NARSIMHA REDDY ENGINEERING COLLEGE
UGC AUTONOMOUS ACCREDITED BY NBA & NAAC WITH A-GRADE

UNIT WISE QUESTION BANK

25CE301 BUILDING MATERIALS AND CONCRETE TECHNOLOGY

UNIT-3

S.NO	QUESTIONS	BT	CO	PO
	Part–A(Short Answer Questions)	L1	CO3	
1	Define fine aggregate and coarse aggregate.	L1	CO3	PO5
2	What are the functions of aggregates in concrete?	L1	CO3	PO2
3	Define specific gravity of aggregates.	L1	CO3	PO1
4	What is bulk density of aggregate?	L1	CO3	PO6
5	What is sieve analysis?	L1	CO3	PO5
	Part–B(Long Answer Questions)			PO1
1	Explain the classification of aggregates and discuss the properties of fine and coarse aggregates used in concrete.	L2	CO3	PO3
2	Describe the physical properties of aggregates such as specific gravity, bulk density, grading, shape, and surface texture.	L2	CO3	PO6
3	Explain sieve analysis of aggregates with procedure, calculations, and importance in concrete mix design.	L2	CO3	PO3
4	Describe the aggregate impact value test and crushing value test with procedure, significance, and limitations.	L1,L2	CO3	PO4
5	Explain the flakiness index and elongation index tests on aggregates with neat sketches.	L2	CO3	PO6
6	Discuss the requirements of water used for mixing and curing concrete. Explain the effects of impurities present in water.	L1	CO3	PO2
7	Explain the classification of admixtures used in concrete and discuss their functions and applications.	L1	CO3	PO5
8	Describe plasticizers and super plasticizers. Explain their effect on workability, strength, and durability of concrete.	L3	CO3	PO1
9	Explain retarders, accelerators, and air-entraining agents with their advantages, disadvantages, and applications in concrete.	L2	CO3	PO2
10	Discuss pozzolanic admixtures and explain the effects of different admixtures on the properties of fresh and hardened concrete.	L2	CO3	PO5