

Second Year's Lectures.—Metallurgy (second course), 3 hours; applied mechanics (second course), 1½ hours; mechanical extraction of gold (last part of second course mining), 0; assaying and metallurgical laboratory, 0; drawing, 4 hours.

III. Associateship.—Geological Division.

First Year's Lectures.—Mathematics, 5 hours; general geology, 2 hours; mining geology, 3 hours; theoretical chemistry and chemical technology, 5 hours; mine and land surveying (first course), 2 hours; drawing, 4 hours: total hours per week, 21.

Second Year's Lectures.—Physics (lectures), 4 hours; mineralogy, 3 hours; use of the blow-pipe and determinative mineralogy, 2 hours; mine and land surveying (second course), 2 hours; surveying practice, 0; biology (lectures and laboratory), 10 hours; drawing, 2 hours.

Third Year's Lectures.—Theoretical mechanics, 3 hours; physics (laboratory), 4 hours; petrography, 3 hours; palæontology, 3 hours; chemical laboratory, 5 hours; drawing, 2 hours; geological field practice, 0.

Special Curriculum for University Graduates and Students coming under Regulation 9.

First Year's Lectures.—General geology, 2 hours; mining geology, 3 hours; mineralogy, 3 hours; use of the blowpipe and determinative mineralogy, 2 hours; mine and land surveying (first course), 2 hours; drawing, 6 hours: total hours per week, 18.

Second Year's Lectures.—Petrography, 3 hours; biology (lectures and laboratory), 10 hours; palæontology, 3 hours; mine and land surveying (second course), 2 hours; surveying practice, 0; geological field practice, 0; drawing, 2 hours.

IV. Certificate of Mining Surveyor.

First Year's Lectures.—Mathematics, 5 hours; general geology, 2 hours; mining geology, 3 hours; theoretical chemistry and chemical technology, 5 hours; mine and land surveying (first course), 2 hours; drawing, 4 hours: total hours per week, 21.

Second Year's Lectures.—Theoretical mechanics, 3 hours; physics (lectures and laboratory), 8 hours; mineralogy, 3 hours; use of the blowpipe and determinative mineralogy, 2 hours; mine and land surveying (second course), 2 hours; survey practice, 0; drawing, 4 hours.

SYNOPSIS OF CLASSES IN THE SCHOOL OF MINES.

Mathematics (Professor Gibbons).—Daily, 4.30 p.m. to 5.30 p.m. Fee, £3 3s.—Euclid: Six books, with geometrical exercises. Algebra, to the binomial theorem. Trigonometry, to the solution of plane triangles, including the use of logarithms. Text-books: Todhunter's Euclid, Todhunter's Algebra, and Lock's Trigonometry.

Mechanics (Professor Shand).—Monday, Tuesday, Thursday, and Friday, 4.30 p.m. to 5.30 p.m. Fee, £3 3s.—Text-books: Goodwin's Statics, Garnett's Dynamics, Besant's Hydrostatics.

Physics (Professor Shand).—Monday, Tuesday, Wednesday, and Thursday, 7.30 p.m. to 8.30 p.m. Fee, £3 3s.—The lectures are the same as in the arts course.

Biology (Professor Parker).—The lectures are the same as in the arts course.

Palæontology (Professor Parker).

Theoretical and Technological Chemistry (Professor Black).—Daily. Fee, £3 3s. (1.) The general principles of chemical notation, combination and nomenclature. (2.) The classification of the elements, and the principles of the leading chemical theories. (3.) The description of the more important elements and organic and inorganic compounds. (4.) The chemistry of metals. (5.) The general chemistry of animal and vegetable organisms. (6.) Chemical physics, including the chemical relations of light, heat, and electricity. Text-book: Fownes's Manual.

Qualitative Analysis (Professor Black).—Fee, £4 4s. This course is conducted in the Chemical Laboratory. Practical instruction is given to the students in classes. It is devoted to the qualitative analysis of simple, compound, and complex salts; soils, water, metallic ores, and other minerals. Text-books: Fresenius's Qualitative Analysis, Thorpe's Qualitative Analysis.

Quantitative Analysis (Professor Black).—Fee, £4 4s. This course is conducted in the Chemical Laboratory. Practical instruction is given to the students in the methods of determining the percentage composition of soils, rocks, fuel, clays, water, the ash of plants; also of metallic ores, limestones, coal, and other minerals. Text-books: Fresenius's Quantitative Analysis, Thorpe's Quantitative Analysis.

Metallurgy (David Wilkinson).—Fee, £3 3s. The lectures treat of: (a.) Fuel, furnaces, crucibles, retorts, fluxes; coal—the different varieties; charcoal—its manufacture in kilns, heaps, ovens; coke—its manufacture in mounds, ovens, &c. The description of the different kinds of furnaces: the blast furnace—hot blast, cold blast; reverberatory furnace, oxidising and reducing furnaces, puddling furnace, refinery, calcining furnace, liquation furnace, assay furnace, Siemens's gas furnace; materials for furnaces and crucibles—e.g., fire-stone, fire-clay, fire-bricks; the different kinds of crucibles and retorts; determination of the heating-power of different kinds of fuel. (b.) Extraction of metals from their ores. (c.) Physical and chemical properties of the metals. (d.) Industrial applications of the metals.

Assaying (David Wilkinson).—Fee, £3 3s. Instruction is given to students in the Assay Laboratory or furnace-room. It is devoted to the most approved and useful methods of assay—both by the dry and wet processes—metallic ores, such as gold, silver, platinum, bismuth, the compounds of copper, lead, tin, antimony, zinc, iron, nickel, cobalt, mercury, &c.; also the dry and wet assay of bullion.

Mining Geology (Professor Ulrich).—Three hours per week. Fee, £3 3s. (1.) Modes of occurrence of useful minerals, description of the various kinds of deposits of useful minerals, lodes or mineral veins, bedded deposits—seams or layers, irregular massive deposits—stocks and stock