TEACHERS' EXAMINATION.

September, 1897.

THE following results of Examinations held by the Education Department during the year 1897 are published for general information.

O. P. STABLES,
Secretary for Education.

19th February, 1898.

ELEMENTARY SCHOOL BURSARIES FOR BOYS.
(All failed.)

ELEMENTARY SCHOOL BURSARIES FOR GIRLS.
(All failed.)

HIGH SCHOOL SCHOLARSHIPS.

R. J. Carter ...   ...   Boys' Public School, Perth.

(Others failed.)

GOVERNMENT EXHIBITIONS.

1. Francis A. Moseley   ...   The High School, Perth.
2. William T. Bryan   ...   Christian Brothers' College, Perth.
3. Frank G. Allen ...   ...   The High School, Perth.
4. Samuel T. F. B. Lewis...   The High School, Perth.
5. Fred. W. Browne   ...   Christian Brothers' College, Perth.
6. Dircksey C. Cowan   ...   Girls' High School, Perth.
7. William G. Lambert ...   The High School, Perth.
8. Cornelius O. Quigley ...   Christian Brothers' College, Perth.

(The above have gained Exhibitions.)

The following will receive Certificates :—

9. Edmund C. Clifton   ...   The High School, Perth.
10. Raoul R. Kahan   ...   Christian Brothers' College, Perth.

(Six candidates failed.)

EXAMINATION FOR PUPIL TEACHERS.

CLASS I.

1. E. S. Bott   ...   Public School, Highgate.
2. Letitia Campbell   ...   Central Girls' School.
3. Blanche Haughton   ...   Central Girls' School.
4. Cora M. E. Anderson ...   Public School, Pinjarrah.
5. May L. Chipper   ...   Public School, Victoria Park.

(Four candidates failed.)

CLASS II.

May Dibdin   ...   Public School, Highgate.

(Six candidates failed.)

CLASS III.

1. Barbara Sunderland   ...   Central Girls', Perth.
2. Mary F. Connor   ...   Public School, Wagin.
3. John Flanigan   ...   Public School, East Perth.
4. Narcissa Preston   ...   Girls' Public School, Fremantle.

(Four candidates failed.)

CLASS IV.

1. Adolph C. Heinrichs ...   Public School, Fremantle North.
2. Frances E. Metcalfe ...   Infants' Public School, Perth.
3. Ada Hodges   ...   Infants' Public School, Fremantle.
4. Ethel Jane Smith   ...   Public School, York.
5. May Warnecke   ...   Public School, East Perth.
6. Florence Pyke   ...   Public School, York.
7. Mabel E. Yewers   ...   Public School, Fremantle North.
8. Louise Thirioux   ...   Public School, East Perth.
9. Edith Walker   ...   Public School, Beaconsfield.
10. Mary Jowett   ...   Public School, Menzies.
11. Edith Jenkins   ...   Public School, Central Girls'.
12. Pearl Amy Smith   ...   Public School, Northam.
13. Dorothy Galley   ...   Public School, Bridgetown.

(Fourteen candidates failed.)

The following were successful at the Candidates' Examination, and may be appointed when suitable vacancies occur :—

1. John G. Turner.
2. Elizabeth A. Douglas.
3. Emelie Keen.
4. Constance Jones.
5. { Juliet A. Stonehouse.
   { Kate Ware.
7. Agnes Jardine.
8. George Lloyd.
9. Ivy A. Lewis.
10. Gertrude E. Minchin.
11. Cecilia M. Huggins.
12. Amy Brockway.
13. Elsie Keen.

TEACHERS' EXAMINATION.

"A." CLASSIFICATION.

Elizabeth Julius ...   ...   1st Class Honours.

"B." CLASSIFICATION.

*1. R. Kenafick ...   . 1st Class Honours.
 2. G. W. Bailey...   ...   ... 2nd Class Honours.
*3. Samuel Dark...   ...   ...   do.
*4. C. R. James ...   .   do.
*5. James Flanigan   ...   ...   do.
 6. L. T. Ryan   ...   ...   do.
 7. C. G. Hamilton   ...   ...   Passed.
*8. A. H. Russel...   ...   ...   do.
*9. M. F. Darcey   ...   ...   do.
10. J. T. Draper (subject to his passing in English
    in 1898.)

(Six candidates failed.)

"C." CLASSIFICATION.

 1. Frances Burgess   ...   ... 1st Class Honours.
 2. A. Lyngberg ...   .   do.
 3. M. J. Graham   ...   2nd Class Honours.
 4. Hannah Gleeson   ...   ...   do.
 5. W. G. Kerr   ...   .   do.
 6. J. Murnane   ...   ...   do.
 7. W. R. O'Brien   ...   ...   do.
 8. Edith Hill   ...   .   do.
*9. T. J. Brown ...   .   do.
10. E. W. Schonell   ...   ...   do.
11. Adolph Schneider   ...   ...   do.
12. Edward Hayes   ...   ...   do.
13. Patrick McGuinness ...   ...   Passed.
*14. J. W. Casey ...   .   do.

(Twenty candidates failed.)

Those marked (*) are pending the Inspector's Report on their examination in "Practical Skill."

THE following Questions set at the Examinations, as mentioned hereunder, held during the year 1897, are published for general information.

O. P. STABLES,
Secretary for Education.

Education Department,
    Perth, February 21st, 1898.

"FAILING" SUBJECTS.

"A.," "B.," AND "C." CERTIFICATES.

SEPTEMBER, 1897.

WRITING.

1. Write in small-hand—Necessity is the mother of invention.
2. Write in half-text—Alleghany Mts.
3. Text hand—Necessity.

SPELLING.

1. Write the Dictation Exercise selected.
2. Marks will be deducted for incorrect spelling in any of the worked papers.

Arithmetic.

"A." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed : Three hours.

1. Express $\dfrac{\frac{7}{8}+\frac{5}{9}-1\frac{1}{4}}{\left(\frac{5}{8}-\frac{1}{16}\right)\left(\frac{3}{4}+\frac{1}{2}\right)} \div \frac{52}{81}$ of a sovereign as the decimal of 5 guineas.

2. Find the Least Common Multiple of 143, 78, 91, 637, 286, and 156, and the Greatest Common Multiple of 12,321 and 54,345.

3. Find a 4th proportional to $\frac{2}{3}$, $\frac{1}{4}$, $\frac{3}{8}$.

4. Find the square root of $3\frac{8934}{17089}$.

5. A. can do half a piece of work in 10 days and B. can do the whole in 15 days. A. works by himself for 5 days, and in conjunction with B. for 4 days more. A. and B. then call in C. to help them, and the work is then finished by the three in $1\frac{1}{2}$ days. How long would it take C. to do it alone ?

6. If I invest in stock at 5 per cent. discount and sell out at 14 per cent. premium, how much per cent. do I gain ?

7. Find the present worth of £1,868 payable as follows :—£406 in three months, £618 in six months, and the remainder in eleven months, interest being at the rate of 6 per cent. per annum.

8. A train 88 yards long and travelling at a uniform speed passes a telegraph post by the line in 6 seconds. It then overtakes a train 110 yards long, travelling in the same direction on a straight parallel track, and passes it in 81 seconds. What was the speed in miles per hour of the second train ?

9. A., who has invested £3,450 in 4-per-cent. stock at £115, finds that he has £15 less income than B., who has invested a certain sum in 3-per-cent. stock at par. How much did B. invest ?

10. The distance between two opposite corners of a square field by a straight path is 100 yards shorter than the way round two sides of the field. Find approximately the length of the straight path across the field.

"B." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed : Three hours.

1. Find the value in £ s. d. of the difference between 1·6 of 3·4 of £1·125 and $\frac{1}{2}$ of 3·6 of £9·1125.

2. If 9 persons are boarded 4 weeks for £27, how long should 11 persons be boarded for £107 5s. ?

3. A man buys eggs at 10s. a gross and retails them at a penny each. What is his profit per cent. ?

4. Find the simple interest for $2\frac{1}{4}$ years at 3 per cent. on £489 6s. 7d.

5. Express $\dfrac{\frac{7}{8}+\frac{5}{9}-1\frac{1}{4}}{\left(\frac{5}{8}-\frac{1}{16}\right)\left(\frac{3}{4}+\frac{1}{2}\right)} \div \frac{52}{81}$ of a sovereign as the decimal of 5 guineas.

6. Find the Least Common Multiple of 143, 78, 91, 637, 286, and 156, and the Greatest Common Multiple of 12,321 and 54,345.

7. Find a 4th proportional to $\frac{2}{5}, \frac{1}{4}, \frac{3}{5}$.

8. Find the square root of $3\frac{8934}{17689}$.

9. A. can do half a piece of work in 10 days and B. can do the whole in 15 days. A. works by himself for 5 days and in conjunction with B. for 4 days more. A. and B. then call in C. to help them, and the work is then finished by the three in $1\frac{1}{2}$ days. How long would it take C. to do it alone ?

10. If I invest in stock at 5 per cent. discount and sell out at 14 per cent. premium, how much per cent. do I gain ?

" C." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed : Three hours.

1. A. owned a ship. He sold $\frac{1}{3}$ to B. and $\frac{1}{4}$ to C. The part he now owns is how many times as much as he sold ?

2. Simplify $4\frac{1}{4} + \dfrac{1\frac{1}{6}}{3\frac{1}{2}}$ of $\left(\dfrac{\frac{1}{6} + 19\frac{1}{4}}{6\frac{3}{4} - 1\frac{1}{2}}\right)$

3. What fraction is $\dfrac{4\frac{1}{3} - 1\frac{1}{2}}{3\frac{1}{4}}$ of 1 guinea of $\dfrac{6\frac{1}{4}}{3\frac{1}{3}}$ of a pound.

4. Divide ·000324 by ·018, ·0000018 and 1800.

5. A man bought 1 ton 11cwt. 3lb. of sugar at $2\frac{1}{4}$d. a lb. How much did it cost ?

6. Multiply 7642 by ·12i and divide 1761 by ·5283.

7. Find the value in £ s. d. of the difference between 1·6 of 3·4 of £1·125 and $\frac{1}{5}$ of 3·6 of £9·1125.

8. If 9 persons are boarded 4 weeks for £27, how long should 11 persons be boarded for £107 5s. ?

9. A man buys eggs at 10s. a gross and retails them at a penny each. What is his profit per cent. ?

10. Find the simple interest for $2\frac{1}{4}$ years at 3 per cent. on £489 6s. 7d.

English.

" A." AND " B." CERTIFICATES.

SEPTEMBER, 1897.

Time allowed : Two hours.

1. Write a short note showing how the anomalies in English spelling are accounted for. Define aphaeresis, apocope, syncope.

2. Form the plural of the following words :—
   Genus, genius, formula, phenomenon, bandit, staff, crisis, dogma, index.

3. Parse the words *in italics* in the following phrases :—
   " *Many* a man," " a *few* men," " a great *many* men," " *all* round the world," " a *little* wine," " twice *a* week," " *the* more the *merrier*."

4. Explain the origin and meaning of the adverb or preposition in the following sentences :—
   " I will come by and by," " it is sold by the yard," " how did you come by that property ?" " take any form but that," " this is too bad."

5. What is the force of the verb prefixes—Be, for, with, gain ? Give examples.

6. Paraphrase the following lines :—
   The quality of mercy is *not* strained,
   It droppeth, *as* the gentle rain from heaven
   Upon the place *beneath* : it is twice *blessed* :
   It blesseth him that gives and him *that* takes :
   'Tis mightiest in the mightiest : it becomes
   The *throned* monarch *better* than his crown :
   His sceptre shows the force of temporal power,
   The *attribute* to awe and majesty,
   Wherein doth sit the dread and fear of kings :
   But mercy is above this *sceptred* sway,
   It is *enthroned* in the heart of kings,
   It is an attribute to God *himself* :
   And earthly power doth then show *likest* God's
   When mercy seasons justice.

