

(Louise)  
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Halifax Ladies College  
June 18<sup>th</sup> - 1896.

## HISTORY OF LITERATURE.

### THIRD YEAR.

1. Name the English poets of the time of the French Revolution; also those that may be called Post Revolution poets; and say what were their various attitudes towards the Revolutionary movement. ②
2. Write a brief historic outline of the life of Sir Walter Scott. ②
3. Name three works each of Burke, Macaulay, Carlyle, Thackeray, Ruskin. ②
4. Write the full name of the authors of (a) 'Cottar's Saturday Night,' (b) 'John Gilpin,' (c) 'The Library,' (d) 'Rime of the Ancient Mariner,' (e) 'Curse of Kehama,' (f) 'The Excursion,' (g) 'Locksley Hall,' (h) 'Confessions of an English Opium Eater,' (i) 'Last Days of Pompeii.' ②

### MODERN POETRY.

1. What was the origin of the poem "Adonais"? Account for the name, describe the stanza in which this poem is written, and quote a stanza referring to the author. ②
2. What allegorical meaning may be read in Wordsworth's poem beginning, "O nightingale thou surely art." ②
3. From what poems are the following lines?
  - (a) "Joy have I had, and going hence  
I bear away my recompense."
  - (b) "As in the eye of Nature he has lived,  
So in the eye of Nature let him die."
  - (c) "And dragged to earth both branch and bough with  
crash and merciless ravage"
  - (d) "Yet how forlorn should ye depart,  
Ye superstitions of the heart." ②
  - (e) "Youthful poets, who among these hills  
Will be my second self when I am gone."
4. Relate briefly the story told in "The Rhyme of the Duchess May." State four events in the life of the author.
5. What is the subject of the poem, "The Two Voices"? Quote the first two stanzas. After what scene is the second voice introduced? ②
6. How is the "Dream of Fair Women" introduced? To whom do these lines refer?
  - (a) "Where'er I came I brought calamity."
  - (b) "The bright death quivered at the victim's throat."
  - (c) "I subdued me to my father's will."
  - (d) "Those dragon eyes of angered Eleanor."
  - (e) "A light of ancient France." ②

## GRADE B.

3.05 TO 4.05 P.M., THURSDAY, 4TH JULY, 1895.

# Physics.

(Only *five* questions to be answered.)

1. (a) What should 100 lbs., when weighed on the surface of the earth by a spring balance, weigh in like manner 12,000 miles above the *surface* of the earth?

(b) If water is to be raised from a well 50 feet deep, how high must it be lifted by the piston of the pump, and why?

2. (a) If a piece of lead (sp. g. 11.35) is dropped into a graduate, and displaces 12cc. of water, what does the lead weigh?

(b) An ounce bullet leaves a gun weighing 8 pounds, with a velocity of 800 feet per second. What is the maximum velocity of the gun's recoil?

3. (a) How long is a pendulum which makes 40 oscillations per minute?

(b) How much work can a 2 horse-power engine do in an hour?

4. (a) How is heat conducted in gases and liquids?

(b) How much heat will be produced by freezing one cubic foot (about 29k or 62.5 lbs.) of water?

5. (a) What is "polarization" of the elements of a voltaic battery, and how is it best got rid of?

(b) A volt-meter applied each side of an electric lamp shows a difference of potential of 40 volts; what current flows through the lamp, if it has a resistance of 10 ohms?

6. (a) What is the law of the vibration of strings?

(b) Describe in outline the essential parts of the phonograph.

7. (a) Explain the fundamental principle of photometry.

(b) What is the cause of chromatic aberration in a lense?

## GRADE B.

10.05 to 11.05 A. M., Thursday, 4th July, 1895.

### ALGEBRA.

*(Only five questions to be answered.)*

1. Find what values of  $m$  make  $3mx^2 + (6m - 12)x + 8$  a perfect square.

✓ 2. Given  $\frac{9\sqrt{x-23}}{3\sqrt{x-8}} = \frac{6\sqrt{x-17}}{2\sqrt{x-6}}$ , find  $x$ .

