

Government of Madras

EDUCATIONAL DEPARTMENT.

Recd.

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} 1913.

Enclosures

Spare copies

G.O. No. 1066, 19th November 1913.

School-leaving Certificate.

Informing the Government of India that the Syndicate of the Madras University is prepared to admit holders of the Government of India — to the Intermediate course in Arts.

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GOVERNMENT OF MADRAS.

EDUCATIONAL DEPARTMENT.

READ—the following papers :—

I

G.O. Nos. 176-77, Educational, dated 25th February 1913.

ABSTRACT.—Informing the Government of India that the Syndicate of the University of Madras is prepared favourably to consider the question of admitting to the local Intermediate course in Arts students holding school final certificates from the Simla school.

II

Letter—from the Hon'ble Mr. H. SHARP, C.I.E., Joint Secretary to the Government of India, Department of Education (Education).
To—the Secretary to the Government of Madras, Educational Department.
Dated—Simla, the 16th September 1913.
No.—1802.

With reference to the correspondence ending with your letter No. 177, dated the 25th February 1913, I am directed to forward a copy of the rules, syllabus and a form of certificate, which have been drawn up by a committee including representatives of the Universities of Bombay and Calcutta, in connection with the school-leaving certificate examination for schools for the children of the Government of India employees at Simla and Delhi, and to request that, with the permission of the Governor in Council, the Government of India may be informed whether the Madras University will admit holders of this certificate to the Intermediate course in Arts and Science.

ENCLOSURES.

(i)

Government of India school-leaving certificate (for schools in Simla under the Government of India and for schools in the Province of Delhi).

1. The school-leaving certificate here prescribed represents a record of the school career of a pupil and of an examination written and oral which closes the school course. The certificate is divided into two parts :—

A.—Preliminary record.

B.—Completion of certificate.

The possession of part A merely indicates that a pupil has studied in a school. Part B indicates that the pupil has successfully completed the course and succeeded in the examination. It is accepted in lieu of the matriculation for Government employment and is recognised by the universities of as the equivalent of that examination and as admitting to university courses.

2. The rules for the filling of part A are as follows :—

(i) The pupil must have attended one or more secondary schools recognised by the Government of India, by a Local Government or by a university as teaching up to the completion of the high school course for at least four years previous to the attainment of the certificate. The final year must have been passed in one of the schools recognised by the Government of India for purposes of this certificate.

(ii) Evidence must be shown that previous to entering the form fourth from the highest of the recognised school or schools the pupil was receiving instruction under proper conditions.

(iii) An annual mark will be shown on the certificate for each subject separately during each of the last two years as a rule or for one year when that is the extent of the pupil's enrolment in a school recognised for purposes of this certificate. This mark is to be obtained by a reduction of marks obtained in class or at school tests to 200, 150 or 100 as the maximum mark for the year.

(iv) It is not necessary that the pupil should have attained any minimum mark during any year in order to gain a certificate in form part A; but it is the duty of the headmaster to enter a general remark both as regards work and as regards conduct.

(v) Each page of the certificate will be signed by the inspecting officer (who shall be an inspector of schools or of at least equal status) at his annual visit, if necessary after enquiry.

(vi) Before a certificate is issued it will be sent to the office of the inspecting officer for endorsement and registration.

(vii) If a boy leaves the school in which he is studying at any time during his progress through the four highest classes he is entitled to take his certificate so far as completed with him, a note being entered on page 2 as to the cause of his leaving and endorsed by the inspecting officer.

3. A pupil will be entitled to compete for part B of the certificate if he fulfils the following conditions—

(i) His attendance during a year spent in each of the four highest forms must have amounted to 70 per cent. of the number of working days. In case of transfer from other districts the attendance must have been satisfactory according to the standard laid down by the local education authority.

The number of working days in the school year shall be fixed by the Chief Commissioner of Delhi or the inspecting officer, as the case may be.

The week should ordinarily contain 27 hours of school work, apart from hours set apart for exercise. The total of hours of work during the week must be equally distributed over days.

(ii) The conduct and general work of the pupil must have satisfied the headmaster and the headmaster's remarks must have received the endorsement of the inspector so far as the knowledge of the latter enables him to judge.

(iii) The annual marks obtained in class or in school tests must amount in each year to 70 in each subject carrying 200 marks, 55 in each subject carrying 150 marks and to 35 in each subject carrying 100 marks.

(iv) The candidate must have completed 16 years of age before the commencement of the examination.

4. The method of applying for admission to the examination necessary for part B of the certificate is as follows :—

(i) The headmaster will reduce the marks obtained in each subject during the last two years to one-half and will enter them in black ink in the certificate.

(ii) He will fill up the certificate and forward it to the inspecting officer together with a receipt for Rs. 12 for each certificate so sent.

