

1890.
NEW ZEALAND.

EDUCATION: TEACHERS' AND CIVIL SERVICE EXAMINATIONS.

[In Continuation of E.—1A, 1889.]

Presented to both Houses of the General Assembly by Command of His Excellency.

The INSPECTOR-GENERAL of SCHOOLS to the Hon. the MINISTER of EDUCATION.

SIR,—

Education Department, Wellington, 31st March, 1890.

I have the honour to report that, in accordance with regulations, the annual examination of candidates for teachers' certificates, and the examinations required by "The Civil Service Reform Act, 1886," were held in the month of January in this year. There were sixteen centres of examination for all candidates, including, in addition to the towns in which the thirteen Education Boards have their offices, the towns of Thames, Hamilton, and Gisborne; and the Civil Service examinations were also held in four other places, the candidates at these four places paying special fees to defray the cost of supervision.

The total cost of the examinations, including £19 distributed in prizes for drawing and experimental science, was £647 16s. 8d. (Last year the cost was £647 11s. 6d.) The fees received amounted to £631 2s. 6d., including £15 16s. 6d. for supervision at the four extra places of examination. The net cost to the department was, therefore, £16 14s. 2d.

The total number of candidates was 910, there being 715 candidates for the teachers' examination and 199 for the Civil Service, 4 persons being candidates for the teachers' examination and for the Civil Service examination at the same time. Ten of the candidates sat both for the Junior Civil Service examination and for the Senior. In this enumeration no account is taken of two provisionally certificated teachers who came up to pass in one subject each in order to obtain a full certificate, or of 24 pupil-teachers who availed themselves of the permission to sit for one branch of drawing in anticipation of their candidature for certificates: these all passed except three of the pupil-teachers.

Out of 163 candidates for the Junior Civil Service examination, 86 were placed in order of merit in the list from which the appointments were to be made. The list in the *Gazette* was imperfect, owing to a clerical error by which the name of John McLroy was omitted: the name, however, is in its due place in the official list now in the office of the Hon. the Colonial Secretary.

Of the 46 candidates for the Senior Civil Service examination, 13 passed, including one candidate who sat for shorthand only.

The 715 candidates for the teachers' examination were—119 to complete the examination for Class D ("partial pass for D" having been already obtained), 120 for the whole examination for Class D, 196 to complete for Class E, and 280 for the whole examination for Class E.

Of these 715 candidates, 313 were teachers in the service of the Boards, 204 were pupil-teachers in the same service, 66 were normal-school students at the close of last year, 82 were persons formerly but not at present teachers, pupil-teachers, and normal-school students, and 50 were candidates not connected with Education Boards. A large number of the candidates for Class D had already passed the examination for Class E; 136 having certificates of Class E, and 13 expecting certificates on the completion of the required term of service, or on having marks assigned to them by an Inspector.

The number of candidates who passed for Class D and of those who completed a formerly incomplete examination for that class was 70, of whom 27 had certificates of Class E before, so that the additions to the list of certificated teachers on this account will not exceed 43. The number who passed for Class E and of those who completed a formerly incomplete examination for that class was 147. The total addition therefore to the number of persons who have obtained the examination qualification for a certificate is 190.

Of those who were not successful in passing the whole examination for a class, 126 obtained "partial pass for Class E," and 43 obtained "partial D" (among the latter being 3 who at the same time obtained "partial E," and 3 who had previously obtained "partial E"); and among those who passed for Class E are 18 who obtained also "partial D" by this examination.

The successes and "partial" successes are shown in the following table:—

Status.	Teachers.	Pupil-Teachers.	Normal Students.	Ex-Teachers, Ex P.-teachers, Ex-Students.	Others.	Total.
Number of candidates	313	204	66	82	50	715
Passed in full for Class D	5	3	8	2	...	18
Completed for Class D	33	3	11	3	2	52
Passed in full for Class E	1	31	5	5	3	45
Completed for Class E	42	27	8	22	3	102
Partial pass for D (excluding 21—below)...	21	4	12	1	5	43
Partial pass for E (excluding 3—below)...	23	73	7	8	12	123
Number successful or "partially" successful	125	141	51	41	25	383
Partial D included in number of passes for E	1	2	10	5	3	21
Partial E included in partial D	3	3

The results in some cases have been arrived at by taking into consideration work done by the candidates at the University matriculation examination. The number of failures (excluding the cases of those who failed to obtain promotion or to complete "partial pass") was 66, and of these there were 33 who had failed at former examinations also. The number of persons who have as yet altogether failed—taking into account all the annual examinations since the department was instituted, in 1878—is 602. At this year's examination, 56 succeeded in getting their names removed from the list of failures, while 33 names were added to it.

