



THE
Adelaide University Calendar

FOR THE

ACADEMICAL YEAR 1877.

ADELAIDE:

BY AUTHORITY: W. C. COX, GOVERNMENT PRINTER, NORTH-TERRACE.

1877.



NOTICE.

The following Abstract of the Regulations at present in force relating to Studies, Examinations, and Degrees, in The University of Adelaide, is published for the information of present and intending students, and others.

The attention of persons desiring instruction in special subjects only, is called to Section III. (2); and persons who wish to graduate, but are unable to attend the ordinary Lectures of the University, are referred to the note on page 14, and to the foot-note appended to the Time Table on page 20.

Any further necessary information, together with printed forms of candidature for Examinations, &c., may be obtained of the Registrar, William Barlow, Esq., B.A., at his office, Morialta Chambers, Victoria-square West, Adelaide, to whom also all fees are to be paid.

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I. Calendar for 1877.

1877.

March 13. First Term begins. Matriculation Examination begins.
 " 20. Lectures begin.
 " 29. } Easter Recess.
 April 2. }
 June 1. First Term ends.

VACATION.

June 18. Second Term begins. Lectures begin.
 Aug. 24. Second Term ends. Lectures end.

VACATION.

Sept. 11. Third Term begins. Lectures begin.
 Nov. 16. Lectures end.
 " 26. Ordinary Examinations begin.
 Dec. 11. Third Term ends.

N.B.—A Second Matriculation Examination, of which due notice will be given, will be held early in December.



II. The University of Adelaide, 1877.

Visitor.

HIS EXCELLENCY THE GOVERNOR.

The Council.

THE CHANCELLOR: The Right Rev. Augustus Short, D.D., Lord Bishop of Adelaide.
 THE VICE-CHANCELLOR: His Honor Samuel James Way, Esq., Chief Justice of South Australia.
 THE TREASURER: The Honorable Sir H. Ayers, K.C.M.G., M.L.C.
 The Right Rev. C. A. Reynolds, D.D.
 The Rev. J. Jefferis, LL.B.
 The Rev. W. P. Wells.
 HIS HONOR MR. JUSTICE STOW.
 The Hon. A. Blyth, M.P.
 The Hon. A. Hay, M.L.C.
 The Hon. Sir W. Milne, Kt., President of the Legislative Council.
 The Hon. W. Everard, M.L.C.
 G. C. Hawker Esq., M.A., M.P.
 W. A. E. West-Erskine, Esq., M.A.
 W. R. Boothby, Esq., M.A.
 J. M. Gunson, Esq., M.D.
 A. Campbell, Esq., M.D.
 J. A. Hartley, Esq., B.A., B. Sc., President of the Council of Education.
 A. von Treuer, Esq., J.P.
 M. McDermott, Esq., J.P.
 W. H. Bunday, Esq.

Professors.

CLASSICS.—Rev. Henry Read, M.A.
 ENGLISH LANGUAGE AND LITERATURE, AND }
 MENTAL AND MORAL PHILOSOPHY } Rev. John Davidson.
 MATHEMATICS—Horace Lamb, Esq., M.A.
 NATURAL SCIENCE—Ralph Tate, Esq., F.G.S.

The Professorial Board.

The Chancellor.
 The Vice-Chancellor.
 DEAN: Professor Read.
 Professor Davidson.
 Professor Lamb.
 Professor Tate.

Registrar.

William Barlow, Esq., B.A., Morialta Chambers, Victoria-square West.

Matriculated Students.

Caterer, Thomas Ainslie	1876.
Herbert, Charles Edward	"
James, Johnson	"
Jefferis, James Eddington	"
Langsford, William Alfred	"
Niesche, Frederick William	"

Admitted ad eundem Statum.

Langsford, Arthur	1876.
Maughan, Moss Milton	"

Non-Matriculated Students.—Session 1876.

Baker, Richmond.	Kirkpatrick, Annie.
Baker, Windham H. C.	Loughton, Annie W.
Blyth, Emily.	Lyall, Helen.
Blyth, Frances E.	Magarey, Bertha V.
Brookman, William G.	Magarey, Sarah.
Brown, Margaret H.	Maley, Charles.
Cater, James.	Milne, Barbara A.
Colley, Isabella.	Milne, Florence M.
Culley, Ada E.	Pierce, George H.
Counsell, Martha.	Robin, Marie.
Craigie, Alfred O.	Russell, William.
Crooks, Marianne.	Seiffert, Ellen L.
Dobbs, Francis J.	Shoobridge, Anne J.
Giles, Alice M.	Smeaton, Stirling.
Giles, Amy.	Stanes, Jane S.
Giles, Lillian M.	Stow, Adelaide E.
Glen, Clara E.	Stow, Ella H.
Goode, Clara.	Stow, Laura H.
Hargrave, Abraham M.	Thomas, Rosetta J.
Hargrave, Henry W.	Tomkinson, Amy L.
Harvey, Patience.	Tomkinson, Edith C.
Hayward, Thomas C.	Torr, William G.
Hedde, John.	Verco, Elizabeth A.
Hill, John C.	Verco, Henry.
Hughes, Maria.	Ware, William L.
Hughes, Rosa M.	Whittington, Frederick T.

III. Regulations for Admission of Students.

THE students of the University are of two classes, (1) Matriculated, and (2) Non-Matriculated Students.

1. Any person who has attained the age of sixteen* years, and passed the Matriculation Examination, becomes a matriculated student on signing his or her name in the University Roll-book, and also to the following declaration:—

"I do solemnly promise that I will faithfully obey the Statutes and Regulations of The University of Adelaide so far as they may apply to me, and that I will submit respectfully to the constituted authorities of the said University, and I declare that I believe myself to have attained the age of sixteen years."

Persons who have matriculated, and completed the whole, or any portion, of their undergraduate course at any University recognised by The University of Adelaide, and can produce satisfactory evidence to that effect, will be allowed corresponding standing in The University of Adelaide, on signing the University Roll-book and the above declaration, and on payment of the proper fees.

2. Persons who have not matriculated are allowed to attend the Lectures of the University on payment of the proper fees, provided they have attained the age of sixteen* years, and that they can, if required, satisfy the Professors whose classes they propose to attend of their ability to profit by the course of instruction given.

*The Chancellor, or, in his absence, the Vice-Chancellor, has power, in special cases, to admit as students persons who have not attained this age.

IV. The Matriculation Examination.

In future two Matriculation Examinations will be held in every year, the first on the second Tuesday in March and following days, and the second early in December. These examinations are open to all persons who shall have sent in the prescribed form* to the Registrar at least one calendar month prior to the date of examination, and who shall have paid the required fee.

Every Candidate is required to satisfy the Examiners in each of the following subjects:—

1. *Latin* †
2. *Mathematics*. ‡—The ordinary rules of Arithmetic, fractions (vulgar and decimal), and the extraction of the square root; Algebra, to simple equations, inclusive; Geometry—the substance of Euclid, Books I. and II., with simple exercises.
3. *English Language*.—Dictation, grammar (including analysis of simple sentences), and composition.
4. *English History*, from the Conquest to A.D. 1800.
5. *Geography*.—General descriptive geography of the World, particularly of the Australasian Colonies. Map-drawing from memory. Physical geography, such as may be obtained from a good class-book. The natural history of the raw materials of commerce.

Candidates may also present themselves for examination in any or all of the following optional subjects:—

6. One of the following languages—*Greek*, § *French*, or *German*.
7. *Natural Philosophy* ||
8. *Chemistry*. ¶
9. *Natural History*. **

* See Appendix. Printed forms may be obtained from the Registrar.

† The special subjects for the Matriculation Examination to be held in March, 1877, are:—Cicero de Senectute; translation of simple English into Latin; Smith's Smaller Latin Grammar. At the Examination in Dec., 1877, Caesar, Gallic War, Book II., will be substituted for Cicero de Senectute.

‡ Both in arithmetic and in algebra candidates will be expected to show not merely proficiency in the use of the various rules and processes, but also a knowledge of the reasoning on which these are based. In geometry candidates will not be restricted to Euclid's methods of proving the various propositions; and any proofs that are strictly geometrical will be accepted.

§ At the examination to be held in March, 1877, the special subjects will be:—Xenophon, Cyropædæa, Book I.; Translation of simple English into Greek; Smith's Smaller Greek Grammar. At the Examination in Dec., 1877, Xenophon, Anabasis, Book II., will be substituted for the Cyropædæa.

|| The elementary parts of Statics, including the composition and resolution of forces, the conditions of equilibrium of forces acting in one plane, the definition and properties of the centre of gravity, the nature and laws of fluid pressure, the conditions of equilibrium of liquids and of floating bodies, and the construction and use of the principal instruments and machines whose action depends on the facts and laws above specified. The elements of Kinetics, including the definition and measurement of velocity, acceleration, mass, momentum, and force; the laws of motion, and the motion of falling bodies. The elements of the science of Heat, including the definition of temperature, the construction of the mercurial thermometer, the laws of expansion of gases and vapours, the principle of the air-thermometer, the nature of conduction, convection, and radiation of heat, specific heat, and the elements of calorimetry.

¶ Preparation and properties of hydrogen, chlorine, oxygen, carbon, nitrogen, and sulphur, and of their simpler compounds.

** Including:—1. *Zoology*.—The general principles of systematic classification. The elements of the physiology of mammals. 2. *Botany*.—The organs of nutrition and reproduction of phanerogamic plants. Examples for special study—Wallflower, pea, sow-thistle (*sonchus*), couch-grass, lily. 3. *Geology*.—Geological processes now in action on the surface and in the interior of the earth. Geological terms.

The examinations are conducted by means of printed papers, but the Examiners are not precluded from putting *vidæ voce* questions to the Candidates.

The names of the successful Candidates are arranged in two classes—in the First Class in order of merit, and in the Second Class in alphabetical order; and no candidate will be placed in the First Class who does not pass in one, at least, of the optional subjects numbered 6, 7, 8, 9, on the last page.

A pass certificate, signed by the Registrar, is delivered to each Candidate who applies for it, after the Report of the Examiners has been approved by the Council.

Articled Clerks.—It may be added that under the recent Rules of the Supreme Court no person can be articled until he has passed the Matriculation Examination of The University of Adelaide, or that of some University recognized by it. [See the *South Australian Government Gazette* for October 5th, 1876, p. 2019, *et seq.*]

V. Regulations relating to the Degree of B.A.

To obtain the Degree of Bachelor of Arts every Candidate must, after matriculation, complete three academical years of study, passing at the end of each the Ordinary Examination proper to that year.

To complete a year of study the Candidate must attend three-fourths of each course of Lectures* delivered in the University in each term of that year on the subjects which he takes up at the Ordinary Examination at the end of it; and no student is allowed to present himself at any Ordinary Examination who shall not have complied with this condition, except in the case of illness, or other sufficient cause to be allowed by the Council.

A student who, at any Ordinary Examination, fails to pass in one subject only, may present himself for examination in that subject at the beginning of the next academical year, when, if he passes, he will be held to have completed the preceding year.

A student who, at any Ordinary Examination, fails in more subjects than one, will be required to pass through an additional year's study previous to taking a Degree, but may be exempted from renewed examination in the subjects in which he has already passed.

Every matriculated student who completes three academical years of study, and passes the three Ordinary Examinations, becomes thereby entitled to the Degree of Bachelor of Arts on payment of the proper fees.

* Attendance at lectures after matriculation may be dispensed with by special order of the Council, the student being then only required to pass the three Ordinary Examinations.

VI. The Ordinary Examinations.

THE Ordinary Examinations are held during the last fortnight of the closing term of each Academical Year. Every matriculated student who purposes presenting himself at any such examination must send in notice of his intention to the Registrar, according to the prescribed form,* at least one month before the commencement of the examination.

Non-matriculated students may, at any such examination, present themselves in any subjects on which they have attended the University Lectures during the preceding academical year, provided they give notice to the Registrar, according to the prescribed form,* at least one month before the commencement of the Examination, and pay a fee of 5s. for every subject in which they present themselves.

At the *First Ordinary Examination* every candidate for the Degree of B.A. is required to satisfy the Examiners in each of the following groups of subjects:—

1. *Latin and Greek*, with translation into Latin.
2. *Pure Mathematics*.—Geometry, Algebra, and Trigonometry.
3. *Natural Philosophy* (elementary).
4. *Inorganic Chemistry*.
5. *English Language and Literature*.