5. The conduct of the examination will be as follows :—

(i) A committee which shall be called the central examination board, and of which the inspecting officer shall be the president will select examiners who will both set and value papers. Two papers in each year (so far as possible in a rotation of subjects) shall be set and valued by two examiners, each selected by an Indian University (the Universities being asked in rotation to make this selection; e.g., Calcutta and Madras in one year, Bombay and Allahabad the next, the Punjab and Calcutta the next, and so on).

(ii) A local committee will also be formed for the oral examination, etc., in each school; the headmaster of the school concerned shall be a member of this committee.

(iii) Papers will be set in the following subjects only :—

Compulsory.—English, mathematics, a vernacular, general knowledge.

Optional.—A classical language, additional mathematics, additional history and geography.

The papers will be given and answered in the schools to be examined or at some convenient place on stated dates.

(iv) When the examiners have corrected and valued the papers, they will forward them to the inspecting officer and a list of the names of candidates will be made showing clearly (a) those who have obtained less than 70, 55 or 35 marks out of papers carrying 200, 150 and 100 marks respectively, (b) those whose mark in any subject is about 70, 55 or 35, (c) those whose marks are clearly above this limit in all subjects and (d) those whose marks in one subject carrying the maximum of 200 and in any two other subjects exceed 85 per cent. of the number

of marks attainable in each paper. These marks will be added to the annual marks. Those whose combined mark in any subject falls short of 140 out of 400, 110 out of 300, or 70 out of 200, or whose annual marks (when subjects are not examined) fall short of 70 out of 200, 55 out of 150, or 35 out of 100, are put down as having failed. Those whose examination marks are about the minima shown above, or whose examination and annual marks exhibit strong differences are orally examined. Those whose combined marks and (in non-examination subjects) annual marks exceed the minima are considered to have passed. Those whose examination mark in one examination subject carrying 200 marks and in any two other papers exceeds 85 per cent. of the number of marks attainable in each paper or whose total annual and examination marks in all subjects come to 1,310 are considered to have passed with distinction.

(v) The inspecting officer will visit each school in company with the local committee and will discuss the work of individual pupils with the headmaster and the responsible teachers and will conduct an oral examination in English, simple hygiene, simple science and typewriting in the case of each successful pupil. He may also conduct practical tests in drawing and manual training, and oral tests in geography and history. He is at liberty to hold an oral test in any doubtful case or where any discrepancy is apparent.

(vi) Before awarding the certificate the central board will discuss the standard of the papers, the award of marks, and decide the doubtful cases and any instances of marked discrepancy between the mark obtained in examination and that awarded during the previous two years.

(vii) The final results will be published in the *Gazette of India*.

(viii) Where it is obvious that a headmaster has presented pupils quite unfit for the examination or irreconcilable differences occur between the annual and examination marks, the recognition of the school may be withdrawn on the recommendation of the inspecting officer.

(ix) The inspecting officer will issue the certificates noting the marks obtained (examination marks being shown in red) and stating clearly whether a pupil has passed or failed.

(x) A pupil who fails may present himself for re-examination in all subjects after a further year of study at a school recognised for purposes of this certificate and on payment of a fee of Rs. 12. An addition will be made to his certificate whether he pass or fail. No pupil may appear at more than three examinations.

(xi) A candidate may, on the payment of Rs. 6 for each group, present himself for examination in one or more of the optional groups at examinations subsequent to the one in which he obtained the school leaving certificate. Such candidates must satisfy the examiners in each subject of the groups taken.

The subjects of study and the maxima value obtainable in annual and examination marks are as follows:—

I.—Compulsory.

	Annual mark (for two years' work).	Examination mark.	Total.
English	200	200	400
Mathematics	200	200	400
A Vernacular	100	100	200
History and Geography	150	150	300
General knowledge	100	100	200
Drawing and Manual Training	100	100	200
			1,350

II.—Optional.

Any one of the following groups must be taken:—

	Annual mark (for two years' work).	Examination mark.	Total.
(a) { A classical language—Sanskrit, Arabic, Persian or Latin	150	150	300
Simple hygiene	150	150	300
(b) { Additional mathematics	150	150	300
Simple Science	100	100	200
(c) { <i>Either</i> additional mathematics or additional history and geography	150	150	300
Type-writing, book-keeping and commercial arithmetic	100	100	200
			400
			1,750

Government of India School Leaving Certificate.

SYLLABUS OF THE EXAMINATION.

English.

(Compulsory: 2 papers; marks 200.) Books or portions of books in prose and poetry will be prescribed of which a detailed knowledge will be required; certain other books will be recommended as suitable for reading in the high school classes. One recommended book should deal with stories or chapters in English history.

	Marks.
Paper (i) Translation from a vernacular into English	70
Two essays on the subject matter of the recommended books. .. .	30
Paper (ii) Questions on the prescribed books, and on unseen passages .. .	70
Grammar and composition	30

Mathematics.

(Compulsory: 2 papers; marks 200.)

