

 In Pursuit of Excellence	Lecture Plan & Course Coverage	SESSION-2024-2025
		SEM-5 th

Total Period: 40

Sr. No.	No. of Periods	Topics/Sub Topics	Reference Books	CO Covered	Planned Date	Coverage Date	Sign
1.	2	Cement: types and cement chemistry	[1,7]	CO1			
2.	2	Quality of water for use in concrete	[1,7]	CO1			
3	4	Aggregates: mineralogy, properties, test and standards.	[1,7]	CO1			
4		Assignment test 1	[1,7]				
5		Assignment Analysis 1					
6	2	Study of supplementary cementing materials like fly ash, silica fume , ground granulated blast furnace slag, metakaoline and pozzolana; their production, properties and effect on concrete properties .	[4,10,11]	CO2			
7	2	Introduction & study of accelerators, retarders, water reducers, air entrainers, water proofers, super plasticizers.	[4,10,11]	CO2			
8		Assignment test 2					
9		Assignment Analysis 2					
10	2	Concert production: batching, mixing and transportation of concrete.	[9,10,11]	CO3			
11	3	Determination of compressive and flexural strength as per BIS. Mechanical properties of concrete: elastic modules, poisson's ratio, creep, shrinkage and durability of concrete.	[9,10,11]	CO3			
12	3	Workability test: slump test, compacting factor test and Vee Bee test.	[9,10,11]	CO3			

13	2	Segregation, bleeding and Laitance in concrete, curing of concrete and its methods.	[9,10,11]	CO3			
14		Assignment test 3					
15		Assignment Analysis 3					
16	2	Mix design of concrete	[8,10,11]	CO4			
17	3	Principle of mix proportioning, properties related to mix design	[8,10,11]	CO4			
18	3	Mix design method (IS method and ACI method)	[8,10,11]	CO4			
19	2	Rheology, mix design examples	[8,10,11]	CO4			
20		Assignment test 4					
21		Assignment Analysis 4					
22	1	Self-compacting concrete	[8,10,11]	CO5			
23	2	Study and uses of high strength concrete	[8,10,11]	CO5			
24	3	Ready Mix Concrete, recycled aggregate concrete and status in India.	[8,10,11]	CO5			
25	2	Fiber reinforced concrete, ferro cement		CO5			
26		Assignment test 5					
27		Assignment Analysis 5					

Name & Sign. of Faculty

Sign. of Reviewer

Sign. of HOD