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By order of

E. B. MERITT,

Asst. Commissioner.

6-4344

61576, 1917.

CARLISLE

File No.

810

DEPARTMENT OF THE INTERIOR
UNITED STATES INDIAN SERVICE

Carlisle, Pa.

June 20, 1917.

*File
6/29/17
emu*

FILED BY C. P. F.

OFFICE OF INDIAN AFFAIRS
RECEIVED
JUN 21 1917

Commissioner of Indian Affairs,
Washington, D.C.

Sir:

In accordance with authority granted April 11, 1917, final examination questions were prepared to cover the various courses given here. This authority required that we transmit a copy of such questions for the information of the Indian Office.

OFFICE OF INDIAN AFFAIRS
RECEIVED
JUN 25 1917
61576

I am enclosing herewith the copies of questions.

The following subjects are omitted as we had no students prepared to take them:

- Nursing - Prevocational
- Gardening
- Types & Breeds of Farm Animals - 3rd yr.
- Blacksmithing " "
- Masonry " "
- Printing " "
- Masonry 4th "

Emu

Very truly yours,

John Francis
Superintendent.

JF:R

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division.

Reading

May 14, 1917.

Fourth Year.

I.

FILED BY C. P. F.

Name three classics that you have studied this year and their authors. Tell in one paragraph which you most enjoyed, and why?

II.

Write from memory "Portia's Plea for Mercy."

III.

What books have you read on vocational guidance? Your industrial work? On moral training?

IV.

What was Franklin's plan for attaining moral perfection? What are some of his precepts? What was the "Junto?"

V.

What is the lesson learned from Abou Ben Adhem? Paraphrase the story.

VI.

Who wrote the following books: "Ben Hur," "Last Days of Pompeii," "Evangeline," "The Christmas Carol," "The Last of the Mohicans," "Robinson Crusoe," "Treasure Island," "Julius Caesar," "The Oregon Trail," "Pushing to the Front," Give an outline for a book review. Give a review of one of the books mentioned above.

VII.

Give the title to a thrilling incident in Ben Hur. What catastrophe overtook Pompeii? In what year? What is your opinion of Julius Caesar? Of Portia in "The Merchant of Venice?" What is meant by the "Oregon Trail?" What is the plan of "Pushing to the Front?"

VIII.

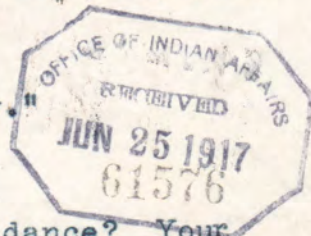
In what stories are the following characters: Tiny Tim, Shylock, Topsey, Philip Nolan, Brutus.

IX.

Make an outline of the chapel talk you made this year.

X.

Name at least ten books that you shall want in your own home. On an average, how much of your spare time is spent in reading?



CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division.

Composition

May 14, 1917.

Fourth Year.

I.

In the following sentences, fill each blank with some form of the verb lie, or lay: Give your reasons.

- (a) The logs are ---- where they fell.
- (b) I have ---- your clothes on the bed.
- (c) How long have you ---- there?
- (d) Yesterday I ---- on the couch for an hour.
- (e) I shall ---- down for a few minutes.

II.

Write a simple sentence containing an adjective phrase; one containing an adverbial phrase; one containing an infinitive phrase; one containing a participial phrase. Change each to a complex sentence.

III.

Write a letter to some business firm that you know, ordering goods of some kind. State clearly the number and kind of articles that you desire, and tell how you wish them sent.

IV.

Narrate in one paragraph, an interesting event in your school life.

V.

Describe the room in which you are taking the examination.

VI.

- (a) State a question for debate.
- (b) Give the general outline of a debate.

VII.

Write five sentences illustrating the use of the noun clause. Give the diagram and written analysis of one of them.

VIII.

Analyze the following sentence: "Youth is the time when the seeds of character are sown."

IX.

Write the outline for an account of a sleigh-ride, an automobile ride, or a boatripe.

X.

Write an essay of at least 250 words on one of the following subjects:

- (a) Coal; its discovery and usefulness.
- (b) My Favorite Season.
- (c) Rural Life and its Increasing Attractiveness.
- (d) The Sugar Beet and the Manufacture of Sugar.
- (e) History and Manufacture of Paper.

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division.

Composition

May 14, 1917.

Fourth Year.

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- (e) History and Manufacture of Paper.

OF THE AGRICULTURE OF THE STATE OF IOWA: STAG BONE LESSONS.
IN THE IOWA STATE UNIVERSITY, IOWA CITY, IOWA

I.

Composition

MAY 15, 1917.

FOURTH YEAR.

ACADEMIC DEPARTMENT
FINAL EXAMINATION FOR COMPLETION OF

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division.

Arithmetic

May 15, 1917.

Fourth Year.

(Answer ten questions. Reduce each result to its simplest form and mark each answer "Ans." Questions 1, 2, 3 and 4 are given as tests for accuracy; therefore no credit will be allowed unless the answer is correct.)

I.

