

BE Semester- VI (Civil Engineering) Question Bank

(Advanced Construction)

All questions carry equal marks (10 marks)

Q.1	Describe conditions under which pile foundations are adopted. Also explain in brief factors affecting selection of type of piles.
Q.2	Explain in brief various cased cast in situ concrete piles with neat sketches
Q.3	Explain pre cast concrete piles with merits and demerits.
Q.4	Explain in detail under reamed piles with neat sketches.
Q.5	Describe (1) Group of piles, (2) Spacing of piles with necessary sketches.
Q.6	Explain in detail various pile driving formulas.
Q.7	Define Cofferdam. Describe uses of coffer dams. Explain selection of type of coffer dams.
Q.8	Explain in brief with neat sketches: (1) Earth fill coffer dams, (2) Rock-fill coffer dams
Q.9	Explain in brief with neat sketches: (1) Single wall coffer dams, (2) Double wall coffer dams
Q.10	Explain cellular coffer dams with sketches.
Q.11	Describe: (1) Design features of coffer dams, (2) prevention of leakage in coffer dams.
Q.12	Explain in detail economic height of coffer dams.
Q.13	Explain in detail open caissons.
Q.14	Explain: (1) Box caissons, (2) Monoliths
Q.15	Explain in detail pneumatic caissons.
Q.16	Explain in detail floating of caissons with necessary sketches.
Q.17	Explain in detail sinking of caissons with necessary sketches.
Q.18	Explain in detail caisson diseases with precautions.
Q.19	Explain in detail pumping from well points with neat sketches.
Q.20	Explain in detail reduction of ground water flow by grouting.
Q.21	Write notes on: (1) freezing process, (2) Vibro floatation with sketches.
Q.22	Write notes on: (1) Requirements of a good formworks, (2) Economy in formwork.
Q.23	Describe with neat sketch (1) formwork for columns, (2) formwork for floors
Q.24	Explain in detail various types of centering.
Q.25	Write notes on: (1) structure of earth, (2) Plate tectonics with sketches.
Q.26	Discuss various properties to be considered for better seismic performance. Also describe zoning of earthquake as per standards.
Q.27	Explain in detail construction methods for improvement of masonry walls.
Q.28	Explain in brief repair and restoration. Describe in detail (1) repairs of major cracks and crushed concrete, (2) Installing Ferro-cement plate at corners
Q.29	Explain concept of retrofitting. Describe in detail strengthening (retrofitation) of Reinforced Concrete members.
Q.30	Write short note on tall structures. Describe various structural concepts for tall and special structures.
Q.31	Explain in detail methods of pre-stressing.
Q.32	Describe various points to be considered during the procedure of safe demolition of structures.

Q.33	Classify the demolition methods. Explain in detail any three methods of demolition.
Q.34	Describe evaluation of main demolition methods.
Q.35	Give detailed classification of construction equipments. Also write short note on selection of equipments.
Q.36	Write short note on: (1) Bulldozers and angle dozers, (2) Grader, (3) scrapper
Q.37	Write detailed note on Hauling equipments.
Q.38	Describe in detail gantry cranes and tower cranes.
Q.39	Describe in detail conveying equipments.
Q.40	Explain in detail various pile driving equipment.