

1881.  
NEW ZEALAND.

EDUCATION.  
EXAMINATION OF TEACHERS.

[In continuation of part of H.—1A, 1880.]

*Presented to both Houses of the General Assembly by Command of His Excellency.*

The INSPECTOR-GENERAL of SCHOOLS to the Hon. the MINISTER of EDUCATION.  
SIR,— Wellington, 29th April, 1881.  
I have the honour to submit a statement with regard to the annual examination of candidates for teachers' certificates, which was held at the end of January in this year, and of which the results were determined by you at the end of March.  
The numbers of candidates who entered, and of those who presented themselves, as also of those who were more or less successful, are shown in the following table:—

	Auckland.	Taranaki.	Hawke's Bay.	Wanganui.	Wellington.	Marlborough.	Nelson.	Westland.	North Canterbury.	South Canterbury.	Otago.	Southland.	Totals.
Entered for Class C (one candidate, successful) ...	...	...	1	...	...	...	...	...	...	...	...	...	1
Entered for Class D ...	9	2	5	4	4	1	5	2	21	5	29	2	89
Of whom—present at examination ...	9	2	3	3	4	...	4	2	16	2	27	2	74
passed for Class D ...	1	...	2	...	...	...	...	...	5	...	10	...	18
partially successful for Class D ...	...	1	...	1	1	...	1	...	1	...	2	...	7
completed former examination for Class E ...	...	...	...	2	1	...	...	...	...	...	...	...	3
Entered for Class E ...	134	10	5	14	20	1	3	5	49	6	64	6	317
Of whom—present at examination ...	115	8	5	13	16	1	3	5	44	6	57	5	278
passed for Class E ...	6	...	...	1	...	...	...	...	10	...	12	...	29
partially successful ...	30	1	...	2	1	...	...	3	11	1	9	...	58
Entered to complete former examination ...	38	3	7	6	13	2	8	5	43	9	24	7	165
Of whom—present ...	35	2	5	4	11	...	7	3	38	9	20	3	137
successful ...	19	2	2	3	7	...	6	1	31	8	10	3	92

More concisely stated, the results are as follows:—

	Class C.	Class D.	Class E.	To complete former Examination.	Total.
Entered ...	1	89	317	165	572
Present ...	1	74	278	137	490
Passed ...	1	18	29	92	140
Partially successful...	...	7	58	...	65
Completed former examination for Class E ...	...	[3]	...	...	3

The examiner in arithmetic reports that the candidates in this subject for Class D were weaker than might have been expected, the results obtained being inferior to those of last year; and that the answering of the candidates for Class E, though showing an improvement over that of last year, was still far from satisfactory.  
The geography work for Class E was much better than it was last year; but in Class D there was no improvement, except, perhaps, in the map-drawing. The examiner says:—"In both classes geography is treated almost entirely as a matter of memory; those questions which appeal to the understanding are either not attempted, or are very badly done."  
1—E. 1A.

The answers of many of the candidates in history showed surprising verbal memory, with very little power of any other kind.

Of the elementary science papers, the examiner reports that "whilst many papers exhibit careful study and marked scientific capacity, the average of the work is scarcely so good as last year."

The amount received in fees from candidates is £404 1s., which is sufficient (within £5 or £6) to cover the whole cost of the examination.

A complete file of the examination papers is enclosed with this report. I do not think it is necessary to reprint the papers for Class C; as the examination for that class is ordinarily conducted by the University. It was undertaken by the department this year for reasons that are not likely to occur again.

I have, &c.,

WM. JAS. HABENS,

Inspector-General of Schools.

The Hon. the Minister of Education.

#### CLASS E.—ENGLISH GRAMMAR AND COMPOSITION.

*Time allowed: Three hours.*

1. Parse as fully as you can—

Let me no longer waste the night over the page of antiquity or the sallies of contemporary genius, but pursue the solitary walk, where Vanity, ever changing, but a few hours past walked before me—where she kept up the pageant, and now, like a froward child, seems hushed with her own importunities.

2. What various ways are there of forming the plural of English nouns? Give instances of words that have two plurals (distinguishing the difference between the two plurals of each), of plurals that have no singulars, and of plurals that have become singulars.

3. What adjectives do not admit of comparison by inflexion? Compare *fore*, *late*, *nigh*, *old*. Give instances of superlative adjectives that have no corresponding positive forms.

4. Give the past tense and the perfect participle of *creep*, *cling*, *beat*, *drink*, *drive*, *rid*, *lie*, *spit*, *stride*, *sling*, *hit*, *tread*, *hang*, *dive*, *swim*, *slit*, *roast*, *swell*, *wake*, *wring*. Where two forms exist, give them, and, if they differ in use, state both uses.

5. Form sentences to bring out the correct use of the prepositions *at* and *on* after *smile*; *to* and *with* after *correspond*; *for* and *upon* after *wait*; *at*, *for*, and *on* after *call*; and sentences to show the use of appropriate prepositions after *concur*, *differ*, *dissent*, *contend*.

6. Correct or justify—

During the three or four first years of its existence.

There are not less than twenty of the sort.

My brother as well as my sister approve of this step.

Your's faithfully, JOHN. G. ARNOTT.

The Board have ordered him to desist.

Griesbach, with the majority of the critics, are of this opinion.

I should have been glad to have accepted it.

The hay smells sweetly.

A two-foot rule.

7. Write a passage dictated by the Supervisor.

8. Write a list of words dictated by the Supervisor as an exercise in spelling.

#### CLASS E.—EXERCISE IN DICTATION AND SPELLING.

(Part of paper on English Grammar and Composition.)

7. Dictation exercise:—"Most readers must have witnessed with delight the joyous burst which attends the dismissing of a village-school on a fine summer evening. The buoyant spirit of childhood, repressed with so much difficulty during the tedious hours of discipline, may then be seen to explode, as it were, in shout, and song, and frolic, as the little urchins join in groups in their playground, and arrange their matches of sport for the evening. But there is one individual who partakes of the relief afforded by the moment of dismissal, whose feelings are not so obvious to the eye of the spectator, or so apt to receive his sympathy. I mean the teacher himself, who, stunned with the hum and suffocated with the closeness of his schoolroom, has spent the whole day (himself against a host) in controlling petulance, exciting indifference to action, striving to enlighten stupidity, and labouring to soften obstinacy; and whose very powers of intellect have been confounded by hearing the same dull lesson repeated a hundred times by rote, and only varied by the various blunders of the reciters."—*Sir Walter Scott*.

8. Spelling exercise:—Benefited, committal, beleaguered, analogous, peremptory, antediluvian, antichristian, exorbitant, eccentric, condign, discipline, receive, believe, moneys, parallel, porcelain, inveigle, psalmody, assuage, victuals, worthiest, witticism, irrepressible, applicable, rhetorical.

#### CLASS E.—ARITHMETIC.

*Time allowed: Three hours.*

1. If the divisor is one million seventy thousand and thirty-eight, the quotient forty-five millions sixty-seven thousand and eight, and the remainder two hundred and six thousand five hundred and ninety, find the dividend and write it down in words.

2. Multiply 23 acres 2 roods 16 poles 14 yards by 29½.

3. If a coal wagon can carry 5 tons 6 cwt. 2 qr. 12 lb., how many wagons will be required for the carriage of a cargo of 1,791 tons of coal?

4. Find, by Practice, the value of 15 lb. 11 oz. 16 dwt. of gold, at £46 14s. 6d. per lb.

5. A person receives £28, and is told to pay for 2 cwt. 3 qr. 4 lb. of sugar at  $4\frac{1}{2}$ d. per lb., and 3 chests of tea, each containing 44 lb., at 2s. 10d. per lb.; and to spend the rest in coffee at 1s. 11d. per lb. How much coffee does he buy?

6. There are 365 days in the ordinary year, and leap-years contain one day more: if there are 97 leap-years in 400 years, find the average length of the year.

7. How many yards of carpet, 2 feet 3 inches wide, will be required to cover the floor of a room 35 feet 3 inches long by 22 feet 6 inches wide? and what will be its cost at 6s. 9d. a yard?