Add: 49658
76459
27862
51374
96941
30286
64125
98507
83786
49013

II.

Subtract 6793 from the product of 4853 and 796.

III.

Multiply the sum of $\frac{2}{3}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{5}{6}$, $\frac{7}{12}$ by $\frac{3}{10}$.

IV.

Divide .3075 by .75.

V.

A family uses in one month $1\frac{1}{4}$ tons of coal at \$6.80 per ton and 3500 cu. ft. of gas at \$1.00 per thousand cu. ft.; and the father's monthly salary is \$120. What fractional part of his monthly salary does he pay for fuel and light?

VI.

What will it cost to excavate a cellar 45 ft. long, 20 ft. wide and $7\frac{1}{2}$ ft. deep at 65 cents a cu. yd?

VII.

For a horse and carriage I paid \$540. What was the cost of each, if the cost of the carriage was $1\frac{1}{2}$ times the cost of the horse?

VIII.

Find the cost of the wire necessary to fence a rectangular field whose length and breadth are 24 rd. and 18 rd., respectively, if the fence contains five wires and the wire is worth $1\frac{1}{4}$ ¢ per ft.

IX.

A farm of 40 acres is in the form of a rectangle, the length

NO CREDIT WILL BE ALLOWED UNLESS THE AMOUNT IS COLLECTED
AND THE DEBTOR HAS BEEN NOTIFIED: THE DEBTOR
MAY BE HELD RESPONSIBLE FOR THE AMOUNT OF THE DEBT
(UNLESS THE DEBTOR HAS BEEN NOTIFIED)

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ADDITIONAL INFORMATION

IX. (continued)

of which is twice its width. How many rods of fence will
enclose it?

X.

Find the net proceeds of a sale made by an agent charging
 $3\frac{1}{2}\%$ if incidental charges and commission charges were each
\$41.30.

XI.

A grocer buys 10 barrels of apples, each barrel containing
 $2\frac{1}{2}$ bushels at \$2 per barrel. If the loss by decay amounts
to 20%, at what price per peck must he retail them in order
to clear 20%?

XII.

A man sold two farms for \$8000 each, receiving for one
20% more than it cost and for the other 20% less than it cost.
Did he gain or lose by the sale and how much?

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division.

Chemistry

May 15, 1917.

Fourth Year.

(Answer ten questions, but only ten)

I.

Why is the study of science important? How can you prove that matter is indestructible? What is the difference between a physical and a chemical change?

II.

Explain carefully the molecular and atomic theories. Why is not the molecular theory sufficient?

III.

What is an element? About how many elements are there? Name ten common elements and give the symbol for each.

IV.

- (a) What three gases are of most importance to man?
- (b) What are the principal properties of each?
- (c) What is an acid, a base, a salt?
- (d) How do they differ from each other? Give an example of each.

V.

Draw a figure showing the apparatus with which you made hydrochloric acid in the laboratory. What substances did you use? Write the equation showing the chemical reaction taking place when hydrochloric acid is made in this way.

VI.

Define atomic weight, molecular weight, valence, graphic formula, and radical.

VII.

Give the properties of sodium and tell what experiment was performed in class with metallic sodium. Name the most important compounds of sodium.

VIII.

Why are carbon and its compounds of so much importance? Name the principal forms in which carbon is found and give some of the uses of each form.

IX.

Where is sulphur found, how obtained, and of what uses is it?

X.

How much sulphuric acid must be combined with 1000 pounds of salt to make hydrochloric acid? How much hydrochloric acid will this make? Show your entire work.

the molecular weight and density
showing clearly the molecular and atomic weights. This is not

II*

and a chemical change
is indicated. This is the difference between a physical
and a chemical change. How can you prove that

I*

(Answer for questions, not only for)

Chemistry

How is it done?

How is it done?

X. (continued)

Atomic weights.

H	1
Na	23
O	16
S	32
Cl	35.5

XI.

Tell the importance of nitrogen compounds in agriculture.

GI 22*2
S 25
O 79
IV 82
H J
V. COMPTON & COMPANY

X* (continued)

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division.

Rural Economics.

May 16, 1917.

Fourth Year.

(Answer any ten questions, but only ten)

I.

Sketch the development of agriculture from its most primitive state to the individual ownership state.

II.

Explain what factors after the Civil War hastened the development of agriculture in the U.S.

III.

What advantage has diversified over specialized types of farming?

IV.

- (a) What are the disadvantages of farming on a small scale?
- (b) What are the advantages of crop rotation?

V.

Give some reasons for the scarcity of labor and remedies for same.

VI.

- (a) Will mechanical power replace horse power on the average farm? Give reasons.
- (b) Give different methods of decreasing the cost of horse power.

VII.

What effect has the size of farm on the efficiency of labor and income of the farm?

VIII.

What factors would influence the type of farming carried on? Explain each.

IX.

What three factors would you consider the most important in the profitable management and organization of a farm? Explain each.

X.

- (a) Name two kinds of deeds.
- (b) Tell which you prefer and why.
- (c) What is an abstract of title?

XI.

