diction, is equally useful, as a pair will often carry to their nest forty caterpillars an hour, or 3,000 a week. It happened that in the environs of Vienna, when every cultivator was obliged to pay a tax of two sparrow heads, the trees of the district were devoured by caterpillars, and it was found necessary to revoke the law. We spoke of the prodigious damage done to
5 agriculture in France by people mercilessly killing small birds. |

Maori.—For Senior and Junior Civil Service. Time allowed: 3 hours.

Translate the following into English :—

Ko Poneke te tino taone o Niu Tireni. Ehara i te mea i neke ake te nui o tenei taone i nga taone o Niu Tireni ; engari ko te taone tena e noho ai Te Kawana, he mea whakahaere mai hoki i reira nga ture o te whenua. I ia tau, i ia tau e noho huihui ana ki Poneke nga tangata e whiri-whiria ana e nga tangata o Niu Tireni, ki te hanga Ture, ki te whakarite hoki i nga tikanga mo tenei whenua. E huaina ana enei tangata he mema no te Paremete. E huihui ana enei tangata ki te Whare Paremete. Ko ratou hei whakarite i te nui o nga moni e pau i te whakatu kura Maori, me te utu hoki mo nga kai whakaako.

Tera tetahi whare nui kei Poneke, he mea hanga ki te papa rakau—ko tenei pea te whare nui rawa o te ao i hanga ki te papa rakau. Kei tenei whare te nuinga o te mahi Kawanatanga e whakahaerea ana. Ko nga mema o te Paremete hei whakahau i nga mahi kia mahia, a ma te Kawanatanga me ana Minita e whakahau e whakamahi nga tangata mahi i aua mea i roto i taua whare nui nei. Ko ratou hei whakahaere i nga mahi reriwe, i nga tikanga whenua, i nga mahi rori, i nga poutapeta i nga " waea " me era atu me katoa e kiia ana e nga mema o te Paremete kia whakahaerea e ratou.

Translate the following into Maori :—

The Maoris account for the arrival of their ancestors in various ways. The general tradition is that their progenitors arrived from Hawaiki, in about ten principal canoes, but of different structure to those that we now see, and it is generally admitted by them that the chief Kupe, who came in the canoe Matahourua, was the first who took possession of New Zealand. This he did by naming all the rivers and mountains from Whanganui to Patea. He afterwards circumnavigated the whole of the northern island, giving names to many places as he sailed along its shores. Turi is the chief mentioned as having next arrived, in the canoe Aotea. Farther in point of time were the canoes Te Arawa and Tainui ; the former was commanded by Tama-te-kapua and other chiefs, and first touched land at Whangaparaoa, a headland near the East Cape. Then they coasted along, touching at various places, where the chiefs gave names to the principal land-marks, their object being to take possession of the land, which they did as far as Cape Colville, where Tama-te-kapua died and was buried. His people then placed themselves under the guidance of Ngatoroirangi, and returned to Maketu. In the meantime the chiefs Ruaura and Toroa, in the canoe Matatua, had landed at Whakatane, and therefore part of the Arawa district was taken by them from Te-awa-o-te-Atua to Whangaparaoa.

Answer the following :—

How many numbers have personal pronouns in the Maori language? Give one example of the use of each, with translations, and explain the application of each number.

How would you express the word " self " in Maori?

Put the following into English :—

Na wai i a nga heihei ki waho o te mahinga?

Kua whakato ratou i a ratou taewa.

He waka ranei to Hemi raua ko Tamati inanahi.

He toki ta tetahi tangata.

E hapai ana ia i te pouaka.

Tera matou e haere ki Karori apopo.

Tera ranei koe e haere.

Kia tae koe ki te kainga kua to ke te ra.

Put the following into Maori :—

There were one hundred and thirteen pigs, all of them black ones.

I go. So do I. What do you think of doing to-morrow? I am going out in my canoe to fish.

I love her very much.

Trigonometry—For Senior Civil Service. Time allowed: 3 hours.

1. Find the supplements of 20°, 200°, and −220°, and express them in circular measure.

Divide a right angle into two parts, such that the number of degrees in the one part is to the circular measure of the other part as 270 : π.

2. Express all the trigonometrical ratios of A in terms of tan A, and determine the values of the trigonometrical ratios of 60°.

3. Express cos A and cos 2 A in terms of sin A, and show that—

$$\frac{\sin A}{1+\cos A} = \tan \tfrac{1}{2} A = \frac{1-\cos A}{\sin A}.$$

4. Find an expression for all the angles which have a given sine.

If sin A + cos A = 1, find the general value of A.