(a) *Arithmetic*.—The principles and processes of arithmetic applied to whole numbers and vulgar and decimal fractions. The metric system. Contracted methods of multiplication and division of decimals; practice; ratio and proportion; square and cubic measure; direct applications of the term *per cent.* including interest; present worth and discount; stocks and shares; profit and loss; exchange; square root.

(b) *Algebra*.—The four simple rules: fractions; greatest common measure; least common multiple; factors; simple equations of one or more unknown quantities with easy problems; square root; simple questions on fractional and negative indices; quadratic equations of one unknown quantity with easy problems; easy graphs.

Squared paper will be provided.

(c) *Geometry*.—The course includes both practical and theoretical geometry, and every candidate will be expected to answer questions in both branches of the subject.

The questions on practical geometry will be set on the constructions contained in the annexed Schedule A, together with easy extensions of them. All figures should be drawn accurately, for which purpose every candidate should provide himself with a graduated scale, a pair of set squares, a protractor, a compass and a hard pencil.

The questions on theoretical geometry will consist of theorems contained in the annexed Schedule B, together with easy extensions and deductions with numerical illustrations. Any proof of a proposition will be accepted which appears to the examiners to form part of a systematic treatment of the subject; the order in which the theorems are stated in Schedule B, is not imposed as the sequence of their treatment. In the proof of the theorems hypothetical constructions will be permitted.

Additional Mathematics.

(Optional: 2 papers; marks 150.)

The examination will consist of two papers and a practical test.

1. *Algebra*.—Fundamental laws and definitions; factors; remainder theorem; highest common factor; and lowest common multiple; elementary properties of fractions; simple quadratic and simultaneous equations; elementary theory of equations; elementary properties of surds and imaginary expressions; involution and evolution; elementary propositions in ratio, proportion and variation; simple progressions; graphical representation of simple functions.

2. *Mechanics*.—Definitions of velocity, acceleration, angular velocity, etc., measurement of such quantities when uniform or variable and their graphical representation; motion under constant acceleration; laws of motion; simple propositions and problems on work and energy.

Parallelism law for the composition of velocities, accelerations, forces; resultant of concurrent forces; triangle of forces, and polygon of forces; moments and elementary propositions connected therewith; resultant of parallel forces, couples and their fundamental properties; friction; determination of centres of gravity in simple cases; specific gravity; mass; density; pressure of a gas; Boyle's law.

3. *Trigonometry*.—Methods of measuring angles; trigonometrical ratios and their values in special elementary cases; relations between the trigonometrical ratios; trigonometrical transformations; multiple and sub-multiple angles; solution of triangles; area of a circle; properties of logarithms; the use of logarithmic tables; elementary properties of triangles; measurements of heights and distances.

Practical examination.—The practical examination will be held in any of the following:—

Simple measurements of areas; volumes; mass; density and specific gravity.

The measurement of the height of a tower or distance between two inaccessible objects with the aid of simple instruments for measuring angles; parallelogram of forces; determination of the centre of gravity; use of balance.

Vernacular.

(Compulsory : one paper ; marks 100).

	Marks.
Translation from English into the vernacular	40
Questions on grammar	20
Essay	40

History and Geography.

(Compulsory : no final examination.)

History.—Simple outlines of Indian and English history dealing very briefly with the period prior to the 15th century A.D. and the subsequent history of India in greater detail. Elementary ideas in general and particularly English history should also be imparted by the teacher.

Geography.—The globe ; the poles ; equator and zones.

Latitude and longitude. Maps.

Principal physical features of the earth ; simple account of the atmosphere.

Movements of the earth ; day and night ; The seasons ; eclipses.

The principal countries of the world, their peoples, their political and economic importance, the chief towns and most noteworthy physical features.

The detailed geography of the school district and the geography of Great Britain and India in some detail.

Discovery and opening of trade routes to India. Salient features of the economic geography of the world. Means and instruments of transport. Principal routes.

Additional History and Geography.

(Optional : two papers ; marks 150).

History—Indian.—Progress of India under the British rule and the present administration of India, on the model of the Calcutta University Matriculation syllabus.

British.—The Victorian age.

Geography—

(i) More detailed political geography of the world.

(ii) Political and general geography of India and Burma, including the following points:—

(1) Natural regions and surface features.

(2) Distribution of rocks and economic minerals.

Action of weather on rocks, formation of soil. The work of rain and rivers alluvium.

(3) Climate.

(4) Vegetation.

Forest, pasture land, agricultural land, desert. Areas rendered cultivable by systems of irrigation. The distribution of teak ; sal ; and cocoanut trees ; of rice, millet, wheat ; of cotton, tea and jute.

(5) Animal life.

The principal animals and their distribution.

(6) Industries.

The leading industries and their location. Circumstances favouring their growth.

(7) Population.

Approximate number and density. Distribution of races, languages, and religions. Agricultural and non-agricultural elements of the population.

(8) Means of communication.

The chief roads, waterways, and railways, and mountain passes.

(9) Commerce.