- (a) What are the advantages of cooperative buying and selling?
- (b) What are its drawbacks?

state to the industrial organization state.
 sketch the development of agriculture from its most primitive

(Answer any ten questions, but only ten)

Write Economica.

Write the Latin.

Write the English.

CARLISLE INDIAN SCHOOL
 Final Examination for Completion of
 Vocational Division.

General Exercises. May 16, 1917. Fourth Year.

I.

How many amendments to the Constitution of the United States?
 Give the Preamble.

II.

Give the Sixteenth Amendment.

III.

How many votes in the Electoral College? How many electoral
 votes in your state? Who is the governor of your state?

IV.

Name the following: (1) The Commander-in-Chief of the Army & Navy.
 (2) The Premier of England.
 (3) The group of islands recently pur-
 chased by the United States. The price paid.
 (4) Our Ambassador to Mexico.
 (5) The poet from India who lectured
 in the United States in 1916.

V.

Locate by city, state or country:

- (1) The Statue of Liberty.
- (2) The Garden of the Gods.
- (3) The Mammoth Cave.
- (4) The Alhambra.
- (5) The Metropolitan Museum.

VI.

Distinguish between character and reputation. What are the
 principles that constitute good character? What is the value of
 character?

VII.

What is the standard rule for our treatment of others?
 Where is it found?

VIII.

What is duty? Is it good morals to expect a reward for
 doing one's duty? Why.

IX.

What do you understand by "good manners?" As applied to you/
 or your neighbors?

X.

(a) From what Operas are the following taken:

Лодка на море...
Нам нужна лодка на море...

III*

Спаси нас, Господи...

II*

Спаси нас, Господи...

Нам нужна лодка на море...

I*

Спаси нас, Господи...

III* II* I*

Спаси нас, Господи...

Спаси нас, Господи...

X. (continued)

Soldiers' Chorus, Anvil Chorus?

(b) Write the scales of G and F and show where the half-steps occur.

CPITQ 2409A

SEP '17 1917

FOURTH YEAR

ASSOCIATION OF
FINAL EXAMINATION FOR COMPLETION OF
CARTISLE INDIAN SCHOOL

CARTISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division

Child Study

Feb. 1, 1917

Fourth Year

(Answer any ten.)

I

Give a brief outline of the first three days' care of the new-born infant. In clothing a baby, what principles are to be observed? What may be the effect of too tight clothing about the chest? Abdomen? Hips?

II

What objections are there to continuous playing with a baby? Give the reasons against allowing a baby to quiet itself with the so-called "soother".

III

What is the best food for a baby? Why? How often should a baby be fed? Why give a baby water? When? How? How much? What are the general objections to the patent baby-foods? What are the principal dangers in feeding a baby cow's milk?

IV

What is meant by a balanced food? How may cows' milk be modified so as to be a balanced baby-food? Give at least one formula for modifying milk and state the age for which such a modification would be suitable. How is milk pasteurized? How sterilized?

V

What is meant by the expression "contagious disease"? Name five contagious diseases to which children are subject. Which two of these are the most to be dreaded? Why should a physician be called at once in case of suspected contagious disease?

VI

Name three serious non-contagious diseases that attack children. Give the causes, symptoms, and treatment for any one of them. What is an ordinary cold? Mention five causes of colds. Why is no cold trivial?

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CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division

Plant Diseases January 31, 1917 Fourth Year

I

A plant may be called diseased when?

II

Give the two most general causes for plant diseases.

III

Define fungi.

IV

Define spores.

V

That we may check and control plant diseases what are some of the important things that we should know? (Name five)

VI

Root diseases are commonly due to what?

VII

How may wounds caused by pruning be protected from fungous diseases?

VIII

Name two ways of checking injuries caused by soil diseases.

IX

What is the chief fungicide?

X

What fungicide is much used for the San Jose Scale?

XI

Give cause for leaf ^{ves} drying and dropping before the usual time.

XII

What atmospheric conditions are favorable to the growth of fungi?

XIII

What may be done to prevent the growth and development of parasitic fungi? (Name five preventions.)

PLANT DISEASES
JANUARY 21, 1914
FOURTH YEAR
VOCATIONAL DIVISION
FINAL EXAMINATION FOR COMPLETION OF
CARLISLE INDIAN SCHOOL

CARLISLE INDIAN SCHOOL

Final Examination for Completion of
Vocational Division

Plant Diseases

Fourth Year

XIV

Name five common plant diseases and two plants that each attack.

XV

Tell definitely and accurately how to treat smut on wheat seed.

XVI

Tell definitely and accurately how to treat scabby seed potatoes.

XVII

Tell definitely and accurately how to make Bordeaux mixture.

NAME DATE COMMON INSECT DISEASES AND THE DISEASES THEY CAUSE

INSECT DISEASES

1917

VOCATIONAL DIVISION
FINAL EXAMINATION FOR COMPLETION OF
OVERSIGHT INDIAN SCHOOL

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division

Insects and Insecticides Jan. 31, 1917 Fourth Year

I

Why is insect study important?

II

What is meant by metamorphosis? What are the distinct stages in complete metamorphosis?