The names of the successful candidates in this examination will be arranged in three classes, in order of merit in each.

At the *Second Ordinary Examination* for the Degree of B.A., every candidate is required to satisfy the Examiners in *three*, at least, of the following groups of subjects:—

1. *Latin and Greek*, with translation into Latin and Greek, and Ancient History.
2. *Higher Pure Mathematics*.
3. *Natural Philosophy*.—One of the following divisions: A. Light, Heat, and Sound; B. Magnetism and Electricity.
4. *Natural Science*.—Mineralogy, Botany, Practical Chemistry (optional).
5. *Logic*.—Inductive and Deductive.

A separate class-list will be drawn up for each of the above groups, giving the names, arranged in three classes and in order of merit, of the students, both matriculated and non-matriculated, who pass in that group.

At the *Third Ordinary Examination* for the degree of B.A., every candidate is required to satisfy the Examiners in *two* at least of the following groups of subjects; but no candidate will be allowed to

* See Appendix. Printed forms may be obtained from the Registrar.

present himself for examination in any group unless he shall have passed in the corresponding group at the Second Ordinary Examination:—

1. *Latin and Greek*, with Composition and Classical Philology.
2. *Applied Mathematics*.
3. *Natural Philosophy*.—Division B, or Division A, according as the student shall have passed in A or B at the Second Ordinary Examination.
4. *Natural Science*.—Zoology and Geology.
5. *Mental and Moral Philosophy*.

A separate class-list will be drawn up for each of the above groups, giving the names, arranged in three classes, and in order of merit, of the students who pass in that group.

The extent of acquirements expected in the several subjects of each Ordinary Examination is defined by the courses of lectures given on those subjects during the preceding Academical Year. (See Section VII.)

VII. Courses of Lectures.

THE following Courses of Lectures will be given during the Academical Year 1877. They are open to all persons, whether matriculated or non-matriculated, who comply with the conditions stated in Section III. The Course in Classics, English Literature, and Logic, will be held in the Training School, Grote-street; those on Mathematics, Natural Philosophy, and Natural Science, in the temporary lecture-rooms of the University, Victoria-square West.

LATIN.—Professor Henry Read, M.A.

First Year's Course.—Monday, Wednesday, and Friday, from 10 to 11 a.m.

Virgil's *Æneid*, Books I. & II.; Cicero de *Amicitia*; Horace, *Odes*, Book II.; Latin Prose Composition.*

Second Year's Course.—Tuesday and Thursday, from 10 to 11 a.m.

Livy, Book I.; Tacitus, *Agricola*; Horace, *Satires*; Latin Composition,† History of Rome.‡

GREEK.—Professor Henry Read, M.A.

First Year's Course.—Monday and Wednesday, from 11 to 12 a.m.

Xenophon, *Cyropædia*, Book II.; Euripides, *Alcestis*; Herodotus, Book II.; Greek Prose Composition.*

Second Year's Course.—Tuesday and Thursday, from 11 to 12 a.m.

Homer's *Iliad*, Books I. & II.; Sophocles, *Ajax*; Thucydides, Book I.; Greek Composition,† History of Greece.‡

ENGLISH LITERATURE.—Professor John Davidson.

First Year's Course.—Monday and Wednesday, from 12 noon to 1 p.m.

The English Literature of the Eighteenth Century.

Text-books: Armstrong's *History of English Literature*, and Craik's *History of English Literature*.

Extra Class.—Monday and Thursday, from 4 to 5 p.m.

The Course of Lectures in this class covers the same ground as the above.

LOGIC.—Professor John Davidson.

Second Year's Course.—Tuesday, Thursday, and Friday, from 12 noon to 1 p.m.

A Course of Deductive and Inductive Logic—*Text-books*, Fowler's *Deductive Logic* and *Inductive Logic*.

* The First Year's Classical Composition Class will be held on Friday, from 11 to 12 a.m.
 † The Second Year's Classical Composition Class will be held on Monday, from 2 to 3 p.m.
 ‡ The Ancient History Class will meet on Wednesday, from 2 to 3 p.m.

MATHEMATICS.—Professor Horace Lamb, M.A.

First Year's Course.—Tuesday and Thursday, from 10 to 11 a.m., and Friday, from 12 noon to 1 p.m.

Geometry, Algebra, and Trigonometry.

Text-books: Wilson's *Elementary Geometry*, Todhunter's *Euclid and Algebra for Beginners*, J. H. Smith's *Elementary Trigonometry*.

Second Year's Course.—Monday, Wednesday, and Friday, from 10 to 11 a.m.

The higher parts of Algebra and Trigonometry, Elementary Analytical Geometry, and (if time permit) the Elements of the Differential Calculus.

NATURAL PHILOSOPHY.—Professor Horace Lamb, M.A.

First Year's Course.—Tuesday and Thursday, from 11 to 12 a.m.

Statics, Kinetics, Hydrostatics, the Elements of the Science of Heat, Elementary Astronomy.

Text-books: Deschanel's *Natural Philosophy*, Part I., and Brinkley's *Astronomy*.

Second Year's Course.—Monday, Wednesday, and Friday, from 11 to 12 a.m.

Heat, Sound, and Light.

Text-books: Deschanel's *Natural Philosophy*, Parts II. & IV.; Maxwell's *Theory of Heat*.

In each of these courses the lectures will be illustrated as far as possible by experiment.

In the Second Year's Course opportunity will be given to the students, as far as possible, of practising physical methods of observation, and of becoming acquainted with the use of the various instruments.

NATURAL SCIENCE.—Professor Ralph Tate, F.G.S.

First Year's Course.—Tuesday and Thursday, from 12 noon to 2 p.m.

Chemistry or Geology (as may be found most convenient).

In Chemistry the Lectures will embrace Mineral Chemistry, with special reference to its applications in the Arts and Manufactures.

In Geology the course of instruction will consist of lectures and field excursions. The latter will take place at times to be arranged on the formation of the class.

Second Year's Course.—

Mineralogy and Botany.

The Course of Lectures on Mineralogy will extend over the first two

Terms, and will be held on Monday and Wednesday, from 12 noon to 1 p.m. It will comprise—

1. Crystallography—the leading classification of the crystalline forms, and their combinations.
2. The physical properties of minerals viewed principally as aiding in the practical discrimination of the various kinds.
3. The use of the blow-pipe, and of such tests as are calculated to be serviceable to the miner, the geologist, or the general observer, when in the field.
4. The systematic description of minerals, including all the more important species; with particular reference to the mode and places of occurrence, both of those substances which bear a commercial value, and of those which derive their chief interest from geological and physical considerations.

The Course of Lectures on Botany will extend over the Second and Third Terms, and will be held from 1 to 2 p.m. on Monday and Wednesday. The teaching will be conducted, as far as practicable, with reference to actual illustrative specimens. The chief subjects lectured upon will be—

1. The chemistry of the compounds forming the principal part of the structure of plants.
2. Vegetable Histology.
3. The general structure and physiology of a flowering plant.
4. The structure and mode of growth of a Fern and a *Chara*.
5. The Morphology and Physiology of Fungi and Algæ.
6. The characters, including general properties, of the following natural orders:—*Crucifera*, *Caryophyllacea*, *Malvacea*, *Leyuminosa*, *Myrtacea*, *Composita*, *Goodenoviacea*, *Mysporinacea*, *Chenopodiaca*, *Proteacea*, *Orchidacea*, *Cyperacea*, *Graminea*, *Conifera*.
7. The broad facts of the geographical distribution of flowering plants.

VIII. Time Table of Lectures, 1877.

Courses.	Hours of Lecture.				
	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
FIRST YEAR.					
1. { Latin	10 to 11	—	10 to 11	—	10 to 11
{ Greek	11 to 12	—	11 to 12	—	—
{ Classical Composition	—	—	—	—	11 to 12
2. Mathematics	—	10 to 11	—	10 to 11	12 to 1
3. Natural Philosophy	—	11 to 12	—	11 to 12	—
4. Chemistry (or Geology)	—	12 to 2	—	12 to 2	—
5. English Language & Literature	12 to 1	—	12 to 1	—	—
SECOND YEAR.					
1. { Latin	—	10 to 11	—	10 to 11	—
{ Greek	—	11 to 12	—	11 to 12	—
{ Composition	2 to 3	—	—	—	—
{ Ancient History	—	—	2 to 3	—	—
2. Mathematics	10 to 11	—	10 to 11	—	10 to 11
3. Natural Philosophy	11 to 12	—	11 to 12	—	11 to 12
4. Natural Science	12 to 2	—	12 to 2	—	—
5. Logic	—	12 to 1	—	12 to 1	12 to 1
English Literature (extra class)	4 to 5	—	—	4 to 5	—

N.B.—For the benefit of matriculated students who may be unable to attend the Ordinary Lectures of the University, but who wish to obtain a degree under the conditions stated in the note on page 14, one of the Professors will be in attendance between the hours of 4 p.m. and 6 p.m. on every week day (except Saturday), during Term time, in order to explain difficulties, and generally to superintend the reading of such students. Professor Davison will attend between the above hours on Mondays, Professor Tate on Tuesdays, Professor Read on Wednesdays and Fridays, and Professor Lamb on Thursdays. The Professors reserve the right of discontinuing their attendance should the students become unpunctual or the number attending inadequate.

IX. Schedule of Fees.

THE following is the Scale of Fees at present in force. It is, however, subject to alteration:—

	£	s.	d.
Fee for admission to Matriculation Examination	2	2	0
Term Fee (payable in advance by each Student intending to Graduate)	3	10	0
Entrance-fee for Students not intending to Graduate	0	10	6
Term-fee payable in advance in respect of each Course of Lectures attended by Students not intending to Graduate	0	10	6
Fee for the Degree of Bachelor of Arts	3	3	0
Fee for the Degree of Master of Arts	5	5	0
Fee for Graduates of other Universities admitted to the same Degree (when not honorary) in The University of Adelaide ..	3	3	0
Admission-fee payable by Undergraduates of other Universities admitted to same standing in The University of Adelaide (in addition to the Term-fee of £3 10s.)	2	2	0
Fee payable (before Examination) by Non-Matriculated Students for each subject in which such Students shall present themselves for Examination	0	5	0

X. Scholarships.

THE COUNCIL OF EDUCATION offer annually for competition three *University Scholarships*, each of the value of Fifty Pounds per annum, and tenable for three years.

These Scholarships are awarded by an Examination held in December of each year. Candidates must be under eighteen years of age on the 31st of December in the year in which the Examination is held, and must have been resident in the Province for at least three years immediately preceding the Examination.

The successful competitors must, as soon as possible after the Examination, matriculate, and become students of The University of Adelaide. Payment of the Scholarship will not be made unless the holder conduct himself or herself to the satisfaction of the University authorities, and pass such Examinations as the Council of Education may require.

At the Examination held in December, 1876, the following were the successful candidates for these scholarships:—

Agg. { Mack, Hans Hamilton,
 { Robin, Percy Ansell,
 3. Wyatt, Harry Sutton.

The Council of Education also offer annually for competition a Scholarship of the value of Two Hundred Pounds per annum, and tenable for four years, to be called the *South Australian Scholarship*. The first Examination will be held in the December following the first admission to degrees (other than *ad eundem* degrees) in The University of Adelaide. Candidates must be under twenty-one years of age on the 31st December in the year in which the Examination is held, and must have been resident in the Province at least five years immediately preceding the Examination. The successful candidate must, as soon as possible after the Examination, become a student at some European University, to be approved by the Council of Education, and payment of the Scholarship will not be made unless the holder conduct himself or herself to the satisfaction of the authorities of such University.

THE ANGAS SCHOLARSHIP.—The Council of The University of Adelaide have accepted an offer made by J. H. Angas, Esquire, to found a Scholarship tenable (conditionally on good behavior and satisfactory progress) for three years, and of the annual value of Two Hundred Pounds. It is proposed that the Scholarship shall be open for competition every three years to all graduates of the University who shall be under twenty-eight years of age, and have resided in South Australia for five years. The award is to be determined by a special examination in Mathematics and Natural Science conducted by the University Examiners, under such regulations and at such times as the Senate shall fix. The holder of the Scholarship is to proceed to England to take a degree in Natural Science at the London University, and to

receive a training at such school of engineers as he may select, and the Senate approve, in order to acquire proficiency in civil engineering, more especially in those branches which include the construction of harbor works, reservoirs, irrigation, and waterworks, bridges, and railways.