The list of passes and partial passes, published in the *Gazette* at the close of the examination, is appended to this report, with some amendments, particularly with respect to the districts to which the candidates belong. In the *Gazette* the names were arranged according to the places at which the candidates were examined, and many of them had chosen to sit in districts remote from their residences.

The papers set at the examination are also appended to the report.

At the end of 1889 there were 1,976 teachers above the rank of pupil-teachers engaged in the service of the Education Boards. With respect to examination the 1,976 may be classified as follows, when the successes at the recent examination are taken into account: There are 1,683 who either have certificates, or have passed the examination and wait only for marks, or for the completion of the service qualification; 115 who have "partial pass" recorded in their favour; 66 who have failed at examination; and 112 who have not been examined by the Department.

These facts are exhibited in the following table, in which numbers in square brackets denote licensed teachers:—

Education District.	Passed.	"Partial Pass."	Failed.	Not examined.	Total.
Auckland	405	24 [4]	4	7 [2]	440
Taranaki	34	3	7	4 [2]	48
Wanganui	90	7 [1]	7 [2]	6	110
Wellington	113	9 [1]	4 [1]	10 [2]	136
Hawke's Bay	68	8 [5]	3	9 [1]	88
Marlborough	25	1	1	21	48
Nelson	69	16	17	21 [1]	123
Grey	20	6	2	5 [1]	33
Westland	21	...	3	13	37
North Canterbury	304	18	5	6 [1]	333
South Canterbury	76	3	4	3	86
Otago	350	8 [2]	358
Southland	108	12 [1]	9	7	136
Total	1,683	115	66	112	1,976

The number of certificated teachers engaged in public instruction as inspectors, high-school teachers, teachers in Native schools, &c., was about 62, and the number not known to be in any public service was about 800.

I have, &c.,

WM. JAS. HABENS.

EXAMINATION LISTS.

I.—PASSED FOR CLASS C (University status being taken into account).

Auckland—

Carter, Henry J.

Otago—

Pollok, James R.

II.—PASSED FOR CLASS D.

Auckland—

Beale, Miss Arundel M.
 Colebrooke, Miss Eva L.
 Dunning, Alec Carson.
 Field, Edward T.
 Hall, Miss Annie E. J.
 Hamilton, Robert J.
 Hould, Miss Mary E.
 Lane, Charles A.
 McGibbon, George.
 Morrison, Miss Annie C.
 Ohlson, Frederick J.
 Philips, Henry W. C.
 Robb, James, jun.
 Walker, William R. C.
 Wooller, Joseph.

Taranaki—

Lattay, Dugald B.
 Roby, Miss Ada M.

Wanganui—

Harris, Thomas A.

Wellington—

Beaglehole, Edward William.
 Brown, Miss Caroline M.
 Malcolm, John H.

Marlborough—

Prichard, Miss Gladys.

Nelson—

Hodder, William R.
 Hounsell, Miss Kitty E.
 Jacobsen, Miss Frances R.
 Johnson, Miss Edith E.

Grey—

Scott, John A.

Westland—

Wyde, Robert E.

North Canterbury—

Glanville, Miss Gertrude M.
 Gray, Alexander.
 Guise, Miss Henrietta A.
 Hunnibell, Arthur.
 Lynskey, Michael.
 Mayo, Miss Mildred E.
 Menzies, Miss Jeannie B.
 Peacock, Miss Edith J.
 Sinclair, John R.
 Stout, William.
 Waller, Francis D.
 West, William McD.
 Williamson, Miss Isabella.

South Canterbury—

Bell, Alexander.
 Browne, William.
 Lewis, William John.
 McLeod, John.

Otago—

Ballantyne, William A.
 Dick, Miss Isabella.
 Ellisson, Lionel E.
 Finlay, Thomas A.
 Johnstone, Miss Margaret.
 Lillie, Charles O.
 McLean, Miss Agnes P.
 Marshall, Hugh.
 Moir, Miss Rodney B. H.
 Morgan, Miss Effie M. S.
 Nimmo, Miss Margaret C.
 Paterson, Miss Joanna H.
 Paterson, William A.
 Porteous, John.
 Rutherford, Miss Jessie H.
 Smith, William.