7. Parse all words *in italics* in the preceding question.

8. Analyse—
   a. Knowing the high qualities of the French navy, I am led to imagine that the signal which preceded the engagement must have been chosen in expectation of a really great battle, or else had been fashioned beforehand and enforced upon the reluctant admiral by some paramount authority.
   b. I sometimes hold it half a sin
   To put in words the grief I feel :
   For words, like nature, half reveal
   And half conceal the soul within.
   c. I know a Mount the gracious sun perceives
   First, when he visits, last, too, when he leaves
   The world.

9. Write an essay on " The progress of Australia during the present reign."

" C." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed : Two hours.

1. What are the vowel sounds in the English language ? How are the consonants classified ?

2. Define the following terms :—
   Case, object, indirect object, complement.

3. Distinguish between the use of " my " and " mine," " that," " who," and " which " (relative), " who " and " which " (interrogative), respectively.

4. Form sentences showing the different uses of the infinitive and subjunctive moods, respectively.

5. Form diminutives from the following words :—
   " Sack, spade, hump, lamb;"
   Abstract nouns from—
   " Christian, knight, young, woman;"
   Adjectives from—
   " Law, parish, danger, night ;"
   and explain the manner of formation in each case.

6. Paraphrase the following lines :—
   Then quickly rose *Sir* Bedivere, and ran,
   And, leaping *down* the ridges lightly, plunged
   Among the *bulrush* beds, and clutch'd the sword,
   And strongly wheel'd and threw it. The great brand
   Made lightnings in the splendour of the moon,
   And *flashing* round and *round* and whirl'd in an arch,
   Shot *like* a streamer of the Northern morn,
   Seen where the moving isles of winter *shock*
   By night, with noises of the Northern Sea.

7. Parse the words in italics in the preceding question.

8. Analyse—
   Before I had determined to write any account of this war, there were grounds from which many inferred that a task of this kind would be mine.

9. Write an essay on the advantages and disadvantages of the Proposed Federation of Australia.

Geography.

" A." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed : Two hours. Seven questions may be answered.

1. Draw a map of India and its " buffer " States, showing also the principal mountain ranges, rivers, towns, and political divisions of India itself.

2. Where and of what interest are the following : —
   Khartoum, Khyber, Cotopaxi, Quito, Bangkok, Cincinnati, Valparaiso, Simla, Chitral, Kingston, Labrador, Trinidad (two of the name), Klondyke.

3. What is climate ? Describe fully the chief circumstances that determine climate. State how and by what correlative circumstances the effect of these may be modified.

4. Describe fully the river system of the Indian Ocean.

5. What are tides and their causes, and what notable instances are there of their effect upon rivers and inlets ?

6. What British and Spanish possessions are there in the West Indies ? Describe briefly the principal towns, the climate, the products, and the inhabitants of the former.

7. Show by a map the boundaries and capital towns of the various Provinces and States of the Balkan Peninsula.

8. Draw up a table to show the chief lines of volcanic activity.

"B." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed : Two hours.

1. Show by a map the territorial distribution of that portion of Africa lying South of the Equator. Fill in the principal towns, harbours, rivers, and lakes.

2. What do you know of Cyprus, Hong Kong, Straits Settlement, Aden, Labaun, Kandy, Singapore, Colombo, Trinidad (two of the name), Zanzibar, Khartoum, Toronto, Vancouver.

3. Give a brief description of the native races of India.

4. Explain briefly—Watershed, monsoon, pampas, simoon, snow-line, moraine, isothermal, tundras, longitude, cyclone, meridian.

5. Name the countries of Europe, their leading products, and respective forms of Government.

6. What is climate, and what are the circumstances that determine climate ?

7. Describe concisely the river system of the North American Continent.

8. Write a short account of the British possessions in Europe other than Great Britain and Ireland.

"C." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed : Two hours.

1. Draw a map of South America, showing the various countries, two of their principal towns, and also the chief mountain ranges, rivers, and capes.

2. Tell what you know of two of the most important towns in each of the following countries :—Germany, France, Spain, Austria, and Russia.

3. What and where are the chief deserts of the world ?

4. Name in order the principal rivers of Europe and describe fully the course of the Danube.

5. Name the chief members of the Melanesian Group of Islands.

6. Locate and describe the following :— Trieste, Thessaly, Lombardy, Zuyder Zee, Landes, Nuremberg, Nijni Norgovod, Stamboul, Lipari, Hammerfest, Prest, and Menai.

7. Describe the mountain system of Australia.

8. Where are silver, copper, coal, gold, and tin found in Australia ?

School Management.

"A." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed : Two hours.

1. What is meant by the phonic method of teaching reading ? Name the advantages and disadvantages of the method.

2. (a) What would you understand by the following sentence in a school report :—" Geography has evidently been taught by rote."

   (b) Show how the blackboard may be used in teaching Geography.

3. What is meant by Physical Education ? What place should it occupy in any system ? Show what precautions are necessary so that physical exercises may not be injurious.

4. The following lessons are required in our schools :—Moral Lessons, and Lessons on Temperance and Health. Why are these necessary ? Draw up a course of moral lessons for a small school.

5. What are the leading principles which should guide a teacher in drawing up a time table ? Answer fully.

6. Draw up a course of composition exercises suitable for each standard. Give reasons for what you propose.

7. Of what value is the teaching of History as (1) a mental exercise, (2) knowledge ?

8. What do you understand by a good Kindergarten training ? Explain briefly what you know of its first introduction. What is the first gift ? and show how it is used.

"B." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed : Two hours.

1. What are the commonest faults in writing ? Show how you would correct these faults.

2. " Curiosity is exceptionally active in children." Comment on this statement, and show how you would use this natural curiosity in gaining the interest of children.

3. What exercises in composition would you give to children of Standards I. to III. inclusive ?

4. (a.) What would you understand by the following sentence in a school report :—" Geography has evidently been taught by rote."

   (b.) Show how the blackboard may be used in teaching Geography.

5. What is meant by the phonic method of teaching reading ? Name the advantages and disadvantages of the method.

6. Of what value is the teaching of History as (1) a mental exercise, (2) knowledge ?

7. Write out notes of a lesson on gold or cattle-rearing.

'C." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed: Two hours.

1. " Curiosity is exceptionally active in children." Comment on this statement, and show how you would use this natural curiosity in gaining the interest of children.

2. In what way may the Teacher's manner and bearing affect the discipline of a class or school ?

3. What do you understand by the terms " cramming," " learning by rote," " recapitulation," " object lesson ? "

4. Give notes of a lesson to children eight years of age on one of the following :—
      The cat.
      Cheese.

5. What are the objects of simultaneous reading ? Show how this method may be defective in the hands of a careless teacher.

6. If you were the teacher of a small bush school, what Kindergarten exercises could you introduce into the infants' classes without appealing to the Department for apparatus ? Explain fully.

OTHER SUBJECTS.

History.

"A." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed : Two hours.

1. Tell fully—What effect had the following events upon " The progress of English freedom " :—
      (a.) The Great Charter.
      (b.) Wars of the Roses.
      (c.) Struggle between Charles I. and his Parliaments.

2. Write a biographical sketch on any two of the following :—
      William Pitt, the younger.
      John Hampden.
      Edmund Burke.

3. Explain the meaning and use of the following terms :— Radical, scutage, Renascence, Danegeld, Atheling, balance of power, tonnage and poundage, hundreds, benevolences, Witenagemot.

4. When were the following Statutes passed, and what were their chief provisions :—

Habeas Corpus, of Mortmain, of Rights, of Præmunire, of Treasons.

5. Discuss fully the Colonial expansion attained by England in the Sixteenth and Seventeenth Centuries.

" B." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed : Two hours.

1. What events make the following places of interest :—Torbay, Sedgemoor, Marston Moor, Havre, Guinegate, Kenilworth, Runnymede, Bosworth, Inkerman, Meerut.

2. Write explanatory notes on the following :—Star Chamber, Poyning's Law, Scutage, Stamp Act, Whigs and Tories, The Grand Remonstrance, Curia Regis, National Debt, prerogative.

3. Explain the causes of the Afghan War of 1839, trace the course of the war, and show the effect it had upon Scinde.

4. How was the union of England and Scotland brought about ? Show the successive stages.

5. Discuss the statement that " The Elizabethan Age forms one of the most brilliant in the history of English Literature."

6. Write a succinct account of the exploration of Australia.

7. Write a biographical sketch of Cardinal Wolsey.

" C." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed : Two hours.

1. Write a brief account of the Roman occupation of Britain—
    a. under Julius Cæsar.
    b. under Julius Agricola.

2. Write an account of the introduction of Christianity into England.

3. In what wars were the following battles fought ?—Give dates and names of the respective military leaders—Fontenoy, Killiecrankie. Malplaquet, Brunanburgh, Drogheda, Zutphen, Assaye.

4. Sketch in chronological order the leading events of the Wars of the Roses.

5. What events are connected with the following dates:—1637, 1587, 1649, 1704, 1714, 1798, 1851, 1852, 1855.

6. Write biographical sketches of Sir Walter Raleigh and the Duke of Wellington.

Sanitation.

" A." CERTIFICATE.

SEPTEMBER, 1897.

Time : One hour and a half.

1. What is digestion ? Where is it carried on ? Describe it.

2. What functions are performed by the blood ? Describe the course of the blood through the body.

3. (a.) " Water is a necessity of life."—Prove the truth of this, and tell of what elements water is composed.
    (b.) What are the characteristics of pure water ?
    (c.) How may water be rendered impure ?

4. What are the objects of ventilation ? Name the various modes of ventilation. How could you test the purity of air in rooms ?

5. (a.) What points would you chiefly consider in choosing a site for a house ?
    (b.) What evils result from damp soil ?

6. (a.) What are infectious diseases ? Name the chief zymotic diseases and explain the meaning of " epidemic " and " endemic " diseases.
    (b.) How would you treat a patient suffering from an infectious disease ?
    (c.) What are the advantages of cremation from a sanitary point of view ?

Needlework.

"A." CERTIFICATE.

Time : One hour and a half.

N.B.—The practical work must be done first.

1. Darn on linen a crosscut darn half an inch in length.

2. Cut out child's night dress.

3. Write out as if for a class instructions for working a buttonhole.

" B." CERTIFICATE.

1. To darn on a piece of stocking web a hole ½ an inch square.

2. To work a buttonhole bridged at one end.

3. Give instructions for setting gathers into a band.

" C." CERTIFICATE.

1. To gather and sew into a band 2 inches long a piece of calico 3 inches wide.

2. To sew a calico patch 2 inches square into a square of 4 inches.

3. To sew a flannel patch 2 inches square into a piece 4 inches square.

English Literature.

" A." CERTIFICATE.

SEPTEMBER, 1897.

Time Allowed : Two hours.

1. Give a list of Bacon's works. What do you consider his principal claim to greatness?

2. What does Bacon consider the remedies for poverty in a State ? How far do you think them beneficial ?

3. Who were the " Schoolmen," and what is Bacon's attitude towards them ?

4. In what sense are the following words used, respectively, in the Essays :—
    Bravery, steal, inward, plausible, calendar, infamed.
    Show how Bacon's use of each differs from the modern.

