Syllabus of Instruction.

The syllabus of lectures and instruction was fully given in the report of last year, the several subjects and their divisions being as follows:—

General and Mining Geology.—Physical geology, dynamical geology, structural geology, geological surveying, stratigraphical geology.

Mineralogy and Blowpipe Determination.—Systematic mineralogy, descriptive mineralogy, crystallography.

Mathematics.—Arithmetic, algebra, Euclid.

Land- and Mine-surveying.—Adjustments of instruments, mine-surveying, mathematics, levelling.

Mining, Applied Mechanics, and Hydraulics.—Mining, pumping and pit-work, ventilation, explosives, hauling and winding, water-power.

Practical Assaying.—Dry assaying, wet assaying.

Practical Chemistry.—Junior class, senior class.

Theoretical Chemistry.—Principles of chemistry and chemical philosophy, the elements.

Metallurgy of Gold and Silver; Physics; Practical Astronomy; Mechanical Drawing.

Special classes are held for the instruction of candidates for the Government mine-managers', battery-superintendents', and engine-drivers' certificates. First term, first Monday in February to 30th April; second term, 9th May to 20th August; third term, 9th September to 20th December. Registration of membership, 10s. per annum; class fees, 5s. per term for each subject taken up.

Scale of Charges for Public Assays and Analyses.

	£	s.	d.
Bullion assays	0	5	0
Assays of quartz, tailings, or concentrates	0	5	0
Examination and determination of rocks and minerals	0	5	0
Assay of lead- and tin-ores, each	0	5	0
" iron- and manganese-ores	0	10	0
" copper- and antimony-ores	0	10	0
" zinc-, mercury-, and bismuth-ores	0	10	0
" gold- and silver-ores, with parting assay	0	5	0
Analysis of limestone and calcareous freestone, complete	1	0	0
Analysis of limestone and calcareous freestone, partial	0	10	0
" coals and fuels, each	0	10	0
" rocks and soils, complete	2	0	0
" rocks and soils, partial	1	0	0
" fireclays and slags	1	0	0
" manures	2	0	0
" waters, complete	3	0	0
" waters, partial	2	0	0
" nickel-, cobalt-, and chrome-ores	0	10	0
" concentrates	1	10	0
" complex sulphide-ores, &c.	1	10	0

Experimental Plant.

Reports of working-tests of parcels of gold- and silver-ores, concentrates, and tailings, from 1 to 3 tons:—

(1.) By the cyanide process: Dry crushing—(*a*) by percolation; (*b*) by agitation. (2.) By amalgamation in pans: Wet or dry crushing—(*a*) by raw amalgamation in charges; (*b*) by Washoe process with chemicals—1, hot pan-amalgamation; 2, after chloridizing roasting. (3.) Chlorination—small barrel tests.

Cost of treatment (minimum charge): £5 per parcel not exceeding 1 ton.

Students are permitted to work in the experimental plant under special conditions.

COROMANDEL SCHOOL OF MINES.

Mr. P. J. McLeod, B.A., B.Sc., Director.

Notwithstanding the decrease of population in and around Coromandel in consequence of the closing-down of some of the mines, the number of students was well maintained during the year 1900 in comparison with previous years, and the average attendance at the classes has been exceptionally good. At the commencement of the first term sixty-eight students were enrolled, and in the second and third terms the attendance was sixty-two and fifty-nine respectively.

At the annual Schools of Mines Examination, held in December, several of the students acquitted themselves very creditably, but the two scholarship candidates failed to pass owing to their not obtaining 75 per cent. of marks possible in every subject.

The total number of public assays made during the year 1900 was eighty-six, an advance on the record of any previous year. Many of these were on samples sent from various parts of the colony.

The mineral collection of the school has been considerably added to by specimens from Tasmania and various parts of New Zealand, also by valuable specimens of Abyssinian rocks and materials presented by Mr. H. P. Hornibrooke, and Triassic fossils from the Nelson District presented by Mr. James Park, F.G.S.

Valuable services have been rendered to the school by the Rev. C. F. R. Harrison, instructor in mechanical drawing, and Mr. A. H. Gatland, lecturer in mathematics.