The principal commodities exchanged and the countries of exchange. The chief ports, and their leading imports and exports.

General knowledge.

(Compulsory : one paper, 100 marks.)

Questions shall be limited to topics which are deemed to fall within the knowledge which the average boy is expected to acquire in the course of the school career. Papers should be set once a month during the last year and the marks recorded. A similar paper will be set by the examiner.

Drawing and Manual Training.
(No final examination.)

Drawing.—Freehand and memory drawing, and colour drawing as defined in Schedule C.

Manual work—(a) Sloyd.—For manual work it will be expected that schools will provide systematised instruction in educational hand-work from the lowest classes approximately on the lines indicated below. In the lowest classes practical activities of the kindergarten should be prescribed for children from 5 to 8 years of age. From the age of 8 to the age of 10 paper cutting and folding and cardboard modelling on such a plan as is followed in Rich's Paper Sloyd should be included in the hand-work. From 10 to 12 years educational hand-work should take the form of cardboard modelling, further developed and light wood-work. From 12 to 15 years in the three classes immediately below the highest class of a High school, sloyd or advanced wood-work should be taught. A series of models and exercises (from 8 to 10 for each class) may be arranged in progressive order. The hand-work of the highest class may be limited for want of time to practical work in the science laboratory or in the case of pupils not proceeding to a University take the form of lathe-work, carving or metal-work.

(b) *Carpentry.*—As an alternative to sloyd instruction the following syllabus of drawing and carpentry may be taken to indicate approximately the kind of instruction which will be accepted.

Drawing—(a) Use of drawing-board ; T-square ; set square compasses ; construction and use of scales ; construction and use of protractor.

(b) Construction of simple geometrical figures ; areas of simple geometrical figures (1) by ordinate method, (2) by the use of squared paper.

(c) Orthographic projection—Projection of points, lines, plane figures ; determination of true length of line, having given its Projections ; determination of true shape of plane figure, having given its projections ; projection of regular solids ; sections of solids, and solids of revolution.

(d) Isometric projection.—Projection of simple solid figures.

(e) Drawing of a simple piece of wood-work, such as carpentry joint, box chair, stool, table, door, window, bookcase. The drawings to be to scale, from orthographic or isometric sketches and given data.

(f) Sketching.—Making dimensioned sketches of simple actual objects such as are mentioned under the preceding head, the dimensions being obtained by actual measurements. The sketches to be intelligible, and sufficiently complete to afford all the data required for making a drawing of the object to scale.

Practical Carpentry.—(a) Use of tools : plane square, rule, marking gauge, compasses, chisel, saw, turning lathe.

(b) Construction of a simple piece of work :—

1. Joints.—Halved, mortise and tenon, dovetailed, scarf, tongue and groove.

2. Table, chair, box, bookshelf, model roof truss.

(c) Elementary knowledge of "timber". Growth, structure, seasoning, shrinkage, properties, and uses of the kinds of wood in ordinary use. Examiners will inspect the classes during instruction and also the pupil's work of the previous year, and may test the work of the class as a whole.

Classical Language.

(Optional : 150 marks.)

(i) Passages from the prescribed texts for translation into English with (a) grammatical questions and (b) questions on the subject matter of the texts : 75 marks.

(ii) Questions involving the practical use of the elementary rules of grammar : 30 marks.

(iii) Translation of simple sentences from English into the classical languages : 45 marks.

Hygiene.

(Optional : no final examination.)

Simple lessons on food and cooking, light, air, water, the dwelling and its surroundings, clothing, physical exercise, sleep, general cleanliness, conservancy, pollution of water-supply, common diseases, disinfection, etc. Simple notions of physiology.

Simple Science.

(Optional : no final examination.)

Either (a) elementary physics and chemistry, or

(b) Botany.

(a) *Elementary physics and chemistry.*—[Practical work must be done systematically by the pupils themselves].

Measurements of length, area, volume, mass and weight, the balances. Density, specific gravity, principle of Archimedes. The three states of matter.

Heat.—Expansion of solids, liquids and gases, temperature, thermometers, melting and boiling points. Conduction, convection, and radiation. Unit of heat, specific heat, latent heat.

Light.—Rectilinear propagation of light. Reflection, refraction, mirrors, simple lenses and prisms. Position of object and image.

Magnetism.—Attraction and repulsion, magnetization, terrestrial magnetism, magnetic meridian. The compass.

Electricity.—Production by friction. Attraction and repulsion. The electroscope, conductors and insulators.

A simple cell, magnetic and heating effect of a current.

Chemistry.—Common properties of common substances. Solubility, crystallization, distillation. Mixtures and compounds, elements and compounds. Metals and non-metals. The atmosphere, combustion, rusting, oxidation. Oxygen and nitrogen, water, hydrogen, carbon, carbonic acid, chalk. Animal and Plant life.

(b) *Botany*.—(Optional: no final examination).

[This subject is to be taught as a branch of nature study and illustrated by the common plants of the locality.]