3.  $A$  varies as  $B$  directly, and as  $C$  inversely; and  $A = 10$  when  $B = 15$ ,  $C = 6$ ; find  $A$  when  $B = 8$ ,  $C = 2$ .

✓ 4. Insert two harmonic means between 4 and 12.

5. If the equation  $x^2 + 2(1+n)x + n^2 = 0$  has equal roots, what is the value of  $n$ ?

✓ 6. In how many ways can  $n$  things be given to  $m$  persons, when there is no restriction as to the number of things each may receive?

✓ 7. Express the duodenary number  $te$  in the binary scale.

GRADE B.

2 TO 3 P.M., THURSDAY, 4TH JULY, 1895.

## Physiology.

1. Indicate by a drawing and otherwise, the several bones of the arm and hand in their relation to each other, with the positions of a few of the more important muscles controlling their motion.
2. (a) Sketch the general structure and forms of the teeth. (b) Discuss their liability to disease and their hygiene.
3. Describe the liver and its functions.
4. (a) Draw a vertical section of the eye showing its various parts. (b) Explain by the aid of diagrams "hypermetropic," "myopic" and "presbyopic" vision.
5. Give a full description of one of your dissections.

*Relotic*

GRADE B.

9 TO 10 A.M., FRIDAY, 5TH JULY, 1895.

## English Language.

(Only five questions to be answered.)

1. Give a short sketch of the plot of the "Lady of the Lake."
2. Quote a passage from the poem showing Scott's power of describing natural scenery, and describe generally the preparation and sending forth of the "Fiery Cross."
3. Explain *quarry*, *pibroch*, *bourgeon*, *henchman*, *snood*, *coronach*, *claymore*, *targ*, *kern*, *Beltane*.
4. Give a short account of the life of Warren Hastings, after the trial was over.
5. "With all his faults—and they were neither few nor small—only one cemetery was worthy to contain his remains." Name some of those faults. What cemetery is referred to? Where was he buried?
6. Write notes on Augustulus, Pepin, Clive, Lord North, Oates, Cosmo, and give a short description of Benares.

GRADE B.

11.10 TO 12.10 A.M., THURSDAY, 4TH JULY, 1895.

## Practical Mathematics.

(Only five questions to be answered).

1. Given  $\sin 18^\circ = \frac{\sqrt{5}-1}{4}$  find the values of the remaining trigonometrical functions of  $18^\circ$ .

2. In the triangle  $ABC$ , there are given angle  $A = 63^\circ 48'$ , angle  $B = 49^\circ 25'$ , and  $BC = 275$ ; find all the other parts of the triangle. (Given  $\log \operatorname{cosec} 63^\circ 48' = 10.0470825$ ;  $\log \sin 49^\circ 25' = 9.8805052$ ;  $\log 275 = 2.4393327$ ;  $\log 2327665 = 6.3669204$ ;  $\log \sin 66^\circ 47' = 9.9633253$ ;  $\log 28167 = 4.4497405$ .)

3. Explain fully the construction and use of a Traverse Table.

4. The radius of the circle circumscribing equiangular triangle is 25 inches. Find the area ( $a$ ) of the circle, ( $b$ ) of the triangle.

5. What is the diameter of a hemispherical pot to contain ( $a$ ) ten gallons, ( $b$ ) 50 liters?

6. Explain the principle of moments; or solve the following:

An endless screw which is turned by a wheel 10 feet in circumference acts upon a wheel having 81 teeth; this wheel has an axle 18 inches in circumference; the power is 75 lbs.; what weight can be supported from the axle?

## GRADE B.

3.05 TO 4.05 P.M., FRIDAY, 5TH JULY, 1895.

# German.

1. *Translate into English*:—Eine blind gewordene Henne, welche des Scharrens gewohnt war, horte, auch in ihrer Blindheit nicht auf, fleissig zu scharren. Was half es der arbeitsam Narrin? Eine andere sehende Henne, welche aber ihre zarten Füsse schonte, wich nie von ihrer Seite und genoss, ohne zu scharren, die Frucht dieser Arbeit; denn so oft die blinde Henne ein Korn aufgescharrt hatte, frass es die sehende weg.