5. Write critical and explanatory notes on the following passages :—
    (a.) One of the fathers, in great severity, called poesy " vinum dæmonum."
    (b.) Certainly virtue is, like precious odours, most fragrant when they are incensed or crushed.
    (c.) All rising to great place is by a winding stair.
    (d.) Nay, even the school which is most accused of Atheism doth most demonstrate religion.
    (e.) Superstition hath been the confusion of many States, and bringeth in a new " primum mobile " that ravisheth all the spheres of government.

6. Othello has been represented on the stage as a Negro. How far is this justified ? Quote any passages in the play bearing on this question.

7. Explain the following passages, especially with regard to any metaphors contained in them, and show in what connection they occur, respectively :—
    (a.) If it hath ruffianed so upon the sea,
    What ribs of oak, when mountains melt on them,
    Can hold the mortise ?
    (b.) If this poor trash of Venice, whom I trash
    For his quick hunting, stand the putting on,
    I'll have this Michael Cassio on the hip.
    (c.) Oh ! you are well tuned now,
    But I'll set down the pegs that make this music,
    As honest as I am.
    (d.) A Sibyl, that had numbered in the world
    The sun to course two hundred compasses,
    In her prophetic fury sewed the work.
    (e.) Here is my journey's end, here is my butt,
    And very seamark of my utmost sail.

8. Give the substance of Othello's reply to the charge of witchcraft in winning Desdemona's affections, quoting any lines that you consider especially effective.

9. Name in order of importance the languages from which modern English is derived. What are the Non-Aryan languages of Europe ?

10. Mention two English words of different meaning derived from each of the following :—
Captivus, factum, dilatare, securus.

11. Grimm's Law shows that an aspirate in the classical languages is represented by a flat in Low German and by a sharp in High German. Give three examples of this. Also name the languages composing these groups.

"B." CERTIFICATE.

September, 1897.

Time Allowed: Two hours.

1. What do you know of the following works :—Caedmon's Paraphrase, The English Chronicle, The Vision of Piers the Plowman, and The Romaunt of the Rose ?

2. Write a note on the origin and growth of the story of King Arthur, and name the different works dealing with it.

3. Give a list of Chaucer's works and a short account of his life.

4. Write a note on the influences which laid the foundation of Elizabethan literature. Name the principal writers of the period.

5. What were Pope's principal works ? What is the character of his poetry ?

6. Write a short note on each of the following :—Roger Ascham, Robert Browning, Sir Thomas More, Congreve, Fielding, Carlyle, Keats.

7. What faults does Goldsmith find in the English people in "The Traveller ?"

8. To what do the following lines refer :—
"A man he was to all the country dear."
"A man severe he was and stern to view."
"While oft in whirls the mad tornado flies."
"With tuneless pipe beside the murmuring Loire."

Physiography.

"A." CERTIFICATE.

September, 1897.

Time allowed: Two hours.

Seven questions may be attempted.

1. How do you account for the earth's internal heat ?
2. "The earth is a great magnet." Prove this statement. Define declination and inclination or dip.
3. What is a cyclone? Show clearly the difference between a cyclone and an anti-cyclone.
4. How is the longitude of a place determined ?
5. Into what groups may meteorites be divided? Give the physical characters of meteorites.
6. Explain clearly the cause of the daily retardation of the moon's rising and setting. What is meant by a gibbous moon ? When is the moon said to be in syzygy ?
7. What is supposed to be the origin of sun-spots ?
8. Define briefly :—Isogonic and isoclinic lines, the anemometer and parallax.

"B." CERTIFICATE.

September, 1897.

Time allowed: Two hours.

Seven questions may be answered.

1. "The earth is a great magnet." Prove this statement. Define declination, and inclination or dip.
2. What influence has the sea on climate ?
3. Distinguish between aerial and aqueous denudation. State briefly the general results of denudation.
4. Explain concisely the formation of dew, rain, and snow.
5. What liquids are used for barometers ? Explain why mercury is used in preference to others. What do you know of the density and pressure of the atmosphere at different heights.

6. Give an account of sea-floor deposits.
7. How does coal differ from peat.
8. Define the following :—Contour lines, canon, isobars, hygrometer, trilobite, ebullition.

Animal Physiology.

"A." CERTIFICATE.

September, 1897.

Time: One hour and a half.

1. By what means is the body nourished? Describe the composition of living blood. "After blood has been shed it clots." Explain the cause of the clotting.

2. Briefly describe the heart, and tell how the blood is sent through the body. Give any proofs you can that the blood circulates.

3. What are the organs of respiration ? Describe their structure and show how they purify the blood.

4. Name the excretory organs and tell what waste matters are thrown off by each.

5. Give a brief description of the brain. What do you understand by cerebro-spinal system, sympathetic system, vaso-motor nerves ?

6. Make notes on *three* of the following :— Blind spot, organ of Corti, Neurilemma, cancellous tissue, glands of Lieberkühn, thoracic duct, striated muscle.

"B." CERTIFICATE.

September, 1897.

Time: One hour and a half.

1. How many bones are there in the human body ? Name the principal bones of the trunks, and say how they are united.

2. What is an organ ? Name the organs of alimentation, excretion, and circulation. What organs have been called "The Tripod of Life ?"

3. Describe the formation and functions of the organ of touch.

4. Of what is living blood composed ? What changes take place when blood dies ?

5. Describe Red and White Corpuscles, and tell in what respects they differ from each other.

6. Make notes on *three* of the following :—The pulse, oxidation, pericardium, proteids, lymphatics, venous blood.

Geology.

"A." AND "B." CERTIFICATES.

September, 1897.

Time allowed: Two hours.

"B"—*Answer any seven questions.*
"A"—*Answer seven questions. Four of these must be selected from Section II.*

Section I.

1. In the case of a cone-shaped hill, how would you determine if it were a volcano ?

2. Describe the cause of landslips. Name any coast lines where landslips occur frequently. Give an account of one of the most memorable landslips.

3. What are Chalybeate springs ? Show clearly how they are formed. What chemical action takes place when chalybeate water mixes with water containing dissolved carbonates ?

4. Say what you know of the action of the sea in the demolition of the land.

5. Define lava streams, tuffs, crater, volcanic dykes and fissures.

6. What elements enter largely into the composition of rocks ? Which of them are found in a free state ? What are the most frequent compounds ?

SECTION II.

7. Explain briefly the various conditions under which mineral crystals are formed.

8. Describe the mode of formation of limestone rocks. Name the chief varieties of limestone.

9. Show by the aid of diagrams the meaning of the following terms:—Dip and strike, curved strata (anticlinal and synclinal), faults.

10. What strata contain the earliest organic remains? Give an account of three of the fossils found in these strata.

11. Explain the origin of Terassic rocks. Name any English rocks belonging to this period, and sketch three Terassic plants.

Euclid, Algebra, and Mensuration.

"B." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed : Three hours.

1. The angles at the base of an isosceles triangle are equal to one another, and if the equal sides be produced, the angles on the other side of the base are equal also.

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

3. If the square described on one side of a triangle be equal to the sum of the squares described on the other two sides, then the angle contained by these two sides shall be a right angle.

4. If a straight line is divided into any two parts, the square on the whole line is equal to the sum of the squares on the two parts together with twice the rectangle contained by the two parts.

5. If in a circle two chords cut one another, which do not both pass through the centre, they cannot both be bisected at their point of intersection.

6. The opposite angles of any quadrilateral inscribed in a circle are together equal to two right angles.

     If one side of the quadrilateral be produced, show that the exterior angle is equal to the opposite interior angle of the quadrilateral.

7. Find the sum, difference, and product of $3x^2 - 4xy + 4y^2$ and $4x^2 + 2xy - 3y^2$

8. Divide $8y^2 + 16xy + 6x^2$ by $4y + 2x$.

     If $x^2 + 7x + c$ is exactly divisible by $x + 4$, what is the value of c?

9. Simplify—

(1.) $\dfrac{2a}{2a - 2b} + \dfrac{2b}{2b - 2a}$

(2.) $\dfrac{\dfrac{p^2 + q^2}{q} - p}{\dfrac{1}{p} - \dfrac{1}{q}} \times \dfrac{p^2 - q^2}{p^3 + q^3}$

10. Solve the equations—

(1.) $\dfrac{4x - 7}{8} - \dfrac{1}{2x - 1} - \dfrac{3x + 5}{6} = 0$

(2.) $\begin{aligned} 2x + 3y - \tfrac{3}{4} &= 18 \\ 3x + 2y - \tfrac{4}{3} &= 17 \end{aligned}$

(3.) $3\sqrt{x} - 4 = \sqrt{x} + 6$

(4.) $\dfrac{x}{3} - \dfrac{6}{x} = \dfrac{x^2 - 6}{3(x + 4)}$

11. A person by selling a horse for £56 gains as much per cent. as the horse cost him. What was its original price?

12. The inner diameter of a circular building is 68ft. 10in., and the thickness of the wall is 22in. Find how many square feet of ground the base of the wall occupies.

Domestic Economy.

"B." CERTIFICATE.

SEPTEMBER, 1897.

Time : One hour and a half.

1. (a) Give the daily routine of work in a house.

     (b) Tell how you would thoroughly clean a sitting-room.

2. What is hard water? How may it be softened? Tell how flannels should be washed. What causes flannels to felt?

3. What are the purposes served by food? Why are vegetables and fruit necessary to health? Compare the values of fish, meat, and milk as foods.

4. Name the different methods of cooking food, and describe frying, roasting, and stewing. Say which method you prefer, and give reasons for your answer.

5. Give a few simple rules for the treatment of the sick.

6. How would you treat the following accidents:—A cut artery, a burn, a sprain.

Latin.

"B." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed :

1. Translate and parse all words in italic in the following passages :—

(a) " Interea ea *legione*, quam secum habebat, militibusque, qui ex provincia convenerant, a lacu Lemanno, qui in flumen Rhodanum influit, ad montem Iuram, qui fines Sequanorum ab Helvetiis dividit, *milia* passuum decem novem murum in altitudinem pedum *sedecim* fossamque perducit. Eo opere perfecto præsidia disponit, castella communit, quo facilius, si se *invito* transire conarentur, prohibere possit. Ubi ea dies, quam constituerat cum legatis, venit, et legati ad eum reverterunt, negat se more et exemplo populi Romani posse iter *ulli* per provinciam dare et, si vim facere *conentur*, prohibiturum ostendit. Helvetii ea spe *deiecti* navibus iunctis ratibusque compluribus factis, alli vadis Rhodani, qua minima altitudo fluminis erat, nonnunquam interdiu, saepius noctu, si perrumpere possent, *conati* operis munitione et militum concursu et telis repulsi hoc conatu *destiterunt*."

(b.) " Diviaiacus multis cum lacrimis Cæsarem *complexus* obsecrare coepit, ne *quid* gravius in fratrem statueret: *Scire* se illa esse vera, nec *quemquam* ex eo plus quam se doloris capere, propterea quod, cum ipse gratia plurimum *domi* atque in reliqua Gallia, ille minimum propter adolescentiam posset, per se *crevisset*; quibus opibus ac nervis non solum ad minuendam gratiam, sed pæne ad perniciem suam *uteretur*. Sese tamen et amore fraterno et existimatione *vulgi* commoveri. Quod si quid ei a Cæsare gravius accidisset, cum ipse eum locum amicitiæ apud eum teneret, *neminem* existimaturum non sua voluntate factum ; qua ex re futurum, *uti* totius Galliæ animi a se averterentur."