8. Explain why the numerator and denominator of a fraction may be both multiplied by the same number without altering the value of the fraction. Show that multiplying the numerator of a fraction by any number has the same effect as dividing its denominator by the same number.

9. Simplify  $2\frac{2}{3}$  of  $4\frac{1}{2}$  of  $\frac{1\frac{1}{3} - \frac{3}{4}}{1\frac{1}{3} + \frac{3}{4}}$ . Express the difference between  $2\frac{2}{3}$  of half-a-guinea and  $\frac{2}{3}$  of £1 14s. 2d., as the fraction of £1 11s.

10. Arrange the fractions  $\frac{1}{3}$ ,  $\frac{1}{5}$ ,  $\frac{1}{7}$ ,  $\frac{1}{11}$ , in the order of magnitude; and find by how much the quotient of the least by the greatest exceeds the difference of the same.

11. Divide 182·4 by ·0418, and explain the rule for fixing the decimal point in the quotient.

12. If 10 lb. of sugar cost 140625 of 16s., what will 3125 cwt. cost?

13. Find the simple interest on £912 6s. 8d., from 21st October, 1879, to 10th January, 1881, at  $7\frac{1}{2}$  per cent. per annum.

14. A merchant buys quantities of tea as follows, and mixes them:—40 cwt. at £11 18s. per cwt., 50 cwt. at £12 2s. 8d. per cwt., and 22 cwt. at £15 8s. per cwt. At what price per lb. must he sell the mixture so as to make a profit of 25 per cent.?

#### CLASS E.—GEOGRAPHY.

*Time allowed: Three hours.*

1. Explain the meaning of the expressions Arctic Circle, Torrid Zone, Equinox, Estuary, Table-land.

2. Explain the causes which affect the climate of a country.

3. What becomes of the snow which is deposited in such large quantities on the tops of high mountains?

4. Enumerate the principal islands and groups of islands which lie near the coast of Asia, beginning from the north-east.

5. Draw a map of Europe, and insert in it the principal rivers and mountain-chains.

6. Give the names and positions of four important towns in each of the following countries: Italy, China, India, United States of North America, Russia, Australia.

7. What are the British possessions which are in Africa, or which lie near its coast? Give the situation of each.

8. A ship leaves New York for Sydney, thence it goes to Newcastle (in New South Wales), thence to Lyttelton, from which place it returns to New York. Trace the course of the ship, and describe the probable nature of the cargo with which it would be loaded at the several ports at which it calls.

9. Describe briefly the more important physical features of the United States of North America.

#### CLASS E.—ENGLISH HISTORY.

*Time allowed: Three hours.*

[NOTE.—Candidates must attempt Questions 9 and 10 and four others.]

1. On what points did James I. differ with his Parliament?

2. Sketch the history of the Commonwealth and of the Protectorate.

3. Characterize the foreign policy of Charles II.

4. When was the Habeas Corpus Act passed? Describe its provisions and effects.

5. What reforms are due to the Parliaments of William III.?

6. What mercantile schemes brought disaster on England during last century, and how were their evil effects met?

7. How has Portugal been connected with English history during the last two centuries?

8. In what directions did Canning liberalize the home and foreign policy of England?

9. What do you know of the Petition of Right, the Solemn League and Covenant, the Test Act, the Rye House Plot, the Peace of Ryswick, and Poyning's Law?

10. In whose reign was each of the following battles fought? Who were the victors, and who the defeated?—Bosworth, Cressy, Agincourt, Stamford Bridge, Blenheim, Dettingen, Waterloo.

#### CLASSES D AND E.—ELEMENTARY SCIENCE.

*Time allowed: Three hours.*

[NOTE.—Candidates are not to attempt more than ten questions. Female candidates, if proficient in Needlework, may substitute for this paper the paper on Domestic Economy and the Laws of Health; but passing in Science will not exempt them from passing in Needlework also.]

1. Draw a section through a force-pump, and explain the use of the air-vessel that is often connected with a force-pump.

2. State the use of the pendulum of a clock. What is sometimes substituted for the pendulum in timekeepers? Can you tell how high above the earth a pendulum clock would have to be to go twice as slowly as at the surface?

3. What would be about the total pressure on the inside of a box of one foot cube filled with air at ordinary pressure, and placed inside a vacuum?

4. A stone is dropped into a well, and after two seconds and a half a splash is heard: what is the depth of the well? Supposing the time to be from eight to ten seconds, would anything but the laws of falling bodies have to be considered to ascertain the depth?

5. Draw a diagram showing the mode of the formation of the image in a photographic camera.

6. What is the physical difference between noise and music? Upon what do the pitch and loudness of note depend?

7. How would you prove that water expands when it freezes? Describe the effects of this expansion in nature.

8. Describe various simple means of producing an electric current. Draw a diagram of, and give the formulæ of, the action of either Grove's or Daniell's cell.

9. Divide the following into two lists, one of elements and the other of compounds; if you know their affinities, place the elements in order, the most positive being at the top; and where you know the composition, place a statement of it opposite to the name of the compound:—Table salt, sulphur, kerosene, sugar, iron, silver, oxygen, flint, charcoal, glass, bone-ash, clay, phosphorus, copper, and zinc.

10. Show (with chemical equations, if you can) all the experiments that may be made with the following substances, and describe one experiment in detail:—

Hydrogen.	Oxygen.
Chlorine.	Water.
Phosphorus.	Sodium.

11. Make an enlarged sketch of a candle flame, and write on it all the chemical changes going on in its several parts; show also which are the reducing and the oxidising parts, and explain why they have this property.

12. Give an account of the manufacture and composition of glass, or soap, or porcelain, or cement.

13. Draw a diagram to illustrate, as completely as you can, the circulation of the blood.

14. Describe the structure and functions of either the root or leaf of a tree.

15. Give a general account of the mechanism of respiration.

16. Make a sketch of any common flower, writing on it the names of the several parts, and stating their uses.

#### CLASSES D AND E.—DOMESTIC ECONOMY AND LAWS OF HEALTH.

*Time allowed: Three hours.*

[NOTE.—This paper is for female candidates who are proficient in Needlework, and, in consideration of this, are allowed, if they prefer it, to be examined in Domestic Economy and the Laws of Health, instead of in the general subject of Elementary Science. See the note on the Elementary Science paper.]

1. State what you know of the composition of the air. How is its composition altered by breathing it?

2. Foods are often divided into heat-givers and flesh-formers. Give examples, and state the general composition of each class.

3. What happens to a piece of bread as it passes from the mouth into the general circulation of the blood?

4. Draw a diagram of the heart, and show the course of the blood through it.

5. Describe the general structure of the skin, and state why soap is required in order to cleanse it.

6. Give some account of the effects upon the system produced by an excessive use of alcoholic drinks.

7. Describe the various ways of cooking potatoes, and give the advantages of each method.

8. What precautions would you take in order to prevent a contagious disease from spreading?

9. Explain the process of respiration, and state some of the effects produced by tight lacing.

10. Give an account of the processes of grilling and frying, and state the effects of each and their advantages.

#### CLASSES D AND E.—SCHOOL MANAGEMENT.

*Time allowed: Three hours.*

[NOTE.—Candidates may select one question from each of the first three sections, but not more than one. Sections IV., V., and VI. are compulsory, and candidates are advised to deal with these first, or to reserve at least half the time for them.]

##### SECTION I.

1. Supposing you were appointed to a newly-established school in a district where the majority of the children had not passed any standard examinations, explain fully the method by which you would classify your pupils.

2. Define clearly the respective duties of the headmaster and of the female assistant in a school in which they are the only teachers.

3. Describe the advantages and disadvantages connected with the employment of pupil-teachers.

##### SECTION II.

1. State what means you would adopt to eradicate the following faults:—Irregularity in attendance, want of punctuality, falsehood, insubordination. Give your reasons.

2. Show that "copying" is a result of bad teaching as well as of bad discipline, and describe the methods by which you would deal with the evil when you found it prevalent.

3. How can a teacher use the playground as a means to improve the tone of his school? What help in this would you expect from the elder pupils in the playground, and on the road to and from the school?

