

## GROUP-61

### **(For Public Health Engineering Dept. & Housing Board Haryana only)**

### **Draughtsman Civil Jobs (Level- Matric+ Diploma in Draughtsman civil)**

- 1) General awareness, Reasoning, Mathematics, Science, History including Haryana related history, current affairs, literature, Geography, Civics, Environment, Culture etc.- **(Weightage 20%)**
- 2) Computer terminology, Fundamentals, word software, excel software, Power point, internet, web browsing, Communication, emails, downloading and uploading data on websites etc. - **(Weightage 10%)**
- 3) Subject related syllabus- **(Weightage 70%)**

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**ENGINEER DRAWING:** Drawing instruments, lettering, lines and conventional signs of materials, dimensioning sketching, geometrical drawing, scales, Projection- Isometric projection, oblique projection, perspective views.

**BUILDING MATERIAL:** Bricks, Stone, Lime, Cement, Timber, Sand, Surkhi and Cinder.

**BUILDING CONSTRUCTION:** Brick masonry and various types of bonds, stone masonry, foundation, floor, lintels, and arches, carpentry and various types of joints, door, windows and ventilation, roofs, stairs, residential building and its planning, damp proofing course, pointing, white and colour washing, Drawing tracing, printing.

**ALLIED TRADE:** Electrical wiring, Carpentry, Plumbing.

**SURVEYING:** Chain surveying, Plane Table Surveying, Leveling and various surveying instruments.

**RAIL WAY ROAD AND BRIDGE:** Roads, railway culverts and bridge-classification and components.

**WATER RESOURCES ENGINEERING:** Hydrology, water distribution works, cross drainage works, diversion storage Head Works.

**WATER SUPPLY AND SANITATION ENGINEERING:** Water supply and Distribution, sanitation system, sanitary fittings, Drain and sewers.

**REINFORCED CEMENT CONCRETE AND STEEL STRUCTURES:** Reinforcement cement concrete- selection of material, form work extra beams and girders, rivets and type of joints, nuts and bolts, steel structures section.

**ESTIMATING AND COSTING:** Units of measurement, main items of building, types of estimate, method of detailed building estimate, rate analysis, building specifications.

### **11. BASIC COMPUTER APPLICATIONS AND AUTOCAD**

Autocad (2D and 3D)-Interface, drawing commands, drafting settings, editing commands, inquiry tools, layer and objects properties, creating and editing text, annotation scale, dimensioning, hatch objects, block and symbol library, plot and drawing, managing project extra.

Water CAD-building models, scenario management, calibrating; models, using models for solving design and operation problems, sizing tanks and selecting pumps, optimal design.

ARC Info-GIS map basics, feature-attribute relationship and its benefit, creating a map layout, coordinates to find places, measurements on maps, managing map layers, symbolizing categorical data and quantitative data, styles, labels, annotation, map templates, join and related tables.

**Important Note: The Weightage as mentioned against the syllabus is tentative & may vary.**