During his training in engineering science the holder of the Scholarship shall spend at least six months in visiting the great engineering works of Europe or America; and on his return to South Australia shall be required to present to the University an account of his tour, with special reference to the mechanical and engineering arts. On the deposit of this account with the University and its approval by the Senate, he shall have granted him the further sum of £100 towards his travelling expenses.

The necessary arrangements respecting the Angas Scholarship have not yet been completed.

XI. Public Lectures.

THE following courses of Public Elementary Lectures on Scientific Subjects will be given during the Academical Year, 1877:—

1. A Course of Six Lectures on Sound and the Physical Basis of Music, by Professor Lamb.
2. A Course of Six Lectures on Optics, with special reference to the Theory of Vision, by Professor Lamb.
3. A Course of Twelve Lectures on the Ancient Physical Geography and Geology of South Australia, by Professor Tate.

The ordinary students of the University will be entitled to free admission to these lectures. To other persons the fee for admission to Courses 1 and 2 conjointly, or to Course 3, will be 5s. In case twenty persons do not enter themselves for any course at least one week previous to the date fixed for its commencement, of which due notice will be given, that course will not be held, and the fees paid will be returned.

APPENDIX A.—CLASS LISTS, 1876.

I. MATRICULATION EXAMINATION, SEPTEMBER, 1876.

FIRST CLASS.

(In order of merit).

Bollen, Frederick James.	Colton, Edward Blacker.
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SECOND CLASS.

(In alphabetical order).

Caterer, Thomas Ainslie.	Langsford, William Alfred.
Herbert, Charles Edward.	Lathlean, Richard Hedley.
James, Johnson.	Niesche, Frederick William.
Jefferis, James Eddington.	Wells, Alfred James.

II. LIST OF STUDENTS WHO MATRICULATED DURING 1876.

Caterer, T. A.	Langsford, W. A.
Herbert, C. E.	Langsford, A. (Melbourne Certificate).
James, J.	Maughan, M. M. do.
Jefferis, J. E.	Niesche, J. W.

III. FIRST ORDINARY EXAMINATION FOR THE DEGREE OF B.A., DECEMBER, 1876.

FIRST CLASS.

Maughan, Milton Moss.

SECOND CLASS.

None.

THIRD CLASS.

Caterer, Thomas Ainslie.

IV. LIST OF NON-MATRICULATED STUDENTS

who passed in the undermentioned subjects at the Ordinary Examination in December, 1876.

ENGLISH LITERATURE.

Marianne Crooks (second place).	Helen Lyall (third place).
Amy Giles.	Sarah Magarey (first place).
Alice M. Giles.	Ellen L. Seiffert.
Clara Goode (third place).	Rosetta K. Thomas.
Annie W. Laughton.	

MENTAL AND MORAL PHILOSOPHY.

Martha E. Counsell (third place).	Clara Goode.
Marianne Crooks (second place).	Annie W. Laughton.
Amy Giles.	Sarah Magarey (first place).
Alice M. Giles.	Ellen L. Seiffert.
Lilian M. Giles.	Rosetta K. Thomas.

ENGLISH LANGUAGE.

Lilian M. Giles.

APPENDIX B.—EXAMINATION PAPERS.

MATRICULATION EXAMINATION, 1876.

ARITHMETIC AND ALGEBRA.

- I. Multiply 539 by 236, giving the reason for each step of the process.
- II. Divide five hundred and six millions seven hundred and ten thousand and thirty-six by sixteen thousand one hundred and five, and express the result in words.
- III. State and prove the rule for the multiplication of fractions. Simplify $(1 - \frac{1}{2} - \frac{1}{3} + \frac{1}{6}) \times (1 - \frac{1}{4} + \frac{1}{8} + \frac{1}{16})$, and express the result as a decimal.
- IV. Explain the notation of decimal fractions. Express in words—3·025. Multiply ·000625 by ·003. Give the reason of the rule for finding the position of the decimal point in the product.
- V. Assuming that a cubic foot of water weighs 1000 ounces, find the weight, in tons, of the water contained in a cistern 32 feet long, 21 feet 6 inches wide, and 10 feet deep, when it is half full.
- VI. A man borrows £500, at 10 per cent. compound interest, and pays off £100 at the end of each year: how much will he owe at the end of three years?
- VII. Prove that $a - (b - c) = a - b + c$. Simplify $(b - c)(x - a) + (c - a)(x - b) + (a - b)(x - c)$.
- VIII. Find the factors of (1st) $4x^2 - 49$; (2nd) $x^2 - 16x - 105$; (3rd) $x^3 + 27$.
- IX. Simplify $(x^2 - yz)^2 - (y^2 - zx)(z^2 - xy)$, and divide the result by $x + y + z$.
- X. Reduce to its lowest terms $\frac{x^3 + x - 2}{x^3 - x^2 - 4}$
- XI. Solve the equations—

$$(1st) 2(6 - x) + \frac{3x}{2} = \frac{x + 3}{8} + 8\frac{1}{2}.$$

$$(2nd) \frac{a^2 - bx}{a - b} = \frac{ax - b^2}{a + b} + b.$$
- XII. If to the double of a certain number I add 5 and multiply by 5, and then add 10 and multiply by 10, the result is 5550: what is the number in question?

ENGLISH GRAMMAR.

- I. Write the names of ten places, ten things, and ten thoughts.
- II. Name the Parts of Speech.
- III. Give a list of Prepositions.
- IV. Into what classes may Adverbs be divided?
- V. What is the Past Tense and Past Participle of each of the following words—Blow, flow, grow, row, dare, fare, give, live, thrive, arrive, cut, hit, bite, write, sleep, peep, grind, mind.
- VI. Parse the following sentence:—"The boat reappeared; but brother and sister had gone down in an embrace never to be parted."
- VII. Construe:—

"Propt on beds of amaranth and moly
 How sweet, while warm airs lull us, blowing lowly,
 With half-dropt eyelid still
 Beneath a heaven dark and holy
 To watch the long bright river drawing slowly
 His waters from the purple hill."
- VIII. Analyze simply:—"The terrible darkness of night greatly increased their alarm."
- IX. Correct grammatical errors in the following sentences:—

It is neither the one thing or the other.
 To be fair, comely, and prepossessing are desirable.
 That sentiment is most true.
 The first, as well as the second and third man, receive prizes.
 In the selection of subjects every one must do as they think best.
- X. Give a clear and concise description of any place near Adelaide.

LATIN.

- I. Translate into English—

"Ita ancipiti prælio diu atque acriter pugnatum est. Diutius quum sustinere nostrorum impetus non possent, alteri se ut cœperant in montem receperunt, alteri ad impedimenta et carros suos se contulerunt: nam hoc toto prælio, quum ab horâ septimâ ad vesperum pugnatum sit, aversum hostem videre nemo potuit. Ad multam noctem etiam ad impedimenta pugnatum est propterea quod pro vallo carros objecerant et e loco superiore in nostros venientes tela conjiciebant, et nonnulli inter carros rotasque mataras ac tragulas subiciebant nostrosque vulnerabant. Diu quum esset pugnatum, impedimentis castrisque nostri potiti sunt."
- II. Translate into English—

„Cognito Cæsaris adventu Ariovistus legatos ad eum mittit: quod antea de colloquio postulasset, id per se fieri licere quoniam

- propius accessisset; seque id sine periculo facere posse existimare. Non respuit conditionem Cæsaris, jamque cum ad sanitatem reverti arbitrabatur, quum id quod antea petenti denegasset ultro polliceretur, magnamque in spem veniebat pro suis tantis populi Romani in eum beneficiis, cognitis suis postulatis, fore uti pertinaciâ desisteret. Dies colloquio dictus est, ex eo die quintus. Interim sæpe ultro citroque quum legati inter eos mitterentur, Ariovistus postulavit ne quem peditem ad colloquium Cæsaris adduceret: vereri se ne per insidias ab eo circumveniretur: uterque cum equitatu veniret; aliâ ratione sese non esse venturum."
- III. Translate the following sentences—
 - (1) "Perfacile factu esse illis probat conata perficere."
 - (2) "Legatis respondit Diem se ad deliberandum sumpturum; si quid vellent, ad Idus April. reverterentur."
 - (3) "Quod ubi Cæsaris rescit, quorum per fines ierant, his uti conquirent et reducerent, si sibi purgati esse vellent, imperavit: reductos in hostium numero habuit."
 - (4) Cum his in præliis versabantur, ad hos se equites recipiebant: hi si quid erat durius concurrebant; si qui graviore vulnere accepto equo deciderat, circumstiebant: si quo erat longius prodeundum aut celerius recipiendum, tanta erat horum exercitatione celeritas ut jubis equorum sublevati cursum adæquarent."
 - IV. Parse the following words—

"Vagarentur;" "sementes;" "consciverit;" "persuasuros;" "exisset;" "confertissimâ;" "constiterant;" "gravaretur;" "abfuturum;" "consedissee."
 - V. What is the meaning of verbs "deponent," "inceptive," "frequentative," and "neuter-passive?" Give examples of each.
 - VI. Explain the Dativus Ethicus, and the Double Dative. Distinguish between the Genitive and Ablative of Quality, with examples in each case.
 - VII. Write down the Perfect and Supine of "veto," "plico," "juvo," and "misceo." Also, the Comparatives of "celer," "gracilis," and "beneficus."
 - VIII. Distinguish between "vereor ut res sit" and "vereor ne res sit."
 - IX. Translate into Latin—

"Upon receiving information, on the same day, from his scouts, that the enemy had encamped at the foot of a mountain eight miles from his own camp, he sent persons to ascertain what the nature of the mountain was, and of what kind the ascent on every side. Word was brought back that it was easy. During the third watch he orders Titus Labienus, his lieutenant with prætorian powers, to ascend to the highest ridge of the mountain with two legions, and with those as guides who had examined the road; he explains what his plan is."

GEOGRAPHY.

- I. Draw a map of the coast line of South Australia, marking the names of the chief bays, headlands, ports, and rivers.
- II. Where are the Towns—Newcastle, Boston, Perth, Plymouth, Halifax, and Richmond?
- III. Name the chief rivers of Continental Europe, the seas into which they flow, and the chief towns on their banks.
- IV. What is the cause of the well-known *hot winds*? (8)
 - V. State all you know respecting the *monsoons* and the *zone of calms*. (10)
 - VI. What is the *snow-line*, and upon what circumstances does its position mainly depend? (16)
- VII. Write an account of the River Murray and its principal tributaries. (13)
- VIII. Show in what way three great engineering achievements of the last twenty-five years have affected the commercial relations between Europe and the rest of the world. (15)
- IX. Is Australia an island or a continent? Give reasons for your answer. (15)
- X. Give a classified list of the commercial productions, terrestrial and marine, indigenous to South Australia. (12)

GEOMETRY.

- I. Define a surface, a line, and a point.

Given ten straight lines, in how many points do they in general intersect?
- II. If two triangles have two sides of the one equal to two sides of the other, each to each, and have likewise the angles contained by those two sides equal, then the triangles are equal in all respects.
- III. Bisect a given finite straight line.
- IV. The three angles of any triangle are together equal to two right angles.

A is the vertex of the isosceles triangle ABC , and DEF is drawn perpendicular to the base, meeting AC in E , and BA produced in F —Prove that AEF is also an isosceles triangle.
- V. The opposite sides and angles of a parallelogram are equal, and the diagonal bisects it.
- VI. Triangles of equal area on the same base and on the same side of it are between the same parallels.

Two triangles of equal area are on the same base, but on opposite sides of it—Prove that the straight line joining their vertices is bisected by the base.

- VII. In any right-angled triangle the square on the side opposite the right angle is equal to the sum of the squares on the sides containing it.
- VIII. The rectangle contained by two given straight lines is equal to the sum of the rectangles contained by one of them, and the several parts into which the other is divided.

If two equal straight lines intersect anywhere at right angles, the quadrilateral formed by joining their extremities is equal to half the square described on either of them.
- IX. If a straight line is divided internally in any joint, the square on the whole line is equal to the squares on the two parts together with twice the rectangle contained by the parts.

What is the corresponding algebraical theorem?
- X. In any obtuse-angled triangle the square on the side opposite the obtuse angle is greater than the sum of the squares on the sides containing it by twice a certain rectangle.

State what rectangle this is, and prove the theorem.

HISTORY.

