

**Subject-wise distribution (approx.)**

Subject	Approx. Qs	Topics seen
Strength of Materials	~15	Stress-strain, shear stress, Young's modulus, Poisson's ratio, shear modulus, flexural formula, Hooke's law, riveted joints
Structural Analysis / Theory of Structures	~15	BM/SF diagrams, beam deflection, fixed/simply supported beams, virtual work, stiffness method, indeterminacy (suspension bridge), rolling loads
Engineering Mechanics	~10	Force, momentum, impulse, kinetic energy, angular velocity/momentum, instantaneous centre of rotation, relative velocity, dimensional analysis
Fluid Mechanics & Hydraulics	~15	Reynolds number, Froude number, venturi meter, Bernoulli's equation, hydraulic jump, specific energy, head loss, pitot tube, open channel flow
Geotechnical Engineering (Soil Mechanics)	~15	Void ratio, unit weight, permeability, consolidation, shear strength, Coulomb's theory, Terzaghi's theory, piles, thixotropy, sensitivity
Surveying	~10	Bearings, traverse correction, tacheometry, chain surveying, prismatic compass, geodetic surveying
Environmental/PHE Engineering	~10	Water treatment, pH, turbidity, trickling filters, sewage treatment, acid rain
Transportation Engineering	~2	Superelevation, engineer's chain
RCC/Design	~2	Tension reinforcement limit, creep coefficient

Key trends:

1. **Numerical-heavy paper** – roughly 55–60% of questions require calculation
2. **Balanced weightage** across the 4 core streams (Structural, Fluid, Geotech, Survey) — no single subject dominates
3. **PHE-specific topics** (water/sewage treatment, water quality parameters) appear concentrated toward Q45–65, suggesting a distinct “specialization block” within the paper.
4. **Repeated concept-testing:** Reynolds number, factor of safety, shear stress/strength,



and Bernoulli-related concepts each appear 2–3 times in different forms — high-yield topics to prioritize in revision.

5. **Basic engineering mechanics/SOM fundamentals** (stress, strain, dimensional formulas) recur heavily in the first 10 and last 10 questions — likely used as easy scoring anchors.

Suggestion: Focus preparation on Fluid Mechanics (flow classification, meter coefficients) and Geotechnical (index properties, consolidation, shear strength) as they carry the most numerical weight, alongside SOM/Structural basics which are consistently tested with quick formula-based problems.