

Board Administration
BUILDING ADMINISTRATION N411

(One 3-hour paper)

(With effect from January 1980)

1. Organisational structure of a building firm: One man type structure; divided functions type structure; subdivision by elements type structure; subdivision by products type structure; functions of a clerk of works; staff and line relationships.
2. Departments of a firm: Contracts; estimating and costing; buying; personnel; plant and maintenance. Methods of obtaining business (advertising etc.)
3. Professional consultants: Duties and responsibilities of the architect, quantity surveyor, structural engineer, mechanical engineer and electrical engineer.
4. Workshop organisational structure: Subdivision by trades; organisation and control. Use and distribution of portable tools, various machinery and plant. Workshop layout including use of models and string diagrams with respect to increasing of production and improved efficiency.
5. Site organisation: Preliminary planning organisation; clearing of site; demolishing of existing buildings; position and erection of site sheds; huts and offices; temporary water, electricity and telephone services.
6. Building materials: Receipt, checking, handling and storage of materials.
7. Shoring and underpinning of adjoining buildings; raking shores; flying shores (single and double); dead shores; anchor pinning in excavation walls; underpinning of adjoining buildings.
8. Flanking and strutting of trenches: Shallow and deep trenches in stable and unstable soils and damp or wet soils (trenches for continuous foundations and pipes only).
9. Scaffolding (steel pipe type only): Putlog pipe scaffold; independent scaffold; cantilever scaffold; hanging scaffold.
10. Builders lifts and cranes: Lifts for workers and materials; specific uses; advantages and disadvantages of derrick cranes; cantilever cranes; tower and telescopic cranes; mobile cranes.
11. Programming: Pre-tender programme; labour required for contract programme.

BUILDING ADMINISTRATION N521

(One 3-hour paper)

(With effect from January 1981)

1. Mechanical plant required for building work: Types of plant used for levelling, excavating, loading, mixing and compacting. Brief description of plant and utilisation. Selection of mechanical plant for various purposes. Sequence utilisation, maintenance and servicing.
2. Progress charts and schedules: Types of progress charts and schedules. Methods of recording on charts. Mechanical equipment and plant loading schedules.
3. Subcontractors: Co-ordinating the work of subcontractors and specialists. Supervision and co-ordination of various trades. Provision of special facilities, scaffolding, etc. Allocation of storage space.
4. Materials: Methods of ordering, storage, control, issue and crediting of materials.
5. Handing over of completed work: Defects liability, cleaning, security arrangements, removal of plant, removal of surplus materials, debris, huts, sheds and offices and equipment.
6. Administration and personnel: Introduction to the principles of administration Effects of efficient site administration upon production, formulating site policy and procedure, allotment duties, delegation of responsibilities, personal contacts on the site (employer, architect, consultants, building owner, local authority officials, etc.) Qualifications and personal characteristics required in foremen and supervisors.
7. Contract documents: Types of contract documents. Uses of drawings, specifications, bills of quantities and tender documents.
8. Mass-haul programme: Determining of cut and fill economically for given plotted ground surface shapes. (using Simpson's rule)
9. Variations, omissions and extras: Definitions; effects on efficiency; progress and costs involved in handling of a building contract. Variation order day book. Day works and additional works.
10. Site meetings: Reasons for the necessity of site meetings; procedure during handling of a contract. Typical items for discussion at site meetings. Recording of instructions issued at meetings.

BUILDING ADMINISTRATION N631

(One 3-hour paper)

(With effect from September 1981)

1. Work study: Types of work programmes; Production, jobbing etc. Organising of flow of work, operations loading, dispatch and general process and method. Time study.
2. Estimating: Measuring and costing of labour, material and plant. Detailed costing in workshops and on site. Analysis and scheduling of costs for estimating and pricing.
3. Pre-tendering: Proposed work requirements; type of work plant and equipment. Available labour force. Subcontractors required. Holding of meetings with departmental heads.
4. Tendering: Invitation; advertising; negotiation; contracts etc. Contract documents; drawings specification; bills of quantities; form of contract; subcontracts. Costs. Bonds and guarantees. Tender regulations.
5. Building laws, by-laws, insurance and taxation: Legal aspects; standard forms of building contract; arbitrations; building regulations; building and drainage by-laws. Insurance; income tax; sales tax (rendering of returns).

Reference to the applicable sections from the following:

Apprenticeship Act; Training of Artisans Act; Electrical Wiremen and Contractors Act; Building workers Act for Black workers; Wage measures for the Building Industry; Industrial Conciliation Act; Unemployment Insurance Act.

6. Programme charts: Financial; labour; material; plant and equipment; progress.
7. Management and welfare: Leadership; motivation; incentives; competition; co-operation; working conditions. Personnel psychology; duties of personnel officer; staff records; recruitment; training; welfare. Human relations. Safety of workers and public. Causes of accidents, prevention and protection with reference to the Factories Machinery and Building Work Act.