3. Give full descriptions of two kinds of insects that are particularly destructive to wheat. Describe the injury they inflict, and discuss any methods that may be employed to minimise it.

4. The ladybird beetle (Coccinella) is of special value in the destruction of some kinds of blight:

give an account of its life-history and of the manner in which it destroys blight.

5. Discuss the extent to which agriculture benefits by the action of insects in fertilising flowers.

- 6. To what extent do (a) the sparrow and (b) the starling affect agricultural prospects?

  7. What destructive effects does the New Zealand cockchafer (Odontria zelandica) have upon the growth of any plants of agricultural value during the various stages of its existence? How may these be minimised?
- No. 71.—Geography, A.—For Junior National Scholarships and Free Places in Secondary Schools. Time allowed: Two hours. [Any eight questions may be answered, but not more than eight. Draw diagrams or sketch maps, where possible, to illustrate your answers.]
- 1. Give a full description of the surface and other physical features of the place in which your school is situated, and of the country lying within a few miles round it. Draw a map to illustrate your
- 2. What causes the length of the period of light to vary from day to day? When is it longest, and when shortest? Why?
- 3. Name an inland town and a coast town in the Education District to which you belong. Compare them as to (a) population, (b) industries, (c) climate, (d) possibility of growth.
- 4. Give the names and the exact position and approximate population of six important manufacturing towns in Britain, and explain the circumstances to which each of them owes its importance.
  - 5. What towns in New Zealand form the centres of the following industries, and from what ports

are the products exported: Timber, flax, coal, gold, oats, apples?

6. What is meant by longitude? What is the length of a degree of longitude at the Equator, and how does the length change as you go away from the Equator ? If two places on the Equator are 7,000 miles apart, how much sooner will one have midday than the other?

7. Tell all you know about each of the following places: Hull, Vigo, Marseilles, Matterhorn,

- Crimea, Kiel, Cook Islands, Sicily, Waimangu, Gippsland.

  8. Compare in respect of (a) length, (b) drainage-area, (c) rate of flow, any two rivers of New Zealand. Draw maps to illustrate your answer.
- 9. From which European ports or countries are the following articles exported (name the ports if you can) : Sugar, glass, butter, hemp, currants, olive oil, boots, silk, porcelain? Whence does New Zealand receive its supply of each of these?
- 10. Compare the surface of England with that of the South Island of New Zealand. In each case show how the nature of the surface influences (a) climate and (b) industries.
- 11. You are sending a letter to London: describe two routes by which it might go. How would you address it? Give approximately the length of each route, and mention the chief stopping-places on the way.
- 12. Give as full an account as you can of the winds most commonly experienced in the district in which you live (name the district).
- No. 72.—Geography, B.—For Junior National Scholarships and Free Places in Secondary Schools. Time allowed: Two hours. [Any eight questions may be answered, but not more than eight. Draw diagrams or sketch maps, where possible, to illustrate your answers.]
- 1. What changes would you observe during December in the length of the shadow cast at noon by a post, and how do you account for such changes? At what other places on the earth would the changes be exactly the same as at the place in which you live?

2. Compare Otago and Auckland in the following respects: (a) Area, (b) population, (c) large centres,

3. Explain fully the action of frost in the formation of soil. What is an iceberg? Where are

they to be found, and what work do they do?

- 4. What rivers drain the northern slope of Central Europe? Describe one of them fully under the following heads: (a) Length, (b) drainage-area, (c) navigability, (d) nature of the country through
- 5. Give a general idea of the distribution of land and water on the surface of the globe. Compare the positions of England and New Zealand, and point out any advantages possessed by either over the other.
  - 6. Explain as well as you can why England has become such a great manufacturing country.
- 7. Tell all you know about each of the following: Bohemia, Caucasus, Rome, Antwerp, Kawhia, Riverina, Mount Cenis, Maniototo, Great Barrier Reef, Wakatipu.
- 8. Compare the surface of Switzerland with that of Holland, and in the case of each country show how the nature of the surface has affected the character and industries of the people.
- 9. What towns in Australia are the centres of the districts in which the following articles are grown or obtained: Sugar, coal, fruit, gold, copper, grain, silver? Name and give the position of the ports from which each of these articles is exported.
- 10. Name and give the direction, height, and length of three mountain ranges in New Zealand. Compare with any one of them, in the same respects, the Pyrenees. Tell the height of the snow-line in each case.