- I. To what races do the inhabitants of Great Britain belong? When was each introduced?
- II. Give an account of the dispute between King John and the Pope.
- III. Explain the cause, and state the result, of the rebellion of Wat Tyler.
- IV. Why did Edward III. claim the throne of France?
- V. Show (in words or by a genealogical table) what right Henry VII. had to the English throne; who had a better claim; and how was the question settled?
- VI. Write a short account of the attempt made by Philip II. of Spain to conquer England.
- VII. Who were the leading men in the reign of Queen Anne? Give fuller particulars about any *one* of them.
- VIII. Explain the terms—Petition of Right, Covenanters, Self-denying Ordinance, Non-jurors.
- IX. When was the last attempt made by the Stuarts to regain the English throne, and who was the leader?
- X. Give a table showing the principal events from the accession of George III. to A.D. 1800.

INORGANIC CHEMISTRY.

- I. Explain and illustrate the use of the terminations *ite, ide, ate, ic,* and *ous.* (10)
- II. Describe two methods of preparing *oxygen.* (10)
- III. Distinguish between a *chemical compound* and a *mechanical mixture.* (10)
- IV. Express by symbols the composition of *water, sulphuric acid, light carburetted hydrogen, ammonia, sulphuretted hydrogen, carbonic oxide,* and *laughing gas.* (10)
- V. State as accurately as you can the composition of *atmospheric air.* What accessory compounds are sometimes present? (12)
- VI. Describe two or three experiments by which you would show that chemical action is a source of luminous heat. (13)
- VII. How is *sulphuretted hydrogen* prepared? Give a drawing of the apparatus you would employ. What is its chief use in the laboratory? (15)
- VIII. I give you a jar containing a mixture of *nitrogen, oxygen,* and *carbonic acid gas,* how would you determine the volume of each gas? (20)

GEOLOGY.

- I. What is a *glacier,* and what are the laws governing its motion?
- II. Explain the cause of the issue of water in the form of a spring.
- III. Account for the alluvial deposit of the Nile Valley.
- IV. Draw a diagram showing *unconformable stratification.*
- V. Define the terms *degradation, disintegration, and denudation.*
- VI. The coast of South Australia is rising; how is this ascertained?
- VII. Discuss the possible causes of the saltness of the water of Lake Torrens.
- VIII. Interpret the phrase—"The strata dip 45° S., 5° E."

NATURAL PHILOSOPHY.

- I. Define a force. How many elements are required to specify completely a force? Why can forces be represented geometrically by straight lines?

- II. Define component and resultant forces. Show how to find geometrically the component of a given force in a given direction. Explain how a ship is able to sail against the wind.
- III. Given two parallel forces, show how to find the magnitude and line of action of their resultant. A uniform girder, whose weight is five tons, rests symmetrically on two piers thirty feet apart, and a load of ten tons is placed five feet from one pier; find the weight borne by each pier.
- IV. What are the conditions which should be satisfied by a good balance? Explain how accurate weighings can be made with a faulty balance.
- V. Define specific gravity. Equal weights of water and a liquid whose specific gravity is 1.2 are mixed together; find the specific gravity of the mixture. Describe some practical method of determining the specific gravity of a solid.
- VI. Describe the essential parts of the barometer. What would be the effect on the reading of the instrument if a drop of water were introduced into the space above the mercury in the tube?
- VII. Define mass, acceleration, momentum, and force. Equal forces act on a body of 1lb. mass for two seconds, and on another of 3lbs. mass for four seconds; compare the velocities produced in the two bodies.
- VIII. What is meant by the statement " $g = 32$ " when a foot and a second are taken as units of space and time? Find the space described by a body falling under the action of gravity only in the fourth second of its motion.
- IX. Describe the mercurial thermometer. What are the principal sources of error to be apprehended in a badly constructed thermometer? Describe the scales of Fahrenheit and Celsius. What reading on the centigrade scale corresponds to 80° F.?
- X. Explain what is meant by conduction, convection, and radiation of heat, respectively; and give examples of the transfer of heat by each of these processes. Describe an experiment showing that water is a very bad conductor of heat.

GERMAN.

1. Read the following passages:—

Der Tell host ein verlornes Lamm vom Abgrund
Und sollte seinen Freunden sich entziehen?
Doch, was ihr thut, laßt mich aus eurem Rath!
Ich kann nicht lange prüfen oder wählen;
Bedürft ihr meiner zur bestimmten That,
Dann ruft den Tell, es soll an mir nicht fehlen.

Oh' ihr zum Schwerte greift, bedenkt es wohl!
Ihr könnt es friedlich mit dem Kaiser schlichten.
Es kostet euch ein Wort, und die Tyrannen,
Die euch jetzt schwer bedrängen, schmeicheln euch
Ergreift, was man euch o t geboten hat,
Trennt euch vom Reich, erkennet Oestreich's Hoheit—

2. Translate the same into English.

3. Translate into German:—

Clever girl!—what a memory she has! Sit down, Gregory, upon this most happy—I mean melancholy—occasion, I feel that I may trust you with a secret. You see this fine house—our fine servants—our fine plate—our fine dinners: every one thinks Sir John Vesey a rich man.

4. State the different forms of declensions of adjectives, and decline one of each form.

5. State the rule for the gender of compound substantives, and give a few examples.

6. Decline Haus, Ofen, Stern, with the definite article.

7. Decline the personal pronouns.

8. Explain the different kinds of compound verbs, and give examples of each.

9. Conjugate verstehen in the active voice, indicative mood only.

10. Name as many prepositions as you can, and state the different cases which they govern.

11. Name some adjectives governing the different cases.

12. Parse the following lines:—

Du bist ein Meister, auf der Armbrust, Tell,
Man sagt, du r'ist es auf mit jedem Schützen?

GREEK.

- I. Translate into English:—

Ἐκέλευσε δὲ τοὺς Ἕλληνας, ὡς νόμος αὐτοῖς εἰς μάχην, οὕτω ταχθῆναι καὶ στήναι συντάξαι δὲ ἕκαστον τοὺς ἑαυτοῦ. Ἐτάχθησαν οὖν ἐπὶ τεττάρων· εἶχε δὲ τὸ μὲν δεξιὸν Μένων καὶ οἱ σὺν αὐτῷ· τὸ δὲ εὐώνυμον Κλέαρχος καὶ οἱ ἐξ ἐκείνου· τὸ δὲ μέσον οἱ ἄλλοι στρατηγοί. Ἐθεώρει οὖν ὁ Κύρος πρῶτον μὲν τοὺς βαρβάρους· οἱ δὲ παρήλαινον τεταγμένοι κατ' Ἰλας καὶ κατὰ τάξεις. εἶτα δὲ τοὺς Ἕλληνας, παρελαίνων ἐφ' ἄρματος καὶ ἡ Κίλισσα ἐφ' ἄρμαμάξης. Εἶχον δὲ πάντες κράνη χαλκᾶ καὶ χιτῶνας φοινικοῦς καὶ κνημίδας, καὶ τὰς ἀσπίδας ἐκκεκαλυμμένους.

- II. Translate into English:—

Ἄλλ' ἔγωγε φημι ταῦτα μὲν φλυαρίας εἶναι δοκεῖ δέ μοι ἄνδρας ἐλθόντας πρὸς Κύρον, οἵτινες ἐπιτήδειοι, σὺν Κλέαρχῳ ἐρωτᾶν ἐκείνον τί βούλεται ἡμῖν χρῆσθαι· καὶ ἐὰν μὲν ἡ πράξις ἢ παραπλησία οἷα περ καὶ πρόσθεν ἐχρήτο τοῖς ξένοις, ἐπεσθαι καὶ ἡμᾶς καὶ μὴ κακίους εἶναι τῶν πρόσθεν τοῦτο συναναβάντων· ἐὰν δὲ μείζων ἢ πράξις τῆς πρόσθεν φαίνεται καὶ ἐπιπρονωτέρα καὶ ἐπικινδυνότερα, ἀξιοῦν ἢ πείσαντα ἡμᾶς ἄγειν ἢ πεισθέντα πρὸς φιλίαν ἀφίεσθαι· οὕτω γὰρ καὶ ἐπόμενοι ἂν φίλοι αὐτῷ καὶ πρόθυμοι ἐποιεσθαι, καὶ ἀπίοντες ἀσφαλῶς ἂν ἀπίομεν· ὅ τι δ' ἂν πρὸς ταῦτα λέγῃ, ἀναγγεῖλαι δεῦρο· ἡμᾶς δ' ἀκούσαντας πρὸς ταῦτα βουλευέσθαι.

- III. Parse the following words:—

συναλλαγέντι, ἐπέξυγμένῃ, κρημάσαι, συνεγένοντο, κατεθέμην, πείσομαι, ἐλέσθαι, ἐξελλθεῖν, ληφθῆναι, ἀποδοδράκασιν.

- IV. Decline throughout the following words:—μάστιξ, πόλις, ἡδύς, τάλαια, and οὗτος, and write out the imperfect and future of εἰμί, I am.

- V. What cases do the following prepositions take, and with what meanings:—ἀντί, ἀπό, διά, κατά, περί, and πρὸς?

- VI. What is the force of the Optative with and without ἄν, and of the Imperfect with ἄν? Give examples.

- VII. Translate into English:—

Καὶ ἐν τούτῳ τῷ καιρῷ τὸ μὲν βαρβαρικὸν στράτευμα ὁμαλῶς προσήει· τὸ δὲ Ἑλληνικόν, ἔτι ἐν τῷ αὐτῷ μένον, συνετάττετο ἐκ τῶν ἔτι προσύοντων. Καὶ ὁ Κύρος παρελαίνων οὐ παντὶ πρὸς αὐτῷ τῷ στρατεύματι κατεθέατο ἑκατέρωστε ἀποβλέπων εἰς τε τοὺς πολεμίους καὶ τοὺς φίλους. Ἰδὼν δὲ αὐτὸν ἀπὸ τοῦ Ἑλληνικοῦ Ξενοφῶν Ἀθηναῖος, ὑπελάσας ὡς συναντήσῃ ἤρετο εἴ τι παραγγέλλοι· ὁ δ' ἐπιστήσας εἶπε, καὶ λέγει ἐκέλευε πάντιν ὅτι καὶ τὰ ἱερά καλὰ καὶ τὰ σφάγια.

VII. Translate into Greek :

It was now about the time of full market, when one of Cyrus' confidential adherents came in sight, riding at full speed, and immediately called out to all whom he met—that the King was approaching with a vast army, prepared as for battle. Upon this great confusion arose; and Cyrus, leaping down from his chariot, and mounting his horse, took his javelin in his hand and called out to all the rest to arm themselves.

FIRST ORDINARY EXAMINATION FOR THE DEGREE
OF B.A.—1876.

PURE MATHEMATICS. (I.)

- I. Find the product of $x + 2y + 3z$, $2x + 3y + z$, $3x + y + 2z$.
 II. Resolve into factors—
 (1.) $x^2 + 24x - 81$, (2.) $8x^2 - 1$, (3.) $(b^2 + c^2 - a^2) - 4b^2c^2$.
 III. Reduce to their lowest terms—
 (1.) $\frac{x^3 - 3x + 2}{x^3 + 4x^2 - 8}$ (2.) $\frac{4x^2 + 6y - 9y^2 - 1}{4x^2 + 12xy + 9y^2 - 1}$.
 IV. State and prove the rule for multiplication of fractions.

Simplify $\frac{x + 2 + \frac{1}{x}}{x - \frac{1}{x}} \times \frac{x - 1}{x^2 + x}$.

- V. Solve the equations—

(1.) $\frac{3}{10}(3 - 2x) - \frac{5}{6}(5 + 2x) = x$.

(2.) $\frac{x - 2}{3} + \frac{y - 3}{2} = 0$.

$\frac{x + y - 3}{2} + \frac{x - y - 2}{3} = 0$.

(3.) $\frac{1}{x - 1} - \frac{1}{3(x - 2)} = \frac{1}{2x}$.

- VI. A man sets apart £28 a-year to be spent in drink, and considers that he requires in the year a quantity of alcohol amounting to 24 (reputed) quarts. He prefers claret to ale, but claret costs 40s. a dozen, ale only 12s. a dozen. The percentage of alcohol in the claret being 10, and in the ale 6, how much does he buy of each?

If the price of ale rise, will he drink more ale, or less, than before?

- VII. Prove that the sum of the roots of the equation $x^2 + px + q = 0$ is equal to $-p$, and their product to q .

