- 3. Divide a given right line into two parts so that the square on one part shall be equal to the rectangle under the whole line and the other part.
- 4. Apply the preceding construction to the division of a right angle into ten equal parts.
- 5. If two circles touch each other, prove that their point of contact and their centres are situated on the same right line.
- 6. If from a point outside a circle two right lines be drawn, one cutting the circle and the other touching it; prove that the square on the tangent shall be equal to the rectangle under the whole secant and its external part.
- 7. Apply the preceding to describe a circle passing through two given points and touching a given right line, and point out the number of solutions of the problem.
- 8. If one pair of the opposite sides of a quadrilateral inscribed in a circle be parallel, prove that the other pair are equal in length.
- 9. If a right line be divided into two equal parts and also into two unequal parts, prove that the rectangle under the unequal parts together with the square on the intermediate part is equal to the square on half the line.
- 10. Divide a given right line into two parts so that the difference between the squares described on the parts shall be equal to a given rectangle.

ENGLISH LANGUAGE.

[Not more than ten questions are to be attempted in addition to the exercise in dictation.]

1. Write out and punctuate the passage read by the examiner.

(Candidates will bear in mind that it is not allowable to make a fair copy of this exercise in dictation.)

- 2. At what different periods has a Latin element been introduced into our language? Give examples of Latin words introduced in the several periods mentioned.
- What is meant by Runes? Tell whatever you know concerning any Runic letters admitted into the English alphabet.
 - 4. What is meant by English roots? What

- letter changes from the English root have occurred in the following words:—each, thunder, speak, crumb?
- 5. Define the grammatical term gender. What is the original force of the suffix in hunter, maltster? Account for the gender of sun and moon in modern English.
- 6. Mention any English nouns which form their plurals by processes generally obsolete. Which of the following are genuine plurals, and how do you account for the forms which are not such?—alms, summons, banns, sessions, costs, eaves, weeds, riches, dice.
- 7. What is the origin, and what is the meaning in English grammar, of the term case? Of what lost case-endings are the traces still discernible in our language?
- 8. Enumerate and explain the origin of the various kinds of suffixes employed in the formation of English ordinals. Give the etymology of *foremost*.
- 9. What do you know concerning the origin and history of English possessive pronouns? Account for the form ours.
- 10. Which are the English auxiliary verbs properly so called? Explain the forms of the preterites of the verbs have, make, can.
- 11. Discuss the words italicised in the following:—
- "Long ago we were wont to let plain living accompany high thinking."
 "Methinks you might have spoken, but you
- durst not,"

 12. Distinguish between co-ordinating and
- 12. Distinguish between co-ordinating and subordinating conjunctions. Which are the various uses of the word but in English?
- 13. Give instances of the use of proper nouns as common nouns in English. What is the derivation of dunce, copper, tramway, gipsy?
- 14. State clearly the rules of English syntax with regard to the use of will and shall.
- 15. Give examples of grammatical pleonasm and ellipsis in English.

Analyze grammatically the following sentence; point out any defects or deviations from modern usage which you may notice in its construction, and rewrite it accordingly:—

"By our common law, although there be for the prince provided many princely prerogatives and royalties, yet it is not such as