## SECTION III.

1. What are the special advantages of the object-lesson as an educative power?
2. Describe the method by which you would teach history in preparing a class for examination in Standard III.
3. State how you would teach simple subtraction, clearly explaining the *rationale* of the rule; and give such illustrations as you consider would be necessary to a class.

## SECTION IV.

Draw up full notes of a lesson on *one* of the following subjects:—

- (a.) The human ear.
- (b.) Cleanliness.
- (c.) The mountain system of Central Asia.

## SECTION V.

Construct a time-table for *one* of the following schools:—

- (a.) Your own school (if you are the principal teacher); and specify any peculiar circumstances you have taken into consideration.
- (b.) A mixed school of 40 pupils, with teacher unassisted.
- (c.) An infant school of 40 pupils, forming part of a school of 80 pupils, the mistress being unassisted, and having charge of the needlework of the girls in the master's department.

## SECTION VI.

1. What is meant by "strict average" and "working average," and how is each to be obtained from the register?
2. Under what circumstances may it be necessary to cancel a mark in the attendance register, and how should it be done?
3. What are the uses of registration to the parents, to the teacher, and to the Education Department?

## CLASS D.—ENGLISH GRAMMAR AND COMPOSITION.

*Time allowed: Three hours.*

1. What general rules would you lay down for the division of words into syllables? Correct, with reasons, or justify the division of the following words: e-le-phant, ass-is-tance, phal-anx, drow-sy, mark-et, e-du-ca-tion, ci-vil, tow-ards, blank-et, hear-ken, migh-ty, pas-sing.

2. In what respects do *a* and *the* differ (a) from an adjective, (b) from a pronoun? Define exactly the force of the italicized articles in the following sentences: *A* few men; many *a* man; myself and a sister both born in *an* hour; *a* Kepler; I am alone *the* villain of the earth; the birds of *the* air; *the* judicious few; the king is angry—see, he bites *the* lip; Alexander *the* Great.

Are the following italicized words articles? If not, state what they are:—*An* I have not ballads made on you all; his disciples were *an* hungered; he that died *a* Wednesday; I go *a* fishing; a hundred *a* year; the sooner *the* better.

3. What is the meaning of the apostrophe before the *s* of man's? What theory formerly prevailed as to the origin of this *s*, and how can you conclusively disprove the theory? State, with reasons, whether the following are correct or not: The wrath of Peleus' son; Festus came into Felix' room; for conscience' sake; and the weaned child shall put his hand on the cockatrice' den; Harris' Hermes; Millais's picture; for whose name sake I have been made willing.

4. What is the difference between *pleasing* as an adjective and *pleasing* as a participle? Explain why adjectives can be so easily used as adverbs in poetry. Give an instance of an adjective that has become a preposition, one of a preposition become an adjective, and one of an adjective become a noun.

5. The relative combines the functions of two different parts of speech: define these functions. What are the two main uses of the relative, and in what various ways is the ambiguity that arises therefrom avoided? When may the relative be omitted?

6. For what different parts of speech may the infinitive stand in a sentence? What relationship has the gerund to the infinitive, and how is it to be distinguished from the verbal noun and the present participle?

7. Parse fully the italicized words: Who *fair* him 'quited *as that* wondrous was; Richard *except*; there is no man *but* hates me; 'gainst that season comes; think'st *thee*?; and may direct his course as *please* himself.

8. Correct, with reasons, or justify—

- (a.) Simon, the witch, was of this religion too. (*Bunyan.*)
- (b.) Who should I meet the other night but my old friend? (*Spectator.*)
- (c.) Whom do men say that I am? (*Bible.*)
- (d.) Gedaliah, who with his sons and his brothers were twelve. (*Bible.*)
- (e.) So hand in hand they pass'd, the loveliest pair  
That ever since in love's embraces met. (*Milton.*)
- (f.) For thou shalt go to all that I shall send thee. (*Bible.*)
- (g.) I had rather be a doorkeeper. (*Bible.*)
- (h.) Many of your readers have mistook that passage. (*Steele.*)
- (i.) A man were better relate himself to a statue. (*Bacon.*)
- (j.) I would wish me only he. (*Shakespeare.*)
- (k.) What went ye out for to see? (*Bible.*)

9. Describe any piece of scenery or any scene in life that seemed to you striking when you saw it.

10. Spell the words dictated by the Supervisor.

11. Write and punctuate the passage dictated by the Supervisor.

## CLASS D.—EXERCISE IN DICTATION AND SPELLING.

(Part of paper on English Grammar and Composition.)

10. Spelling exercise:—Blissful, embarrassment, intral, appal, truism, swingeing, eyrie, vying, trueness, truly, enterprise, withal, saveall, sympathize, windfall, alkalies, similes.

11. Dictation exercise:—"To be strong-backed and neat-bound is the desideratum of a volume. Magnificence comes after. This, when it can be afforded, is not to be lavished upon all kinds of books indiscriminately. I would not dress a set of Magazines, for instance, in full suit. The dishabille, or half-binding (with russia-backs ever), is *our* costume. A Shakspeare or a Milton (unless first editions), it were mere foppery to trick out in gay apparel. The possession of them confers no distinction. The exterior of them (the things themselves being so common), strange to say, raises no sweet emotions, no tickling sense of property in the owner. Thomson's Seasons, again, looks best (I maintain it) a little torn and dog's-eared. How beautiful to a genuine lover of reading are the sullied leaves and worn-out appearance, nay, the very odour (beyond russia), if we would not forget kind feelings in fastidiousness, of an old "Circulating Library" Tom Jones, or Vicar of Wakefield! How they speak of the thousand thumbs that have turned over their pages with delight!—of the lone sempstress whom they may have cheered (milliner, or harder-working mantua-maker) after her long day's needle-toil, running far into midnight, when she has snatched an hour, ill spared from sleep, to steep her cares, as in some Lethean cup, in spelling out their enchanting contents! Who would have them a whit less soiled? What better condition could we desire to see them in?"—*Charles Lamb*.

## CLASS D.—ARITHMETIC.

*Time allowed: Three hours.*

1. Multiply five thousand and forty-eight million nine thousand seven hundred and six by nine million six hundred and three thousand and eight, and write down the answer in words. Verify the result by the method of casting out nines.

2. The length of the military quick-step is 30 inches, and 108 steps go to the minute: at what rate is that per hour?

3. Divide 327 acres 2 roods 31 poles 16 yards by  $17\frac{2}{11}$ .

4. Find, by Practice, the value of 18 tons 4 cwt. 1 qr. 12 lb. at £3 11s. 8d. per cwt.

5. Define a *fraction*, a *proper* fraction, a *compound* fraction, and a *complex* fraction. If the same number be added to the numerator and denominator of a proper fraction, will its value be increased or diminished? Explain why.

6. Simplify  $\frac{2\frac{1}{2} \text{ of } 3\frac{1}{3} \text{ of } 4\frac{1}{4} - 1}{5\frac{2}{3} \text{ of } 6\frac{1}{2} - 1}$ , and  $\frac{\frac{5}{6} - \frac{3}{4}}{1\frac{1}{2} - 1\frac{1}{8}} \div \frac{1\frac{3}{4} + 5\frac{5}{8}}{2\frac{3}{4} + 4\frac{1}{8}}$ .

7. Find the difference between the product of 1.06 into 2.27, and the quotient of 6.35 by 4.618.

8. Find the value of  $\frac{2}{3}$  of a guinea + .4375 of £1 4s. — .036 of £13 10s.; and reduce 10 days 18 hours 36 seconds to the decimal of 1 week 7 hours 30 minutes.

9. Extract the square root of  $6\frac{2}{3}$  to five places of decimals.

10. The height of a room is 14 feet 7 inches, and its content is 9,803 cubic feet 416 cubic inches, and it is known to be twice as long as it is broad: what is its length?

11. If 8 men working 8 hours a day, or 12 boys working 6 hours a day, can do a piece of work in 21 days, how long would 16 men and 30 boys take to do a piece of work twice as large as before, all working 7 hours a day?