The two shortest sides of a right-angled triangle are given by the roots of the equation $x^2 - 17x + 60 = 0$; find its area.

- VIII. Prove the formula for the sum of n terms of an Arithmetical Progression whose first term (a) and common difference (b) are given.
How many times does the Post Office clock strike altogether in the twenty-four hours?
- IX. Define the sine, cosine, and tangent of any angle.
Prove that $\sin. ^2A + \cos. ^2A = 1$.
Given $\sin. 44^\circ 26' = .7$, find $\cos. 134^\circ 26'$, and $\cos. 135^\circ 34'$.
- X. The angle of elevation of an object above the horizon is observed to be 30° , and on walking 500 yards towards it the observer finds the elevation to be 45° ; how much nearer must he approach it before its elevation becomes 60° ?

LATIN PAPER.

VIRGIL. CICERO. HORACE.

I.—Translate into English—

Idcirco, certis dimensum partibus orbem
Per duodena regit mundi Sol aureus astra.
Quinque tenent cœlum zonæ; quarum una corusco
Semper sole rubens et torrida semper ab igni;
Quam circum extremæ dextra lævaque trahuntur,
Cœrulea glacie concretæ atque imbris atris;
Has inter mediamque duæ mortalibus ægris
Munere concessæ divom, et via secta per ambas,
Obliquus qua se signorum verteret ordo.
Mundus, ut ad Scythiam Rhipæasque arduus arces
Consurgit, præmitur Libyæ devexus in austros.
Hic vertex nobis semper sublimis; at illum
Sub pedibus Styx atra videt Manesque profundi,
Maximus hic flexu sinuoso elabitur Anguis
Circum perque duas in morem fluminis Arctos,
Arctos oceani metuentes œquore tingui.

II.—Translate into English—

Continuo, ventis surgentibus, aut freta ponti
Incipiunt agitata tumescere et aridus altis
Montibus audiri fragor, aut resonantia longe
Litora misceri et nemorum increbrescere marmor.
Jam sibi tum curvis male temperat unda carinis,
Cum medio celeres revolant ex œquore mergi
Clamoreque ferunt ad litora, cumque marinæ
In sicco ludunt fulicæ, notasque paludes

Deserit atque altam supra volat ardea nubem.
Sæpe etiam stellas, vento impendente, videbis
Præcipites cœlo labi, noctisque per umbram
Flammaram longos a tergo albescere tractus;
Sape levem paleam et frondes volitare caducas,
Aut summa nantes in aqua colludere plumas.

III.—Explain the allusions—

Chaoniam glandem. Acheloïa pocula. Unci monstrator aratri.
Claram Lycaonis Arceton. Et pro purpureo pœnas dat Scylla capillo. Laomedontææ luimus perjuriam Trojæ.

IV.—Translate—

Hujus tu neque auctoritatem verebere nec iudicium sequere
nec vim pertimesces? Quæ tecum, Catilina, sic agit, et quodam
modo tacita loquitur: "Nullum jam aliquot annis facinus
exstitit nisi per te; nullum flagitium sine te; tibi uni mul-
torum civium neces, tibi vexatio direptioque sociorum impunita
fuit ac libera; tu non solum ad negligendas leges et quæ-
stiones, verum etiam ad evertendas perfringendasque valuisti.
Superiora illa, quamquam ferenda non fuerunt, tamen, ut
potui, tuli: nunc vero me totam esse in metu propter unum te,
quidquid increpuit, Catilinam timeri, nullum videri contra me
consilium iniri posse, quod a tuo scelere abhorreat, non est
ferendum. Quamobrem discede atque hunc mihi timorem eripe:
si est verus, ne opprimar: sin falsus, ut tandem aliquando
timere desinam.

V.—Translate—

Sed quum viderem ne vobis quidem omnibus re etiam tum
probatâ, si illum, ut erat meritis, morte multassem, fore ut
ejus socios invidiâ oppressus persequi non possem, rem huc
deduxi, ut tum palam pugnare possetis quum hostem aperte
videretis. Quem quidem ego hostem, Quirites, quum vehe-
menter foris esse timendum putem, licet hinc intelligatis, quod
etiam illud moleste fero quod ex urbe parum comitatus exierit.

VI.—Parse the following words:—

Perculsum, mementote, nactus, præstolarentur, egredere, peperit.

VII.—Translate, with explanations where necessary—

Scriberis Vario fortis et hostium
Victor Mæonii carminis alite,
Quam rem cunque ferox navibus aut equis
Miles te duce gesserit:
Nos, Agrippa, neque hæc dicere nec gravem
Pelidæ stomachum cedere nescii
Nec cursus duplicis per mare Ulixei
Nec sævam Pelopis domum
Conamur tenues grandia, dum pudor
Imbellisque lyræ Musa potens vetat
Laudes egregii Cæsaris et tuas

Culpa deterere ingeni.
 Quis Martem tunicâ tectum adamantinâ
 Digne scripserit aut pulvere Troico
 Nigrum Merionen aut ope Palladis
 Tydiden superis parem?
 Nos convivia, nos prælia virginum
 Sectis in juvenes unguibus acrium
 Cantamus vacui, sive quid urimur
 Non præter solitum leves.

In what metre is this Ode written? Scan the first stanza.

VIII.—Translate with notes—

Velox amœnum sæpe Lucretilem
 Mutat Lycæo Faunus et igneam
 Defendit æstatem capellis
 Usque meis pluviosque ventos.
 Impune tutum per nemus arbutos
 Quærunť latentes et thyma devię
 Olentis uxores mariti,
 Nec virides metuunt colubras
 Nec Martiales Hædilię lupos,
 Utcunq̄e dulci, Tyndari, fistula
 Valles et Usticę cubantis
 Levia personuere saxa.
 Di me tuentur, dis pietas mea
 Et Musa cordi est. Hic tibi copia
 Manabit ad plenum benigno
 Ruris honorum opulenta cornu.

IX.—Write a scheme of the Alcaic Metre.

NATURAL PHILOSOPHY. (I.)

- I. State and prove the proposition known as the Triangle of Forces.
 One end B of a horizontal rod 3 feet long is hinged to a wall, and the other end C is tied by a wire to a point of the wall 4 feet above B; a weight of 20lbs. being suspended from C, find the tension of the wire and the thrust of the rod.
- II. Give the rule for compounding two parallel forces.
 A plank, whose length is 25 feet and weight 150lbs., rests on two supports, one at an end, the other 15 feet from that end; how far beyond the second support is it safe for a boy weighing 100lbs. to stand on it?

- III. Define the centre of gravity of a body, and state its principal properties.

A box 6 feet long, 4 feet wide, and 3 feet deep, (inside measurement), is made of 1-inch board, but is without a lid; where is its centre of gravity? Also, supposing it to be half filled with water, find the C. G. of the whole mass, the specific gravity of the wood being .6.

- IV. Explain the terms mechanical advantage, and disadvantage.

Find an expression for the mechanical advantage in the wheel and axle.

Explain generally under what circumstances machines giving mechanical advantage, and disadvantage, are respectively employed. Give instances.

- V. Define velocity and acceleration.

Write down and explain the formulę connecting the velocity, the space described, the acceleration, and the time, in the case of uniformly accelerated motion.

A body is let fall from a tower 150 feet high; find the velocity with which it strikes the ground, neglecting the resistance of the air.

- VI. State and explain the second law of motion.

How is it proved that the weight of a body is proportional to its mass?

- VII. Define fluid pressure, and show how to find the pressure at any depth in a liquid.

A bladder containing 50 cubic inches of air is sunk to a depth of 50 feet in the sea; find the space now occupied by the air, the atmospheric pressure being 15lbs. on the square inch, and the weight of a cubic foot of salt water 64lbs.

- VIII. State and prove the principle of Archimedes.

A plate of iron (sp. gr. = 7) 3 inches thick, floats on the surface of mercury (sp. gr. = 13.6), find the depth to which it is immersed. Also find what proportion of its thickness is immersed in the mercury when water is poured on the top until the iron is covered.

PURE MATHEMATICS. (II.)

- I. Define the following terms:—Plane, right angle, locus, similar figures, ratio, reciprocal proportion.
- II. The three angles of any plane triangle are together equal to two right angles.

III. Parallelograms on the same base and between the same parallels are equal in area.

IV. If a straight line is divided externally in any point, the square on the line is equal to the squares on the two segments diminished by twice the rectangle contained by the segments.

State the corresponding algebraical theorem, and explain to what extent the truth of the geometrical proposition may be inferred from it.

V. The angles in the same segment of a circle are equal.

A, B are fixed points, and P a variable point, on the same fixed circle, and straight lines AQ, BQ are drawn bisecting the angles PAB, PBA, respectively; find the locus of Q.

VI. Define a tangent to a circle. Prove that the tangent is perpendicular to the radius at the point of contact.

Draw a circle of given radius to touch each of two given circles. What limitation is there to the possibility of solution of this problem?

VII. Describe a circle through three given points.

What becomes of the solution when the three points are in the same straight line?

VIII. The straight line bisecting the vertical angle of a triangle divides the base into two segments which have the same ratio as the sides of the triangle.

IX. Prove that the ratio of the circumference to the diameter is the same for all circles.

The radius of a carriage-wheel is two feet; how many times does it revolve in travelling a distance of one mile?

X. What are the advantages of the decimal system of measuring angles? Why has it not come into general use?

Find the number of degrees, minutes, and seconds, in the angle whose circular measure is $\frac{P}{\sqrt{10}}$, P denoting the ratio of the circumference of a circle to the diameter.

GEOLOGY.

- I. Name the signs by which you would detect the former existence of *glaciers* in regions where they no longer exist.
- II. By what physical characters and modes of occurrence can *igneous* rocks be easily distinguished?
- III. Draw a diagram showing *faulted strata* covered by *unconformable* beds which are not affected by the fault.

IV. Give a diagram sketch showing the geological structure of the Adelaide hills and plain.

V. What are the chief rock-forming minerals?

VI. Give the mineral composition of *granite*, *gneiss*, *syenite*, and *basalt*.

VII. What kind of palaeontological circumstances accompany great breaks between stratified deposits? Give some instances.

VIII. What is a *Belemnite*?

IX. I show you a black shale containing *Graptolites* and several kinds of *Trilobites*. What are the probabilities of finding coal below it?

X. Give the range in time of each of the following:—*Trilobites*, *Ammonites*, *Nautilus*, *Trigonia*, *Orthoceras*, and *Ostrea*.

XI. Name the rock specimens numbered 1—6.

XII. Name the genera of fossils numbered 1—6.

GREEK PAPER.

HECUBA.

MEDEA.

HERODOTUS.

I. Translate into English, with necessary notes:—

Ἐκάβη, διδάσκου, μηδὲ τῷ θυμονίμῳ
τὸν εὖ λέγοντα δισμενῆ ποιοῦ φρενί.
ἐγὼ τὸ μὲν σὸν σῶμ', ἕψ' αὐπερ ἠτύχουν,
σώζειν ἔτοιμός εἰμι, κοῦκ ἄλλως λέγω.
ἃ δ' εἶπον εἰς ἅπαντας, οἴκ ἀρήσομαι,
Τροίας ἀλούσης, ἀνδρὶ τῷ πρώτῳ στρατοῦ
σὴν παῖδα δοῦναι σφάγιον ἐξαιτουμένῳ.
ἐν τῷδε γὰρ κάμνουσιν αἱ πολλαὶ πόλεις,
ὅταν τις ἐσθλὸς καὶ πρόθεμος ὦν ἀνὴρ
μηδὲν φέρηται τῶν κακίωνων πλέον.
ἡμῖν δ' Ἀχιλλεὺς ἀξίος τιμῆς, γίναι,
θανὼν ὑπὲρ γῆς Ἑλλάδος κάλλιστ' ἀνὴρ.
οὐκ οὐκ τὸδ' αἰσχρὸν, εἰ βλέποντι μὲν φίλῳ
χρῶμεσθ', ἐπεὶ δ' ὄλωλε, μὴ χρῶμεσθ' ἔτι;
εἰεν· τί δὴτ' ἐρεῖ τις, ἣν τις αὐ φανῆ
στρατοῦ τ' ἄθροισις, πολεμίων τ' ἀγωνία;
πότῃρα μαχοῦμεθ', ἢ φιλοψυχῆτομεν,
τὸν καθανόνθ' ὄρωντες οὐ τιμώμενον;

II. Translate :—

- Χο. δεινὸς χαρακτήρ, κάπισσιμος ἐν βροτοῖς,
ἐσθλῶν γενέσθαι, κατὰ μείζον ἔρχεται
τῆς εὐγενείας ὄνομα τοῖσιν ἀξίοις.
- Εκ. καλῶς μὲν εἶπας, θύγατερ' ἀλλὰ τῷ καλῷ
λίπη πρόσεστιν· εἰ δὲ δαί τῷ Πηλέως
χάριν γενέσθαι παιδί, καὶ ψόγον φυγεῖν
ἡμᾶς, Ὀδυσσεῦ, τήνδε μὲν μὴ κτείνετε·
ἡμᾶς δ' ἄγοντες πρὸς πυρὰν Ἀχιλλέως,
κεντεῖτε, μὴ φείδεσθ'· ἐγὼ τέκον Πάριν,
ὃς παῖδα Θέτιδος ὠλεσεν τόξοις βαλὼν.
- Οδ. οὐ σ', ὦ γεραῖά, καταναεῖν Ἀχιλλέως
φάντασμι' Ἀχαιοὺς, ἀλλὰ τήνδ', ἤτήσατο.
- Εκ. ἡμεῖς δὲ μ' ἀλλὰ θυγατρὶ συμφωνεῖσθε,
καὶ δις τόσον πῶμ' αἵματος γενήσεται
γαίᾳ, νεκρῷ τε τῷ τὰδ' ἐξαιτουμένῳ.
- Ογ. ἄλις κόρης σῆς θάνατος· οὐ προσουπέος
ἄλλος πρὸς ἄλλῳ· μηδὲ τόνδ' ὀφείλομεν.