Southland—

Birss, William.
 Fowler, Miss Lillian E.
 Fullarton, John G.
 Hamilton, Miss Martha.
 Hodgkinson, Miss Edith.
 Lea, Miss Mary.
 Shand, Thomas G.

III.—PASSED FOR CLASS E.

Auckland—

Ashman, Miss Margaret H.
 Astley, Miss Margaret.
 Barlow, Miss Gertrude E.
 Bennett, Miss Elizabeth J.
 Blackman, Harold.
 Boone, Miss Grace E.
 Broun, Miss Janet S.
 Burns, Miss Jessie A.
 Clark, Miss Isabella.
 Clymo, Miss Mary S.
 Colebrooke, Miss Florence M.
 Cox, James T. G.
 Cox, William L.
 Daniels, Miss Caroline G.
 Dillon, Miss Eveleen S.
 Donaldson, Miss Sarah A.
 Durham, Harry J.
 Elmsly, Frederick.
 Gillespie, Miss Catherine E.
 Greatbatch, Miss Florence M.
 Harding, Miss Frances S.
 Hobson, Miss Lavinia M.
 Jameson, Frank.
 Kissling, Miss Mabel E.
 McGee, Miss Helen.
 McGee, Miss Janet.
 Mackenzie, Norman R.
 Maxwell, Miss Marion.
 Mulvany, Miss Agnes M.
 Nixon, Miss Amelia M.
 Paterson, Robert H.
 Ramsay, James B.
 Steel, Miss Clara E. E.
 Stillwell, Miss Martha.
 Tisdall, Miss Estelle A.
 Truscott, Miss Kate.
 Tuthill, Miss Mary.
 Walker, Miss May L.
 Watson, Miss Sara.
 Wills, Miss Ella.

Taranaki—

Wyllie, Samuel.
 Young, Miss Ada.

Wanganui—

Bowater, Charles Henry Thomas.
 Laird, Miss Emma P.
 Lock, Miss Matilda.
 Templer, Reginald C.
 Williams, Daniel J.

Wellington—

Davis, Miss Caroline.
 Dransfield, Miss Elvina.
 Drummond, Robert.
 Firth, Miss Clara N.
 Hall, Miss Alice L.
 Johnston, Miss Nita.
 Jones, Ernest B.
 McKenzie, Alexander.
 Mills, Miss Ella H.
 Ramsay, Miss Elizabeth E.
 Reeves, Miss Sophia L.
 Thomson, Miss Gertrude E.
 Wilkinson, Miss Clara.

Hawke's Bay—

Cooper, Miss Mary L.
 Ferguson, Miss Phebe.
 Friberg, Miss Anna E.
 Izod, Lionel.
 Miller, Miss Mary.
 Newton, Miss Margaret M.
 Trimmer, John H.
 Watt, George T.
 Webb, Miss Elizabeth D.

Marlborough—

Matthews, Miss Laura.
 Pritchard, Miss Florence.
 Williams, Miss Mary C.

Nelson—

Alexander, Miss Elizabeth M.
 Bolton, Miss Pamela E.
 Hill, Miss Annie.
 Hughes, Miss Margaret.
 Kitching, Miss Mary E.
 Riley, Miss Eveline C.

Grey—

Batchelor, Miss Bessie.
 Blair, Miss Elizabeth.
 Brassell, Walter J.

Westland—

Jack, Miss Marian B.
Lockington, William J.
Seddon, Miss Jane A.

North Canterbury—

Alley, Miss Amy J.
Allison, Herbert J.
Bell, Miss Matilda.
Brownlee, Thomas.
Burr, Miss Susanna M.
Chamberlain, Miss Martha J.
Dalziel, Miss Annie.
Durey, Miss Sarah J.
English, Henry.
Green, Miss Jeannie A.
Hayman, Miss Emily.
Hepworth, Miss Mary A.
Jackson, Joseph.
Lezard, Miss Ida.
Lusk, Miss Alice J.
McLauchlan, Miss Jeanie G.
Maxwell, Alfred C.
Menzies, Miss Annie J.
Menzies, Miss Jeannie.
Meyenberg, Miss Annie E.
Pavitt, Miss Eva E.
Sheard, Miss Fanny.
Sheldon, James C.
Thompson, Miss Margaret.
Tulley, Miss Catherine M.
Walker, William H.

South Canterbury—

Byers, Miss Jessie W.
Gillespie, James.
Hill, Miss Flora L.
McBeth, Miss Rebecca.
McIlroy, Miss Annie L.
Meredith, Miss E.
Rowley, Miss Lillie M.
Wake, Hugh G.