12. Three miners own a claim, A having one-third, B one-fourth, and C the remainder. A, however, abandons the ground, and his share is divided between his partners in the proportion of their interests. What are now the shares respectively of B and C?

13. Define *discount*, and explain the difference between *true* and *mercantile* discount. Find the true discount on £33 16s., due eight months hence, at 6 per cent. per annum.

14. A tradesman sells an article for £12, thereby losing 4 per cent., and recovers his loss by selling another article for £8: what is his gain per cent. on the second article?

15. If I invest £5,747 in the New Zealand 5 per cents. at  $102\frac{1}{2}$ , and sell out at  $103\frac{1}{4}$ , after having received a half-year's dividend, what sum shall I have gained, the brokerage both on the purchase and sale of the stock being  $\frac{1}{8}$  per cent.?

## CLASS D.—GEOGRAPHY.

*Time allowed: Three hours.*

1. What is meant by a great circle of a sphere? What is meant by great-circle-sailing? Show that if the captain of a ship wants to reach a port due east of that from which he starts, his shortest course will not in general lie in the direction of due east.

2. Explain carefully what becomes of the snow which is deposited in such abundance on the tops of high mountains.

3. What are the trade-winds? In what parts of the earth do they blow, and how are they caused?

4. Describe the mountain system of Great Britain.

5. Draw a map of Europe; insert the mountains and rivers, and the names of the capes and bays, &c., on its coast.

6. What are the principal British possessions in Asia or near its coast?

7. Describe the position of the following towns in Europe, and mention anything for which any of them are remarkable: Cologne, Antwerp, Archangel, Granada, Orleans, Trieste, Mayence, Belfast, Lucerne, Venice.

8. Enumerate the various countries in Asia, and give the chief towns of each.

9. Draw an outline-map of Australia and New Zealand, showing their relative positions, and (approximately) their relative sizes.

## CLASS D.—ENGLISH HISTORY.

*Time allowed: Three hours.*

[Candidates may omit three questions.]

1. Give a brief account of the character and reign of Alfred the Great.
2. What was the state of Britain when Cæsar invaded it?
3. Describe the effects of the Norman Conquest.
4. Narrate the struggle of the barons with John and Henry III., and estimate the results.
5. What anticipations of the Reformation can you point out in English history?
6. Trace the connection between the character of Edward I. and the events of his reign.
7. How did Continental politics affect England during the reign of Henry VIII.?
8. Compare the character and influence of the Queens who have sat in their own right on the throne of England.
9. Sketch the history of the Long Parliament.
10. State the origin of the Star Chamber, and also of the Court of High Commission, and trace their history.
11. What part did England take in the War of the Austrian Succession?

## CLASS D.—GREEK (Optional).

*Time allowed: Three hours.*

1. Decline, using Attic forms only, *ναῦς, βασιλεὺς, πόλις, γένος*; and, in the singular number only, *πολύς, ἀληθής, τοιοῦτος*.
2. Write out in full the second aorist imperative passive of *τύπτω*, and the present subjunctive active of *δηλώω*. Parse *στήσαι, στήσαι, ἔντο, ἐτέθη, φανοῖσι, φανῶσι, εἶεν*.
3. Give the first persons singular of the tenses in use of *πάσχω, ὁράω, ἔχω, αἰρέω, λαγχάνω, τρέφω, εὐρίσκω*.
4. With what cases and in what senses are the following prepositions used?—*ἐπί, παρά, μετά, διά, πρὸς, κατά*.
5. How is *μή* used—(1) in prohibitions, (2) in direct questions?
6. Translate into Greek—
  - (1.) The Gods gave me good things instead of bad.
  - (2.) They were educated (*παιδεύω*) by the same teacher.
  - (3.) You yourself have often done the same thing.
  - (4.) It is just that the stronger should rule the weaker.
  - (5.) The horsemen who were with Cyrus crossed the river.
  - (6.) This has already been pointed out (*δηλόω*) by me.
7. Translate—*Ἐπειτα ὅτε Ξέρξης ὕστερον ἀγείρας τὴν ἀναριθμητὸν στρατιὰν ἦλθεν ἐπὶ τὴν Ἑλλάδα, καὶ τότε ἐνίκων οἱ ἡμέτεροι πρόγονοι τοὺς τούτων προγόνους καὶ κατὰ γῆν καὶ κατὰ θάλατταν. ὢν ἔστι μὲν τεκμήρια ὁρᾶν τὰ πρόπαια, μέγιστον δὲ μαρτύριον ἡ ἐλευθερία τῶν πόλεων ἐν αἷς ὑμεῖς ἐγένεσθε καὶ ἐτράφητε· οὐδένα γὰρ ἀνθρώπων δεσπότην· ἀλλὰ τοὺς θεοὺς προσκυνεῖτε.*  
 [*ἀγείρω*=I collect; *πρόγονος*=a forefather; *τεκμήριον*=a proof; *προσκυνέω*=I do obeisance to.]

## CLASS D.—LATIN (Optional).

*Time allowed: Three hours.*

1. Give the genitives, singular and plural, of *senex, parens, heros, decus, felix, idem, uterque*.
2. Give the comparatives and superlatives of *facilis, pius, benevolus, nequam, diu, prope, libenter*.
3. Give the cardinal, ordinal, and distributive numerals from One to Ten. Why have distributives no singular number? Translate into Latin—He appointed (*do*) one leader for every fifty soldiers.
4. Give the perfects, infinitives, and supines of *faveo, fingō, fundo, verito, suadeo, juvo, volvo, haurio*.
5. What cases are governed by the following verbs severally: *Utor, meminī, recorder, potior, credo, impero, consulo, parco*? Where the same verb takes two different cases, explain the difference.
6. Translate into Latin—
  - (1.) Do not suppose, my sons, that the soul can die along with the body.
  - (2.) Having said these words, he bowed his head (*cervicem porrigo*) and bade the centurion strike.
  - (3.) Neither my father nor myself have ever done you even the smallest injury.
  - (4.) I do not know which of the two is likely to be more dangerous (*exitiosus*), to advance or to retreat.
  - (5.) Twenty years ago no one would have believed that this was possible.
  - (6.) Do you really mean to say that this is an honour to him?
7. Translate into English—*Cum enim rex Pyrrhus populo Romano bellum ultro intulisset; cumque de imperio certamen esset cum rege generoso ac potente; perfuga ab eo venit in castra Fabricii, eique est pollicitus, si præmium sibi posuisset, se clam in Pyrrhi castra rediturum et eum veneno necaturum. Hunc Fabricius reducendum curavit ad Pyrrhum, idque ejus factum laudatum a senatu est.*

## CLASS D.—ALGEBRA (Optional).

*Time allowed: Three hours.*

1. A man earns £*a* during each of *p* months every year, and he earns £*b* during each of the remaining months of the year; he spends regularly £*c* every month, and saves the remainder of his income. Write down an expression for the number of pounds which he will have saved by the end of *x* years.

2. Find the value of  $\{2x(x+3) - [x(x+2) - 3x+4]\} - (x-13)$ , when  $x = -2$ .

Show that this expression may be exhibited in the form of a perfect square.

3. Divide  $80a^3b^3 + 60a^2b^2(a^3+b^3) + 25ab(a^4+b^4) + 4(a^6+b^6)$  by  $2(a^3+b^3) + 4ab$ .

4. Resolve into their elementary factors  $a^3+b^3$ ;  $a^3+a^2b+ab^2+b^3$ ;  $a^4+a^2b^2+b^4$ ; and hence find their lowest common multiple.

5. Reduce to a single fraction  $\frac{1}{2(x-1)^2} + \frac{1}{2(x-1)} - \frac{x}{2(x^2+1)}$ ;

and also  $\frac{a^2(a+b)}{a^2b-b^3} + \frac{a^2-ab}{(a+b)b} - \frac{2ab}{a^2-b^2}$ .