III. Parse the words:—

ἰδάν, ἐλιάσθη, ἐπιβάς, ἀπέβησαν, ἐνθανεῖν, ἀποσπασθῆς, αἰδέσθητι.

IV. Translate :—

τί δέ σοι παῖδες πατρὸς ἀμπλακίας
μετέχουσι; τί τοῖσδ' ἔχθεις; οἴμοι,
τέκνα, μή τι πάθῃθ' ὡς ἰπεραλγῶ.
δεινὰ τυράννων λήματα, καὶ πως
ὀλίγ' ἀρχόμενοι, πολλὰ κρατοῦντες,
χαλεπῶς ὄργας μεταβάλλουσι.
τὸ γὰρ εἰθίσθαι ζῆν ἐπ' ἴσοισιν
κρείσσον· ἔμοιγ' οἶν, εἰ μὴ μεγάλως,
ἄχρῶς γ' εἴη καταγηράσκων.
τῶν γὰρ μετρίων πρῶτα μὲν εἰπεῖν
τοῦνομα νικᾶ, χρῆσθαί τε μακρῷ
λῶστα βροταίοισιν· τὰ δ' ὑπερβάλλοντ'
οὐδένα καιρὸν δύναται θνητοῖς·
μείζους δ' ἄσας ὅταν ὄργισθῇ
δαίμων οἴκοις ἀπέδωκεν.

Derive λῶστα, and λήματα. Give the force of μετὰ, κατὰ, and ὑπερ in composition.

V. Translate :—

οὐ γὰρ κατεῖδον πρῶτον, ἀλλὰ πολλάκις
τραχεῖαν ὄργην ὡς ἀμήχανον κακόν.
σοὶ γὰρ παρὸν γῆν τήνδε καὶ δόμους ἔχειν
κούφως φεροῖσθαι κρεισσόνων βουλευμάτων
λόγων ματαίων οὔνεκ' ἐκπεσεῖ χθονός.
κάμοι μὲν οὐδὲν πρᾶγμα· μὴ παῖσθαι ποτέ
λέγουσ' Ἰάσων ὡς κάκιστός ἐστ' ἀνὴρ·
ἃ δ' ἐς τυράννοισι ἐστὶ σοὶ λελεγμένα,
πάν κέρδος ἡγοῦ ζημιονμένη φυγῆ.
κἀγὼ μὲν αἰεὶ βασιλέων θυμονμένον
ὄργας ἀφήρουν, καὶ σ' ἐβουλόμην μένειν·
σὺ δ' οὐκ ἀνίης μορίας, λέγουσ' αἰεὶ
κακῶς τυράννοισι· τοιγάρ ἐκπεσεῖ χθονός.

VI. Explain the constructions of the following expressions :—

ἀτιμάσας ἔχει, σίγα λόγον,
σοὶ γὰρ παρὸν, φοβος εἰ πείσῳ.

VII. Translate the following passage:—

Ἐπολέμησε Μιλησίοισι, παραδεξάμενος τὸν πόλεμον παρὰ τοῦ
πατρὸς. ἐπελαίνων γὰρ ἐπολιόρκει τὴν Μίλητον τρώπῳ τοιφδε·
ὄκως μὲν εἴη ἐν τῇ γῇ καρπὸς ἀδρός, τηρικαῦτα ἐσέβαλλε τὴν
στρατιάν. ἐστρατεύετο δὲ ὑπὸ σιρίγγων τε καὶ πηκτίδων καὶ αὐλοῦ
γυναικῆσιν τε καὶ ἀνδρησῶν. ὡς δὲ ἐς τὴν Μιλησίην ἀπίκοιτο,
οἰκήματα μὲν τὰ ἐπὶ τῶν ἀγρῶν οὔτε κατέβαλλε, οὔτε ἐνεπίμπρη,
οὔτε θήρας ἀπίσπα, εἶα δὲ κατὰ χώραν ἐστάναι· ὁ δὲ τὰ τε δένδρεα
καὶ τὸν καρπὸν τὸν ἐν τῇ γῇ ὄκως διαφέρειε ἀπαλλάσσετο ὀπίσω.
τῆς γὰρ θαλάσσης οἱ Μιλησίοι ἐπεκράτεον, ὥστε ἐπέδρησεν μὴ εἶναι
ἔργον τῇ στρατιῇ. τὰς δὲ οἰκίας οὐ κατέβαλλε ὁ Λυδὸς τῶνδε εἵνεκα,
ὄκως ἔχοιεν ἐνθεύτερον ὀρμεόμενοι τὴν γῆν σπείρειν τε καὶ ἐργάζεσθαι
οἱ Μιλησίοι, αὐτὸς δὲ ἐκείνων ἐργαζομένων, ἔχοι τι καὶ σίνεσθαι
ἐσβάλλων.

VIII. State some of the chief peculiarities of the Ionic dialect.

IX. Translate, with any comments you may think needful:—

“Ἀδρηστε, ἐγὼ σε συμφορῇ πεπληγμένον ἀχάρι, τὴν τοι οὐκ
ὀνειδίω, ἐκάθηρα, καὶ οἰκίοισι ὑποδεξάμενος ἔχω, παρέχων πᾶσαν
δυσάνην· νῦν ὦν (ὀφείλεις γὰρ ἐμεῦ προποιήσαντος χρηστὰ ἐς σέ,
χρηστοῖσι με ἀμείβεσθαι) φύλακα παιδὸς σε τοῦ ἐμοῦ χρῆζω
γενέσθαι ἐς ἄγρην ὀρμεόμενον· μή τις κατ' ὄδον κλώπες κακοῦργοι

ἐπὶ δηλήσει φανέωσι ἡμῖν. πρὸς δὲ τοῖσιν καὶ σέ τοι χρεῶν ἴστί
 ἵνα ἐνθα ἀπολαμπρύνει τοῖσι ἔργοισι πατριῶν τε γὰρ τοι ἴστί
 καὶ προσέτι ρώμη ἵπάρχει.”

Ἀμείβεται ὁ Ἄδρηστος. “Ὡ βασιλεῦ, ἄλλως μὲν ἔγωγε ἂν
 οὐκ ἦν ἐς ἄθλον τοιόνδε· οὔτε γὰρ συμφορῇ τοιῆδε κεκρημένον
 οἶκός ἐστι ἐς ὀμήλικας εἰ πρήσσοντας ἵναί, οὔτε τὸ βούλεισθαι
 πάρα· πολλαχῆ τε ἂν ἴσχον ἐμειωντόν.

COMPOSITION AND GRAMMAR.

I. Translate into Latin Prose:—

“It was then that a great number first began to fly; and at last neither the lake nor the mountains hindered them in their panic. Through every narrow and rugged pass they endeavoured to escape as if blind; and arms and men were tumbled one upon another. A great many finding there was no room for flight, advancing into the water through the shallowest pools of the lake, plunged themselves in, keeping their heads and shoulders only above water. Some there were whom thoughtless terror impelled to seek escape even by swimming; but as this seemed endless and hopeless, they were either drowned in the deep water, courage failing them, or, wearied to no purpose, regained the shallows with the greatest difficulty, and were there cut down on all sides by the cavalry of the enemy who had entered the water.”

- II. When is the genitive, and when the ablative used to denote the name of a place?
- III. What is meant by the historical infinitive?
- IV. Give the perfect active, and past part. pass. of *revincio*, *perumpo*, *distraho*, *dirigo*, *adjicio*.
- V. Write down the principal parts of *claudio*, *do*, *fugio*, *gero*, *jubeo*, *peto*, *tendo*, and *verto*.
- VI. Parse the sentence:—
 “Quā re nuntiātā, Cæsar omnem ex castris equitatum suis auxilio misit.”
- VII. Decline throughout the substantives *νόος* and *νεός*; also, *μήτηρ* and *πόλις*, the adjective *μέλας*, and the participle *λυθείς*.
- VIII. Write down throughout these tenses, 2nd Aor. Ind. Act. *γινωσκω*, Imp. Ind. Act. *δίδωμι*, Fut. Ind. Act. *κομιζω*, and 1st Aor. Mid of *λύω*.
- IX. Write out the vowel changes of the Temporal Augment, with examples.
- X. Translate and parse the sentence:—
ἔφη παρέσθαι, εἴ τι δέοι.

NATURAL PHILOSOPHY. (II.)

[Candidates are not required to pass in the second part of this paper (Questions 4 to 8).]

- I. Define temperature. State the laws connecting the pressure, density, and temperature of a gas.
 Explain some form of the air thermometer, pointing out its theoretical advantages and practical disadvantages.
- II. What is the meaning of “saturated vapour”?
 Describe fully the phenomena observed when water is gradually heated up to the boiling point; explaining clearly how the boiling point depends on the atmospheric pressure.
- III. Define the terms unit of heat, specific heat, latent heat of fusion, latent heat of evaporation.
 Explain some method of measuring the quantity of heat lost by a pound of lead in cooling one degree.
- IV. Explain the meaning of the following terms:— Meridian, pole, ecliptic, right ascension, node, inferior conjunction, parallax.
 The R.A. of Alpha Aquilæ being 19h. 45m., and its Dec. 8° 33' N., whereabouts in the sky and at what time of night would you look for it at Greenwich (lat. 51° 29' N.), and at Adelaide (lat. 34° 55' S.) respectively, on September 21?
- V. Prove that the altitude of the pole at any place is equal to the latitude of that place.
 How is the altitude of the pole found?
- VI. Explain refraction and twilight. Under what conditions as to time and place does twilight last all night?
 How is it ascertained that the moon has no atmosphere, or, at all events, only a very rare one?
- VII. Describe the moon's path in the heavens during one revolution, and explain how this path changes from one revolution to another.
 Distinguish between a “revolution” and a “lunation.”
 What would be the most striking consequences if the inclination of the moon's orbit were abolished?
- VIII. State the principal points of contrast between a solar and a lunar eclipse. Why are eclipses of the sun more frequent than those of the moon; whilst more eclipses of the moon than of the sun are seen at any particular place?

ENGLISH LITERATURE.

- I. Give a short summary of the life, character, and principal works of Raleigh, Bacon, and Sir Philip Sidney.
- II. Quote Pope's famous line upon Bacon. Say whether you think it deserved or undeserved, and why.
- III. Sketch Milton's life. Name his principal poems. Give Macaulay's opinion of the language of "L'Allegro" and "Il Penseroso."
- IV. Quote one or more word-pictures from each of these poems illustrating the contrast.
- V. What do you understand by—
 "Every shepherd tells his tale
 Under the hawthorn in the dale."
 And
 " The cynosure of neighbouring eyes."
- VI. What ancestry does Milton assign to Melancholy in "L'Allegro" and "Il Penseroso" respectively? and how do you account for the difference?
- VII. Quote the passage beginning
 " But let my due feet never fail."
- VIII. What is the "Ode for St. Cecilia's Day" intended to illustrate? and what method does Dryden adopt to effect his purpose?
- IX. Mention some of his questionable rhymes, and show on what grounds they are open to question.
- X. What is the meaning of "Lydian Measures"? Quote one or more parallel passages from other authors.
- XI. Quote some expressions which are now recognised as proverbs or aphorisms.
- XII. Do you prefer the word "spheres" or "spires" in the line
 " Sublime on radiant { spheres }
 { spires } he rode."
 Give a reason for your preference.