The chief types of flowering and flowerless plants, illustrating the range and variation in habitat of the group of plants comprised in the vegetable kingdom.

The chief organs: root, stem, leaves, flowers, fruits and seeds of common plants of the locality.

Seeds and seedlings.—The structure of seeds. Comparison of types (a) the bean, (b) castor oil, (c) date. Germination. Food material in seeds.

The root.—Development of the root from embryo of the seed. Structure of a typical root and its functions. Root hairs. Common modifications of typical root structure to subserve definite functions. Root storage. Adventitious roots.

The stem.—Development of the stem from embryo of the seed and from buds; structure of typical stems (of monocotyledons and dicotyledons); common modifications of typical stems as adapted to specialized habits; climbers, rhizomes, etc.; vegetative reproduction in grafting, budding and growth from cuttings.

The leaf.—The structure of a green leaf; the functions of the leaf; transpiration; assimilation and respiration; the forms of leaves; translocation and storage of food.

Inflorescence and flowers.—The parts of flowers; form of flowers; pollination and fertilization; the development of seeds.

Fruits and the dispersal of seeds.—The development of fruits; the various methods of seed dispersal.

Practical work.—(1) The seed; recognition and dissection of types.

(2) Identification of the different forms of roots. The functions performed by this as shown by their characters.

(3) Recognition of the various parts of examples of dicotyledonous and monocotyledonous stems and leaves.

(4) Description of floral structures, and of common examples of adaptation to different methods of pollination.

(5) Recognition of examples of common types of fruits and modifications aiding seed dispersal.

(6) The description of local plants of economic importance.

Typewriting, Shorthand, Book-keeping and Commercial Arithmetic.

(No final examination.)

1. Taking down in shorthand a passage of ordinary difficulty of 560 words and a letter of 240 words dictated at the rate of 60 words a minute and transcribing the same into longhand.—2 hours.

2. Typewriting a letter of 200 words, a passage of 200 words (with 2 or 3 carbon copies) and typewriting a balance sheet or a tabular statement with not more than four columns.—1 hour.

3. Double entry book-keeping, keeping the bought and sold books, the cash and bill books, the journal, and recording therein transactions involving purchases and sales; cheques, bills receivable and payable, personal accounts, real accounts and nominal accounts like rent, salaries, interest, discount, bad-debts, and depreciation. Posting and closing the ledger and preparing the balance sheets and the profit and loss account. Single entry book-keeping. Keeping the subsidiary books, posting and closing the ledgers.

Preparation of invoices, account sales, and interest accounts with interest products. Direct exchange between India and (1) England, (2) France, (3) Japan.

SCHEDULE A.

Bisection of angles and of straight lines.

Construction of perpendiculars to straight line.

Construction of an angle equal to a given angle.

Construction of parallels to a given straight line.

Simple cases of the construction from sufficient data of triangles and quadrilaterals.

Division of a straight line into a given number of equal parts or into parts in any given proportions.

Construction of a triangle equal in area to a given polygon.

Construction of tangents to a circle and of common tangents to two circles.

Simple cases of the construction of circles from sufficient data.

Construction of a fourth proportional to three given straight lines and a mean proportional to two given straight lines.

Construction of regular figures of 3, 4, 6 or 8 sides in or about a given circle.

Construction of a square equal in area to a given polygon.

SCHEDULE B.

Angles at a point.

If a straight line stands on another straight line, the sum of the two angles so formed is equal to two right angles, and the converse. If two straight lines intersect, the vertically opposite angles are equal.

Parallel straight lines.

When a straight line cuts two other straight lines, if

(i) a pair of alternate angles are equal, or

(ii) a pair of corresponding angles are equal, or

(iii) a pair of interior angles on the same side of the cutting lines are together equal to two right angles; then the two straight lines are parallel; and the converse.

Straight lines which are parallel to the same straight line are parallel to one another.

Triangles and rectilineal figures.

The sum of the angles of a triangle is equal to two right angles.

If the sides of a convex polygon are produced in order, the sum of the angles so formed is equal to four right angles.

If two triangles have two sides of the one equal to two sides of the other, each to each, and also the angles contained by these sides equal, the triangles are congruent.

If two triangles have two angles of the one equal to two angles of the other, each to each, and also one side of the one equal to corresponding side of the other, the triangles are congruent.

If two sides of the triangle are equal, the angles opposite to these sides are equal and the converse.

If two triangles have the three sides of the one equal to three sides of the other, each to each, the triangles are congruent.

If two right-angled triangles have their hypotenuses equal, and one side of the one equal to one side of the other, the triangles are congruent.

If two sides of a triangle are unequal, the greater side has the greater angle opposite to it and the converse.

Of all the straight lines that can be drawn to a given straight line from a given point outside it, the perpendicular is the shortest.

The opposite sides and angles of a parallelogram are equal, each diagonal bisects the parallelogram and the diagonals bisect one another.