(c.) Dum hæc in *colloquio* geruntur, Cæsari nuntiatum est, equites Ariovisti *propius* tumulum accedere et ad nostros adequitare, lapides telaque in nostros *conicere*. Cæsar loquendi finem facit seque ad suos recepit suisque imperavit, ne *quod* omnino telum in hostes reicerent. Nam etsi sine ullo periculo legionis *delectae* cum equitatu proelium fore videbat; tamen *committendum* non putabat, ut pulsis hostibus dici posset eos ab se per fidem in colloquio circumventos. Posteaquam in volgus militum elatum est, *qua* arrogantia in colloquio Ariovistus usus omni Gallia Romanis interdixisset, impetumque in nostros eius equites fecissent, eaque res colloquium ut *diremisset*, multo maior alacritas studiumque pugnandi maius exercitui iniectum est."

2. What was Cæsar's official position in Gaul? Give a short account of the war with Ariovistus.

3. Translate and explain the following phrases :—
     " conversa signa bipartito intulerunt."
     " ad conventus agendos."
     " summa belli."

4. What was the Roman method of noting time? Express in Latin " March 28th, B.C. 58."

5. Give the meaning, gender, and genitive singular of the following words :—
     " caro," " obses," " anus," " veru," " latro."

6. Form comparatives and superlatives from—
     " nequam," " frugi," " novus," " intra," " prope," " acer."

7. What are defective, deponent, impersonal verbs? Give an example of each.

Drill.

"B." CERTIFICATE.

SEPTEMBER, 1897.

1. Describe the position of the pupil when standing at "Attention."
2. In what case must there be a blank file in a squad, and where will it be placed?
3. What are right and left files?
4. When a squad cannot be divided in half-squads of equal strength, which will be the stronger of the two half-squads?
5. How does a squad halted change front?
6. At what distance are the ranks at "Open order?"
7. How are the feet turned out in marching in quick-time?
8. In how many paces does the pupil, when marching, turn about, and what will he do after turning?.
9. How many practices are there in the "Extension motions," and how should the squad be turned before commencing them?
10. Why should the motions in the First Practice be done slowly?
11. What is the object of ".Physical drill?"
12. Describe the Third Practice of "Physical drill with arms," or Chest Expansion with marching "Pole exercise."

Music.

Staff Notation.

"A." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed: One hour.

1. Of what keys, major and minor, are the following the signatures:—
   See Figure (a) in Appendix.
2. (a.) Complete the following bars with rests and notes:—
   See Figure (b) in Appendix.
   (b.) And write time signatures to the following:—
   See Figure (c) in Appendix.
3. Explain the following terms:—Ad libitum, adagio, allegretto, legato, allegro assai, sostenuto, leggiero, da capo, rallentando, ritardando.
4. Write Perfect Fifths, Diminished Sevenths, Minor Sixths, Diminished Thirds, and Minor Thirds to D, F sharp, A flat, and B flat.
5. What is a "Fundamental Discord?"
   Give an example of a chord of the Dominant Seventh, showing its principal resolution.
6. Analyse the following:—
   See Figure (d) in Appendix.

"B." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed: One hour.

1. Write (a) the signature and ascending scale of F sharp minor, and (b) the signature and descending scale of D minor.
2. Write above (1) a Perfect Fifth, (2) Augmented Second, (3) Minor Third, (4) Diminished Sixth, (5) Augmented Third:—
   See Figure (e) in Appendix.
3. Explain the following terms:—(a) Rallentando, (b) Ritardando, (c) Vivace, (d) Da capo, (e) Accelerando, (f) Syncopation, (g) Allegretto, (h) Sforzando, (i) Alla breve.
4. Complete the following bars, (a) with notes, (b) with rests, and beneath each note and rest write its name of duration:—
   See Figure (f) in Appendix.
5. (a.) Define Modulation.
   (b.) What alteration would indicate a modulation into the relative minor, and how would a return to the original key be shown:—

Drawing.

"A." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed: One hour and a half.

Model.—Cube, Hexagon and Vase.
Freehand.—See Figure (g) in Appendix.
Blackboard.—Common objects, such as Candlestick, Cup and Saucer, Jug and Basin, Workbox with open lid, Book, Table, etc.

"B." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed: One hour and a half.

Freehand.—See Figure (h) in Appendix.

Geometrical.—1. Inscribe a circle in the triangle A, B, C.
2. In the given circle inscribe a Pentagon.
3. Divide the line A, B proportionately to the divisions on the line C, D.
4. From A draw a line to B, C, making with it an angle equal to D.
5. In the triangle A, B, C inscribe a square.

See Figures (i) to (m), inclusive, in Appendix.

6. Obtain the elevation of hexagonal prism, plan being given.
7. Find the plan of pentagonal prism, elevation being given. (The prism is 2 inches long.)

Blackboard.—Common objects, such as Candlestick, Cup and Saucer, Jug and Basin, Workbox with open lid, Book, Table, etc.

"C." CERTIFICATE.

SEPTEMBER, 1897.

Time allowed: One hour and a half.

Freehand.—See Figure (n) in Appendix.

Blackboard.—Common objects, such as Candlestick, Cup and Saucer, Jug and Basin, Workbox with open lid, Book, Table, etc.

GOVERNMENT EXHIBITIONS.

DECEMBER, 1897.

Animal Physiology.

Time allowed: Two hours. Seven questions may be attempted.

1. Why are teeth hard? Give the different sorts of teeth and the different parts of a tooth.
2. How many kinds of corpuscles are there in the blood, and what are the important differences between them?
3. Where is the liver placed? What is its secretion, and how and where is that secretion poured into the intestines?
4. What and where are the salivary glands? What is the function of the saliva?
5. What is the "pulse?" Why is no pulse observable in the veins?
6. Where are the ribs? What is their number, their arrangement, and their use?
7. What is cartilage? What are its properties? Mention the several parts of the body which are formed of cartilage or in which cartilage is found.
8. Of what two distinct parts is the skin made? How do they differ from each other in structure, and what are the chief uses of each part?
9. Where is the diaphragm placed? What important organs touch it on the one side, and what on the other? What structures pass through it, and through what part of it do they pass?

Euclid.

Time allowed : Two hours.

1. If the square described on one side of a triangle be equal to the sum of the squares described on the other two sides, then the angle contained by these two sides shall be a right angle.

2. The straight line drawn through the middle point of a side of a triangle parallel to the base bisects the remaining side.

3. To describe a square that shall be equal to a given rectilineal figure.

4. The difference of the squares on two straight lines is equal to the rectangle contained by their sum and difference.

5. The angle in a semicircle is a right angle.

6. To describe a circle to touch a given circle and also to touch a given straight line at a given point.

7. To inscribe a circle in a given triangle.

8. To circumscribe a circle about a given triangle, all of whose angles are acute.

French.

Time allowed : Three hours.

Note : Be careful to put in all accents. All dates to be written in words.

1. Translate—

On entendait de tous côtés siffler les javelots ; les pierres, les pourres, lancées par les chrétiens et par les infidèles, s'entre-choquaient dans l'air avec un bruit épouvantable et retombaient sur les assaillants. Du haut de leurs tours les musulmans ne cessaient de lancer des torches enflammées et des pots à feu. Les forteresses de bois des chrétiens s'approchaient des murailles au milieu d'un incendie qui s'allumait de toutes parts. Les infidèles s'attachaient surtout à la tour de Godefroy, sur laquelle brillait une croix d'or, dont l'aspect provoquait leurs fureurs et leurs outrages. Le duc de Lorraine avait vu tomber à ses côtés un de ses écuyers et plusieurs de ses soldats. En butte lui-même à tous les traits des ennemis, il combattait au milieu des morts et des blessés, et ne cessait d'exhorter ses compagnons à redoubler de courage et d'ardeur. Le comte de Toulouse, qui attaquait la ville au midi, opposait toutes ses machines à celles des musulmans ; il avait à combattre l'émir de Jérusalem, qui animait les siens par ses discours, et se montrait sur les murailles, entouré de l'élite des soldats égyptiens.

2. Translate—

Bazin avait commencé par refuser, car Bazin était de mauvaise humeur, d'abord du départ d'Aramis, qui était parti sans lui dire où il allait, ensuite de servir une messe dite en faveur d'une victoire qui n'était pas selon ses opinions, Bazin était frondeur, on se le rappelle ; et s'il y avait eu moyen que, dans une pareille solennité, le bedeau s'absentât comme un simple enfant de chœur, Bazin eût certainement adressé à l'archevêque la même demande que celle qu'on venait de lui faire. Il avait donc commencé par refuser, comme nous avons dit, tout congé ; mais en la présence même de Bazin la fluxion de Friquet avait tellement augmenté de volume, que pour l'honneur du corps des enfants de chœur, qui aurait été compromis par une pareille difformité, il avait fini par céder en grommelant.

3. Translate—

Au bruit des transports d'allégresse,
Enfin le navire entre au port.
Dans cette barque où l'on se presse,
Hâtons-nous d'atteindre le bord.
    France adorée !
    Douce contrée !
Puissent tes fils te revoir ainsi tous !
    Enfin j'arrive,
    Et sur la rive,
Je rends au ciel, je rends grâce à genoux.
Je t'embrasse ô terre chérie,
Dieu, qu'un exilé doit souffrir !
Moi, désormais je puis mourir
    Salut à ma patrie !

Algebra.

Time allowed : Two hours.

1. Simplify $(a+b)^4 + 6(a^2 - b^2)^2 + (a-b)^4$.

. Divide $a^5 - pa^4 + qa^3 - qa^2 + pa - 1$ by $a-1$.

3. Find the G.C.M. of $10x^3 + 31x^2 - 63x$ and $14x^3 + 51x^2 - 54x$.

4. Find the L.C.M. of $x^2 + 3x + 2$; $x^2 + 4x + 3$; $x^2 + 5x + 6$.

5. Find the value of x in the equation $\frac{x-4}{6x+5} + \frac{3x-13}{18x-6} = \frac{1}{3}$.

6. Find the price of an article when as many can be bought for 1s. 4d. as can be bought for 2s. after the price has been raised one penny each.

7. Solve $\begin{array}{l} x + 10y = 123 \\ y + 10x = 141 \end{array}$

8. A person sells a horse for £144, and gains as much per cent. as the horse cost him. What did the horse cost him ?

9. Solve $\begin{array}{l} x^2 + y = 11x \\ y^2 + x = 11y \end{array}$

10. Divide $x - y$ by $x^{\frac{1}{3}} - y^{\frac{1}{3}}$.

Botany.

Time allowed : Two hours.

1. Mention things generally necessary to the life of plants.

2. Describe the food of plants and the process of nourishment.

3. Describe the germination of a pea, and contrast it with that of a grain of wheat.

4. Describe three kinds of roots. What is the *growing point?*

5. Explain —
    Sessile, serrate, stomata, venation, vernation, peduncle, pedicel, æstivation, pollen, achene.

6. Explain the use of leaves.

7. Briefly describe six common sorts of inflorescence.

8. Mention some of the contrivances for the dispersion of fruits.

Latin.

Part I.—UNSEEN TRANSLATION.

Time allowed : Three hours.

1. Translate—

His Cæsar ita respondit: Eo sibi minus dubitationis *dari* quod eas res, quas legati Helvetii commemorassent, memoria toneret, atque eo *gravius* ferre, quo minus *merito* populi Romani accidissent ; qui si *alicuius* iniuriæ sibi conscius fuisset, non fuisse difficile cavere ; sed eo *deceptum* quod neque commissum a se intellegeret, quare timeret, neque sine causa *timendum* putaret. Quod si veteris contumeliæ *oblivisci* vellet, num etiam recentium iniuriarum, quod eo invito iter per provinciam per vim *temptassent*, quod Aeduos, quod Ambarros, quod Allobrogas vexassent, memoriam deponere, *posse?*

2. Translate—

Eodem die ab exploratoribus certior factus hostes sub monte *consedisse* milia passum ab ipsius castris octo, qualis *esset* natura montis et qualis in circuitu ascensus, qui cognoscerent, misit. Renuntiatum est *facilem* esse. De tertia vigilia Titum Labienum, legatum pro praetore, cum duabus legionibus et *iis* ducibus qui iter cognoverant, summun ingum montis ascendere iubet ; quid sui consilii sit, ostendit. Ipse de quarta vigilia eodem itinere, quo hostes *ierant*, ad eos contendit equitatumque omnem ante se mittit.