Otago—

Andrew, Miss Fanny L.
Appleby, William B.
Burnside, Miss Marion.
Cameron, Miss Mary.
Dow, Miss Annie C.
Graham, George P.
Gunn, Miss Elizabeth J.
Harlow, Miss Elizabeth M.
Hawkes, Miss Emma.
Hawkes, Richard N. N.
Heckler, Miss Louisa A.
Johnston, Miss Elizabeth L.
Macfarlane, Miss Margaret J.
Macgregor, Miss Katherine M.
MacKenzie, Miss Margaret.
Mosley, Miss Adelaide S.
Reaks, Henry J.
Renfrew, Miss Mary.
Sinclair, Miss Margaret.
Stewart, Peter G.
Tamblyn, Joseph.
Tubman, Robert G.

Southland—

Cameron, Hugh McL.
Gellatly, Miss Mary.
Harvey, James.
McIvor, Miss Euphemia A.
McKenzie, Duncan.
Rogers, Walter J.
Wraytt, Mrs. Christina.

IV.—OBTAINED PARTIAL PASS FOR CLASS D.

Auckland—

Campbell, Robert.
Davidson, George A.
Draffin, William H.
Edwards, Arthur.
Hill, George E.
Jones, David W.
Laurie, Miss Isabella H.
McKenzie, Norman R.
McNaughton, James D.
Moses, Miss Annie.
Robb, Miss Helen.
Thwaites, George.
Whitham, Robert C.
Worsley, William H.

Taranaki—

Dencker, Eugene F.

Wanganui—

Astbury, Henry E.

Wellington—

Drummond, Robert.
Pope, Robert James.

Hawke's Bay—

Baker, Miss Mary E.
Harper, James D.

Marlborough—

Matthews, Miss Mary J.

Nelson—

Dewar, Miss Janet.
Hughes, Miss Margaret.
Riley, Miss Eveline C.

North Canterbury—

Andersen, Miss Jorgine M.
Atkinson, Miss Edith F. M.
Banks, Edward C.
Burgess, Miss Emily.
Burr, Miss Susanna M.
Dalziel, Miss Annie.
Durey, Miss Sarah J.
Flesher, Miss Mary E.
Gilmour, Miss Ellen.
Grave, William G.
Hepworth, Miss Mary A.
Howard, Miss Annie E.
Menzies, Miss Jeannie.
Morland, Miss Margaret E.
Ryde, Henry J.
Thompson, Miss Margaret.
Wilkinson, Henry R.

South Canterbury—

Anderson, George.
Rowley, Miss Lillie M.

Otago—

Andrew, Miss Fanny L.
Appleby, William B.
Bell, Cecil F. J.
Diack, William A.
Donald, Miss Agnes G.
Dow, Miss Annie C.
Green, Miss Mabel A.
Gunn, Miss Elizabeth M.
Harlow, Miss Elizabeth M.
Hawkes, Miss Emma.
McLaren, Miss Christina.
Simmers, James M.
Stewart, Peter G.
Thomson, Miss Margaret H.
Tubman, Robert G.
Williams, Miss Gertrude.

Southland—

Rout, Miss Frances S.
Young, Henry P.

V.—PARTIAL PASS FOR CLASS E.

Auckland—

Bayly, Miss Jessie J.
Bear, Arthur D.
Brown, Miss Emily.
Chapman, Miss Edith M.
Coad, Miss Mary A.
Dixon, Joseph.
Dunn, Miss Sarah M.
Field, Miss Mary A.
Flatt, Miss Caroline J.
Fraser, Miss Jessie Anne.
Gaudin, Frederic E. N.
Gelling, William M.
Hall, Alfred J. C.
Hamlin, Miss Alethea S. O.
Hamlin, Miss Sarah A. E.
Hougham, Miss Minnie E.
Hunter, Miss Margaret.
Johns, William E.
Keaney, Miss Mary.
Kelly, Miss Elizabeth.
Latimer, Miss Adelaide.
Lewis, Miss Elizabeth.
Luke, Miss Lucy S.
McIntyre, Miss Helena B.
McKee, Miss Fanny J.
Rice, Thomas D.
Russell, Miss Magdalen L.
Sandes, Miss Bessie H.
Sandes, Miss Ellen K.
Simmonds, William.
Smith, Miss Florence M.
Thompson, Miss Frances E.
Walter, Miss Helen J.
Walters, Ernest J.

Taranaki—
 Surrey, Robert George.
 Vaughan, Henry E.