III

Name five beneficial insects.

IV

What insects (two) are called the farmers' worst insect enemies?

V

What is called the most dreaded orchard foe?

VI

What does the codling moth attack and what is the best method of destroying it?

VII

What is the standard remedy for biting insects?

VIII

Name two good sprays for sucking insects.

IX

Name five common household pests and tell the best method of getting rid of each.

X

What is a good remedy to exterminate lice and vermin in the poultry house?

XI

Plant lice, describe by following the "order of study".

XII

Colorado potato beetle " " " "

XIII

Chinch bug, describe by " " " "

11
I
1911
1911
VOCATIONAL DIVISION
FINAL EXAMINATION FOR COMPLETION OF
CARLISLE INDIAN SCHOOL

(Continued-page 3)

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division

Insects and Insecticides

Fourth Year

XIV

Give five important agricultural methods of preventing injuries caused by insects.

XV

Tell accurately how to prepare kerosene emulsion.

XVI

How may the farmer realize profits from use of insecticides?

DEPARTMENT OF AGRICULTURE
 BUREAU OF EXTENSION FOR COMPLETION OF
 SUPERVISORIAL INQUIRY

CARLISLE INDIAN SCHOOL
 Final Examination for Completion of
 Vocational Division

Field Crops

Feb. 1, 1917

Fourth Year

I

- (a) How are field crops classified?
- (b) What is stover?
- (c) Define catch crop, soiling crop, green manure crop.

II

Tell the method you would use in handling corn from the selection of the seed to the harvesting.

III

- (a) Name the three principal varieties of wheat and localities found in.
- (b) What is stooling?
- (c) Name the by-products of wheat.

IV

- (a) Why are oats grown on general farm when corn pays better?
- (b) Name the two varieties.
- (c) What type of soil is best for oats?
- (d) What is the average yield per acre for United States?

V

- (a) What type of soil is best for rye? (b) State uses.
- (b) State use of barley and its place in the rotation.
- (d) State uses of flax.

VI

- (a) How are forage crops defined? Give example.
- (b) How would you establish a meadow?
- (c) What are the principal pasture grasses of the different sections of United States?

VII

- (a) What benefits are derived from the growing of legumes?
- (b) Name the different varieties of clover and uses of each.
- (c) Describe the culture of alfalfa.

(P) 1914
(*) HOW PLANTING CROPS SUCCESSFULLY

FIELD CROPS SEP. 1, 1914 HOLLIS 1914

VOCATIONAL DIVISION
FINAL EXAMINATION FOR COMPLETION OF
CARLISLE INDIAN SCHOOL

(Continued-page)

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division

Field Crops

Fourth Year.

VIII

Name two varieties of both early and late potatoes.

State type of soil best adapted; preparation of soil; rate and method of planting, cultivation, and harvesting.

IX

What method would you adopt to make a run-down farm a success?

X

- (a) Describe the culture of mangels.
- (b) How are sweet potatoes propagated?
- (c) What are the uses of rape?

STATE DEPT. OF EDUCATION
BUREAU OF INDIAN AFFAIRS

1111

LISTING CLERK

1917

VOCATIONAL DIVISION
FINAL EXAMINATION FOR COMPLETION OF
CARTISLE INDIAN SCHOOL

CARTISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division

Reading

May 14, 1917.

Third Year.

I.

Who wrote "The Merchant of Venice?" What is the general plot of the story? Name four of the most important characters. Give three quotations from it.

II.

Who wrote "Sir Galahad?" For what was Sir Galahad seeking? Upon what conditions did his success depend?

III.

What lesson is taught by "The Vision of Sir Launfal?" Give two quotations from it. Name its author.

IV.

Write from memory either "Opportunity" or "The Chambered Nautilus." Who was the author of each?

V.

What short stories or magazine articles have you read recently which impressed you. Give your reasons in one paragraph.

VI.

Name two living writers of importance, one of whom must be an American. What have they written?

VII.

Who were the following: Hawthorne, Dickens, Poe, Scott, Irving, Emerson, Milton, Burns, Holmes, and Eliot? Answer by giving first names, nationality and one work of each.

VIII.

Make a list of the books you have read since Sept. 1st. Which one did you like best? Why?

ACQUISITION DEPARTMENT
 STUDY EXAMINATION FOR COMPLETION OF
 CURRICULUM IN THE SCHOOL

CARLISLE INDIAN SCHOOL
 Final Examination for Completion of
 Vocational Division.

Composition.

May 14, 1917.

Third Year

I.

What do you consider essential points to be remembered in writing a composition, as to (a) subject, (b) arrangement of material, (c) general appearance?

II.

What three qualities should every sentence, every paragraph and every composition possess? How may these qualities be secured in a paragraph?

III.

Give four rules for the use of capital letters. Illustrate each.

IV.

Write two sentences containing similes, and two containing metaphors.

V.

Give the case of the underlined nouns or pronouns, and reasons for each:

- (a) George Washington was President of the United States.
- (b) I told him to go home.
- (c) Our walk being ended, we returned to our rooms.
- (d) John, come here.
- (e) They elected Andrew president.

