23CE503: STRUCTURAL ENGINEERING -I

UNIT-III

S.No	Questions	BTL	CO	PO
	Part–A(Short Answer Questions)			
1	Define slab.	L1	CO3	PO1
2	What is one-way slab?	L1	CO3	PO1
3	What is two-way slab?	L1	CO3	PO1
4	Define effective span.	L2	CO3	PO1
5	What is deflection?	L1	CO3	PO1
6	Define cracking in slabs.	L2	CO3	PO1
7	What are IS coefficients?	L2	CO3	PO1
8	What is serviceability limit state?	L2	CO3	PO1
9	Define cover to reinforcement.	L1	CO3	PO1
10	What is continuous slab?	L2	CO3	PO1
	Part–B(Long Answer Questions)			
1	Design a two-way slab for a room 5.5m × 4m clear size with superimposed load of 7kN/m^2. Use M20 and Fe415. Corners not held down.	L5	CO4	PO3
2	Design a simply supported RC slab for a room of size 3.5m × 4.5m with superimposed load 2.5kN/m^2 and floor finish 1.0kN/m^2. Corners not held down. Use M20 and Fe415.	L5	CO4	PO3
3	Design a reinforced concrete slab for a live load of 3kN/m^2 over an effective span of 3.5m. Use M20 and Fe415. Sketch reinforcement details.	L5	CO4	PO3
4	Design a slab for a classroom (3m × 4.5m) with live load 3.5kN/m^2 and floor finish 1kN/m^2. Slab discontinuous on all sides, corners free to lift. Wall thickness = 230mm. Use M20 and Fe415.	L5	CO4	PO3
5	Design a simply supported roof slab for a room 7.5m × 3.5m carrying an imposed load of 10kN/m^2. Use M25 concrete and Fe415 steel.	L5	CO4	PO3