

# Department of Civil Engineering

II B.Tech II SEM, CT, Section B 2015-16

## LESSON PLAN G. SARANYA

Period	Date	Topic	Unit No	Teaching Methodology	Cumulative Periods
5,6	21-12-2015	Introduction of concrete technology subject, its applications, importance, new phases in concrete technology	1	C.R	2
1,2	22-12-2015	Introduction of 1 <sup>st</sup> unit, Portland cement, its history, importance, raw materials, types of Portland cement	1	C.R	4
5,6	28-12-2015	Chemical composition and manufacturing process of cement	1	C.R	6
1,2	4-1-2016	Hydration and setting of cement	1	C.R	8
5,6	5-1-2016	Structure of hydrate of cement And some physical tests on cement	1	C.R	10
1,2	18-1-2016	Admixtures – types, uses and composition	1	C.R	12
5,6	19-1-2016	Introduction of 2 <sup>nd</sup> unit – importance of aggregate, their origin and properties	2	C.R	14
1,2	1-2-2016	Classification of aggregates and mechanical properties	2	C.R	16
5,6	2-1-2016	Sieve analysis Fineness modulus, grades, curves	2	C.R	18
1,2	8-2-2016	Workability – factors effecting workability, and measurement of workability	2	C.R	20
5,6	9-2-2016	Setting time of concrete and effect of temperature on concrete	2	C.R	22
1,2	15-2-2016	Stages in manufacturing of concrete and quality checking	2	C.R	24
5,6	16-2-2016	Introduction of Harden concrete	3	C.R	26
1,2	22-2-2016	Water cement ratio –Abrams law, gelspace ratio.	3	C.R	28
5,6	23-2-2016	Strength of the harden concrete-gaining of strength at different stages , maturity concept of concrete	3	C.R	30
1,2	1-3-2016	relation of compressive and tensile strength and about curing	3	C.R	32
5,6	7-3-2016	Tests on harden concrete- two tests	3	C.R	34

1,2	8-3-2016	Tests on harden concrete – another – two tests	3	C.R	36
5,6	14-3-2016	NDT tests – code provisions ,	3	C.R	38
1,2	15-3-2016	Introduction of elasticity, creep, shrinkage	4	C.R	40
5,6	21-3-2016	Concept of elasticity of modulus and dynamic modulus of elasticity	4	C.R	42
1,2	22-3-2016	Concept of creep of concrete- factors influencing the creep, relation between creep and time	4	C.R	44
5,6	28-3-2016	Nature of creep , effects of creep, concept of shrinkage , types of shrinkage	4	C.R	46
1,2	29-3-2016	Remedies of to control creep and shrinkage	4	C.R	48
5,6	4-4-2016	Introduction of 5 <sup>th</sup> unit- about mix design, importance, different codes used for mix design	5	C.R	50
1,2	5-4-2016	Calculation of water cement ratio and deciding zones	5	C.R	52
5,6	11-4-2016	Mix design calculation step wise with reference code books	5	C.R	54
1,2	12-4-2016	Mix design calculations of M15	5	C.R	56
5,6	18-4-2016	Mix design calculations of M20	5	C.R	58
1,2	19-4-2016	Revision			60

NOTE: C.R- Class Room Teaching (Black board, PPT)

Signature