6. Substitute  $x + \frac{1}{x}$  for  $a$ , and  $x - \frac{1}{x}$  for  $b$ , in the expression  $\frac{a^2+b^2}{4} - \frac{ab}{a^2-b^2}$

7. Solve the equations—

$$\frac{4x+9}{7} - \frac{2x+5}{5} = \frac{1}{10}(x+10).$$

$$\frac{x+a}{a+b} - \frac{x-b}{a-b} = \frac{x}{a-b} - \frac{x}{a+b}.$$

8. A body starting from rest, and falling freely for  $t$  seconds, will fall through  $16t^2$  feet: find through how many feet it will fall in the first, the second, and the third seconds of its motion respectively.

9. A wine merchant has two sorts of wine, one worth  $a$  shillings a quart and the other worth  $b$  shillings a quart. He wishes to make a mixture of  $n$  quarts which he can sell without loss or gain for  $c$  shillings a quart. How much of each must he take?

#### CLASS D.—EUCLID (Optional).

*Time allowed: Three hours.*

1. What are the classes into which triangles are divided with respect to their sides, and with respect to their angles?

Mention the cases in the First Book in which triangles are proved to be equal in all respects; and also the cases in which they are proved to be equal in area only.

2. If two triangles have two sides of the one equal to two sides of the other, each to each, and have likewise their bases equal, the angle which is contained by the two sides of the one shall be equal to the angle contained by the two sides equal to them of the other.

3. If two straight lines cut one another, the vertical or opposite angles shall be equal.

Show that the lines which bisect two vertically opposite angles are in the same straight line.

4. The opposite sides and angles of a parallelogram are equal to one another, and the diameter bisects it.

Prove that a rhombus is a parallelogram, and that its diagonals bisect one another at right angles.

5. To a given straight line to apply a parallelogram which shall be equal to a given triangle, and have one of its angles equal to a given rectilineal angle.

6. If a straight line be divided into two equal and also into two unequal parts, the rectangle contained by the unequal parts, together with the square of the line between the points of section, is equal to the square of half the line.

Show that, of all rectangles having the same perimeter, the square has the greatest area.

7. In obtuse-angled triangles, if a perpendicular be drawn from either of the acute angles to the opposite side produced, the square of the side subtending the obtuse angle is greater than the squares of the sides containing it, by twice the rectangle contained by the side upon which, when produced, the perpendicular falls, and the straight line intercepted without the triangle between the perpendicular and the obtuse angle.

#### CLASS D.—CHEMISTRY (Optional).

*Time allowed: Three hours.*

1. Show, by two equations for each, how the following gases are made:—*Oxygen, hydrogen, chlorine, carbon dioxide* (carbonic acid), *hydrosulphuric acid* (sulphuretted hydrogen).

2. Explain fully, giving equations, how *phosphorus* is made, and state its uses.

3. In what respects does *ozone* differ from *oxygen*?

4. What weight of each of the products is obtained by the combustion of 100 lb. of a substance containing 80 per cent. of carbon and 20 per cent. of hydrogen?

5. Show, by equations, the action of *sulphuric acid* on *potassic nitrate* (saltpetre), and on *sodium chloride* (table-salt).

6. What are the halogens? How do they differ from and resemble each other?

7. What are the constituents of atmospheric air? Is it a mixture or a compound? How is its composition affected by plants and animals?

8. How is *ammonia* made from gas liquor?

9. State what you know of *chloride of lime* (bleaching powder) under the following heads: (a) its composition; (b) its properties; (c) its uses; (d) the action of acids on it.

10. Write down the names and symbols (formulae) of the *oxides* of the following elements:—*Nitrogen, phosphorus, hydrogen, chlorine, sulphur, carbon, silicon.*

11. Describe experiments showing the properties of *carbon dioxide* (carbonic acid), *oxygen, sulphur, phosphorus.*

12. Describe as fully as you can the process for the manufacture of *sulphuric acid*.



## CLASS D.—ELECTRICITY (Optional).

*Time allowed: Three hours.*

1. Describe fully the properties of a loadstone.
2. Describe the experiments that may be made to prove the earth to be a large magnet.
3. Give an account of magnetic induction; and describe some of the more striking experiments to illustrate the induction of soft iron.
4. Describe a gold-leaf electroscope, and state how, by means of it, you would determine the kind of electricity on a body.
5. State all the essentially different ways in which electricity may be produced.
6. Contrast the electricity produced by a galvanic battery with that produced by an electric machine.
7. Give a description of the construction and chemical action of a Daniell's cell, and state in what respects it is better than a Smee's cell.
8. Describe the mode by which a distant charge of gunpowder is fired by an electric current, and state the laws of the production of heat by the electric current.
9. Give a clear account of the construction of an electro-magnet; and describe some apparatus, such as an electric bell or engine, in which the electro-magnet is practically used.
10. Describe the chemical changes that ensue when a current of electricity is sent through a solution of sulphate of copper. State the laws of electrolysis.

## CLASS D.—SOUND AND LIGHT (Optional).

*Time allowed: Three hours.*

1. A workman is at a distance driving a bar into rock; he is striking ten blows a minute; exactly as the hammer is seen to fall the sound of a blow is heard: at what several distances away may he be for this to happen? Can you suggest any means, merely by watching the man and noting the sound of the blows, of telling which of these distances is the true one?
2. Describe clearly the nature of a sound-wave, and explain how two waves may be made to interfere so as to destroy each other.
3. Give illustrations of resonance and sympathy of vibrations generally, and state where the principle is used in musical instruments.
4. What becomes of a beam of light when it falls obliquely on a plane piece of plate-glass?
5. Show by a diagram how an image is formed in a concave mirror.
6. Explain the formation of an image in a plane mirror, and show by a diagram how it is that you can see your whole reflection in a mirror half your height.
7. Draw a section through an opera-glass or any other telescope. Show how the image is formed in such a telescope.
8. A beam of white light is made up entirely of pure red and pure green; it is allowed to fall upon a prism: show by a diagram the course of the rays after passing the prism, and the appearance the light presents when it is allowed to fall upon a white wall.
9. Give a clear account of the origin of the black bands of the solar spectrum.
10. Describe the construction of an achromatic lens. If I look at a spot of light with an ordinary lens, what appearance will it present?

## CLASS D.—HEAT (Optional).

*Time allowed: Three hours.*

1. What is meant by the coefficient of expansion? How has the coefficient of expansion of metals been ascertained? What is the coefficient of all perfect gases?
2. One pound of ice at  $0^{\circ}\text{C}$ ., ten pounds of water at  $5^{\circ}\text{C}$ ., and two pounds of steam at  $100^{\circ}\text{C}$ . are mixed: what will be the resultant temperature?
3. Describe fully all the physical changes, as regards both matter and energy, in the process of converting ice into steam.
4. Give an account of the action of any form of steam-engine with which you are acquainted. Make a detailed sketch of the valves for causing the steam to enter and leave the cylinder.
5. How many units of heat are equivalent to the work of lifting 5,000 lb. to a height of 500 feet? How has it been proved that quantities of heat and work may be expressed in terms of one another?
6. How may heat be converted into chemical energy, into electricity, and into mechanical work respectively?
7. Describe experiments to prove that radiant heat and light are the same, except as regards their wave-lengths.
8. Explain conduction and convection, and give examples of both phenomena.
9. Describe fully the formation of clouds.
10. What is meant by the term "specific heat"? State what you know of the laws of the specific heat of gases, and describe one method by which specific heats have been ascertained.

## CLASS D.—BOTANY (Optional).

*Time allowed: Three hours.*

1. Describe a vegetable cell, and mention the chief cell-contents, classifying them according to chemical composition.
2. Describe as many kinds of inflorescence as you can.
3. Draw diagrams of flowers with hypogynous, perigynous, epigynous, and epipetalous stamens; and describe the differences in the flowers.

4. Describe the difference in structure between the root and the stem in Dicotyledons.
5. Describe the structure of the stem in Monocotyledons and in Dicotyledons respectively, giving the names of the different parts.
6. Describe the differences in the mode of growth between a leaf and a stem in flowering plants.
7. Describe the different modes by which parasites, saprophytes, and epiphytes obtain nourishment.
8. Explain fully how it is that plants can live in an air-tight Wardian case without any change of air.
9. What is meant by alternation of generations in plants? Give an example.

