E.—11.

Latin (Mr. J. S. Mackie, M.A., Instructor).—The course consists of the study of the Latin grammar, and easy translations from English into Latin and Latin into English. Text-books: Dr. William Smith's smaller Latin Grammar; "Principia Latina," Part I., of the same author.

13

French (Mons. A. Liet, Instructor).—Elementary (first): Text-books—"French Class-book and Reader," by Dejardin; French and English dictionary (Constanseau's recommended). Advanced (second): Text-books—"French Newspaper Reading-book," by Jeffcott; "Guide to French Translation," by Constanseau (prepared English text for translation); French and English dictionary (Constanseau) stanseau's recommended). For lectures on French grammar, the order as found in Brachet's Public School Grammar is adopted; so that students of both classes might find it advantageous to get this work also.

German (Herr M. Schmidt, Instructor). — The study of the grammar, followed by simple

exercises in translation. Text-book, Dr. Otto's Grammar.

Elocution (Rev. A. Macully, A.B., LL.B., Instructor).—(1.) Pure and distinct utterance.

(2.) Smoothness in inflection and modulation. (3.) The timbre of the voice. (4.) Pausation: lung-power, and economy of respiration. (5.) Emphasis and poise. (6.) Physical expression; illustrated in cimple and graceful eventions. illustrated in simple and graceful exercises. (7.) The music of poetry, rhythm, scansion of English

Bookkeeping (Mr. A. G. McCombe, accountant, Instructor).—A system combining single and double entry, practically worked out to the division of profits by the use of books and the entries of transactions common to the offices of general merchants. The necessary books for class-work can be obtained from the instructor. Students before entering this class should be able to write a good hand.

Shorthand (Messrs. Stott and Hoare, Instructors). — Pitman's system is that adopted. Elementary class (first): "The Phonographic Teacher (Jubilee Edition)," "The Phonographic Copybook"—Mr. Hoare. Intermediate class (second): "The Manual of Phonography," "The Phonographic Copy-book"—Mr. Stott. Reporting class (third): "The Reporter's Companion," Note-book

—Mr. Stott. The text-books may be obtained from the instructors.

Applied Mechanics (Mr. F. A. Campbell, C.E., Instructor). — First Term. — Introductory:

Matter, mass, gravity, force. Strength and elasticity of materials; the physical properties of wrought- and cast-iron, steel, timber, stone, brick, cement, lime, mortar, concrete. Working-stress, permanent set, fatigue, factors of safety. Friction, the angle of friction, stability of piers, retaining-walls, chimneys, arches, &c., and the forces to which they are exposed. Beams (timber and iron): Bending-moments, shearing-stresses, and deflections under various loads; graphical representation of the same. Second Term.—Strength and construction of joints in wood and iron, struts and columns, ties and tension-rods. Framed structures; simple forms of roof and bridge trusses, latticed and plate girders. The graphic method of calculating stresses applied to framed structures. The strength of chains and cords; of tubes, pipes, and boilers; of buckled plates. Third Term.—Pressure of air: Fans, blowers, windmills. Pressure of water: Centre of pressure, pumps, hydraulic press, hydraulic lift. Measurement: True plane-surfaces; the principle of work, diagrams of work, energy, velocity, the fly-wheel. Conversion of motion: Straps, pulleys, toothed wheels, cams, quick return-movements, linkwork and parallel motion, trains of wheels, universal joints, special contrivances, machines in common use. This will be an elementary course illustrated by experiments. No great knowledge of mathematics will be required before entering, but to obtain the full benefit of the course students should have studied the first three books of Euclid, algebra as far as equations, and trigonometry as far as the solution of triangles. The course in theoretical mechanics should also precede this. Text-books: Tredgold's "Engineers' Pocket-book;" first and second terms, "Strength of Materials" (Anderson); third term, "Elements of Mechanism" (Goodeve); such portions of the above as may be recommended.

Architecture and Architectural Drawing, under the supervision of Mr. P. Oakden (Mr. Hillson Beasley, Instructor).—Elementary Architectural Drawing: The year's course of study in this class comprises—(a) the use of drawing-instruments and scales, including Indian-ink, (b) classic and (c) Gothic mouldings and combination of mouldings, (d) arches of various kinds, (e) projection of solids as applied to architectural drawing, (f) simple details of construction, (g) the Tuscan order in accurate detail. Advanced Architectural Drawing: In this class the course of study for the year comprises—(a) the classic orders in detail, both Greek and Roman, including the Doric, Ionic, Corinthian, and Composite; (b) Norman, Early English, Decorated and Perpendicular Gothic work in arcades, doorways, windows, and piers; (c) advanced constructional details (with instruction in the use of colours); (d) perspective and projection of shadows in their application to architectural drawing; (e) mounting and straining drawing-paper. Drawings, specially prepared by the instructor under the supervision of Mr. P. Oakden, are being lithographed for use in the above course of study. A course of architectural instruction will be commenced if a sufficient number of students join. Practical Geometry: This course is founded on the well-known text-book of Mr. E. Davidson, and is specially designed to prepare students for the various other classes in technical subjects. All students who have entered for architectural drawing, mechanical drawing, carpentry, or carriage-drafting, if not already proficient in practical geometry, are strongly advised to join the class during the coming term. Students should provide themselves with a drawing-board (about 30in. by 24in.). T-square, two set-squares (45° and 60°), compasses (pen and pencil), dividers, drawing-pen and box-wood scale, drawing-pins, Indian-ink, colours and brushes. In purchasing instruments, students should obtain the best: only a few are required, but they should be good of their kind. Drawingpaper, pencils, and indiarubber can be obtained from the instructor at fixed rates.

Mechanical Drawing—Steam-machine Design (Mr. W. S. T. Magee, M.C.E., Instructor).—Elementary Mechanical Drawing: The instruments, their construction, adjustment, and use; scales, shade-lines, inking drawings; orthographic projection, including mode of obtaining required sections the mathematical describing the mathematical described and described sections, the methods of describing the peculiar curves generated by one solid body intersecting or