Sanjay Ghodawat University, Kolhapur

2020-21

Established as State Private University under Govt. of Maharashtra. Act No XL, 2017

EXM/P/09/00

Year and Program: 2020-21	**School of Technology**	**Department: Civil Engineering**
Course Code: CET341 R1	**Course Title:** Advanced Concrete Technology	**Semester : V**
Day : Wednesday **Date: 23.12.2020**	**End Semester Examination**	**Time:2 Hrs.** **Max Marks:50**

Instructions: 1) All Questions are compulsory.
2) Assume suitable data if required.

		Marks	Bloom's Level	CO
Q.1	**Answer the following (any Two)**–			
a)	Mention different types of superplasticizers. Explain the mechanism of deflocculation of cement particles by plasticizers with a neat sketch.	8	2	CO1
b)	Discuss the effects of following on the properties of concrete. i) Flyash ii) Silica Fume	8	2	CO1
c)	Elaborate the stages of transformation of fresh concrete to hardened concrete?	8	3	CO2
Q.2	**Answer the following (any two)** –			
a)	Describe in brief note on the technique used for construction in ferrocement.	8	3	CO3
b)	List the advantages of ferrocement over the normal concrete.	8	2	CO3
c)	Illutrate Fiber reinforced concrete (FRC)? What are the different factors affecting properties of FRC?	8	2	CO4
Q.3	**Answer the following (any two)** –			
a)	Discuss High performance concrete (HPC)? Discuss briefly properties of HPC in fresh state and hardened state.	9	2	CO5
b)	Describe the following properties of concrete. i) Self-compacting concrete ii) Bacterial concrete.	9	3	CO6
c)	Describe the following concrete placing methods i)Under water concreting ii) Hot and cold weather concreting	9	3	CO6

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