3. Translate—

Dixerat. Ille patris magni *parere* parabat
Imperio : et primum pedibus talaria nectit
Aurea, quae sublimem alis sive æquora supra
Seu terram rapido pariter cum flamine portant.
Tum virgam capit ; hac animas *ille* evocat Orco
Pallentes, alias sub Tartara *tristia* mittit ;
Dat somnos admitque, et lumina *morte* resignat :
Illa *fretus* agit ventos, et turbida *tranat*
Nubila.

4. Parse words in italics in preceding questions.

PART II.—GRAMMAR AND COMPOSITION.

5. Define root, stem, character. On what principle are nouns divided into declensions? Illustrate by examples.

6. What does the verb infinite consist of, and why is it so called?

7. What are the principal rules for the construction of Oratio Obliqua?

8. Give the rules for, and examples of, four kinds of conditional sentences.

9. When is the dative used as the case of the agent? Explain and give examples of the ablative absolute.

10. Translate into Latin—

He ordered three of his own men to exchange dresses with the new comers. He then drew off his little band in sight of the vessels, affecting to return to the city. In the night, however, he came back to the same place and lay in ambush, directing the disguised Spaniards, when the morning broke and they could be discerned, to make signals to those on board. The artifice succeeded.

Inorganic Chemistry.

Time allowed: Two hours. Seven questions may be attempted.

1. Name the substances having the following formulæ:—H_2S; NH_3; CO; H_2CO_3; NO; NO_2; SO_3; O_3.

2. In what respects does the air in a crowded room differ from fresh air?

3. Describe an experiment you have actually seen performed which affords an example of chemical action.

4. How could you prove that chlorine is a constituent of common salt and of hydrochloric acid?

5. Describe the experiment in which an electric current is passed through water. What does the experiment show?

6. What is an acid and what a base? Mention some common acids and some common bases. How can you conveniently tell whether a substance is an acid or a base?

7. How is nitric acid prepared? Explain fully the chemical action which takes place.

8. Explain what takes place when a piece of marble is placed in dilute hydrochloric acid.

9. What is lime? What change takes place when it is (*a*) exposed to the air, (*b*) treated with water.

Geography.

Time allowed: One hour and a half.

Six questions may be attempted, of which No. 3 must be one.

1. Name in order the capes, openings, and islands, and towns passed in a coasting voyage from Port Adelaide to Brisbane.

2. What are the chief productions of Western Australia? State the districts from which they come.

3. Draw a map of the Eastern coast of England, showing capes, bays, rivers, and towns; or of India, showing principal physical features and chief towns.

4. What parts of America are included in the British Empire? Indicate as nearly as you can the position of each.

5. Describe the course taken by a mail steamer from London to Albany, mentioning in order the seas and oceans through which it would pass and the British possessions on the route.

6. Name the chief rivers of Africa. Indicate as nearly as you can where each rises and where each enters the sea.

7. From what parts of the world are the following obtained:—Mahogany, petroleum, currants, cotton, sugar, diamonds, opium, silver, and raw silk.

8. Say what you know of the following, stating particularly the geographical position of each:—Otago, Corea, Missouri, Cotopaxi, Lagos, Baikal, Labuan, and Hecla.

Trigonometry.

Time allowed: One hour and a half.

1. The sides of a right angled triangle are in the ratio 5, 12, 13. Find the sine, cosine, and tangent of each acute angle of the triangle.

2. Prove that $\cos^2 A + \sin^2 A = 1$.

3. Express sin A and cos A in terms of the tangent.

4. Find the value of sin 75° to four decimal places.

5. Given $\log_{10} 2 = \cdot 3010300$. Find the value of $\log_{10} 5$.

6. When the three sides A, B, C of a triangle are given, what are the formulæ for finding the angles A, B, and C?

English.

PART I.—GRAMMAR AND COMPOSITION.

Time allowed: Three hours.

1. Define the following terms:—Gender, syntax, root, prefix, predicate.

2. Distinguish between the gerund and the participle of an English verb. Form sentences to illustrate the distinction.

3. Give the meaning and derivation of the word analysis. What is its object in Grammar?

4. Analyse the following sentences:—

He *first* of all drew them *out*, and allowed them to expend all the spare energy for vociferation they possessed, and then asked them what advantage was to be gained by *stopping* me.

My gracious Lord, *that* which I would discover the law of friendship bids me to conceal.

5. Paraphrase the following lines:—

Now, my co-mates and brothers in exile,
Hath not old custom made this life *more* sweet
Than that of painted pomp? Are not these woods
More free *from* peril than the envious court?
Here *feel* we but the penalty of Adam,
The *season's* difference; *as*, the icy fang,
And churlish *chiding* of the winter's wind:
Which, when it bites and blows upon my body,
Even till I shrink with cold, I smile and say—
This is *no* flattery; these are counsellors
That feelingly persuade me *what* I am.
Sweet are the uses of adversity.

6. Parse the words in italics in questions 4 and 5.

7. Write an essay on "The Advantages of Education."

PART II.—ENGLISH LITERATURE AND ITS HISTORY.

8. Write in a few lines what you know of English writers before the time of Chaucer.

9. Sketch shortly the plot of any one of Shakespeare's plays, giving the names of the principal characters, and quoting any lines you think noticeable.

10. When did the English novel originate? Give the names of three novelists before the year 1800, and mention their principal works.

11. Write a short account of *any three* of the following:—Bacon, Milton, Addison, Byron, Scott, Macaulay, Tennyson.

12. Give the date and the character of the writings of the following:—Chaucer, Jonson, Goldsmith, Spenser, Burns, Wordsworth, Pope. The answers should not exceed one or two lines for each author.

Arithmetic.

Time allowed: Two hours.

1. Divide 44lbs. 5ozs. 17dwts. 1gr. by $4\frac{2}{7}$.

2. Simplify $\dfrac{17\frac{1}{2}}{1\frac{1}{4}} \div 12\frac{5}{6} + \frac{4}{5}$ of $9\frac{3}{8}$.

3. Find the value of $\cdot 945$ of £1 14s. $4\frac{1}{2}$d.

4. If 4 men can reap a field of 12 acres in 5 days, how long will they take to reap 19 acres 2 roods?

5. What is the principal which, invested for 19 years at $3\frac{1}{2}$ per cent. simple interest, produces an interest of £133 ?

6. What is the largest fraction which will divide each of the following a whole number of times : — $\frac{3}{8}$: $\frac{5}{24}$: $\frac{17}{20}$: $\frac{35}{84}$?

7. What fraction of $\frac{9}{11}$ of $\frac{4\frac{1}{4}}{8\frac{1}{2}}$ of £2 6s. 7d. is $\frac{8}{54}$ of $\frac{7\frac{2}{15}}{6\frac{2}{7}}$ of £1 18s. 7d. ?

8. Find the compound interest on £550 for 4 years at 3 per cent.

9. The L.C.M of two numbers is 174537; their H.C.F. is 33 ; one of the numbers is 1419.   What is the other?

10. An indiarubber ball bounces ·585 of the height from which it falls.   If thrown to a height of 72 feet, how high will it rise on the fifth rebound ?

English History.

Time allowed: Two Hours.

Not more than *eight* questions to be answered.

1. What were the principal events in the reign of Henry II.?

2. What were the chief provisions of Magna Charta, and **why** was it so called ?

3. State what you know of Simon de Montfort, Roger Bacon, Sir Thomas More.

4. Give some account of the defeat of the Spanish Armada, with date, and name the leaders on each side.

5. What Saxon leaders were left after the Battle of Hastings ; and how long, and where, was there any further resistance to William the Conqueror ?

6. What do you know of the Mise of Amiens, the Ward of Norham, and the Statute of Labourers ?

7. State the reasons which led to the loss of France after the death of Henry V., and give some description of the leading incidents in the campaign.

8. What do you know of the History of Ireland in the reign of Henry VII. ?

9. Give some account of the rise and fall of Wolsey.

10. Give a short life of three of the leading men in the reign of Queen Elizabeth.

HIGH SCHOOL SCHOLARSHIPS AND BURSARIES EXAMINATION.

September, 1897.

Penmanship and Spelling.

INSTRUCTIONS.

(*a.*) *45 minutes allowed for this Paper.* (*b.*) *The handwriting in the Dictation Exercise will be taken into account in estimating the marks to be given for Penmanship.*

QUESTIONS.

1. Write in small hand, as a specimen of your Penmanship—
   " William of Wykeham."

And in large hand—
   " Spring Flowers."

2. Dictation :—Write the selection read by the Examiner.

Dictation.

(This Paper is for the use of the gentleman conducting the Examination, and must not be shown to the Candidates.)

We are told that William was very devout.   During the time that he remained at school, every morning, even in the depth of winter, he rose early, and went to the Cathedral to attend the first service there.   Nothing was ever allowed to interfere with his devotions, and they were never neglected or hurriedly performed.   This habit of early rising and of prayer helped him quite as much as his diligence and his cleverness to get on well in life.   Some people seem to think piety a hindrance to progress ; yet we see in William not only a very pious but a very practical man.   He had

a sound and vigorous understanding, was remarkable for his prudence and talent for business, and his ability to conduct the most complicated affairs with great wisdom and skill.   He was a good arithmetician and excelled in the science of geometry.

Arithmetic.

Candidates may do 10 of the questions.

Time allowed: Three hours.

1. Multiply Forty-two millions seven hundred and nine thousand and sixty-five by Thirty thousand seven hundred and eighty-nine, and divide the result by Four hundred and eighty-nine thousand seven hundred and fifty-three. Write your answer in words.

2. How many roods is 544,500 square feet short of 13 acres.

3. Find by practice the value of 1 ton 15cwts. 2qrs. 3lbs. 14ozs. at £6 5s. 6d. per cwt.

4. Make out the following bill :—
   25 bullocks at £11 10s. each; 14 cows at £7 15s. ; 13 pigs at 22s. ; 42 calves at £1 6s. ; 76 sheep at 15s. 6d.

5. Multiply the sum of 47·69 and 3·8075 by 64·05 and divide your answer by ·0067.

6. Reduce $26\frac{11}{51}$ to six places of decimals.

7. If 3 engines cost £2,261 16s. 4d., what would be the cost of 366 such engines ?

8. If 15 men in 9 days can reap a field, how long will 10 men require to reap a field of twice the area ?

9. Simplify—
$$\frac{\frac{1}{3}+\frac{5}{6}\ of\ \frac{7}{15}+\frac{24}{45}}{\frac{19}{20}-\frac{85}{147}\div\frac{75}{234}+\frac{3}{5}}$$

10. Find the simple interest on £181 16s. 8d. for 4 years at $7\frac{1}{2}$ per cent. per annum.

11. A coach and pair cost £172 ; if the coach cost three times as much as the horses, find the price of each of the horses.

12. Divide £42·675 16s. $4\frac{1}{2}$d. by 863.

English.

Time allowed : Three hours.

