

# 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: Geotechnology (CE-306-F)

Name of Faculty with designation : Gaurav Thakur (Assistant Prof.)

Month	Date & Day	Sem-Class	Unit	Topic/Chapter covered	Academic activity	Test / assignment	
January	08.01.2018 Monday	VI-CE	I (Section-A)	Introduction to the subject, Application of the subject and its various units, syllabus, books to be referred, Introduction to Unit-I		Assignment of 02 Ques.	
January	11.01.2018 Thursday	VI-CE	I	Causes of failure, factors of safety, Stability analysis of slopes-total stress analysis, effective stress analysis		Assignment of 02 Ques.	
January	12.01.2018 Friday	VI-CE	I	Stability analysis of infinite slopes, types of failures of finite slopes		Assignment of 02 Ques.	
January	15.01.2018 Monday	VI-CE	I	Types of failures of finite slopes, analysis of finite slopes- mass procedure, method of slices		Assignment of 02 Ques.	
January	18.01.2018 Thursday	VI-CE	I	Effect of pore pressure, Fellenius method to locate centre of most critical slip circle, friction circle method		Assignment of 02 Ques.	
January	19.01.2018 Friday	VI-CE	I	Taylor's stability number, slope stability of earth dam during steady seepage		Assignment of 02 Ques.	
January	22.01.2018 Monday	VI-CE	<b>Basant Panchmi</b>				
January	25.01.2018 Thursday	VI-CE	I	Slope stability of earth dam during sudden drawdown and during and at the end of construction		Assignment of 02 Ques.	

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January	26.01.2018 Friday	VI-CE	<b>Republic Day</b>			
January	29.01.2018 Monday	VI-CE	II (Section-B)	<b>Braced Cuts:</b> Depth of unsupported vertical cut, sheeting and bracing for deep excavation (45 min.)		<b>Class Test-1 on Unit-I (45 min. duration)</b>
February	01.02.2018 Thursday	VI-CE	II	Movements associated with sheeting and bracing		Assignment of 02 Ques.
February	02.02.2018 Friday	VI-CE	II	Modes of failure of braced cuts		Assignment of 02 Ques.
February	05.02.2018 Monday	VI-CE	II	Pressure distribution behind sheeting		Assignment of 02 Ques.
February	08.02.2018 Thursday	VI-CE	III (Section-B)	<b>Cofferdams:</b> Introduction, types of cofferdams (45 min.)		<b>Class Test-2 on Unit-II (45 min. duration)</b>
February	09.02.2018 Friday	VI-CE	III	Design and lateral stability of braced cofferdams		Assignment of 02 Ques.
February	12.02.2018 Monday	VI-CE	<b>1st Sessional Examinations</b>			
February	15.02.2018 Thursday	VI-CE				
February	16.02.2018 Friday	VI-CE				
February	19.02.2018 Monday	VI-CE	III	Design data for cellular cofferdams		Assignment of 02 Ques.

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February	22.02.2018 Thursday	VI-CE	III	Stability analysis of cellular cofferdams on soil and rock, Inter-lock stresses		Assignment of 02 Ques.
February	23.02.2018 Friday	VI-CE	IV (Section-C)	<b>Cantilever Sheet Piles:</b> Purpose of sheet piles, cantilever sheet piles (45 min.)		<b>Class Test-3 on Unit-III (45 min. duration)</b>
February	26.02.2018 Monday	VI-CE	IV	Depth of embedment in granular soils-rigorous method, simplified procedure		Assignment of 02 Ques.
March	01.03.2018 Thursday	VI-CE	<b>Holi Break</b>			
March	02.03.2018 Friday	VI-CE				
March	05.03.2018 Monday	VI-CE	V (Section-C)	<b>Anchored Bulkheads-</b> Methods of design (45 min.)		<b>Class Test-4 on Unit-IV (45 min. duration)</b>
March	08.03.2018 Thursday	VI-CE	V	Free earth support method in cohesionless soils		Assignment of 02 Ques.
March	09.03.2018 Friday	VI-CE	V	Free earth support method in cohesive soils		Assignment of 02 Ques.
March	12.03.2018 Monday	VI-CE	V	fixed earth support method in cohesionless soils- Slum's equivalent beam method		Assignment of 02 Ques.
March	15.03.2018 Thursday	VI-CE	VI (section-D)	<b>Soil Stabilisation:</b> soil improvement, shallow compaction, mechanical treatment (45 min.)		<b>Class Test-5 on Unit-V (45 min. duration)</b>
March	16.03.2018 Friday	VI-CE	VI	Use of admixtures, lime stabilization, cement stabilization, lime fly ash stabilization		Assignment of 02 Ques.
March	19.03.2018 Monday	VI-CE	<b>2nd Sessional Examinations</b>			
March	22.03.2018 Thursday	VI-CE				
March	23.03.2018 Friday	VI-CE				
March	26.03.2018 Monday	VI-CE	VI	Dynamic compaction and consolidation		Assignment of 02 Ques.
March	29.03.2018 Thursday	VI-CE	<b>Mahavir Jayanti</b>			
March	30.03.2018 Friday	VI-CE	VI	Bituminous stabilization, chemical stabilization, pre-compression		Assignment of 02 Ques.
April	02.04.2018 Monday	VI-CE	VI	lime pile and column, stone column, Grouting, Reinforced earth		Assignment of 02 Ques.

Month	Date & Day	Sem-Class	Unit	Topic/Chapter covered	Academic activity	Test / assignment
April	05.04.2018 Thursday	VI-CE	VII (Section-D)	<b>Basics of Machine Foundations:</b> Terminologies, characteristics elements of a vibratory system (45 min.)		<b>Class Test-6 on Unit-VI (45 min. duration)</b>
April	06.04.2018 Friday	VI-CE	VII	Analysis of vibratory motions of a single degree of freedom system-undamped free vibrations		<b>Assignment of 02 Ques.</b>
April	09.04.2018 Monday	VI-CE	VII	Undamped forced vibrations, criteria for satisfactory action of a machine foundation		<b>Assignment of 02 Ques.</b>
April	12.04.2018 Thursday	VI-CE	VII	Degrees of freedom of a block foundation, Barken's soil spring constant		<b>Assignment of 02 Ques.</b>
April	13.04.2018 Friday	VI-CE	VII	Barken's method of determining natural frequency of a block foundation subjected to vertical oscillations		<b>Assignment of 02 Ques.</b>
April	16.04.2018 Monday	VI-CE	<b>Pre-University Examinations</b>			
April	19.04.2018 Thursday	VI-CE				
April	20.04.2018 Friday	VI-CE				
April	23.04.2018 Monday	VI-CE				
April	26.04.2018 Thursday	VI-CE	Revision of each units or(and) completion of syllabus (if incomplete due to unforeseen conditions) will be done in these three days accompanied by class tests (including Class Test-7 on Unit VII) and assignments.			
April	27.04.2018 Friday	VI-CE				
April	30.04.2018 Monday	VI-CE	<b>Buddh Purnima</b>			
May	May 01 to 10, 2018	IV-CE	<b>External Practical Exams</b>			
May	14.05.2018 Onwards	IV-CE	<b>University Theory Examinations</b>			