

methods of working hard and soft woods; appearance, characteristic properties (including specific gravity), and defects of timbers. Candidates may be required to identify specimens of timbers in common use.

Bench-work: Measuring and setting out work; dressing a piece of timber truly; principles to be observed in designing joints and fastenings. Processes—sawing, planing, paring, grooving and trenching, slotting, gouging, cutting curves, shaping and filing, chamfering, finishing; fastening-devices—nails, screws, dowels, pins, cleats, keys, and wedges. Joints—the ordinary joints, including haunched mortise and tenon, bridle, mitre, common dove-tail. Use of glues.

(24) *Metal-work Theory.*

The use of scales, calipers, and micrometer and vernier calipers; measurement to ordinary tolerances in fitting and machine work. Simple workshop calculations, including questions involving elementary mensuration. The characteristics and properties of the commoner metals and alloys employed in metal-work, such as iron, steel, copper, brass, zinc, aluminium, &c.

The description, use, and care of setting out, measuring, and testing instruments and of hand tools. The setting-out of a simple piece of work from the drawing. Bench and forge work of a very simple character, drilling, hand riveting, soldering, and brazing.

(25) *Dressmaking and Needlework Theory.*

Selection: Choice and selection of clothes; comparison of cost and wearing-values of cotton, linen, silk, wool, and mixtures; suitable colours and appropriate style of clothes.

Patterns: Making of simple drafts from pupils' own measurements without reference to charts or other mechanical devices; use and adaptation of commercial patterns.

Making up: Making up of articles for personal and household use; the various stitches and processes used in dressmaking; the application of ornamental stitchery to garments and household articles.

Care: Care of clothes; removal of stains; pressing; mending and repairing garments, household linen and furnishings. Adaptation of adult garments for children's wear as required.

(26) *Housecraft Theory.*

House: Arrangements of house and position of equipment (especially with regard to kitchen, dining-room, and pantry); principles, construction, management of ranges, and of gas, electric, and oil stoves; hot-water services; how to set, light, and regulate fires; fuels and economy of fuels. Care and cleaning of stoves, kitchen sinks and traps; care and cleaning of floors, walls, windows, woodwork (plain, painted, and polished); the yard, including care and cleaning of drains, dustbins, and closets; appliances for cleansing purposes; cleaning and care of other things of the house. Arrangement of daily and weekly work.

Laundry: Choice and care of utensils and appliances. Sorting, steeping, washing, and finishing a household wash. Simple methods of disinfecting; removal of stains; treatment of fast and loose colours.

Foods: (a) Preservation of foods for out-of-season use.

(b) Planning, preparation, cooking, and serving of meals (including school lunches) for the different seasons of the year for a family consisting of adults and children. The meals should contain all the essentials of a normal diet for adults and children, and be chosen so that economical meals can be prepared, using different methods of cooking, without great expenditure of energy and time. The meals should be compared with respect to their values as sources of carbohydrates, fats, proteins, minerals, vitamins, and roughage.

(c) Modifications of diet suitable for invalids and convalescents.

(27) *Trade Drawing.*

All candidates must take Part I, and either Part IIA or IIB.

I. Use and care of drawing-instruments, including scales, pencils, pens, compasses, dividers, protractors, set-squares, and T square. How to test the accuracy of drawing-instruments, and how to correct errors. Hand-sketching in plan, elevation, and section. Use of squared paper.

IIA. *Engineering, &c.*—Measuring simple machine parts, determining position of centre lines, and dimensioning sketches. Sketching simple machine parts from memory. Drawing centre-lines, and completing plans, elevations, and sections to scale in pencil from dimensioned sketches of