2. Parse, giving the six parts of the verbs; *die sehende, half, wich, des Scharrens gewohnt*, and decline in both numbers in German: "her tender foot" "a blind hen."

3. *Translate into English*:—Als König Karl, von den Sachsen geschlagen, floh und zum Main kam, wussten die Franken die Furt nicht zu finden, wo sie über den Fluss gehen und sich vor den Feinden retten könnten. Da soll plötzlich eine Hirshkuh erschienen, ihnen vorangegangen und eine Wegweiserin geworden sein. Daher gelangten die Franken über den Main, und seitdem heisst der Ort Frankenfurt oder Frankfurt.

4. Give the two plurals of *Ort*, and distinguish between them. Parse *erschiene*n and *gelang*ten. What does the termination in *Wegweiserin* denote? Translate: Open the door, if you please. The youngest child will some day become an old man. Order for supper what you wish.

5. Translate any *five* of the following:—(1) The man made a journey on foot and his master on horseback? (2) You work hard with your hands and he works hard with his feet. (3) He remained standing for half an hour before the Queen. (4) Is there a mail to England every week? (5) My aunt would have been here if the children had not been sick. (6) You must remain in this waiting-room until the train comes. (7) He fell from a height of several stories without any harm happening to him. (8) Shall I write this letter in English or in German?

GRADE B.

10.05 TO 11.05 A.M., FRIDAY, 5TH JULY, 1895.

English Grammar.

1. Write a full note on the use of *that* as a relative pronoun.

2. Explain the following terms, and give sentences illustrating your explanation: Cognate Objective, Reciprocal Pronouns, Auxiliary, Impersonal and Anomalous Verbs, Conjunctive Adverb, Factitive Verb, Norman-French Possessive.

3. Tell what you know of the writings of Dryden and Pope.

4 and 5. Analyze the following, and parse the words in italics:—

Oh, how it *yearned* my *heart*, when I beheld,  
In London streets that *coronation day*  
When Bolingbroke rode on roan *Barbary* ;  
That *horse*, that thou so often *hast bestrid*,  
That horse that I so carefully have dressed.



GRADE B.

9.00 TO 10.00 A.M., THURSDAY, 4TH JULY, 1895.

## Geometry.

[Only *five* questions to be answered. Shortest form of proof preferred, providing *every* statement is proven by reference to Euclidean Propositions.]

- ✓ 1. From a given circle cut off a segment which shall contain an angle equal to a given angle.
2. Describe a circle to touch three given straight lines.
3. The medians (lines from angles to middle of opposite sides) of a triangle are concurrent in a point called the centroid of the triangle, where they trisect each other. Prove their concurrence and trisection.
4. Show that three times the squares on the sides of a triangle are equal to four times the squares on the medians.
- ✓ 5. What is the Nine-Points Circle? The orthocentre of a triangle? The pedal triangle? Concyclic? Orthogonal intersection of circumferences? Medial section? Duplicate ratio? Reciprocally proportional?
- ✓ 6. If the vertical angle of a triangle be bisected by a straight line which cuts the base, the segments of the base shall have to one another the same ratio as the remaining sides of the triangle.

GRADE B.

4.10 TO 5.10 P.M., THURSDAY, 4TH JULY, 1895.

## History and Geography.

(Only *five* questions to be answered).

1. Write a note on the geography of Ancient Greece.
2. Sketch the condition of the Roman Empire under Augustus.
3. State the general results of the Crusades.
4. Sketch the career of Frederick the Great.
5. State briefly the causes that lead to the French Revolution, and some of its effects.
6. Among the great men of the present century, name *three* in each of the following departments : Philosophy, Science, Literature, Art, stating which you consider the greatest. Name their principal works.
7. Draw an outline map of the United States, marking off those States that formed the late Southern Confederacy.