....	Assignment of 02 Ques. given
14	March	12-Mar	VI-CE	C	Pavement failures. Maintenance operations. Maintenance of WBM, bituminous surfaces and cement concrete pavements. Pavement evaluation. Benkleman beam. Introduction to various types of overlays.	.....	Assignment of 02 Ques. given
15	March	14-Mar	VI-CE	C	Surface drainage: types, brief design. Types of sub-surface drainage. Special characteristics of hill roads: geometrics, hair pin bends, construction of hill roads, drainage of hill roads, maintenance problems of hill roads.	.....	Assignment of 02 Ques. given
16	March	26-Mar	VI-CE	D	Need of economic evaluation. Highway user benefits and costs.	.....	Assignment of 02 Ques. given
17	March	28-Mar	VI-CE	D	Methods of economic evaluation: benefit cost ratio method, net present value method, internal rate of return method, comparison. Highway finance	.....	Assignment of 02 Ques. given
18	April	2-Apr	VI-CE	D	Sections of tunnels: advantages, limitations and suitability of each section.	.....	Assignment of 02 Ques. given
19	April	4-Apr	VI-CE	D	Shaft. Pilot tunnel. Driving tunnel in rocks: sequence of construction operations, full-face method, heading and bench method, drift method	.....	Assignment of 02 Ques. given
20	April	9-Apr	VI-CE	D	Driving tunnels in soft ground: sequence of construction operations, needle beam method	.....	Assignment of 02 Ques. given
21	April	11-Apr	VI-CE	D	shield tunneling, compressed air tunneling.	.....	Assignment of 02 Ques. given
33	April				3RD SESSIONAL		
34	April	26 TO 30 APR			GENERAL PROFICIENCY		

S.No.	Month	Date & Day	Sem-Class	Section/Unit	Topic/Chapter covered	Academic activity	Test / assignment
35	May	10-May			LAST TEACHING DAY		