POPE'S "ESSAY ON MAN."

- I. What is the design of the "Essay on Man"? And what is the special merit of it in Pope's own estimation?
- II. In Epistle I. (line 51), he says—
 " Respecting man—whatever wrong we call,
 May, *must* be right"—
 In what sense does he affirm this to be true, and how does he illustrate it?
- III. To whom does he refer as "Young Ammon" (line 160), and why?
- IV. In Epistle II. (line 53) he says that two principles *reign* in human nature—What are they, and what are their respective functions?

- V. In drawing an analogy between the baser passions and the "savage stock" used for grafting (Ep. II., line 181), what use does he find for "spleen," "obstinacy," "anger," "avarice," and "envy"?
- VI. What is his theory of the origin of Political Societies, and of Monarchy? And what is his estimate of the value of *forms* of "Government" and *modes* of "Faith"?
- VII. State the argument of the Fourth Epistle.
- VIII. In what three words does he find the expression of "Reason's whole pleasure" and the "Joys of Sense"? In what way are these three things necessary to Happiness?

TENNYSON'S "ÆNONE."

- I. Narrate, briefly, the legend upon which the poem is founded.
- II. What is the method of the first paragraph—Narrative, Circumstantial, Picturesque, or Mixed?
- III. To what myths does Tennyson refer in connexion with the expressions—

" I will build up all
 My sorrow with my song;—as yonder walls
 Rose slowly to a music slowly breathed;
 A cloud that gathered shape."—

And the

" Fruit of pure Hesperian gold,
 That smelt ambrosially"?

- IV. Indicate the characteristic merit of Tennyson in his grouping of flowers, and mention what you know of the "Amaracus," the "Asphodel," and the "Lotos."
- V. Quote the first six lines of the Speech of Pallas.

TENNYSON'S "MORTE D'ARTHUR."

- I. On what series of legends are the "Idylls of the King" founded.
- II. Tell briefly the story of this Idyll.
- III. Give, in Tennyson's own words, a description of his "own Ideal Knight," and say to whom he applies it.
- IV. Mention some of the archaic words employed in the poem.
- V. Quote the three lines which follow—
 " And slowly answered Arthur from the barge,"—
 And the eight which follow—
 " More things are wrought by prayer."
- VI. What kind of measure is employed by Tennyson in the "Idylls"?

GRAMMAR.

ENGLISH LANGUAGE (Pearson and Strong).

- I. Explain the meaning and use of the various parts of speech.
- II. Mention as many rules as you can for the formation of strong verbs, giving examples of each.
- III. How many kinds of pronouns are there? Describe how they are used. Give examples.
- IV. How many kinds of adverbs of manner are there? Name them.
- V. Explain the partitive, adjectival, and appositional uses of the preposition "of."
- VI. Into how many classes are the co-ordinating and sub-ordinating conjunctions divided? Name them.
- VII. Parse the following sentence—
 " When once her eye
 Hath met the virtue of this magic dust,
 I shall appear some harmless villager
 Whom thrift keeps up about his country gear."
- VIII. Write an essay on—
- IX. Select from your essay a sentence containing about thirty words and parse it.



APPENDIX C.—FORMS.

I. FORM to be SENT to the REGISTRAR by CANDIDATES for
MATRICULATION.

THE UNIVERSITY OF ADELAIDE.

I, _____, 18____
 hereby give notice that I intend
 to present myself at the Matriculation Examination in the
 Term, 18____, for examination in the following subjects, viz.:—

- | | |
|----|----|
| 1. | 6. |
| 2. | 7. |
| 3. | 8. |
| 4. | 9. |
| 5. | |

And I send herewith the prescribed fee of £2 2s., and supply the information required of me, viz.:—

1. Name at full length—
2. Date and place of birth—
3. Name of father—
4. Profession or occupation of father—
5. Name and residence of parent (if any) who sends me—
6. Signature of ditto—
- or,
5. Name and residence of guardian (if any) who sends me—
6. Signature of ditto—
7. Post Office Address—
8. Name and residence of friend (if any) with whom resident in Adelaide—
9. Last place of education—

Signed _____

The Registrar,
 University of Adelaide.

II. FORM of NOTICE to be SENT to the REGISTRAR by MATRICULATED STUDENTS of their INTENTION to present themselves for EXAMINATION.

THE UNIVERSITY OF ADELAIDE.

I, _____ Matriculated Student of this University, hereby give notice, that for the purpose of completing the year of the course for the Degree of Bachelor of Arts I intend to present myself at the Ordinary Examination in the Term of 187____, for examination in the undermentioned subjects, viz. :—

- | | |
|----|----|
| 1. | 4. |
| 2. | 5. |
| 3. | |

And I send herewith the evidence of my having fulfilled the conditions prescribed for admission to the said Ordinary Examination.

Signed _____

Dated this _____ day of _____ 18 ____ .

The Registrar,
University of Adelaide.

III. FORM of NOTICE to be SENT to the REGISTRAR by NON-MATRICULATED STUDENTS of their INTENTION to present themselves for EXAMINATION.

THE UNIVERSITY OF ADELAIDE.

I, _____ a Non-Matriculated Student of this University, hereby give notice, that I intend to present myself at the Ordinary Examination in the _____ Term, for examination in the following subjects :—

- | | |
|----|----|
| 1. | 4. |
| 2. | 5. |
| 3. | |

And I send herewith the prescribed fee of £ _____, being 5s. for each subject in which I intend to present myself for examination.

Signed _____

Dated this _____ day of _____ 18 ____ .

The Registrar,
University of Adelaide.

. Printed copies of the above Forms may be obtained from the Registrar.

APPENDIX D.

ANNUAL REPORT, 1874-5.

Report of the Proceedings of The University of Adelaide, from the appointment of the first Council to the end of the year 1875.

To His Excellency Sir ANTHONY MUSGRAVE Knight Commander of the Most Distinguished Order of Saint Michael and Saint George, Governor in and over Her Majesty's Province of South Australia and the Dependencies thereof, &c., &c.

The Council of The University of Adelaide have the honor to present to your Excellency the following report of the proceedings of the University to the close of the year 1875.

At the first meeting of the Council, held on the 11th of December, 1874, the Honorable Sir Richard Davies Hanson, Chief Justice, was elected to the office of Chancellor, and the Right Rev. Augustus Short, D.D., Lord Bishop of Adelaide, to the office of Vice-Chancellor; and, at the next meeting, the Hon. Sir Henry Ayers, K.C.M.G., M.L.C., was elected to that of Treasurer, and W. Barlow, Esq., B.A., T.C.D., was appointed to that of Registrar.

The Council then proceeded to a consideration of the various measures necessary to the establishment of the University. These were principally the passing of statutes relating to its future government, to the functions and duties of the Professors, and to the matriculation of students; the choice of Professors; and the selection of the site for the University buildings, and of the land to be appropriated to the endowment of the University.

Statutes have been framed for the various purposes above-mentioned, which, in terms of the Act for incorporating the University, have been submitted to your Excellency for confirmation.

The liberal contribution to the University by Walter Watson Hughes, Esq., was devoted to the founding of two Professorships, one for Classics and Comparative Philology and Literature, and the other for the English Language and Literature and Mental and Moral Philosophy; and the Rev. H. Read, M.A., and the Rev. J. Davidson were nominated to the respective chairs; but that by the Hon. T. Elder, M.L.C., was left at the disposal of the Council. The Council deciding on founding two Professorships, one of Mathematics and one of Natural Science; and in order to secure as far as possible the appointment of suitable persons as Professors, the Council requested four gentlemen of high literary attainments

Great Britain, namely, J. Todhunter, Esq., M.A., F.R.S., Hon. Fellow of St. John's College, Cambridge; P. G. Tait, Esq., M.A., Professor of Natural Philosophy in the University of Edinburgh; Henry W. Ackland, Esq., L.M., Regius Professor of Medicine in the University of Oxford, and President of the Medical Council; and Thomas H. Huxley, Esq., Professor of Natural History in the Royal School of Mines; assisted by the Right Hon. Sir James Fergusson, Bart., and F. S. Dutton, Esq., C.M.G., the Agent-General, to undertake the task of selection. This duty they kindly consented to discharge; and Horace Lamb, Esq., M.A., Fellow and Assistant Tutor of Trinity College, Cambridge, has been appointed Elder Professor of Mathematics, and Ralph Tate, Esq., Associate Lin. Soc., F.G.S., Elder Professor of Natural Science.

The site for the University buildings has been granted by the Government in a very convenient and suitable position on North-terrace, fronting Pulteney-street; and 50,000 acres of country land granted by Parliament have been selected in four blocks, which will be conveyed to the University as soon as the necessary preliminary steps have been taken.

The Council felt that it would be impossible to open the University until after the appointment of the Elder Professors; but in the meantime they were desirous of availing themselves of the assistance which the Hughes Professors were willing to render. They therefore arranged for the delivery of popular lectures by these Professors upon subjects connected with their Chairs, and by other gentlemen, which have been well attended, and have been both interesting and instructive. They arranged also for the holding of classes; and, as an encouragement to the students attending them, appropriated small sums for prizes.

The Council did not think it was wise to expend any portion of the present endowment of the University in the erection of buildings, and they consequently are in some degree of uncertainty as to the arrangements that they may be able to make for the delivery of lectures and the holding of classes. They have been indebted to the courtesy of the Governors of the South Australian Institute for their place of meeting and for the use of rooms for the delivery of lectures and holding of classes by the Professors. But even if this accommodation could be continued, which it is to be feared would not be the case, it would be inadequate to the wants of the University; and the Council have not yet succeeded in obtaining any building suitable for the purpose. They fear, consequently, that some temporary inconvenience may be felt from the want of adequate accommodation, but not, they hope, in any way to affect the efficient working of the University. It will, however, be one of their first objects to secure the erection of a building adequate to the requirements of the University, and, if possible, worthy of the object and of the Colony.

An abstract of the income and expenditure of the University during the first year, duly audited, is annexed to this report.

The Council feel that their work during the past year has been only preliminary, and that there have been few results to report. This has

been inevitable under the circumstances; but they trust that in future years they may be able to exhibit some substantial results from the beginning they have now made. It must be remembered, however, that the success of the University must mainly depend upon the action of the people of South Australia, and that it is to their interest in its prosperity, and their readiness to avail themselves of the means of instruction it is intended to supply, that we must look for its permanent usefulness and stability.

Signed on behalf of the Council,

R. D. HANSON,
Chancellor of The University of Adelaide.

Adelaide, January 31st, 1876.

Account of the Income and Expenditure, furnished in compliance with the 18th Section of Act 37 and 38 Victoria, No. 20, 1874.

INCOME.		EXPENDITURE.	
	£ s. d.		£ s. d.
Endowment—		Annual Expenses—	
Donations received	489 18 0	Salaries	1,450 0 0
Building—		Charges: Advertising, Stationery, &c.	72 11 6
Donation received	5 0 0	Incidental Expenses	151 15 4
Maintenance—		Lectures	17 17 0
H.M. Government, Grant for 1874-5	1,293 3 0	Prizes	10 0 0
Ditto account of 1875-6	500 0 0		
One year's interest on £40,000, invested at 5 per cent. per annum	1,893 3 0	Agent-General, S.A.—For advance to Professors and the purchase of Apparatus and Books	1,702 3 10
Annual Subscriptions	2,400 0 0	Investments.—Deposited with the Bank of Adelaide, at 5 per cent. per annum	1,161 10 0
Fees from Students	10 10 0	Balance in Bank	1,900 0 0
Incidental receipts	6 15 0		54 14 1
	13 1 11		
	<u>4,323 9 11</u>		<u>£4,818 7 11</u>

Adelaide, 31st December, 1875.

HENRY AYRES, Treasurer.

APPENDIX E.

ANNUAL REPORT, 1876.