VI.

Fill in blanks, giving reasons:

- (a) I knew it to be (he, him)
- (b) It looked like (she, her)
- (c) He is taller than (I me)
- (d) There are many (who, which) saw him.
- (e) I knew it was (they, them)
- (f) Every student must arrange (his, their) desk.
- (g) John and (I, myself) are invited.
- (h) This is the man (who, whom) I spoke of.

VII.

Write two sentences containing object complements, two containing objective complements, two containing attribute complements, and two containing indirect objects.

VIII.

Write two simple sentences, two compound sentences, and two complex sentences.

IX.

Fill in the following blanks, giving reasons:

- (a) I (saw, seen) John after he (did, done) his work.
- (b) I wanted to take the 5:15 train, but it had (went, gone) when I reached the station.

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division.

Composition

May 14, 1917.

Third Year.

IX.

(c) (set, sit) your bundle on the table, and (set, sit) down for a chat.

(d) Before I (lie, lay) down, I will (lie, lay) the book on the shelf.

(e) You (may, can) go if I (may, can) spare you.

X.

Write a theme of at least 200 words on the subject:

"A Day at Carlisle."

~~(ANSWER EIGHT QUESTIONS. NUMBER 10 MUST BE INCLUDED)~~

ACCEPTED BY DIVISION
FIRST EXAMINATION FOR COMPLETION OF
VOCATIONAL DIVISION
CARLISLE INDIAN SCHOOL

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division.

Physics.

May 15, 1917.

Third Year.

I.

- (a) Make a simple diagram showing the position of the fulcrum, weight and power in each class of lever.
(b) To which class do the following belong: spoon, scissors, nutcracker? Make a diagram of each.

II.

- (a) What is the law of the pulley?
(b) Of what practical value is the pulley?

III.

State two advantages of the metric system of weights and measures and two disadvantages of the common system.

IV.

- (a) Who was Torricelli?
(b) How did he prove to the world that the atmosphere exerts pressure?
(c) Of what value is his experiment to people today?

V.

- (a) Describe a common fire extinguisher and explain how it works.
(b) Make a diagram showing the interior arrangement of a fire extinguisher.

VI.

- (a) In what different ways may a home be heated?
(b) Make a drawing to show how a stove heats a room and why a stove draws.
(c) Why does a stove smoke when a fire is first started in it?

VII.

- (a) Why do substances expand when heated and contract when cooled?
(b) State the Molecular theory of matter.

VIII.

- (a) Define evaporation, dew point, boiling point, latent heat.
(b) What is the effect of decreased pressure upon the boiling point? Explain carefully.

IX.

- (a) What are the three most important ways of producing electricity?
(b) Describe a simple cell and explain how polarization interferes with its work.
(c) Name the different cells which have been invented in the effort to overcome polarization.

X.

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division.

Soils and Soil Fertility

May 15, 1917.

Third Year.

(Answer any ten questions, but only ten.)

I.

What factors influence the growth of a plant after germination?

II.

- (a) By what agencies was our soil formed?
- (b) Name 5 different classes of soils and tell origin of each.

III.

- (a) How can we increase the amount of nitrogen in the soil?
- (b) What is inoculation? Explain two methods commonly used.

IV.

- (a) Name three forms of lime and benefits obtained from use of lime.
- (b) Describe the litmus test.

V.

- (a) What benefits do we derive from the use of manure?
- (b) How is its value often lost?
- (c) How should it be cared for?

VI.

Give three reasons for cultivating the soil.

VII.

- (a) Name and explain the three forms of water in the soil.
- (b) Of what importance is water to plants?

VIII.

- (a) What benefits are derived from drainage?
- (b) Name two kinds of underdrains; advantages and disadvantages of each type.

IX.

How can we best keep up the fertility of the soil without the use of commercial fertilizers?

X.

What is soil erosion? Name different ways of preventing.

XI.

Explain purpose of dry farming and management necessary for success.

DEPARTMENT OF EDUCATION
BUREAU OF INDIAN AFFAIRS
CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division.

General Exercises

May 17, 1917.

Third Year.

I.

(a) Write two verses of "America." (b) Define the following music terms: D.C., D.S., Fine, P., PP., F., FF., MF and rit.

II.

Tell some interesting fact about Joffre, Lloyd-George, Gen. Wood, Von Hindenburg, Jeanette Rankin, Herbert Hoover, Balfour, Verdun, Eddystone and Petrograd.

III.

What are the causes that impelled the United States to enter the war?

IV.

What do you consider the best reasons for being polite?

V.

Name what you consider necessary things to be remembered in table manners.

VI.

What are the qualifications for President?

VII.

Name five of the President's powers.

VIII.

Define, "citizen."

IX.

(a) Name five powers of Congress
(b) Which are most important now?

X.

Mention the benefits you have derived from studying Civics.

VOCATIONAL DIVISION
FINAL EXAMINATION FOR COMPLETION OF
CURRICULUM INDIAN SCHOOLCARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division

Chemistry

Jan. 31, 1917

Third Year

I

What is Chemistry? Define matter. Name five physical properties of matter and three chemical properties.