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CLASS D.—ZOOLOGY (Optional).

*Time allowed: Three hours.*

1. Describe the structure of a sponge. Explain why the sponges found commonly on the shore are not adapted for household purposes.
2. Give the differences in structure and external form that distinguish a slug from an earthworm.
3. State the differences that distinguish a moth, a beetle, a cockroach, a cicada, a honey-bee, and a blue-bottle fly.
4. Describe the apparatus for respiration in a bony fish, and state how it acts.
5. Give as many points of difference as you can, in external and internal structure, between a kiwi and a fowl.
6. Describe the stomach of a sheep, and the process of rumination.
7. State in detail how the food which an animal takes into its stomach finds its way to the tissues which have to be nourished.
8. A quantity of carbon is set free in the tissues from the decomposition of the protoplasm. Describe what becomes of this carbon.
9. Describe the structure of the human skin.

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CLASS D.—GEOLOGY (Optional).

*Time allowed: Three hours.*

1. The detritus of a granitic district is carried down by a river, and spread out in the sea in the form of sand and clay. Explain how it is that the detritus is separated into sand and clay, and explain the relative positions in which each of these rocks will be formed.
2. Define the two great classes of sedimentary and eruptive rocks, showing how they can be distinguished from each other.
3. Define the meanings of the terms "dip" and "strike," and draw a diagram explaining them.
4. Why are fossils useful to a geologist? What do they prove to him?
5. How are concretions formed? Explain the difference between a concretion and a boulder.
6. Draw an ideal section through a volcanic mountain, and explain its structure.
7. State your opinion as to the origin of valleys in mountain chains, giving the reasons for your opinion.
8. By what evidences do geologists prove the former existence of glaciers in some places where no glaciers are now found? Describe the evidence in detail.

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CLASS D.—FRENCH (Optional).

*Time allowed: Three hours.*

1. What difference is there in meaning between *a* and *à*, *la* and *là*, *des* and *dès*, *ou* and *où*, *du* and *dû*, *sur* and *sûr*?
2. Give the feminine of *absous*, *favori*, *jumeau*, *long*, *traître*.
3. Grammarians speak of three comparatives, viz., of superiority, inferiority, and equality. How are they formed in French?
4. Give the French for the cardinal, ordinal, collective, and distributive of 1, 2, 3, 4, 5.
5. What is the difference between *ce* the demonstrative adjective and *ce* the demonstrative pronoun?
6. Write out in full the present indicative of the verb *se lever*—affirmatively, negatively, interrogatively, and negatively-interrogatively.
7. What are the various meanings of *on*? What is its derivation? Whence does it arise that *on* is sometimes preceded by *'*?
8. Translate the following sentences, in order to show the different meanings which *de* may bear:—  
*Je viens de Paris.*  
*Ne venez pas de nuit.*  
*Je suis enchanté de son succès.*  
*Mon frère a aussi une montre d'argent.*  
*Nous bûmes le jour de l'an du vin de Champagne.*  
*Il tremblait de peur.*
9. Write out in full the verb *il gèle*.
10. When should the perfect definite be used, and when should the perfect indefinite be used?
11. Verbs ending in *-eler* and *-eter* double the *l* or *t* before a mute syllable. Do you know any exceptions to this rule?
12. There is only one verb which does not take a circumflex in the 1st and 2nd persons plural of the perfect definite, and in the 3rd person singular of the imperfect subjunctive: which is it?
13. What is the difference in meaning between *connaître* and *savoir*?
14. Give the principal parts of the following verbs: *envoyer*, *ouvrir*, *sentir*, *voir*, and *craindre*.
15. After what conjunctive phrases should the subjunctive be used?
16. By what general rules can you be guided as to the proper position of some adjectives in French?

17. Why does *le* remain invariable in such phrases as the following :—

Madame, êtes-vous malade? Non, monsieur, je ne le suis pas.  
Messieurs, êtes-vous amis? Oui, nous le sommes.

18. When is *ne* used before a second verb?

19. From the following adjectives form substantives :—*Malade, hardi, ferme, faible.*

20. Translate into English—*Après, d'après; de service, en service; du reste, de reste; parceque, par ce que; mot à mot, mot pour mot.*

21. Translate into English—

#### A.

HARPAGON, *criant au voleur dès le jardin.*] Au voleur! au voleur! à l'assassin! au meurtre! Justice, juste ciel! Je suis perdu, je suis assassiné; on m'a coupé la gorge, on m'a dérobé mon argent. Qui peut-ce être? Qu'est-il devenu? Où est-il? Où se cache-t-il? Que ferai-je pour le trouver? Où courir? Où ne pas courir? N'est-il point là? N'est-il point ici? Qui est-ce? Arrête. (*à lui-même, se prenant par le bras.*) Rends-moi mon argent, coquin... Ah! c'est moi! Mon esprit est troublé, et j'ignore où je suis, qui je suis et ce que je fais. Hélas! mon pauvre argent! mon pauvre argent! mon cher ami! on m'a privé de toi; et puisque tu m'es enlevé, j'ai perdu mon support, ma consolation, ma joie: tout est fini pour moi, et je n'ai plus que faire au monde. Sans toi il m'est impossible de vivre. C'en est fait, je n'en puis plus; je me meurs; je suis mort; je suis enterré. N'y a-t-il personne qui veuille me ressusciter en me rendant mon cher argent ou en m'apprenant qui l'a pris. Euh! que dites-vous? Ce n'est personne. Il faut, qui que ce soit qui ait fait le coup, qu'avec beaucoup de soin on ait épié l'heure; et l'on a choisi justement le temps que je parlais à mon traître de fils. Sortons. Je veux aller querir la justice et faire donner la question à toute ma maison; à servantes, à valets, à fils, à fille, et à moi aussi. Que de gens assemblés! Je ne jette mes regards sur personne qui ne me donne des soupçons, et tout me semble mon voleur. Hé! de quoi est-ce qu'on parle là? de celui qui m'a dérobé? Quel bruit fait-on là-haut? Est-ce mon voleur qui y est? De grâce, si l'on sait des nouvelles de mon voleur, je supplie que l'on m'en dise. N'est-il point caché là parmi vous? Ils me regardent tous et se mettent à rire. Vous verrez qu'ils ont part, sans doute, au vol que l'on m'a fait. Allons vite, des commissaires, des archers, des prévôts, des juges, des gênes, des potences, et des bourreaux. Je veux faire pendre tout le monde; et, si je ne retrouve mon argent, je me pendrai moi-même après.—*Molière.*

#### B.

Oui, Lamoignon, je fuis les chagrins de la ville,  
Et contre eux la campagne est mon unique asile.  
Du lieu qui m'y retient veux-tu voir le tableau?  
C'est un petit village ou plutôt un hameau,  
Bâti sur le penchant d'un long rang de collines,  
D'où l'œil s'égare au loin dans les plaines voisines.  
La Seine, au pied des monts que son flot vient laver,  
Voit du sein de ses eaux vingt îles s'élever,  
Qui, partageant son cours en diverses manières,  
D'une rivière seule y forment vingt rivières.  
Tous ses bords sont couverts de saules non plantés,  
Et de noyers souvent du passant insultés.  
Le village au-dessus forme un amphithéâtre:  
L'habitant ne connoît ni la chaux ni le plâtre;  
Et dans le roc, qui cède et se coupe aisément,  
Chacun sait de sa main creuser son logement.