Report of the Proceedings of The University of Adelaide during the Year 1876.

To His Excellency Sir ANTHONY MUSGRAVE, Knight Commander of the Most Distinguished Order of Saint Michael and Saint George, Governor in and over Her Majesty's Province of South Australia and the Dependencies thereof, &c., &c.

The Council of The University of Adelaide have the honor to present to your Excellency the following report of the proceedings of the University during the year 1876:—

FIRST ACADEMICAL YEAR.

The arrival of the Professor of Mathematics in the month of March last, and of the Professor of Natural Science in the preceding December, enabled the Council to carry out their purpose of initiating the studies of the University without the loss of another year; but the first Matriculation Examination was deferred till September last, in order that candidates might have sufficient opportunity to prepare themselves in the prescribed subjects—the selection and announcement of which had been unavoidably delayed. The Professors, however, formed their classes in March, and commenced to deliver their lectures, although in consequence of the unexpected death, early in that month, of the late Chief Justice, Sir R. D. Hanson, the Inaugural Meeting was postponed until the 25th of April.

LECTURES.

Anticipating that many persons, who felt unable or unwilling to study all the subjects comprised in the "Arts" course, would nevertheless avail themselves of any opportunity that presented itself of taking up some one or more of those subjects, the Council resolved to extend the usefulness of the University by allowing such persons, as non-matriculated students, to attend such of the classes as they might select. As an experiment, also, in the same direction, courses of lectures to be delivered during the afternoons and evenings were provided, in order to suit as far as possible the convenience of persons whose business avocations occupied them during the day.

The Council regret that owing to the paucity and irregularity of the attendance the evening lectures have not proved a success. The experiment, therefore, will not be continued. It is intended, however, during the year 1877, to substitute afternoon tuition to meet the expressed wishes of some young men who have intimated their intention of attending such tuition with the view of obtaining a Degree. For the benefit of *matriculated* students, therefore, who may be unable to attend the ordinary lectures of the University, one or other of the Professors will, during Term time, attend every week-day (except Saturday), between 4 p.m. and 6 p.m., in order to explain difficulties and generally to superintend the reading of such students. Any undergraduate wishing to avail himself of this privilege must obtain an order of the Council dispensing with his attendance on lectures.

The Council, while discontinuing evening lectures to students *alone*, have arranged for the delivery by Professors Lamb and Tate during the year 1877 of evening lectures, which it is hoped will prove highly instructive to numerous persons desirous of self-improvement, besides the students of the University. The subjects treated of will be handled in a manner at once scientific and popular. Professor Lamb will deliver a short course of lectures on "Sound and the Physical Basis of Music," and another on "Optics, with special reference to the Theory of Vision." Professor Tate has chosen for the subject of his course "The Ancient Physical Geography and Geology of South Australia." These lectures will be open to the public on payment of a small fee.

STUDENTS AND CLASS LISTS.

During the past year two gentlemen, who had previously passed the Matriculation Examination of the University of Melbourne, were admitted to matriculate in that of Adelaide without further examination. Of these one has not continued his studies. Ten other gentlemen passed the Matriculation Examination in September, but only five of them have continued the University career. The total number of matriculated students pursuing their Academical course is at present six, of whom four notified their intention of presenting themselves at the Ordinary Examination in December, 1876. One of these was prevented by illness from fulfilling his purpose; another failed to pass; and the remaining two were placed respectively in the first and third classes.

The total number of non-matriculated students who during the past year joined one or more of the classes was fifty-two, of whom thirty-three were ladies. Of the non-matriculated students, only eleven (all ladies, who had attended Professor Davidson's classes) presented themselves at the Ordinary Examination for examination in one or more of the subjects of his lectures. The Class-lists will be found in the Appendix to this Report.

CHANGES IN THE COUNCIL AND OFFICERS.

The death of the late Chief Justice (Sir R. D. Hanson) rendered vacant the office of Chancellor of the University and a seat in the Council.

The Lord Bishop of Adelaide (then Vice-Chancellor) was elected Chancellor; His Honor the Chief Justice of South Australia was elected Vice-Chancellor; and W. H. Bunday, Esq., was appointed to the vacant seat in the Council.

SITE AND BUILDINGS.

Some dissatisfaction having been expressed at the grant to the University of that part of the site which lay opposite to the end and eastward of Pulteney-street, the Council expressed their willingness to exchange that portion of the site for a piece of land of equal size, and adjoining on the west the site originally granted to the University. An Act of Parliament enabling the proposed exchange to be effected has been passed.

The Act by which the University was established has not provided any funds for the erection of the building necessary even to commence the work of a University; but in its last Session Parliament voted £2,000 for building purposes. Other sums of money, the aggregate of which is £860, have been paid or promised to the Building Fund. The Council have invited designs for the building, and several plans have been lately received. It is hoped that the Council will be able shortly to adopt one suitable for the purpose; and the Council intend, when a plan has been selected, to make a further appeal to the public to provide funds for the erection of the building.

LANDS.

In pursuance of powers conferred by the Act No. 20 of 1874, four blocks of land, namely:—15,000 acres at Wirreanda, 15,000 at Parnaroo, 10,000 in the District of Tatiara, and 10,000 on Craigie's Plains, have been recently granted to the University. The last-named block has been let on agricultural leases for fourteen years at a rent of 7d. per acre for the southern half, and of 6d. per acre for the northern half. The other three blocks of land have been let to the late Crown lessees thereof for pastoral purposes from the 1st of July, 1876, on leases which will expire at the end of 1878. The Council hope that in two or three years, should agricultural settlers take up neighboring lands for farming purposes, the University lands, or part of them, may be advantageously leased to such agriculturists. The Wirreanda and Parnaroo blocks have been let at a uniform annual rent of 6d. per acre, in addition to £10 per cent. per annum on the sums which the University paid to the Government for the improvements thereon. The rent of the Tatiara lands is 9d. per acre, with a like addition. The sum paid to the Government as the value of the improvements on these three blocks is £1,922 9s. 1d.

GIFT TO THE UNIVERSITY.

To the public spirit and generosity of John Howard Angas, Esq., the University is indebted for the creation and liberal endowment of a Scholarship, which the Council have designated "The Angas Engineering Scholarship," and which is to be of the annual value of £200, and tenable for three years. It is proposed by Mr. Angas that the Scholar-

ship shall be competed for every three years by graduates of this University who shall be under twenty-eight years of age, and shall have resided five years in the Province. It is to be held conditionally on good behaviour and satisfactory progress. The examination for it will be specially in Mathematics and Natural Science. Each holder must take a Degree in Natural Science at the University of London, and be trained at a school of Civil Engineers. During his training in Engineering Science the scholar must spend six months in visiting the great engineering works of Europe or America, and on his return to South Australia must present the University with a report of his tour with special reference to the Mechanical and Engineering Arts. When this report has been furnished and approved by the Senate, the scholar will receive a further sum of £100 towards his travelling expenses.

CONSTITUTION OF THE SENATE.

The election of members of the Council belongs, according to the Act, to the Senate. The Council being impressed with the importance of constituting that body, have invited all Graduates in the Colony, of any University recognized by that of Adelaide, who hold any of the Degrees of Master in Arts, or Doctor of Medicine, Laws, Science, or Music, and other Graduates of three years' standing, to make known to the Registrar their Degrees. The Senate will be constituted when the Council have reported to the Governor that the number of Graduates admitted by this University to such Degrees, whether *ad eundem* or otherwise, is not less than fifty, and such report shall have been published in the *Government Gazette*.

PRIZES.

The Chancellor has presented a prize of the value of £5 to Milton Moss Maughan for passing in the first class at the first year's Examination for the B.A. Degree. The Chancellor has also presented a prize of like value to Sarah Magarey (a non-matriculated student), who obtained the highest place at the Class Examinations in Mental and Moral Philosophy, as well as English Literature.

SCHOLARSHIPS.

This Council having been informed by the Council of Education that they had established three Scholarships, tenable for three years at this University, and to be competed for annually, resolved to remit the fees payable to the University by such scholars when matriculated, and thus afford them a free education. They are also exempted from passing the Matriculation Examination.

CONCLUDING REMARKS.

In conclusion, the Council reiterate emphatically, in the words of their late Chancellor (Sir R. D. Hanson), the closing sentiment of their Report for the year 1875, that "the success of the University must mainly depend upon the action of the people of South Australia, and their readiness to avail themselves of the means of instruction it is intended to supply."

It is a gratifying sign of the times that so large a number as thirty-three ladies have, as non-matriculated students, attended some of the University Classes during the first year of its operation, for it is certain that high mental culture on their part must react on the other sex, and give a powerful impetus to self-education, and the acquirement of literary as well as social knowledge. It is hoped that ladies will become matriculated students, and compete for Degrees and Scholarships.

An abstract, duly audited, of the income and expenditure during the year 1876 is annexed to this report.

Signed on behalf of the Council,

A. ADELAIDE,

Chancellor of The University of Adelaide.

Adelaide, January 19, 1877.

APPENDIX.—CLASS LISTS, 1876.

I. MATRICULATION EXAMINATION, SEPTEMBER, 1876.

FIRST CLASS.

(In order of merit.)

Bollen, Frederick James		Colton, Edwin Blacker
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SECOND CLASS.

(In alphabetical order.)

Caterer, Thomas Ainslie		Langsford, William Alfred
Herbert, Charles Edward		Lathlean, Richard Hedley
James, Johnson		Niesche, Frederick William
Jefferis, James Eddington		Wells, Alfred James.

II. LIST OF STUDENTS WHO MATRICULATED DURING 1876.

Caterer, T. A.		Langsford, A. (Melbourne Certificate)
Herbert, C. E.		Maughan, M. M. (Melbourne Certificate)
James, J.		Niesche, F. W.
Jefferis, J. E.		
Langsford, W. A.		

III. FIRST ORDINARY EXAMINATION FOR THE DEGREE OF B.A.,
DECEMBER, 1876.

FIRST CLASS.

Maughan, Milton Moss.

SECOND CLASS.

None.

THIRD CLASS.

Caterer, Thomas Ainslie.

IV. LIST OF NON-MATRICULATED STUDENTS

who passed in the undermentioned subjects at the Ordinary Examination in December, 1876.

ENGLISH LITERATURE.

Marianne Crooks (second place)		Helen Lyall (third place)
Amy Giles		Sarah Magarey (first place)
Alice M. Giles		Ellen L. Seiffert
Clara Goode (third place)		Rosetta K. Thomas.
Annie W. Laughton		

MENTAL AND MORAL PHILOSOPHY.

Martha E. Counsell (third place)		Clara Goode
Marianne Crooks (second place)		Annie W. Laughton
Amy Giles		Sarah Magarey (first place)
Alice M. Giles		Ellen L. Seiffert
Lilian M. Giles		Rosetta K. Thomas.

ENGLISH LANGUAGE.

Lilian M. Giles.

THE UNIVERSITY OF ADELAIDE.

Account of Income and Expenditure for the year 1876, furnished in compliance with the 18th Section of Act 37 and 38 Victoria, No. 20, 1874.

INCOME.		EXPENDITURE.	
	£ s. d.		£ s. d.
Balance from 1875	54 14 1	Annual Expenses—	
Endowment—Donations received	110 5 0	Salaries	2,350 0 0
Building—Donations received	105 0 0	Fees paid to Professors	135 5 0
Investments—Deposits withdrawn from the Bank of Adelaide	2,000 0 0	Charges	309 9 2
Maintenance—		<i>Disbursements</i>	2,794 11 2
H.M. Government Grant, balance of 1875-6	1,400 0 0	Books	11 6 11
Ditto on account of 1875-7	1,000 0 0	Laboratory	5 0 0
Interest	2,400 0 0	Agent-General S.A.—For purchase of Scientific Instruments	300 0 0
Rent	2,505 12 1	Investments—Deposited with Bank of Adelaide, at 45 per cent. per annum	1,400 0 0
Annual Subscriptions	212 11 5	Country Lands—H.M. Government, value of improvements on 50,000 acres	2,134 15 1
Fees from Students	27 1 0	Balance in Bank	875 9 7
Books sold to Students	198 11 6		
	4 12 0		
	5,348 8 0		
	£7,618 7 1		£7,618 7 1

Audited, and found correct,
Adelaide, January 9th, 1877.

HENRY AYERS, Treasurer.

FREDERIC WICKSTEED }
W. S. DOUGLAS } Auditors.