II

Explain as fully as you can the atomic theory. What is valance?

III

What is the difference between an element and a compound?

Between a symbol and a formula? Name three elements and three compounds, giving the symbol or formula for each.

IV

Name three gases of most importance to man, tell where in nature each is found, and give the principal uses of each.

V

Draw a figure showing an apparatus for making oxygen in the laboratory and explain the process by which it may be made.

Write the equation showing the chemical reaction which takes place when oxygen is made in this way.

VI

Name the three allotropic forms in which carbon is found.

Of what value is carbon to man? In which of the three forms is it most useful?

VII

Explain fully the difference between an acid and a base.

What is a salt? Give an example of each, writing both the name and the chemical formula.

VIII

Describe either phosphorus or sulphur, telling where found, in what forms, the properties, and the uses. Write of either one but not of both.

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division

Chemistry

Jan. 31, 1917

Third Year

IX

What forms of calcium are of great use to man? Where are these forms found, or how made? What are their properties, and of what use are they?

X

(a) Complete the following equation and test it by balancing the atomic weights: $\text{NaNO}_3 + \text{H}_2\text{SO}_4 \rightarrow$

(b) How much HCL can be made from 1000 pounds of NaCl?

In each case show your entire work.

Atomic Weights

H = 1
Na = 23
O = 16
N = 14
S = 32
Cl = 35.5

VOCATIONAL DIVISION
FINAL EXAMINATION FOR COMPLETION OF
CARLISLE INDIAN SCHOOL

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division.

Reading

May 14, 1917.

Second Year.

1. Name two American authors and a production of each.
2. Name an Indian writer of note, and one or two of his works.
3. What classics have you read in the classroom during the past year? Give a brief summary of one of them.
4. What American has written a famous poem about the Indian race? Give a quotation from that poem.
5. (a) Who wrote the following: "Old Ironsides," "The Ship of State," "The Recessional," "Ode to a Waterfowl," "The Builders." (b) What is meant by the "Ship of State?" (c) In what war was England engaged when the Recessional was written? What is an ode? Who are the "Builders?"
6. (a) What papers and magazines do you read?
(b) How much of your spare time do you spend in reading?
7. (a) In what stories are the following characters:
Ichabod Crane, Philip Nolan, Friday.
(b) How many and what books do you own?
8. Tell some of the things you have learned from reading good books.

ACCEPTANCE DICTIONARY
 FINAL EXAMINATION FOR COMPLETION OF
 VOCATIONAL DIVISION

CARLISLE INDIAN SCHOOL
 Final Examination for Completion of
 Vocational Division.

Spelling.

May 14, 1917.

Second Year.

- | | |
|------------------|------------------|
| 1. inventory | 13. cooperate |
| 2. receipt | 14. ensilage |
| 3. deposits | 15. evaporation |
| 4. nitrogen | 16. belligerent |
| 5. culinary | 17. merchandise |
| 6. mischievous | 18. appreciation |
| 7. chauffeur | 19. probably |
| 8. corporation | 20. exaggerate |
| 9. prohibition | 21. palatable |
| 10. agricultural | 22. nutritious |
| 11. literature | 23. legumes |
| 12. convenience | 24. mortgage |
| | 25. capillary |

Dictation:

Imagine a semicircular area, scooped out like a funnel at the bottom, and enclosed by a vertical wall from twelve to fourteen hundred feet high, surmounted by the vast gradations of an amphitheatre whitened by eternal snow, and these crowned with rocks in the form of towers, having glaciers for battlements.

VOCATIONAL DIVISION
FINAL EXAMINATION FOR COMPLETION OF
COURSE IN INDIAN SCHOOL

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division.

Grammar

May 14, 1917.

Second Year.

I.

Analyze the following sentence: "The gentleman who spoke to us will lecture before the school tonight."

II.

Compare the following adverbs; sweetly, little, far, badly, well, rapidly, much, ill, late, near.

III.

Write a sentence containing (a) a prepositional phrase used like an adjective; (b) a prepositional phrase used like an adverb; (c) a participial phrase used like an adjective; (d) an infinitive phrase used as the object of a verb.

IV.

Name the tense of each verb expressed in the following sentences. Change the first to past tense. The second to present. The third to present perfect. The fourth to past perfect. Change the sixth to second person, interrogative sentence.

- (a) I see you.
- (b) John swam across the creek.
- (c) You will see the ocean.
- (d) I have seen the Great Dipper.
- (e) Had you seen him before?
- (f) I shall have been here a year in June.

V.

Write synonyms for the following words: mutual, excuse, wholly, dreary, ludicrous, competent, skill, shrewd, civil, arrange.

VI.

Point out the transitive verbs in the following sentences:

- (a) The frightened animal sought the open country.
- (b) The petition was signed by a number of the students.
- (c) In order to do well in this examination you must control your thoughts.

above to be ... the following sentence: "The ..."

