

Divide the sum of $3\cdot27$ and $\cdot238$ by their difference, expressing the result as a decimal correct to six places.

8. Find the value of $\frac{5}{7}$ of £1 + $\frac{3}{8}$ of $2\frac{2}{3}$ of 2s. 6d. — $\frac{3}{14}$ of £2 10s.;

And also of $\frac{\cdot016}{\cdot016}$ of $\frac{\cdot016}{\cdot016}$ of 55 tons.

9. If a kilogramme is equal to $2\frac{1}{2}$ lb., and a metre to 39·37 inches, express the atmospheric pressure, which is $14\frac{1}{2}$ lb. per square inch, in kilogrammes per square metre.

10. Extract the square root of $\frac{1}{4}$ to seven places of decimals.

11. In 1880 there were 42,784 boys and 39,667 girls attending the public schools in New Zealand, 20,436 of the whole number being under seven years of age. Supposing that among the children under seven there were 25 girls for every 27 boys, find the percentage of girls attending school who were under seven years of age.

12. Define *interest*, *rate per cent.*, *present value*, and *discount*. Find the *present value* of £1,000, due 100 days hence, at 10 per cent. per annum.

13. A person sells ten thousand dollar bonds at $92\frac{1}{2}$ per cent. If he pays $\frac{1}{4}$ per cent. for brokerage, and $\frac{1}{4}$ per cent. for exchange, how much will he receive in sterling money, a dollar being worth 4s. 2d.?

14. If an article be sold for 10s. at a loss of 20 per cent., what must the price be raised to in order to gain 20 per cent.?

15. To a puncheon of rum, containing 84 gallons, which cost £100 16s., a dealer added a certain quantity of water, and retailed it at 28s. a gallon, making a profit of 40 per cent. What quantity of water did he add?

CLASS D.—GEOGRAPHY.

Time allowed: Three hours.

1. How do you explain the fact that degrees of latitude are of nearly the same length all over the world, but that degrees of longitude are of very different lengths? Why is it necessary to say degrees of latitude are of *nearly* the same length? Where are they longest?

2. Show how the inclination of the earth's axis to the plane of its orbit affects the seasons, including in your answer both the variation in temperature and the variation in the length of the day.

3. Trace the course of the great European watershed. Give, in order, the names of the rivers which lie south of it, stating into which sea, &c., each flows, and mentioning the more important tributaries.

4. What is a volcano? Give the names of as many volcanoes in America as you can, and explain the position of each.

5. Draw a map of the coast-lines which bound the Atlantic Ocean, marking the mouths of the principal rivers which flow into it or into seas connected with it.

6. Describe the mountain system of Asia.

7. Explain the position of the following towns in New Zealand: Oamaru, Tauranga, Gisborne, Picton, Westport, Patea, Kaiapoi, Queenstown.

8. Enumerate the more important towns in the Colony of Victoria, and explain the position of each.

9. What are the British colonies in or near Africa? What are the principal exports from each of those colonies?

CLASS D.—ENGLISH HISTORY.

Time allowed: Three hours.

(Four questions may be omitted.)

1. What influence had foreign rule on England before the Norman Conquest?

2. Discuss the character and policy of William the Conqueror.

3. What part did the barons play in England under Norman and Plantagenet rule?

4. Outline the history of English parliamentary government up to the reign of Elizabeth.

5. Describe the growth of organization in commerce and industry up till the seventeenth century.

6. Give an account of Lollardism and its political and social causes and effects.

7. Compare the characters of Elizabeth and Mary Queen of Scots.

8. Sketch the influence of favouritism in the reigns of James the First and Charles the First.

9. Characterize the great leaders on the side of the Parliament, and their military tactics in the Civil War.

10. What led to the Revolution of 1688, and what were its chief effects?

11. Was the rule of the Commons the rule of the nation in the latter part of the eighteenth century? Discuss the question.

12. What do you know of the Statute of Mortmain, the Court of High Commission, the Solemn League and Covenant, the Test Act, and the Occasional Conformity Bill?

CLASS D.—LATIN (OPTIONAL).

Time allowed: Three hours.

1. Give the perfects (first person only), the infinitives, and supines of *pario*, *venio*, *video*, *laccio*, *sterno*, *gigno*, *seco*, *consulo*. Parse *sunto*, *fierent*, *vixeris*, *retulissent*, *eundum*.

2. What cases are governed by the following verbs respectively: *Fruor*, *memini*, *egeo*, *misereor*, *prosum*, *praesto* (I excel)? How is *refert* used (1) with substantives or proper names, (2) with pronouns?