Wanganui—
 Ballantine, Miss Elizabeth C.
 Bullock, George G.
 Ewing, Miss Jane.
 Kilgour, Miss Agnes F.
 Low, Miss Elizabeth K.

Wellington—
 Britland, Walter.
 Bunting, Nelson D'A.
 Edmonds, Herbert.
 Feist, Adolph M.
 Feist, Miss Annie McI.
 Foden, Edward.
 Fraser, Miss Sara.
 Graham, Miss Margaret L.
 Hutchins, Miss Emmeline E. R.
 Mowat, Miss Elizabeth D.
 Thorburn, Miss Christina F.
 Turkington, Samuel.
 Warne, Miss Catherine F.
 Williams, Miss Mary.

Hawke's Bay—
 Bissell, John.
 Broberg, Miss Felicia.
 Down, Miss Agnes.
 Harding, Miss Lydia A.
 Mills, Miss Sarah A.
 Prentice, Miss Emily.

Nelson—
 Ainsworth, Miss Lilian A. J.
 Cowles, Miss Sarah A.
 Dobson, Frank B.
 Harris, Miss Elizabeth.
 Murray, Miss Alice C. G.
 Prebble, Miss Norah E.
 Sadd, Miss Mary E.
 Sheppard, Miss Leila.
 Stanley, Miss Hester.
 Street, Miss Emily.
 Thompson, Miss Katie E.
 Thorn, Miss Eliza.

Grey—
 Harrison, Miss Ada.

Westland—
 Moore, Miss Mary M.
 Nightingale, Henry J.

North Canterbury—
 Alexander, Miss Amelia.
 Baird, Samuel.
 Bayley, Miss Alice R.
 Budd, George W. E.
 Burke, Miss Floretta.
 Connal, Miss Martha E.
 Currie, Miss Mary.
 Dohrmann, Miss Matilda.
 Dow, Miss Agnes S.
 Hayward, Miss Mary.
 Kennedy, Hans.
 Leech, Miss Grace C.
 Moses, William H.
 Petrie, Miss Flora.
 Simmons, Miss Elizabeth.
 Smith, Edward.
 Smith, Sidney G.
 Speight, Hubert.
 Thomson, Miss Alice M.
 Withell, Charles W.
 Woolley, Miss Amelia R.

South Canterbury—
 Balfour, Miss Margaret A.
 Bruce, Miss Anne.
 Bruce, Miss Mary B.
 Cartwright, Miss Maud J.
 Oxby, Miss Mary C.

Otago—
 Broome, Miss Annabella.
 Brunton, Miss Jane.
 Duncan, Miss Catherine B.
 Joyce, Miss Mary.
 Higgins, Miss Jessie.
 McLaren, Miss Christina.
 Maxwell, William S.
 Nelson, Miss Jessie R.
 Pringle, John.
 Simmers, James M.
 Smith, William.
 Smyth, Miss Wilhelmina.
 Thomson, Miss Margaret H.
 Weir, Miss Catherine G.

Southland—
 Gilfedder, Thomas.
 Lea, William S.
 McCallum, Miss Mary.
 Oliver, Miss Elizabeth.
 Ramsay, Miss Jane S.
 Scott, Miss Jane M.
 Stevens, Miss Bertha E.
 Sutherland, Frederick R. H.
 Thomson, Alexander G.
 Wilkins, Miss Lily.

VI.—PUPIL-TEACHERS PASSED IN DRAWING IN ONE OR MORE BRANCHES.

Auckland—
 Read, Thomas, freehand and geometrical.

Hawke's Bay—
 Bouillon, Miss Blanche, freehand.
 Faram, Miss Edith H., freehand, model, and geometrical.
 Good, Miss Ada, freehand and geometrical.
 Steele, Miss Nellie E., freehand.
 Thomson, Frank J., freehand, model, and geometrical.
 Townley, Miss Theresa J., freehand and geometrical.

Westland—
 Banks, Miss Annie, freehand.
 Cran, Miss Elizabeth, freehand.
 Davidson, James, geometrical.
 Evans, William J., freehand.
 Evison, John C., freehand.
 Firmin, Miss Elizabeth, geometrical.
 Foster, Miss Agnes, freehand.
 Houston, William, freehand.
 Jamieson, Miss Minnie, freehand.
 Lamasson, Miss Mary, freehand.
 Smith, Miss Cecilia, freehand.
 Mouatt, Miss Maggie, freehand.
 Potts, Miss Mary, freehand.
 Wilson, Miss Margaret A., freehand.