GRAMMAR

MAY 14 1917

SECOND YEAR

ACCOMMODATION DIVISION
ACCOMMODATION DIVISION
FINAL EXAMINATION FOR COMPLETION OF
VOCATIONAL DIVISION

SHEET TWO

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division.

Grammar

May 14, 1917.

Second Year.

VII.

Underline the clauses in these sentences and give classification:

- (a) That he is honest appears evident.
- (b) Wherever he went, he was welcome.
- (c) Did you see the tree that was blasted?

ACCESSION DIVISION
FINAL EXAMINATION FOR COMPLETION OF
VOCATIONAL DIVISION

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division.

Composition.

May 14, 1917.

Second Year.

1. Describe your room at Quarters.
2. Write a legend of your tribe, or reproduce a short story that you have heard or read.
3. Write a telegram not exceeding ten words, to a friend who is at some other school, asking him or her to meet you at the station at the arrival, on a certain day, of the three o'clock train.
4. Use the following words in sentences: currents, currants, principle, principal, corporation, cooperation, accept, except, respectfully, respectively.
5. (a) Give in your own words the thought contained in the following verse: (b) Who is the author?

"The year's at the spring,
And day's at the morn;
Morning's at seven;
The hillside's dew-pearled;
The lark's on the wing;
The snail's on the thorn;
God's in His heaven -
All's well with the world.
6. Write an essay of not more than three paragraphs on one of the following subjects:
 - (a) My Native State.
 - (b) My Dog.
 - (c) My Favorite Sport.
 - (d) The Story of a Picture.
 - (e) My Industrial Work.

2. Write a check for \$100.00 on a bank account for \$100.00.

3. Write a check for \$100.00 on a bank account for \$100.00.

4. Describe how you would use a check.

COMPOSITION

MAY 15, 1917

SECOND YEAR

ARITHMETIC
FINAL EXAMINATION FOR COMPLETION OF
VOCATIONAL DIVISION

CARLISLE INDIAN SCHOOL

Final Examination for Completion of
Vocational Division

Arithmetic

May 15, 1917.

Second Year.

I.

Write a time note, negotiable, non-interest bearing. Suppose the above note was discounted immediately at 6%, what amount would be due on it at maturity?

II.

A family that had been paying rent of \$22.50 a month borrowed money at 6% to purchase a cottage for \$2250. The taxes were \$43; repairs \$32; insurance \$3.50. How much did this family save a year by owning their own home?

III.

By fertilizing a farmer increased the yield of a 10 acre corn field 40%. If the yield the preceding year was 320 bu., how much was the yield per acre after fertilizing?

IV.

Find the force necessary to lift a stone of 1600 lbs. by means of a 5 ft. crowbar supported 1 ft. from the end.

V.

What is the length of the hypotenuse of a triangle whose base is 12 ft. and whose altitude is 9 ft.?

VI.

Tom, Will and Frank caught 48 trout. Tom caught twice as many as Will, and Frank caught as many as both Tom and Will. How many did each boy catch?

VII.

A cow yields 1-1/2 gallon of milk a day. How much does the owner receive for the milk he gets in a week if he keeps 3 pint daily for his own use and sells the rest at 8 cents a quart?

VIII.

Find the contents of a cylinder whose radius is 10 ft. and whose altitude is 6 ft.

IX.

Find the amount of \$2350 for 2 yr. 3 mo. 16 days at 4%.

X.

How much will it cost to plaster the four walls and ceiling of a hall 60 ft. long, 36 ft. wide and 18 ft. high at 22.5 cents per sq. yd., after deducting 486 sq. ft. for door and window openings?

money of 0. to balance a contract for 50000. The price was 100.
A similar price had been paid for 100000 of 1870 a month before

II.

amount would be due on it at maturity
suppose the price was 1000000. The price was 100.
The price was 1000000. The price was 100.

I.

ALTERNATE
ACCOUNT MAY 12, 1917
SECOND YEAR
VOCATIONAL DIVISION
FINAL EXAMINATION FOR COMPLETION OF
COURSE IN THE SCHOOL

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division.

History. May 15, 1917. Second Year.

I.

Tell the condition of our country in 1789.

II.

What is the "Monroe Doctrine?"

III.

Define Tariff and tell why it has been an important subject.

IV.

Tell of the annexation of Texas.

V.

Give an account of Lee or Grant's part in the Civil War.

VI.

Describe the condition of the North and the South at the close of the Civil War.

VII.

Locate 5 United States Colonial Possessions and tell in what way each is most valuable.

VIII.

Give a brief history of the Panama Canal.

IX.

Name five inventions that have been of great benefit to the world.

X.

To what does each of the following selections allude:

- | | |
|----------------------|------------------------|
| "Evangeline" | "Barbara Frietchie" |
| "Paul Revere's Ride" | "Gettysburg Address" |
| "Old Ironsides" | "The Blue & The Gray" |
| "The Ship of State" | "Nathan Hale" |
| "Sheridan's Ride" | "Star Spangled Banner" |

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division.

General Exercises May 16, 1917. Second Year.

I.

- (a) What three kinds of colonial government were there in the Colonies at the beginning of the Revolutionary War?
(b) Briefly describe each.

