Q 1. Minimum clear cover in mm to the main steel bars in slab, beam, column and footing respectively, are

(a) 10, 15, 20 and 25

(b) 15, 25, 40 and 75

(c) 20, 25, 30 and 40

(d) 20, 35, 40 and 75

Q 2. For a continuous slab of 3m x 3.5m size, the minimum overall depth of slab to satisfy vertical deflection limits is

(a) 120 mm

(b) 100 mm

(c) 75 mm

(d) 50 mm

Q 3. If the depth of actual neutral axis in a beam is more than the depth of critical axis, then the beam is called

(a) Over-reinforced beam

(b) Under-reinforced beam

(c) Balanced beam

(d) Deep beam

Q 4. Magnitudes of minimum reinforcement recommended for reinforced concrete using mild steel in slabs/ columns are

(a) 0.15% / 0.60%

(b) 0.25% / 0.80%

(c) 0.50% / 1.00%

(d) 0.15% /0.80%

Q 5. A simply supported beam has an effective span of 16m. What shall be the limiting ratio of span to effective depth as per IS 456-2000?

(a) 26

(b) 20

(c) 12.5

(d) 7

Q 6. A simply supported beam is considered as a deep beam if the ratio of effective span to overall depth is less than

(a) 1

(b) 2

(c) 3

(d) 4

Q 7. As per IS-456 : 2000, side face reinforcement in a beam is provided where depth of the web exceeds.

(a) 750 mm

(b) 250 mm

(c) 500 mm

(d) 1000 mm

Q 8. Critical section for shear in case of flat slabs is

(a) at a distance of effective depth of slab from the periphery of the column/the drop panel

(b) at a distance of % from the periphery of the column/the capital/the drop panel

(c) at the drop panel of the slab

(d) at the periphery of the column [adopting standard notations]

Q 10. What is the minimum area of tension reinforcement in beams when Fe 415 is used?.

(a) 0.8%

(b) 0.12%

(c) 0.15%

(d) 0.2%