1. Give a list of the different classes of pronouns, with examples.

2. What are the degrees of comparison ?   How are they formed ?

3. Define the following terms :—Sentence, voice, transitive verb, complement.

4. Correct the following sentences and give reasons for each correction :—
   1. No sound but their own voices were heard.
   2. He is a man whom I think deserves encouragement.
   3. He told John and I to come with him.
   4. There is nothing to show who that belongs to.
   5. I can tell you this much.

5. Analyse—
   He fears that his father will ask him where he has been.

6. Parse the words underlined in—
   The <u>right</u> valiant Banquo walked <u>too late</u>, <u>whom</u> you may say, if <u>it</u> pleases <u>you</u>, Fleance killed, I have <u>only</u> done <u>what</u> I told <u>you</u> I would do.

7. Write a short essay on life in the country, or a description of the place you live in.

8. Give the meaning and derivation of the following words :— Allegory, homicide, quixotic, ballot, rocket, federation.

9. Paraphrase the following lines :—
   The sun declines : upon Nevada's height
   There dwells a mellow flush of rosy light :
   Each soaring pinnacle of mountain snow
   Smiles in the richness of that parting glow,
   And Darro's wave reflects each passing dye
   That melts and mingles in th' empurpled sky.
   Fragrance, exhaled from rose and citron bower,
   Blends with the dewy freshness of the hour :
   Hushed are the winds, and nature seems to sleep
   In light and stillness : wood, and tower, and steep
   Are died with tints of glory, only given
   To the rich evening of a southern heaven :
   Tints of the sun, whose bright farewell is fraught
   With all that art hath dreamt, but never caught.

History.

Time allowed : Two hours.

1. (*a.*) Name the different races who have conquered Britain, and give the date of each conquest.

   (*b.*) Who was the last of the Saxon kings? What became of him? and by whom was he succeeded?

2. (*a.*) Name (with dates) the Plantagenet kings. Tell what claim they had to the English Throne.

   (*b.*) What was Magna Charta? In whose reign was it signed? By whom was it drawn up? And what were its chief provisions?

3. Who was the first king to rule over the whole Island of Britain? Trace his claim to the Throne of England, and name in order the kings of this House.

4. What family now holds the British Throne? Who is the present Sovereign? How long has she reigned?

5. Tell all you can about three of the following:—Feudal System, Gunpowder Plot, Petition of Right, Tyler's Rebellion, Wars of the Roses, Crimean War, South Sea Bubble.

6. In whose reigns were the following battles fought, and who gained them:—Crécy, Flodden, Bannockburn, Waterloo?

Geography.

Time allowed : Two hours.

1. Draw a map of France, showing the chief rivers, capes, inlets, and six of the most important towns.

2. Define—
   Ecliptic, antipodes, crater, delta, oasis, confluence, plateau, coast, tributary, fauna, Torrid Zone, latitude.

3. What are the principal rivers of India? Mention one important town on each.

4. Tell what you know of the following:—Port Darwin, Warrnambool, Gympie, Invercargil, Launceston, Thessaly, Pesth, Namur, Lausanne, Salonika, Crete, Malaga.

5. Draw up a list of the chief islands surrounding Australia, and give the position of each.

6. Give in order the principal openings in the Eastern coast of Great Britain.

PUPIL TEACHERS' EXAMINATION.

DECEMBER, 1897.

Geography.

Time allowed : One hour and a half.

CANDIDATES.

Five questions only may be attempted.

1. Draw a map of the East coast of Australia, showing capes, openings, islands, and chief towns (meridians and parallels to be inserted).

2. What parts of Australia are well watered? Name the rivers which flow through these parts.

3. Define the following terms and illustrate them on an imaginary sketch map:—Archipelago, watershed, delta, barrier reef, peninsula, and channel.

4. Name the two chief products and two chief seaports of each of the Australian Colonies.

5. Enumerate the goldfields of Western Australia and the chief towns on each.

6. Describe a journey from Albany to Adelaide by steamer, and from Adelaide to Sydney by rail.

FOURTH CLASS.

Time allowed: One hour and a half.

1. Draw a map of New Zealand, and indicate the chief physical features and chief towns (meridians and parallels to be inserted).

2. Describe as fully as you can the productions of New South Wales.

3. What countries bound the Baltic Sea? Mention the rivers flowing into the Baltic from each of these countries.

4. Give a short account of the mountain system of Europe.

5. What and where are the following:—Zante, Ebro, Maladetta, Onega, Egmont, Wyndham, Burdekin, Albury.

THIRD CLASS.

Time allowed : One hour and a half.

1. Draw a map of the South coast of Asia. Insert the names of the chief capes, openings, islands, and towns (meridians and parallels to be shown).

2. What Asiatic rivers flow into the Arctic Ocean? What hinders their navigation during the greater part of the year? Mention a town on each river.

3. Name the mountains of Hindostan. State particularly where they are situated.

4. Name six of the chief manufactures of England, state clearly the district in which each is carried on, and name the principal town in each district.

5. Give the exact position of each of the following towns, and say for what each is noted:—Glasgow, Dundee, Aberdeen, Oban, Limerick, Londonderry, Belfast, Cork.

SECOND CLASS.

Time allowed : One hour and a half,

1. Draw a map of that part of Africa which lies North of the Equator, marking the mountains, rivers, countries and chief towns. (Meridians and parallels to be inserted.)

2. Say what you know of the growth of the British Empire in Southern Africa in recent years.

3. What are the chief rivers and lakes in the Dominion of Canada? In what direction does each river flow?

4. What British possessions are included in Further India? Give a short description of each of them.

5. Give the exact position of the following British possessions, and say for which each is noted:—Hong Kong, Perim, Aden, St. Helena, Labuan, Jamaica, Fiji Islands, Mauritius, Malta, and Gibraltar.

FIRST CLASS.

Time allowed : One hour and a half.

1. Draw a map of the basin of the Amazon. (Meridians and parallels must be inserted.)

2. Describe the mountain system of North America.

3. Enumerate six of the most important industries of the United States, and the towns or districts engaged in each.

4. How are glaciers formed? What is the difference between icefloes and icebergs? Whence are derived the icebergs of the North Atlantic and what is the usual course they take?

5. Mention the circumstances under which rain falls, the countries of heaviest rainfall, and the countries most rarely visited by rain.

Arithmetic.

Two hours allowed for this Paper.

CANDIDATES.

1. Express in words 9,099,909,009, and in figures two thousand million four hundred thousand and sixty.

2. A field containing 18 acres 36 perches is divided into allotments each containing 1 rood 14 perches. How many allotments are there?

3. Find the value of $\left(\frac{7}{55} \text{ of } \frac{13}{20} \right) \div \left(\frac{52}{33} \text{ of } \frac{21}{20} \right)$

4. A lb. avoirdupois contains 7,000 grains. How many grains are there in 2 oz. avoirdupois?

5. Find by Practice the cost of 3,829 articles at £2 14s 8½d. each.

6. Find how much metal is worth £2 2s. 9d., having given that 2 tons 8 cwts. 3 qrs. is worth £1.

FOURTH CLASS.

Time allowed : Two hours.

1. Find the least number that must be added to 56438971 that the result may be exactly divisible by 4064.
2. If the product of $\frac{7}{8}$ and $2\frac{1}{4}$ be added to the sum of $21\frac{4}{7}$ and $3\frac{6}{11}$ by how much will the result differ from 100.
3. Find the value of $\frac{12}{51}$ of 13 guineas.
4. Divide 4·8 by ·0016, and multiply ·47 by ·0016.
5. Find by Practice the cost of 16ozs. 6dwts. 20grs. of gold at £3 17s. 6d. per ounce.
6. If 41 qrs. 2 bus. 3 pks. of wheat cost £86 16s. 5¼d., how much wheat can be bought for £136 8s. 8¼d.

THIRD CLASS.

Two hours allowed for this Paper.

1. Reduce £1 14s. 9¾d. to the decimal of 2 guineas.
2. Find the income-tax on £356 10s. at 5d. in the £.
3. Add together $\frac{4}{5}$ of a guinea, $\frac{3}{5}$ of a sovereign, $\frac{7}{20}$ of a crown, and $\frac{1}{4}$ of a shilling. Express the result as a fraction of $4\frac{7}{20}$ of £1.
4. Three bells begin to toll together, and toll at intervals of 30, 40, and 45 seconds. respectively. When will they all toll together again ?
5. Find the simple interest on £886 10s. 9d. for $4\frac{1}{6}$ years at $5\frac{1}{3}$ per cent.
6. A man buys goods which he sells again for £11 18s. 0½d., making a profit of 16 per cent. What did he give for them ?

SECOND CLASS.

Two hours allowed for this Paper.

1. At what rate per cent. will £365 amount to £537 9s. 3d. in 9 years at simple interest.
2. In a bag of coins there are an equal number of sovereigns, half sovereigns, crowns, half crowns, florins, shillings, six-pences, and three-penny pieces. The total value of the coins is £948 15s. Find the number of each sort.
3. Find the square root of ·01 and of ·1 to 5 places.
4. If 10 sheep or 15 lambs can eat 40 bushels of turnips in 7 days, how long will it take 6 sheep and 18 lambs to eat 36 bushels ?
5. In 1881 the population of a town was 5 per cent. less than in 1871. In 1881 the population was 11,628 ; what was it 1871 ?

FIRST CLASS.

Two hours allowed for this Paper.

1. Find the cube root of 8120601.
2. A square field contains 15 acres 2 roods 20 perches. Find the length of a path crossing it diagonally.
3. A person invests £25,935 in 3 per cent. stock at 90. What income will he derive from it ?
4. How many yards of carpet 2·16 feet wide will cover a room 25·3 feet by 28·8 feet ?
5. A man travelled $\frac{6}{16}$ of his journey by coach, $\frac{7}{10}$ by rail, and walked the last 10 miles. How far did he go ?
6. Pipes A and B could fill a cistern in 3 minutes and 5 minutes respectively, and C could empty it in $7\frac{1}{2}$ minutes. In what time will the cistern be filled if A, B, and C are all turned on together ?

Penmanship.

Write in large hand the word " Egyptian," and in small hand " Cairo, the capital of Egypt, on the River Nile."

Dictation.

(For the use of Examiner only.)

CANDIDATES.

But there is an instinct for self defence as well as for attack. Cattle and deer know how to protect themselves from their enemies. At any alarm they assemble and form a band against the invader. The instinct of the horse leads him to kick with his hind legs, and he has often thus come off victorious against the lion himself. The instinct of the deer leads them to take to the water in extremity of danger, and crouch in it with only their noses above : thus their scent is lost to their pursuers.

FOURTH AND THIRD CLASSES.

When Hercules was in that part of his youth in which it was natural for him to consider what course of life he ought to pursue, he one day retired into a desert, where the silence and solitude of the place very much favoured his meditations. As he was musing on his present condition, and very much perplexed in himself on the state of life he should choose, he saw two women of a larger stature than ordinary approaching towards him. One of them had a very noble air and graceful deportment; her beauty was natural and easy, her person clean and unspotted, her eyes cast towards the ground with an agreeable reserve, her motion and behaviour full of modesty, and her raiment as white as snow. The other had a great deal of health and floridness in her countenance, which she had helped with an artificial white and red; and she endeavoured to appear more graceful than ordinary in her mien, by a mixture of affectation in all her gestures. She had a wonderful confidence and assurance in her looks, and all the variety of colours in her dress that she thought were the most proper to show her complexion to advantage.

Spelling.

THIRD AND FOURTH CLASSES AND CANDIDATES.

1. Write the passage dictated to you.
2. Marks will be deducted for incorrect spelling in any of your papers.

Mathematics (Males).