South Canterbury—
 Strong, Theophilus B., freehand and perspective.

VII.—PRIZES.

Drawing—
 Ramsay, James B., Auckland, first prize.
 Strong, Theophilus B., South Canterbury, second prize.
 Harding, Miss Lydia, Hawke's Bay, third prize.

Elementary Experimental Science—
 Harris, Thomas Abram, Wanganui, first prize.
 Rutherford, Miss Jessie Hamilton, Otago, second prize.
 Waller, Francis D., North Canterbury, } third prize.
 Stewart, Peter Grassack, Otago, }

VIII.—SPECIAL MENTION.

Class D.

Arithmetic—
 Banks, Edward C., North Canterbury.
 Bell, Alexander, South Canterbury.
 Burgess, Miss Emily, North Canterbury.
 Laurie, Miss Isabella H., Auckland.
 Lynskey, Michael, North Canterbury.
 Rutherford, Miss Jessie H., Otago.
 Sinclair, John R., North Canterbury.
 Whitham, Robert C., Auckland.
 Worsley, William H., Auckland.
 Wright, Miss Wilhelmina J., Otago.

History—
 Harris, Thomas A., Wanganui.
 McIntosh, William N., Auckland.
 Stout, William N., North Canterbury.
 Wooller, Joseph, Auckland.
 Worsley, William H., Auckland.

English—
 Wylde, Robert E., Westland.
 Waller, Miss Frances D., North Canterbury.
 Rowley, Miss Lillie M., South Canterbury.

Geography—
 Lynskey, Michael, North Canterbury.
 Ohlson, Frederick, Auckland.
 Pollok, James R., Otago.
 Robinson, Miss Mary, Southland.
 Short, Arthur, Auckland.
 Sinclair, John R., North Canterbury.
 Wylde, Robert E., Westland.

French—
 Beaglehole, Edward W., Wellington.
 Fortune, Miss Mabel H., Auckland.

Algebra—
 Beaglehole, Edward W., Wellington.
 Bell, Alexander, South Canterbury.
 Hawkes, Miss Emma, Otago.
 Meiklejohn, John, South Canterbury.

Algebra—*continued.*

Menzies, Miss Jeannie N., North Canterbury.
 Rowley, Miss Lillie M., South Canterbury.
 Rutherford, Miss Jessie H., Otago.
 Smith, William, Otago.
 Thompson, Miss Margaret, North Canterbury.
 Waller, Francis D., North Canterbury.

Euclid—

Meiklejohn, John, South Canterbury
 Smith, William, Otago.

Chemistry—

Matthews, Miss Mary J., Marlborough.

Biology—

McKenzie, Norman R., Auckland.

Elementary Experimental Science—

Field, Edward T., Auckland.
 Grave, William G., North Canterbury.
 Harris, Thomas A., Wanganui.
 Hawkes, Miss Emma, Otago.
 Lillie, Charles O., Otago.
 Lynskey, Michael, North Canterbury.
 Matthews, Miss Mary J., Marlborough.
 Rutherford, Miss Jessie H., Otago.
 Smith, William, Otago.
 Stewart, Peter G., Otago.
 Waller, Francis D., North Canterbury.

Class E.

Arithmetic—

Alexander, Miss Amelia, North Canterbury.
 Appleby, William B., Otago.
 Barlow, Miss Gertrude E., Auckland.
 Bell, Miss Matilda, North Canterbury.
 Britland, Walter, Wellington.
 Burr, Miss Susanna M., North Canterbury.
 Cartwright, Miss Maud J., South Canterbury.
 Duncan, Miss Catherine B., Otago.
 English, Henry, North Canterbury.
 Gunn, Miss Elizabeth J., Otago.
 Higgins, Miss Jessie, Otago.
 Johns, William E., Auckland.
 Macgregor, Miss Katherine M., Otago.
 Nelson, Miss Jessie R., Otago.
 Pringle, John P., Otago.

Arithmetic—*continued.*

Ramsay, James B., Auckland.
 Sinclair, Miss Margaret, Otago.
 Speight, Hubert, North Canterbury.
 Surrey, Robert G., Taranaki.
 Wake, Hugh G., South Canterbury.

English—

Feist, Miss Annie McL., Wellington.