If there are three or more parallel straight lines and the intercepts made by them on any straight line that cuts them are equal, then the corresponding intercepts on any other straight line that cuts them are also equal.

Areas.

Parallelograms on the same or equal bases and of the same altitude are equal in area.

Triangles on the same or equal bases and of the same altitude are equal in area.

Equal triangles on the same or equal bases are of the same altitude. Illustrations and explanations of the geometrical theorems corresponding to the following algebraical identities:—

$$K(a+b+c+\dots)=Ka+Kb+Kc+\dots$$

$$(a+b)^2=a^2+2ab+b^2$$

$$(b-a)^2=a^2-2ab+b^2$$

$$a^2-b^2=(a+b)(a-b)$$

The square on a side of a triangle is greater than, equal to, or less than, the sum of the squares on the other two sides, according as the angle contained by those sides is obtuse, right or acute. The difference in the case of inequality is twice the rectangle contained by one of the two sides and the projection on it of the other.

Loci.

The locus of a point which is equidistant from two fixed points is the perpendicular bisector of the straight line joining the two fixed points.

The locus of a point which is equidistant from two intersecting straight lines consists of the pair of straight lines which bisect the angles between the two given lines.

The circle.

A straight line drawn from the centre of a circle to bisect a chord which is not the diameter is at right angles to the chord; conversely the perpendicular to a chord from the centre bisects the chord.

There is one circle, and one only, which passes through three given points not in a straight line.

In equal circles (or in the same circle), (i) if two arcs subtend equal angles at the centres they are equal, (ii) conversely if two arcs are equal, they subtend equal angles at the centres. In equal circles (or in the same circle), (i) if two chords are equal, they cut off equal arcs, (ii) conversely if two arcs are equal, the chords of the arcs are equal.

Equal chords in a circle are equidistant from the centre; and the converse.

The tangents at any point of a circle and the radius through the point are perpendicular to one another.

If two circles touch, the point of contact lies on the straight line through the centres.

The angle which an arc of a circle subtends at the centre is double that which it subtends at any point on the remaining part of the circumference.

Angles in the same segment of a circle are equal: and if the line joining two points subtends equal angles at two other points on the same side of it, the four points lie on a circle.

The angle in a semi-circle is a right-angle, the angle in a segment greater than a semi-circle is less than a right-angle, and the angle in a segment less than a semi-circle is greater than a right-angle.

The opposite angles of any quadrilateral inscribed in a circle are supplementary; and the converse.

If a straight line touch a circle, and from the point of contact a chord be drawn, the angles which this chord makes with the tangent are equal to the angles in the alternate segments.

If two chords of a circle intersect either inside or outside the circle, the rectangle contained by the parts of the one is equal to the rectangle contained by the parts of the other.

SCHEDULE C.

Drawing.

The subjects are—

- (a) Outline drawing from a flower or plant.
- (b) Colouring the same.
- (c) Memory drawing.
- (d) Model or object drawing.
- (e) Colouring the same.

(a) The flower or plant is to be drawn in outline in pencil.

(b) The flower or plant drawn in subject (a) is coloured in flat washes in the correct colours of nature, and redrawn with a pen or fine brush in black or one colour after the washes have dried.

(c) The following plan for teaching memory drawing is suggested:—

(1) The drawing master should make for his own use a list of simple objects found in the pupils' homes, seen in the street, or used in the school.

(2) At the end of one drawing lesson he should tell his pupils that at the next lesson they will all have to draw one of these simple objects from memory, in ten minutes, and should impress upon them the necessity of taking particular notice of it in the interval.

(3) Either at the beginning or at the end of the following lesson the object should be drawn by all pupils in one corner of the page containing the free hand drawing of the day. The memory drawing need not be large and should not take more than ten minutes, for such a space of time is amply sufficient to allow any pupil to put down all the facts he can remember—any further time spent in the exercise is therefore wasted. When this drawing is finished another subject should be announced, and so on throughout the term or session.

(4) Occasionally a free hand copy that has already been drawn may be given as a subject for memory drawing—this may be shown for a few minutes to the pupils for them to refresh their memories and should then be taken down, the drawing being made entirely from memory.

(d) The model or object drawing include lotas, and other metal articles, fruit, pottery or stuffed birds, butterflies and insects.

(e) The outline drawn in subject (e) is coloured in flat washes. The masses of colour should be the principal object to correctly imitate, but the interior details may be drawn with the utmost minuteness. The outline may be redrawn with a pen or fine brush in one colour.

Government of India School-Leaving Certificate.

PART A.

[To be filled up when the pupil first enters a school.]

Name of pupil—

Caste or race—

Date of birth—

Father's name—

Guardian's name, in case father is dead—

Place of residence of father or guardian—

Any changes in residence should be noted and intimated by the headmaster.

Signature of pupil—

Brief description of arrangements* for education previous to admission to a school recognized for purposes of this certificate—

Signature of father or guardian in attestation of above.