FOURTH CLASS.

Time allowed : One hour and a half.

EUCLID.

(All generally understood abbreviations and symbols for words may be used, but not symbols of operation, as $+$, $-$, $\times$.)

1. If two angles of a triangle be equal, the sides which subtend or are opposite to the equal angles shall be equal.
2. Any two angles of a triangle are together greater than the third angle.

ALGEBRA.

1. Multiply $1 + 2x + 3x^2 + 4x^3 + 5x^4$ by $1 - 2x + x^2$.
2. Divide $a^2b - 3\ abc + 2ab^2c$ by ab.
3. $(a = 4,\ b = 3,\ c = 2,\ x = 5,\ y = 6)$. Find the value of
$$\frac{(x+y)^2 - a^2}{x+y+a} + \frac{(a+b)^2 - c^2}{a+b-c}$$
4. Simplify
$$13a - [11a + \{9a - (7a + 5a)\}]$$

THIRD CLASS.

EUCLID.

(All generally understood abbreviations and symbols for words may be used, but not symbols of operation, as $+$, $-$, $\times$.)

1. Construct a triangle, the sides of which shall be respectively equal to three given straight lines, any two of which are together greater than the third.
2. If a straight line fall upon two parallel straight lines, it shall make the two interior angles on the same side of the line together equal to two right angles.

ALGEBRA.

1. If $a = 1$, $b = 2$, $c = 3$, $d = 4$, $e = 5$, find the numerical values of the following expressions :—
$$\frac{a^2 + b^2}{e} + \frac{c^2 + e^2}{b} + \frac{e^2 - d^2}{c}$$
2. Find the G.C.M. of—
$$4\ (x^2 - x + 1),\ 3\ (x^4 + x^2 + 1).$$
3. What is the L.C.M. of the following :—
$$x^2 - 1,\ x^3 + 1,\ x^3 - 1,\ x^6 + 1.$$
4. Find the value of—
$$\frac{3}{2x - 4} - \frac{1}{x + 2} - \frac{x + 10}{2x^2 + 8}$$

SECOND CLASS.

EUCLID.

(All generally understood abbreviations and symbols for words may be used, but not symbols of operation, as +, −, ×.)

1. If a straight line be divided into any two parts, the rectangle contained by the whole and one of the parts is equal to the rectangle contained by the two parts with the square on the aforesaid part.

2. In a quadrilateral, if two opposite sides which are not parallel are produced to meet one another, show that the perimeter of the greater of the two triangles so formed is greater than the perimeter of the quadrilateral.

ALGEBRA..

1. Find the value of

$$\frac{3}{2x-4} - \frac{1}{x+2} - \frac{x+10}{2x^2+8}$$

2. Divide $\dfrac{8x^3}{x^3 - y^3}$ by $\dfrac{4x^2}{x^2 + xy + y^2}$

3. Solve the equation —

$$\frac{x}{2} + \frac{x+1}{7} = x - 2$$

4. A prize of £2,000 was divided between A and B, so that their shares were in the proportion of 7 to 9. What was the share of each?

FIRST CLASS.

(All generally understood abbreviations and symbols for words may be used, but not symbols of operation as +, −, ×.)

1. The angle contained by the bisectors of the angles at the base of any triangle is equal to the vertical angle together with half the sum of the base angles.

2. Divide a straight line into two parts, so that the rectangle contained by the whole and one part shall be equal to the square on the other part.

ALGEBRA.

1. What two numbers are they whose product is 255 and the sum of whose squares is 514?

2. Solve the equation $\dfrac{x}{2} + \dfrac{x+1}{7} = x - 2$

3. Solve $\left.\begin{array}{l}\dfrac{3x}{4} - \dfrac{2y}{3} = 1\\[2mm]\dfrac{7x}{3} + \dfrac{5y}{6} = 6\end{array}\right)$

4. Solve the equation $\dfrac{2x+11}{x} = 5 - \dfrac{x-5}{3}$

School Management.

Time allowed: One hour.

FOURTH CLASS.

1. What do you understand by "Simultaneous Reading"? How and when would you use it?

2. "The discipline of the school depends upon the personal character of the Teacher." Give a brief explanation of what you think this sentence means.

3. How can the blackboard be used during a reading lesson?

4. Write out brief notes of a lesson on one of the following subjects:—
   The Dog.
   A Table.

THIRD CLASS.

1. Write out notes of a first lesson to a First Standard Class on "Nouns."

2. Name some of the "common faults of school boys" given in "Gladman's School Method." Say how you would strive to overcome any one of them.

3. What do you understand by Concrete and what by Abstract numbers? At what periods in a child's school life would you use them?

4. What is the object of rewards to school children? What are the chief objections to such rewards?

FIRST AND SECOND CLASSES.

1. What are the uses of "Memory Maps" in the teaching of Geography?

2. How would you explain the difference between units, tens, and hundreds to young children?

3. Write down a complete sentence, and then show how you would deal with it before a class of Standard VI. children.

4. Write out brief notes of a lesson on one of the following:—
   The Dog.
   A Table.

History.

Time allowed: One hour.

FOURTH CLASS.

1. Give a brief account of the proceedings in Britain of three of the chief Roman generals.

2. State concisely the results of the Roman occupation of Britain.

3. Name the Danish Kings of England, and give a brief account of the first of them.

4. Give an account of the discoveries of Bass and Flinders in Australia.

   NOTE.—Give dates where possible.

THIRD CLASS.

1. What English king spent much of his time in the Crusades? What king preceded him and what succeeded? Say what you know of his character.

2. Give a short account of Edward the First's campaigns against Scotland.

3. When were the chief possessions of the English Crown in France lost? What were the circumstances under which they were lost?

4. Narrate the circumstances under which Port Phillip was first discovered.

   NOTE.—Give dates wherever possible.

SECOND CLASS.

1. What personages became prominent in the reign of Queen Mary? Give a brief account of one of them.

2. Explain the words "King by Divine Right." What sovereigns of England asserted this claim, and with what result?

3. Name the reigns and years in which the following Acts were passed, and mention briefly the chief clauses in each:—
   Mutiny Act.
   Bill of Rights.
   Septennial Act.

4. Give a short account of Clive's career in India.

   NOTE.—Give dates wherever possible.

FIRST CLASS.

1. Name three important Acts passed during the reign of Queen Victoria and give an account of one.

2. What do you understand by the term "Limited Monarchy?" Who may be said to be the first Sovereign of England who governed as a limited monarch?

3. Who was called the "Great Commoner?" Give an account of the part he played in English History.

4. What discoveries were made by Sturt, Leichhardt, Bourke and Wills?

   NOTE.—Give dates wherever possible.

English.

Two hours allowed for this Paper.

CANDIDATES.

1. Analyse
   (a.) Day *set* on Norham's *castled steep*,
   On Tweed's fair river *broad* and deep,
   And *Cheviot's* mountains *lone*.

   (b.) My father, *whom* we greatly *feared, demanded*, in stern tones, "*Who is there?*"

2. Parse the words in italics.

3. Write a letter describing a picnic in the bush.

4. What is a pronoun ? Tell to what parts of speech the following words belong :—Himself, misery, goodness, too, two, very, athwart, buy, by.

5. What are regular and irregular verbs, demonstrative adjectives, adverbs ? Give an example of each.

6. Pick out the prefixes or suffixes in the following words :— Democracy, illegible, presuppose, womanly, righteous.

English.

Two hours allowed for this Paper.

FOURTH CLASS.

1. Analyse the following sentences and parse the words in italics :—
   - (*a.*) Our sailors *bold* in days of old
   Were masters of the sea.
   - (*b.*) *Tell me ye winged* winds, that round my pathway *roar*,
   Is *there not* some spot *where* mortals *weep no more*.

2. Write a letter describing a picnic in the bush.

3. Explain as clearly as you can the meaning of the following terms :—Predicate, extension, object.

4. What parts of speech are the words in italics in the following sentences :—

   He sailed *round* the world.
   The knights of the *round* table.
   She bought a *round* of beef.
   The smith hits *hard*.
   The chair is *hard*.

5. Explain the meaning of proper noun, definite numeral adjective, adverb pronoun, and give an example of each.

THIRD CLASS.

1. Analyse the following sentences :—
   - (*a.*) She told me *shame* would *never betide* with truth for my creed.
   - (*b.*) The greatest of English historians is *Edward Gibbon*. The story of his life is *best* told by himself : It is an *absolutely* true *account*, and is further *interesting* from the style in *which* it is *written*.

2. Parse the words in italics.

3. Write a letter to a friend describing the Jubilee festivities in the town or district in which you live.

4. Explain the meaning of transitive verbs, copula verbs, abstract noun, and form sentences to illustrate your answers.

5. (*a.*) What is the work of the adverb ? Classify the adverbs and give one of each class.
   (*b.*) Give examples of the following words used (1) as adverbs, (2) as adjectives :—Hard, bright, round.

6. Give the meaning of the prefixes in the following words :— Inert, subvert, transpose, impious, export, concourse, adhere, biscuit.

SECOND CLASS.

1. Analyse the following sentences :—
   - (*a.*) On *either* side the river *lie*
   Great *fields* of barley and of rye,
   That clothe the wold, and *meet* the *sky*.
   - (*b.*) His *idea* of despotism *did* not go much *beyond freedom* from all restraint and liberty *to do as* he *liked*.

2. Parse the words in italics.

3. Paraphrase—
   It is not growing like a tree
   In bulk, doth make men better be,
   Nor standing long an oak three hundred year
   To fall a log at last, dry, bald, and sear.
   A lily of a day is fairer far in May,
   Although it fall and die that night,
   It was the plant and flower of light.
   In small proportions we just beauties see :
   And in short measures life may perfect be.

4. (*a.*) What is the difference between a gerund, participle, verbal noun ? Give examples of each.
   (*b.*) What is meant by participial phrase, propositional phrase, and infinitive phrase? Say where these are found and illustrate your answer by examples.

5. What do you understand by mood ? Name the moods and give an example of each.

6. What are the meanings of the parts in italics in the following : — *Tempestuous, impracticable, dotage, inharmonious, worthy, adhesion.*

FIRST CLASS.

1. Analyse the following sentences :—
   - (*a.*) O *Solitude ! where* are the charms
   That sages have seen in thy face ?
   Better dwell in the *midst* of alarms
   Than *reign* in this horrible place.
   - (*b.*) Johnson's weighty and impressive style suits well with a subject of moral grandeur *such as* not *seldom* employed his pen ; but it grows monotonous, and *becomes* even ludicrous, when applied on occasions of *trifling* importance.

2. Parse the words in italics.

3. Paraphrase—
   Why are we weighed upon with heaviness
   And utterly consumed with sharp distress,
   While all things else have rest from weariness ?
   All things have rest : why should we toil alone,
   We only toil, who are the first of things,
   And make perpetual moan,
   Still from one sorrow to another thrown :
   Nor ever fold our wings, and cease from wandering,
   Nor steep our brows in Slumber's holy balm :
   Nor hearken what the inner spirit sings
   "There is no joy but calm."

4. What is analysis ? Name the different kind of sentences and give an example of each.

5. What do you understand by apposition, nominative absolute, nominative of address? Give an example of each.

6. What are roots, prefixes, compound words ? Give the meaning of the prefix or suffix in—Enhance, womanhood, subterfuge, wisdom, refer, lawyer, catastrophe.

Needlework.

Time allowed : One hour.

CANDIDATES.

Sew a flannel patch 2 inches square on a piece of flannel four inches square.

FOURTH CLASS.

Gather a piece of calico 5 inches long into a band 2½ inches long.

THIRD CLASS.