Geography—

Appleby, William B., Otago.
 Bayly, Miss Jessie J., Auckland.
 Bennett, Miss Elizabeth J., Auckland.
 Britland, Walter, Wellington.
 Bullock, George G., Wanganui.
 Dunne, Miss Sarah M., Auckland.
 Green, Miss Jeannie A., North Canterbury.
 Hawkes, Richard N. N., Otago.
 Nelson, Miss Jessie R., Otago.
 Prebble, Miss Nora E., Nelson.
 Pringle, John, Otago.
 Riley, Miss Eveline C., Nelson.
 Smith, Sidney G., North Canterbury.
 Speight, Hubert, North Canterbury.
 Thomson, Alexander G., Southland.
 Tubman, Robert G., Otago.
 Wake, Hugh G., South Canterbury.

History—

Barlow, Miss Gertrude E., Auckland.
 Steel, Miss Clara E. E., Auckland.
 Wake, Hugh G., South Canterbury.

Classes D and E.

Drawing—

Budd, George W. E., North Canterbury, freehand.
 Harding, Miss Lydia A., Hawke's Bay, model.
 Ramsay, James B., Auckland, geometrical.
 Read, Thomas J., Auckland, freehand.
 Strong, Theophilus B., South Canterbury, perspective.
 Vaughan, Henry E., Taranaki, freehand.

School Management—

Daniels, Miss Caroline G., Auckland.
 Hamilton, Robert J., Auckland.
 Jacobsen, Miss Frances R., Nelson.
 Lockington, William J., Westland.

EXAMINATION PAPERS.

School Management and Art of Teaching.—For Classes D. and E. Time allowed: 3 hours.

[N.B.—Questions 1, 2, and 3 must be answered by all Candidates, and *not more than six* of the remaining Questions.]

1. State exactly what returns in connection with attendance have to be made by the head teacher of a district school in the course of a year, and explain the object of each return.

2. A teacher (unassisted) is placed in charge of a country school, with an average attendance of 35 (Standards I. to IV. and Infants). How may he best combine his standards so as to ensure a suitable time-table? What are the chief faults he should endeavour to avoid?

3. Write full notes of a lesson on—

- (a.) A common flower (Infants); or
- (b.) Multiplication by factors (a first lesson to Standard II.); or
- (c.) The Revolution of 1688 (Standard V.).

[N.B.—State the time devoted to the lesson.]

4. What would be the nature of your punishment for the following offences?—

- (a.) Inattention.
- (b.) Non-preparation of home-work.
- (c.) Insubordination.
- (d.) Lying.

For what class of school offences should corporal punishment be reserved?

5. In what cases is a teacher justified in requiring lessons to be committed to memory?

6. What are the most common errors in teaching science? Show how they may best be avoided.

7. Distinguish between inductive and deductive teaching, and state how these methods may be combined in an ordinary lesson.

8. What particular faculties does drawing train, and what effect has it on the formation of character?

9. Illustrate your method in giving a lesson on the connection between the physical features of a country and the national character of its people. Take as an example Egypt or Switzerland.

10. A class is taken for the first time in grammatical analysis. Explain the method of your procedure, taking the following as an example:—

“The ancient arrow-maker
 Made his arrow-heads of sandstone.”

11. Write a short essay on "The General Culture of a Teacher."
12. Why is a knowledge of Elementary Psychology of great importance to a teacher?

Elementary Experimental Science.—For Class D. Time allowed: 3 hours.

1. Define the term "inertia" as applied to matter. How may a balance be made to serve as an example of inertia?
2. Describe exactly how you would exhibit the phenomena of gaseous diffusion, making a sketch of the apparatus which you would consider necessary.
3. What is meant by "specific gravity"? How could the fact that the specific gravity of sulphuric acid is about 1.8 be ocularly demonstrated to a class?
4. How would you explain the theory of the lever, and what experiments would you make in illustration of your explanation?
5. How would you prove, experimentally, that sound is conveyed by the air, and that in this respect it differs from light?
What precautions must be taken to insure the success of the experiment?
6. Write an account of specific heat in the form in which you would deal with the subject before a class, and describe the experiments which you would make.
7. How would you construct for class purposes—
(a.) An ordinary mariner's compass;
(b.) An instrument for measuring the magnetic dip?
8. Mention experiments by means of which a general knowledge of the distribution of static electricity on freely-charged conductors might be conveyed.
9. Describe experiments which you would make in illustration of the properties of hydrogen gas.
10. Explain the softening of hard water by the addition of lime. Give details of the experiments required to render your explanation of value to a class.
11. What elements are necessary to plant-life? How would you show their presence in a sample of wheat?
12. Write an abstract of a lesson on sugar.

Elementary Science.—For Class E. Time allowed: 3 hours.