Date—

Date—

Signature of headmaster.

Date—

Signature of inspecting officer.

* Leaving certificates from any previous schools should be attached.

Statement of entry and exit to and from schools recognised for purposes of this certificate.

Record of marks obtained in first of last two years at school as result of class work or school tests.

[illegible]

Conduct—

Physical training and games—

Whether or no a boarder—

General remarks—

Date _____

Date _____

Signature of headmaster.

Signature of inspecting officer.
1066. Edl.-4

PART A.

Record of marks obtained in last year at school as result of class work or school tests.

Subject.	Compulsory.					Optional.						Remarks.
	English.	Mathematics.	Vernacular.	History and geography.	Drawing and manual training.	Classical language.	Simple hygiene.	Additional mathematics.	Simple science.	Additional history and geography.	Type-writing, book-keeping and commercial arithmetic.	
Maximum marks.	150	150	100	150	100	150	100	150	100	150	100	
Marks.												

The pupil ^{is} _{is not} fit to be admitted to Part B of the certificate.

Date

Signature of headmaster.

Remarks of inspecting officer—

Register No. , date , in office of inspecting officer.

Date

Signature of inspecting officer.

PART B.

Record of annual and examination marks.

Subject.	Compulsory.						Optional.					
	English.	Mathematics.	Vernacular.	History and geography.	General knowledge.	Drawing and manual training.	Classical language.	Simple hygiene.	Additional mathematics.	Simple science.	Additional history and geography.	Type-writing, book-keeping and commercial arithmetic.
MAXIMUM.												
Reduced result of two annual marks.												
Examination marks.												
Total maximum ..												
Total marks ..												
Marks obtained at oral examination in subjects in which it is held.												

General remarks made at time of oral examination, in handwriting of inspecting officer, but including suggestions made to him by other members of the local committee.

Signatures of members of local committee { 1.
2.
3.

Date—

PART B—cont.

, son of , resident of , is hereby
awarded a Government of India school-leaving certificate. He has satisfied the rules regarding
attendance and is otherwise a suitable recipient of a certificate. He has passed in

Subjects. {

He has also passed with distinction having obtained the requisite marks in

Subjects. {

His certificate is registered in this office as No. of

Date

Signature of inspecting officer.

III

Endorsement No. 2849-1, Educational, dated 2nd October 1913.

Referred to the Syndicate of the University of Madras for favour of report.

W. FRANCIS,
Ag. Secretary to Government.

To the Registrar of the Madras University.

IV

Letter—from W. H. JAMES, Esq., B.Sc., Acting Registrar, University of Madras.
To—the Secretary to Government, Educational Department.
Dated—the 11th November 1913.
No.—5036.

With reference to your Endorsement No. 2849-1, Educational, dated 2nd October 1913, referring to the Syndicate for report a letter from the Government of India, dated 16th September 1913, forwarding a copy of the rules, syllabus and a form of certificate drawn up for the school-leaving certificate for schools in Simla under the Government of India and for schools in the province of Delhi and enquiring whether the Madras University will admit holders of this certificate to the Intermediate course in Arts, I have the honour, by direction, to reply to the enquiry in the affirmative.

The enclosures to your reference are herewith returned, but I am to request that a copy of the secondary school-leaving certificate scheme, with the schedules, etc., annexed, may kindly be furnished to this office for record.

Order—No. 1066, Educational, dated 19th November 1913.

The following letter will be despatched to the Government of India.

(True Extract.)

W. FRANCIS,
Ag. Secretary to Government.

To the Registrar, Madras University.

” ” ” ” ” ” 191

C. No. 2849, From the Govt of India, No. 1802, dated 16. 9. 1913.

" " " " , "

19

" " " " " " " " 19

No. 10668d, dated 19. 11. 1918

PS. ~~Don't~~
letters in ~~envelope~~
2/18/64
+ return file

The following letter will
be despatched to the Govt

Q India

$$\frac{8K}{17.4.13.} \quad \frac{CA}{17.4.13.}$$

W. F. R. 11

To The Regt Kadras Khimetz
(with full complement
+ enclosures)

See below

Desp'd in ^{File}
19.11.13 8

Madras University

Read 4:50 PM
- on 18-11-13
C. J. J.

Letter to No 1067 Sol und 19.11.1

The Secretary to the Gov^t of Ind
Department of Educ

Dr.

In reply to your letter No. 1802 dated 16th September 1902 regarding the admission to the Intermediate course

198

in Arts & Science of the Madras University candidates possessing the Govt of India school leaving certificate prescribed for schools in Simla under that Govt and in the Province of Delhi, I am directed to state that the Syndicate of the Madras University is prepared to admit holders of this certificate to the Intermediate course in Arts. No Intermediate course in Science has been instituted by the University.

I have etc

SK
17.11.13.
Ca
17.11.13

1/12/11

SK
17/11
17/11

(C)

(C)

PRESS SLIP.