La maison du seigneur, seule un peu plus ornée,  
Se présente au dehors de murs environnée.  
Le soleil en naissant la regarde d'abord,  
Et le mont la défend des outrages du nord.  
C'est là, cher Lamoignon, que mon esprit tranquille  
Met à profit les jours que la Parque me file.  
Ici, dans un vallon bornant tous mes desirs,  
J'achète à peu de frais de solides plaisirs.  
Tantôt, un livre en main, errant dans les prairies,  
J'occupe ma raison d'utiles rêveries:  
Tantôt, cherchant la fin d'un vers que je construis,  
Je trouve au coin d'un bois le mot qui m'avoit fui;  
Quelquefois, aux appas d'un hameçon perfide,  
J'amorce en badinant le poisson trop avide;  
Ou d'un plomb qui suit l'œil, et part avec l'éclair,  
Je vais faire la guerre aux habitants de l'air.—*Boileau.*

#### C.

La population qui l'habite se fond dans l'harmonie du paysage, dont elle a pris le caractère tranquille et doux. Les hommes y sont basanés et secs comme dans le Midi; les femmes élancées et sveltes; un grand chapeau de feutre noir ombrage le front des bûcherons et des laboureurs; une coiffe de toile blanche, ou quelque mante de laine, protège la tête des jeunes bergères et des femmes qui travaillent aux champs. Leur regard a cette profondeur et cette nuance de mélancolie particulière aux habitants des pays à demi sauvages. Le sol leur dispense une nourriture avare et les plie à de rudes travaux qui les accoutument à la ténacité lente et à l'entêtement laborieux du bœuf. Ils luttent, par le travail, contre la pauvreté, et s'y soumettent. Ces grands troupeaux de moutons, qui errent de la plaine aux vallons, prêtent au pays une physionomie patriarcale qui ajoute à sa solitude. Le ciel est gris, le climat humide, l'horizon vapoureux, les clairières, les étangs, les landes ouvrent de longues perspectives animées par le murmure des pins; l'œil s'y plonge et l'esprit s'y perd dans des rêveries dont le charbonnier et le faucheur subissent peut-être le charme sans le comprendre.—*Amédée Achard.*

#### CLASS D.—GERMAN (Optional).

*Time allowed: Three hours.*

##### A. Translate—

"Don Rodrigo ist mein Name,  
Wohl auch Cid Campeador,  
So ergeben meinem König'  
Als mein Weib, Ximene, mir,  
Leb' ich als ein schlichter Kriegermann,  
Der kaum zweimal in der Woche  
Ab die Kriegeswaffen legt,  
Schlafe nirgend als im Zelte,  
Thue keinem Freunde übel,  
Stünd' es auch in meiner Macht.  
Haue nur mit meinem Degen,  
Aber nie mit Zung' und Feder,  
Esse sitzend auf der Erde,  
Weil mir eine Tafel fehlt,  
Lasse niemand mit mir speisen,  
Als die Braven und die Guten,  
Anzuspornen, durch die Sitte,  
Meiner Freunde Heldenmuth.  
Unsre Tischgespräche charren  
Nie auf die begrabnen Todten,  
Greifen nie dem Urtheil Gottes  
Ueber die Lebend'gen vor.  
Ich, der Cid, ich spreche selten,  
Kümmre wenig mich um andre,  
Frage nichts, als ob Babieça  
Sei gewartet und gezäumt,

Aufzusitzen gleich nach Tafel  
Neu zu eilen ins Gefecht.

"Lego nieder mich zum Schlafe,  
Nicht zu wachen und zu sinnen,  
Wie auf Wegen des Betrugers  
Ich erschleiche fremdes Gut.  
Wach' ich auf, so gehts zu Felde,  
Hier—ein feindlich Schloss zu nehmen,  
Oder—liegen es zu lassen,  
Wie das Glück will, wie es fällt.

"Bin ich einsam, so gedenk' ich  
An mein Weib, und das mit Seufzen;  
Weinend musst' ich sie verlassen,  
Klagend, wie die Turteltaube;  
Und wohl einsam, und wohl traurig  
Lebet jetzt sie in der Fremde;  
Doch sie lebet glücklich dort.

"Uebrigens, ihr hohen Herren,  
Kann und darf der Cid antworten  
Jedem, wer es sei, der frägt.  
Er darf seine Seel' enthüllen  
Ohne Lug' und ohne Schaam."

—*Herder.*

## B. Grammar.

N.B.—Five questions in B may be left unanswered. Give the English of all the German words used.

1. Decline: der arme Heinrich; die weise Luise; das reiche London.
2. Decline: derjenige welcher; diejenige welche; dasjenige welches: diejenigen welche. State what words can be used instead of welcher, -e, -es, -e; and also instead of derjenige, diejenige, dasjenige, diejenigen.
3. Translate the following sentences, and say what grammatical rules are exemplified by them:—It is said . . .; A great many bales of wool have been sold; In this town there is a great deal of dancing and playing.
4. Give some of the conjunctions: (1) co-ordinate; (2) subordinate. Illustrate each class with examples.
5. Comment on and explain: die Thaler, die Thäler; die Thoren, die Thore; die Banken, die Bänke; die Bande, die Bände; die Worte, die Wörter. Why is the title of the musical work written: Mendelssohn's "*Lieder ohne Worte*"?
6. State rule and exceptions as regards the gender of metals. Of what gender are stones and precious stones? Give examples of each class.
7. Of what gender are forest-trees? Give six examples. Give also twelve names of various fruits, flowers, and shrubs, prefixing the definite article.
8. Comment on and explain: Diese Bücher sind mein; vier Grad Kälte; drei Buch Papier; sechs Ellen Band; fünf hundert Mann Infanterie.
9. Show how the conjugation of each of the following verbs, as regular (weak) or irregular (strong), varies with the meaning:—Bleichen, pflegen, weichen, schleifen, schaffen, löschen, gleichen, erschrecken, bedingen, bewegen.
10. Account for: die Deutsche. What is the usual mode of forming the feminine of national appellations? Give examples.
11. Decline the personal pronouns, both singular and plural.
12. Give examples of adverbs of place, manner, time, and degree respectively, and illustrate by examples in what order they are placed in sentences.
13. How is the plural of feminine substantives ending in *-er* formed? Are there any exceptions to the rule? Give examples.
14. Give examples of reflexive verbs (1) that govern the accusative; (2) that govern the dative.
15. Give the imperfect subjunctive of *brennen*, *kennen*, *nennen*. Give some more verbs as examples.

## C. Translate—

1. Have you taken my umbrella?
2. No; I have one which belongs to me.
3. Where does Mr. Smith live?
4. He lives in Frederic Street.
5. How far is it to Altona?
6. About a mile and a half.
7. Do you know the President of the United States?
8. Yes; I met him at a ball last winter.
9. Do they know their lessons?
10. Not quite; they have hardly had enough time to learn them.
11. Will you be so kind as to reach me down my hat?
12. Certainly; I will do so with the greatest pleasure.
13. Where does the train stop next?
14. Not far from Vienna, the capital of Austria.
15. Do you like travelling in steamboats?
16. No; I prefer travelling in coaches.
17. Which of the three principal modern languages do you like best?
18. I like English very much, I prefer French, but I like German best.
19. Have you any relations in this country?
20. I have two brothers and three sisters; but my father and my mother are living in Germany.

## LIST OF PASSES.

[Extracted from *New Zealand Gazette*, 4th April, 1881, and 14th April, 1881.]

THE following lists contain statements of the principal results of the examination held at the end of January, 1881. It must be understood that the granting of a certificate depends only in part upon the result of an examination, and that candidates who have not had the experience required by the regulations, or who do not receive the necessary marks from a School Inspector, have no claim to a certificate.

The first list contains the name of a successful candidate for Class C. The second contains the names of the successful candidates at the examination for Class D. The third supplies similar information with regard to Class E. The fourth and fifth lists give the names of candidates who will be allowed to qualify for Classes D and E respectively, by passing at the next examination in those subjects only in which they have this year been unsuccessful. The sixth is the list of candidates whose status before the examination was "provisional," and who have now passed in the additional subjects necessary for a full certificate.

Every candidate will receive a private intimation of his success or failure, and those whose names are in the third and fourth lists will be advised as to the subjects in which they will require to be examined again.

An asterisk against a name signifies that the candidate is too young to hold a full certificate.

## I. PASSED THE EXAMINATION FOR CLASS C.

Hawke's Bay—  
Thomson, Archibald Bruce.

## II. PASSED THE EXAMINATION FOR CLASS D.

Auckland—  
Bruce, Ashton Welborne.

Hawke's Bay—  
Bull, Henry.  
Morton, Albert James.