Make a band 3 inches long and work on it two button-holes, one with bridged ends.

SECOND CLASS.

Set in a print patch 2 inches square on a piece of calico 4 inches square.

FIRST CLASS.

Darn on a piece of linen a crosscut tear 1 inch long.

Drill.

Time allowed : Half an hour.

FOURTH CLASS.

1. Describe the method of Saluting to the Front (by numbers).
2. Explain what is meant by the "Forward Stretch" in Free Exercises without apparatus.
3. How should the pole be held when "Standing at Ease?"

THIRD CLASS.

1. Give the instructions necessary to show boys how to "Mark Time."
2. Describe the movements in "Leg-swinging" in Free Exercise without arms.
3. Explain how the pole should be held in "Changing Pole from Right to Left."

SECOND CLASS.

1. Give the instructions necessary to teach boys "the side step" in Squad Drill.
2. What are the instructions necessary for "chest expansion" in Pole Drill?
3. Name in order the various exercises in Physical Drill without arms.

FIRST CLASS.

1. What orders are necessary in "Desk Drill" when ordinary school desks are used?
2. What is meant by "the side step"?   Give the necessary instructions.
3. Explain the movement following on the order "Form Fours" when a squad is marching to the front.

APPENDIX

Fig. A.
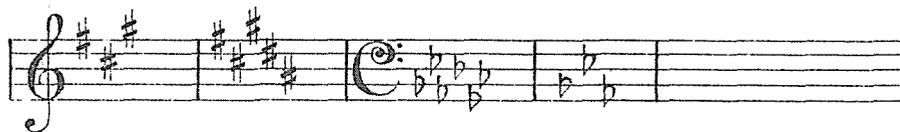
Fig. B.
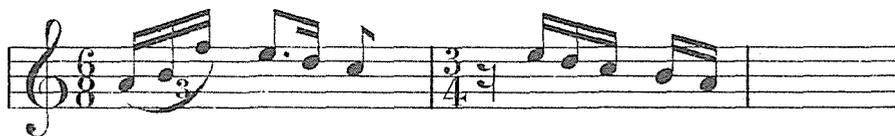
Fig. C.

Fig. D.
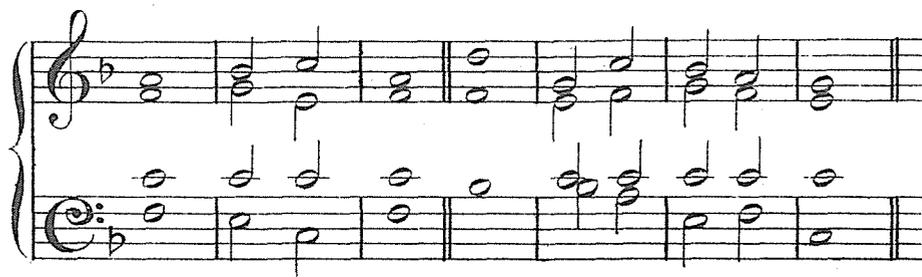
Fig. E.

Fig. F.
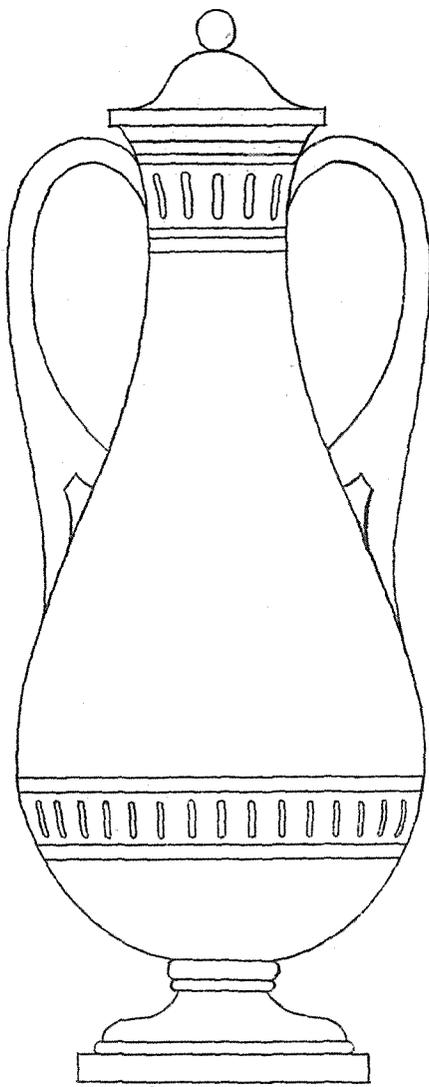
DIRECTIONS — Make the drawing a little smaller than the copy. There must be no measuring, ruling, or tracing. Time allowed for this exercise—forty minutes.

Fig. H.

Fig. I.

A

B   C

Fig. J.

Fig. K.

C ——|————————|————|— D

A ————————————— B

Fig. L.

B ————————————— C

D

A

Fig. M.

A

B   C
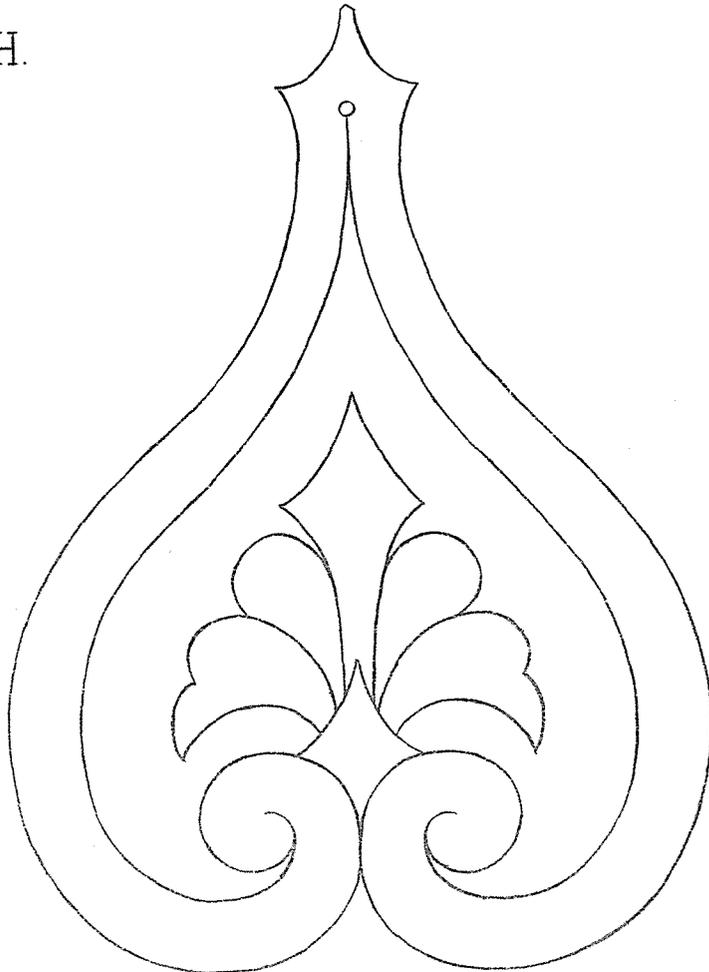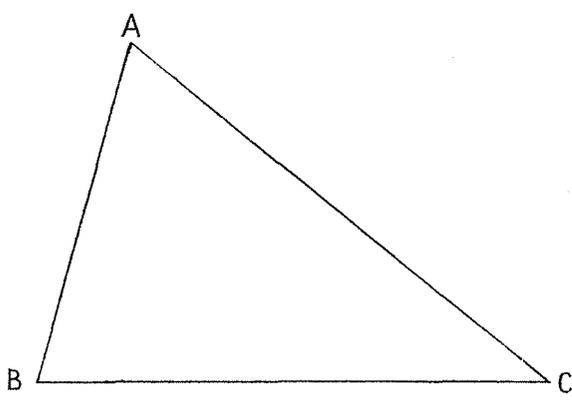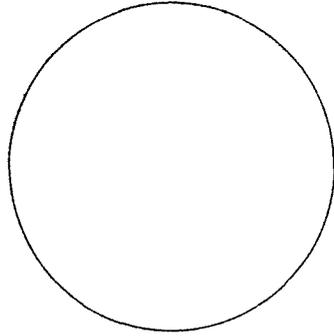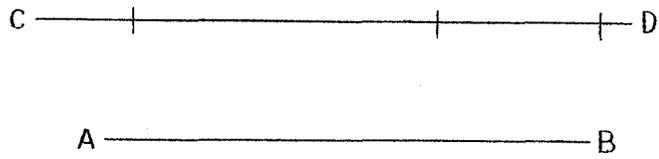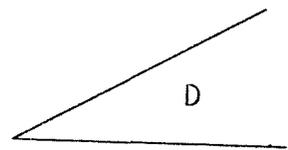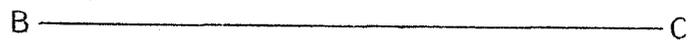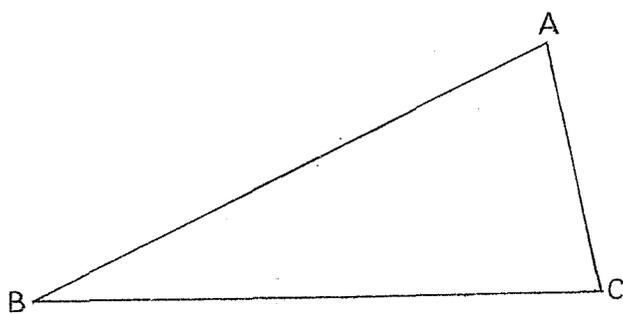
Fig. N.
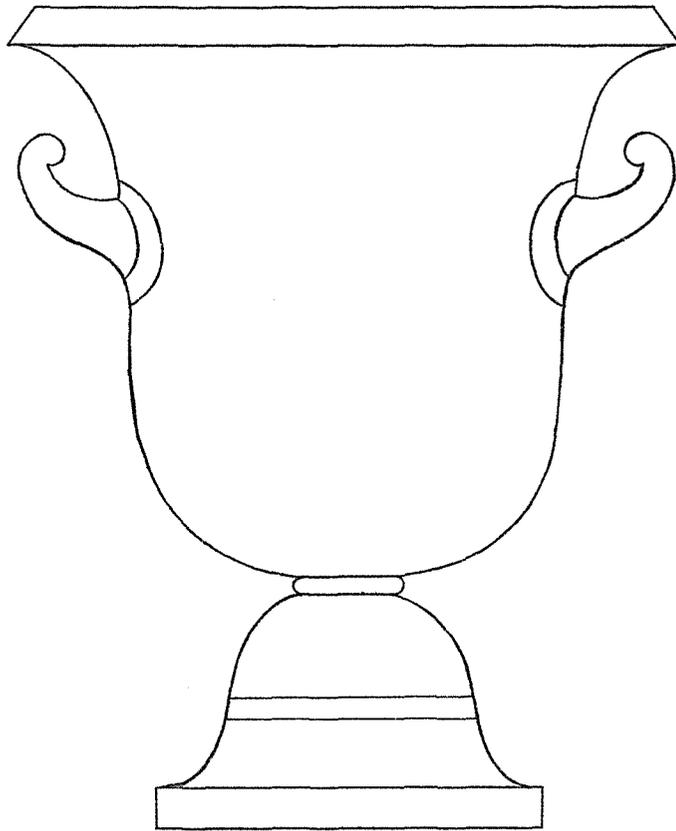
DIRECTIONS— Make the drawing a little larger than the copy.   There must be no measuring ruling, or tracing.   Time allowed for this exercise — forty minutes.