ORDINARY.

PREFERENCE.

URGENT (a).

EDUCATIONAL
LEGISLATIVE DEPARTMENT.

Current No., dated.....190 .

G.O., No. 1066, dated 19. 11. 1903.

Number of MS. pages sent { Correspondence including order or orders
(b)
(b¹)
Notes.....

Docket. Secondary School leaving

Certificate

(See slip within)

Number (c) of copies required when struck off (not including
copies for volumes and editors' table which are returned
in the Press).

Complete
Correspondence
and orders.

Notes

FOR RECORD.*

Madras Records ... 30
Ooty Records ... 4
For filing with original ... 1

Total ...

35

FOR ISSUE.†

Signature copies.....
India Office.....
Govt. of India.....Dept. 35
Public Department.....
Judicial Department.....
Financial Department.....
Revenue Department.....
Public Works Department.....
Local and Municipal Department.....
Dept.....

Spare copies.
The Director of Public Instruction.....
The Comr. for Govt. Examinations.....
The Superintendent, Govt. Museum.....
The Surgeon-General.....
The Accountant-General.....
The Collector of.....
The P. D. B.....
The Regy. University.....
The.....
The.....
The.....
The.....
The.....
The.....
The.....
Total ...

INSTRUCTIONS FOR THE
SECRETARIAT.

(a) If a paper is marked to be printed
urgently, the Superintendent of the section
concerned should sign the Press slip. The
Superintendent should exercise a careful discre-
tion in the matter.

(b) Each letter, memorandum, or order, or set
of orders, in the file of correspondence should be
headed in succession with the Roman numeral I,
II, III, etc., the number being written in red ink
or blue chalk above the item. The particular
papers to be printed in the special issue-copies
should be indicated by the Roman numeral (I,
II, etc.) by which that item has been headed in
the correspondence file. All matter, including
marginal remarks or references, to be printed
should be written in ink and matter which should
not be printed should be encircled. Initials and
signatures that are not quite legible should be
re-written distinctly.

(b¹) For rules regarding printing of notes,
see the rules in G.O., No. 1220, Public, dated
30th November 1900.

(c) The number of copies and the details of
distribution should be filled in by the Superin-
tendent or Referencer concerned.

(d) In the absence of special instructions to
the Press to keep matter standing for a specified
period, ordinary papers of 8 pages and under
will be kept standing for one week, and larger
papers for two weeks only. The type of notes
and of all confidential papers is distributed
immediately after striking.

(e) This slip, properly and completely
filled in, should accompany every paper sent to
Press; it will be returned by the Press when
proofs are furnished; it should be sent to the
Press when a call is made for revised proofs or
when a corrected proof is sent for striking.
When finally returned by Press it should be
filed with the original order or letter.

INSTRUCTIONS FOR THE PRESS.

(a) If, in the opinion of the Superintendent of
the Press, a paper has been marked urgent
unnecessarily, he should send the Press slip to
the Deputy Registrar with a remark to that
effect.

(b) Unless a note to the contrary is made
against the matter, pencil entries should not
be printed. The Superintendent of the Press
may bring to the notice of the Deputy Registrar
any instance of incomplete or careless editing.

(c) Signature copies of letters to the
Secretary of State or to the Government of
India should be printed on hand-made paper.

(d) This slip should be returned by the Press
to the Secretariat when proofs are furnished; it
will be sent back to the Press when proofs
are returned corrected and should be finally
returned to the Secretariat when struck-off
copies are supplied.

(e) The names of the Secretary and Members
should be printed in full when they occur on
the right hand side, but only the first time when
they appear on the left side, the initials alone
being printed later.

* Copies distributed on..... (Press Clerk.)

† Copies distributed on..... (Despatcher.)

TO PRESS, MADRAS.
OOTY.

A

B

C

Please send proof in triplicate. The papers have been carefully edited.

Proof returned corrected. Please strike off and send number of copies as indicated.

As the matter is clear manuscript and has been carefully edited, (b) proof need not be sent. Please print and supply number of copies as indicated.

Type may be released after usual interval at once.

Type may be released after usual interval.

.....Clerk.

.....Clerk.

.....Clerk.

.....Supdt.

.....Supdt.

.....Supdt.

(b) Three copies of proof of all notes should be sent for approval, except when instructions are given to the contrary.

SPECIAL INSTRUCTIONS.

TO BE FILLED IN BY THE PRESS.

Diary.	Initials of Press official.
Received in Press on.....	27-11-13 Lb
First proof furnished on.....	8-12-13 Lb
Call for revised proof received on.....	
Revised proof furnished on.....	
Corrected proof received for striking on.....	15-12-13 Lb
Final copies supplied on.....	19/12/13 Lb

Account of copies.	Complete copies.	Notes.	Issue copies.
Supplied to Secretariat for Record.....	35		
" " " Issue.....	6		
For Volumes.....	16		
For E. T.....			
Total ...	57		