

23CE503: STRUCTURAL ENGINEERING – I (RCC)
DESIGN OF FOOTINGS
UNIT :V

Part A: Objective Questions (MCQs)

1. Footing transfers load to:

- A) Beam
- B) Soil
- C) Column
- D) Slab

Answer: B

2. Isolated footing supports:

- A) One column
- B) Two columns
- C) Beam
- D) Slab

Answer: A

3. Combined footing is used when:

- A) Columns close
- B) Soil weak
- C) Property line near
- D) All

Answer: D

4. Safe bearing capacity is:

- A) Max load
- B) Allowable load
- C) Failure load
- D) None

Answer: B

5. Footing design considers:

- A) Bending
- B) Shear
- C) Bearing
- D) All

Answer: D

6. Punching shear occurs at:

- A) Edge
- B) Center

C) Column face

D) None

Answer: C

7. Thickness depends on:

A) Load

B) Soil

C) Shear

D) All

Answer: D

8. Reinforcement is provided at:

A) Top

B) Bottom

C) Both

D) None

Answer: B

9. Settlement is:

A) Load

B) Movement

C) Stress

D) None

Answer: B

10. Footing is designed for:

A) Strength

B) Stability

C) Both

D) None

Answer: C

Part B: Fill in the Blanks

1. Footing transfers load to _____. Answer: Soil

2. Isolated footing supports _____ column. Answer: Single

3. Combined footing supports _____ columns. Answer: Two

4. SBC means _____. Answer: Safe Bearing Capacity

5. Punching shear occurs near _____. Answer: Column

6. Footing resists _____ load. Answer: Structural

7. Settlement means _____. Answer: Downward movement

8. Reinforcement is provided at _____. Answer: Bottom

9. Footing thickness depends on _____. Answer: Shear

10. Foundation ensures _____. Answer: Stability