North Canterbury—  
\* Allan, John Charles.  
Allison, Laura Malbon.  
Gilling, George.  
\* Henderson, Christina Kirk.  
\* Hunt, Harriet.

Otago—  
\* Bicknell, Bertha.  
\* Brown, Mary Maxwell.  
\* Dow, Jane Maria.  
\* Little, Caroline Eliza.  
Mahoney, James.  
Mitchell, Henry.  
Robertson, James.  
\* Whetter, Richard Gill.  
Whyte, John.  
Worsop, William Hurnall Arthur.

## III. PASSED THE EXAMINATION FOR CLASS E.

Auckland—  
Carter, Charles Morton.  
Marsdon, William Henry Pasco.  
Potter, James John.  
\* Sanderson, Frederick William.  
Wily, Emma Lascelles.  
\* Young, Louisa Linda.

Wanganui—  
Parkes, Frederick James.

North Canterbury—  
\* Allison, Marion Malbon.  
\* Bain, Mary De Renzy.  
Borthwick, James Bibb.  
\* Dynes, Martha.  
\* Hiatt, Mary.  
\* Leach, Ellen Maude.  
\* Milsom, Margaret Simson.  
Quartermain, George.  
\* Weir, Martha.  
\* Veysey, Mary Maria.

Otago—  
\* Allan, Amelia.  
Beattie, Robert Martin.  
\* Bowden, Sarah Emma.  
\* Darton, Henry Lawrence.  
Drummond, Alexander Peter.  
Kirkland, Martha.  
Menzies, Christina Flora.  
\* Nicol, Mary Annie.  
\* Oudaille, Frances Jane.  
Spedding, Selina Amy.  
\* Titchener, Hugh.  
\* Tracey, Mary Anna Temple.

IV. PARTIAL SUCCESS RECORDED TOWARDS  
CLASS D.

Taranaki—  
Potts, George William.

Wanganui—  
McCutchan, William Arthur.

Wellington—  
Brann, John Henry.

Nelson—  
\* Blumer, George Alfred.

North Canterbury—  
Ockford, Florence.

Otago—  
\* Marshall, Margaret Dunbar.  
\* Young, Charles..

V. PARTIAL SUCCESS RECORDED TOWARDS  
CLASS E.

Auckland—  
Ansley, Arthur Frederic Thomas.  
Ballance, Alfred Charles.  
Bowen, Rosanna.  
Burton, Ella.  
Castleton, William Charles.  
\* Coleman, Isabella Maglin.  
Colhoun, Andrew.  
Edmiston, Jessie Hutchison.  
Goodhue, Harriet Marie Elford.  
Hamer, Lallie.  
Henry, Annie.  
Henry, Margaret.  
Hogwood, James.  
Hogwood, Robert.  
Hopper, Charlotte Ann.  
\* Kilfoyle, Leonora.  
Leech, Georgina.  
Litten, Alfred John.  
\* Martin, Elizabeth.  
\* Metge, Daniel Dickinson.  
Mulgan, Arabella Maria.  
O'Connor, Alfred.  
Rushbrook, Louisa.  
Scott, John Lyons.  
Smith, Edith Mabel.  
Sullivan, Walter.  
\* Taylor, Florence.  
Tobin, Cecil Alexander.  
Vialoux, Kate.  
Warren, Francis.

Taranaki—  
James, Sydney Henry.

Wanganui—  
\* Cornfoot, Janet Law.  
Steuart, Frederick Jeffray.

Wellington—  
Bennett, Francis.

Westland—  
\* Brown, Alice Ellen.  
\* De Bakker, Coralie.  
Williams, Sophie.

North Canterbury—  
\* Blake, Florence Esther.  
\* Brock, Margaret.  
\* Cookson, Arthur.  
\* Currie, Janet.  
\* Duffull, Jessie.  
\* Holder, Fanny.  
\* Marr, Thomas Meldrum.  
\* Pole, Thomas Luke Potts.  
Scott, Gideon.  
Stephens, Mary Mackintosh.  
\* Webber, Abel.

South Canterbury—  
Ritchey, Theodore Harold.

Otago—  
\* Attwood, Edith Elizabeth Mary.  
Darton, Annie.  
\* Ferguson, Jane Clark.  
\* Gazzard, George.  
\* Hooper, Jane Dunlop.  
Kilby, Arthur.  
\* Mills, Mary Wilson.  
Officer, John.  
Wicks, William Henry.

## VI. PASSED IN THE SUBJECTS REQUIRED TO COMPLETE FORMER EXAMINATION.

## Auckland—

Allely, Margaret Jane.  
 Bedford, Bernard.  
 Bengé, Alfred.  
 Boler, Robert Goodine.  
 Bradshaw, George William.  
 Burnett, Jane.  
 Caldwell, Margaret.  
 Dent, Eleanor.  
 Edwards, William.  
 Faithfull, Emily Mary.  
 Harrison, Edward Marmaduke Clarke.  
 \* Howard, Mary Catherine.  
 Muir, James.  
 Nicholson, Edith.  
 Simpson, Jane.  
 \* Sinclair, Jane Flett.  
 Wells, Harry Walter.  
 White, Caroline Ellen.  
 Wilson, Joseph Harris.

## Taranaki—

Hogarth, Catherine.  
 Stevens, Robert.

## Hawke's Bay—

Bruford, Charles Augustus.  
 Gosnell, Louisa.

## Wanganui—

Dawson, Rosa.  
 Gower, Alfred.  
 Jordan, Mary Emily.  
 \* McDonald, Johan Johnston.  
 Stedman, Harriet.

## Wellington—

Barry, David.  
 Connell, Frederick William.  
 Gooder, Emma.  
 McGowan, Harriet.  
 McGowan, Jessie.  
 Mathews, Ellen.  
 Maunder, Emma Dormer.  
 Robertson, Annie Elizabeth.

## Nelson—

Chepmell, Charles John Heineken.  
 Falla, Annie.  
 Leech, Annie.  
 McPhee, Flora.  
 Sunley, Ellen.  
 Worley, William Frederick.

## Westland—

\* Gilroy, Harriet Florence.

## North Canterbury—

\* Ansley, Martha.

\* Armitage, William Charlesworth.  
 \* Banks, William Alexander.  
 \* Barrett, Susan.  
 \* Bowley, Charles Frederick.  
 Cannon, Philip Henry.  
 Chambers, Jessie Mary.  
 Chichester, Harry Vernon.  
 Dohrmann, Sophia.  
 Elliott, John James.  
 Fee, Sarah.  
 Fee, Susan.  
 Hobbs, Celia Elizabeth.  
 Jack, Bethia.  
 Kitchingman, Ann.  
 Kitchingman, Sarah.  
 \* Ladbroke, Helen Mary.  
 Low, Benjamin.  
 Low, Sabina.  
 Macmillan, Thomas Hamilton.  
 Opie, Charles Henry Adolphus Truscott.  
 Opie, Louisa.  
 \* Pashby, Julia.  
 Pitcaithley, Margaret.  
 Rowley, Emma Bannister.  
 Sinclair, Janet.  
 Smith, Thomas George.  
 Stewart, Jessie.  
 Stout, Agnes Watson.  
 Thomas, Matilda Jane.  
 \* Twose, Richard James.  
 South Canterbury—  
 Collins, Edward James Bruges.  
 Cramond, Florence.  
 Dunnett, Andrew.  
 Hookham, Marian Ada.  
 King, Walter Junius.  
 Mansfield, Frederick William.  
 Müller, Nicolaus Ludwig Friedrich.  
 \* Wake, Frederick William.  
 Otago—  
 Aldred, Frederick Scott.  
 Bennett, Selina Mary.  
 Black, Jane Ann Stuart.  
 Brown, Jessie Christina.  
 Brunton, Jessie.  
 Carrington, George William.  
 \* Crump, Sarah Lizzie.  
 Lowry, Priscilla Anna.  
 Pearson, David.  
 Watson, Margaret.  
 Southland—  
 Madden, Walter Wilmot.  
 Mahoney, Cornelius.  
 Wild, Herbert Arthur.