1. Topic-wise distribution

- **Concrete technology, cement, aggregates, IS 456 durability and construction practice (Q1-8, 32-51):** about 28 questions (28%)
- **Environmental / public health engineering (water supply, treatment, sewage; Q54-58, 64, 79-84):** about 12 questions (12%)
- **Surveying (Q11-20):** about 10 questions (10%)
- **Geotechnical and foundation engineering (Q21-30):** about 10 questions (10%)
- **Hydrology, irrigation, groundwater, river and dam works (Q59-63, 76-78, 85, 93):** about 10 questions (10%)
- **Highway, railway and traffic engineering (Q9-10, 94-99):** about 8 questions (8%)
- **Open channel flow / hydraulics (Q86-92):** about 7 questions (7%)
- **Project management, CPM and networks (Q69-75):** about 7 questions (7%)
- **Estimating and costing (Q65-68):** about 4 questions (4%)
- **RCC design basics and strength of materials (Q31, 52, 53):** about 3 questions (3%)
- **Temporary works (Q100):** 1 question (1%)

2. Key trends

Concrete and materials dominate. Nearly three in ten questions come from cement types, aggregates (including the recent BIS standards on recycled aggregates), curing, formwork striking, cover, shrinkage, chloride attack and water-cement ratio. This is clearly the highest-yield block.

Questions are mostly code-based and factual. Many are direct recall from IS 456, IS 383, IS 1904, IRC 76 and IS norms for water supply. Examples include minimum cover, grading zone, curing period, factor of safety against overturning, and the 135 lpcd domestic

water norm. Numerical or formula-based questions are rare, roughly 6-8 in the whole paper (long chord of a curve, Freeman formula, Froude number for a triangular channel, whole-circle bearing conversion, refraction correction, end-area versus prismoidal).

Assam and North-East context appears. Q2 asks about a gravity dam in North-East India, Q77 about the Subansiri dam, and Q78 about groynes at Majuli. Expect regional river-training, flood-control and dam questions in this recruitment.

Recent and application-oriented topics are present. Examples are Portland Pozzolana Cement, metakaolin, recycled aggregates, aluminium composite panels, paver blocks and seawater use in curing. The paper tests current practice, not just classical theory.

Core subjects are lightly covered. Structural analysis, RCC and steel design, soil mechanics numericals and fluid mechanics theory get very few questions. The paper leans toward construction materials, field practice and management.

Project management is a scoring area. The CPM and network questions (Q69-75) are simple concept checks: critical path, dummy activity, and CPM versus PERT time estimates. These are easy marks with little preparation.

Environmental engineering is basic but wide. Questions cover sedimentation types, trickling filters, activated sludge, superchlorination, turbidity measurement, dissolved oxygen and fire demand formulas. Each is a definition or standard-value recall.