II.

- (a) Into how many departments is the government of each state divided? (b) Name them and tell their functions.

III.

Describe the progress of a bill from its introduction to its becoming a law

IV.

Describe the jurisdiction of three grades of state courts.

V.

What are the causes of the present war between the United States and Germany?

VI.

- (a) What reasons may be given in favor of universal military training?
(b) Why is it better to select by draft than to depend upon volunteers for securing an army?

VII.

- (a) What important law concerning the railroads was passed a few months ago?
(b) For what reason did Congress pass this law?

VIII.

- (a) What is the basis of true courtesy?
(b) Explain the difference between "good form" and true politeness.

IX.

Give the general rules which should govern the conduct of a courteous person on the street and in public places.

X.

- (a) Name the clefs and tell what voices sing in each.
(b) Give the signatures for the following keys: G, F, D, A, B^b, E, E^b, A^b and C.

ADMISSION EXAMINATION
FINAL EXAMINATION FOR COMPLETION OF
VOCATIONAL DIVISION

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division

Soils and Soil Fertility

Jan. 31, 1917

Second Year

I

- (a) What is nitrification? Explain essentials necessary for nitrification.
- (b) State what is meant by soil inoculation and two methods used.

II

What methods would you use to maintain the fertility of western soils without commercial fertilizers.

III

- (a) What factors influence the germination of a plant?
- (b) What factors affect its growth after germination?

IV

- (a) What are the different classes of soil? Tell the origin of each.
- (b) State the two most important soil-forming agencies.
- (c) What is mechanical analysis?
- (d) What is chemical analysis?

V

- (a) What benefits are derived from the use of farm manure?
- (b) What factors influence its value?
- (c) How should it be handled?

VI

- (a) Name and define the three forms of water in the soil.
- (b) Which is the most important? how controlled?

VII

- (a) Name the benefits derived from drainage.
- (b) What methods would you use in laying out an efficient drainage system?

VIII

- (a) What factors cause the soil to become more granular?
- (b) What treatment would you recommend for a sandy soil that blows?
- (c) What treatment for a clay soil that bakes?

(P) ...
(W) ...

I

SOILS AND SOIL FERTILITY

MAY 21, 1913

SECOND YEAR

ASSOCIATION OF ...
FINAL EXAMINATION FOR COMPLETION OF ...
CARTISLE INDIAN SCHOOL

CARTISLE INDIAN SCHOOL
Final Examination for the Completion of
Vocational Division

Soil and Soil Fertility

Second Year

IX

- (a) How can we prevent the loss of humus?
- (b) What is flocculation?
- (c) How is soil erosion controlled?

X

- (a) What benefits are derived from applying lime to the soil?
- (b) Name the three forms and tell their origin.
- (c) Explain the litmus test for soils.

- (a) How is soil erosion controlled?
(b) How is the soil protected?
(c) How can we prevent the loss of soil?

IX

SOIL AND SOIL RELATIONS

SECOND YEAR

AGRICULTURAL DEPARTMENT

Final Examination for Completion of Vocational Division

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division.

READING

May 14, 1917.

First Year.

I.

Tell the story of "The Courtship of Miles Standish."
Who wrote it?

II.

Give two comparisons from "Miles Standish."

III.

Who wrote "The Christmas Carol?" What was his object in writing the story? Describe briefly that part of the story which interested you most.

IV.

What magazines and papers are you in the habit of reading? What is the most interesting magazine article you have read this year? Write one short paragraph about it.

V.

Write from memory one poem you have memorized this year. Who wrote it. Name the other two which you memorized, and tell who wrote them.

VI.

Tell the nationality of each of the following writers and name one work of each: Hawthorne, Dickens, Burns, Irving, and Holmes.

VII.

Make a list of books that you should like to own.

VIII.

Give two quotations that you like, and tell why you like them.

HEADING

MAY 4, 1917

FIRST YEAR

ACQUISITION DIVISION
FIRST EXAMINATION FOR COMPLETION OF
VOCATIONAL INDIAN SCHOOL

CARLISLE INDIAN SCHOOL
Final Examination for Completion of
Vocational Division.

Spelling

May 4, 1917.

First Year

- | | |
|----------------|-----------------|
| 1. grammar | 11. aviation |
| 2. dictionary | 12. censor |
| 3. agriculture | 13. biscuit |
| 4. mechanical | 14. delicious |
| 5. separate | 15. fertilizer |
| 6. receive | 16. beginning |
| 7. submarine | 17. thermometer |
| 8. sergeant | 18. temperature |
| 9. chocolate | 19. colonel |
| 10. patriotism | 20. aeroplane |

Dictate the following selection:

The poorest man may in his cottage bid defiance to all the force of the Crown. It may be frail; its roof may shake; the wind may blow through it; the storms may enter, the rain may enter, - but the king of England cannot enter; all his forces dare not cross the threshold of the ruined tenement.

The tendency to persevere, to persist in spite of hindrances, discouragements, and impossibilities - it is this that in all things distinguishes the strong soul from the weak.