[NOTE.—Female candidates for E, if proficient in Needlework, may substitute for this paper the paper on Domestic Economy and the Laws of Health; but passing in Science will not exempt them from passing in Needlework also.]

1. Give a simple explanation of the meaning of the terms "inertia," "momentum," and "energy." Describe experiments to illustrate each.
2. What are the principles upon which the usual method of taking specific gravities depends? How is the specific gravity of a substance lighter than water determined?
3. Describe the diving-bell. Suppose a diving-bell to be cylindrical, how deep must it be immersed that the water may half fill it?
4. A screw-jack makes three turns to the inch, and has a handle 3ft. long: what is the gain of power, disregarding friction?
5. If a lens be placed in the shutter of a dark room, a picture is seen on the opposite wall; it is sometimes clear and sometimes blurred, according to the distance of the wall. Show by a sketch why this is so.
6. Describe the simple facts of magneto-electricity.
7. Describe the construction of a simple electric machine, and some experiments that may be made with it.
8. Draw a sketch of the apparatus you would employ to make hydrogen gas. State the materials you would use, and the precautions you would take in making it.
9. Describe the process of making nitric and hydrochloric acids, and the properties of each.
10. Describe the mechanism of respiration. Sketch any simple piece of apparatus designed to illustrate it, and explain the changes in the body that are effected by its means.

Domestic Economy and Laws of Health.—For Class E. Time allowed: 3 hours.

NOTE.—This paper is for female candidates for E who are proficient in needlework, and, in consideration of this, are allowed, if they prefer it, to be examined in Domestic Economy and the Laws of Health instead of in the general subject of Elementary Science. (See the note on the Elementary Science paper.)

1. Explain fully why cooking-vessels should be clean.
2. What are the chief differences between grilling and frying? Which is to be preferred for invalids, and why? Why is dry toast considered good and buttered toast bad for invalids?
3. Describe exactly how you would make an ordinary plain cake; and make an intelligible sketch showing the course of the flues around an ordinary kitchen-range provided with an oven and boiler.
4. What varieties of food are requisite for man? Show how a meal of bread and cheese furnishes the three essential constituents of food.
5. What are the chief narcotics and stimulants that are used by man? What are the especially deleterious effects of the more important?
6. State what you know of the more important recent discoveries as to the organic causes of diseases.

7. What are the most important arrangements about a house that require to be made for the disposal of foul air and water? Sketch a diagram of any perfect mode of connecting the kitchen sink with the drain.
8. Draw a diagrammatic sketch of the circulatory system, and give a short account of its action.
9. Make a sectional sketch of the human eye, drawing lines from the several parts, with the name of each part on the respective line.
10. Make a sectional sketch of the skin, and describe its functions.

English.—For Class D. Time allowed: 3 hours.

[All the Questions are to be attempted.]

1. State what function or functions the italicised words fulfil in the syntax of the following and give reasons for your answers:—(a) There is no man here *but* is willing; (b) This imposition *the* which my love lays on you; (c) In purchasing my soul *from* out the state of misery; (d) I will give *twice* the sum; (e) This comes too *near* the praising of myself; (f) Therefore *no more* of it; (g) I do know *a* many fools; (h) I have said *thus much*; (i) He saw the lion's shadow *ere* himself; (j) But God *sort* all; (k) *What* I have I give; (l) A *milking* stool; (m) I am *that* I am.

2. A word is misused in each of the following: point it out, substitute the correct word, and distinguish the two, so as to show why the latter is correct:—(a) This occurred in the fiftieth year of the Christian epoch; (b) The bank failed in the most disastrous and shameful way, and the directors vanished; (c) Cæsar knew the dangers of the step he was about to take, and vacillated before he crossed the Rubicon; (d) He endeavoured to justify his conduct, but failed, and departed in ignominy; (e) This view of the matter will not bear an impartial survey; (f) The King elected these corrupt men out of all his subjects to be his counsellors.

3. Throw the following together into a single, clear, well-constructed sentence:—"Let us go together. Let us go up the more retired street. At the end of it we can see the pinnacles of one of the towers. Let us then go through the low grey gateway. This has a battlemented top; and it has a small latticed window in the centre. Let us go into the inner private-looking road or close. Nothing goes in there but the carts of the tradesmen who supply the bishop and the chapter. There are little shaven grass-plots there. These are fenced in by neat rails; they are in front of old-fashioned groups of houses. These houses are somewhat diminutive and excessively trim; they have little oriel and bay windows jutting out here and there; they have deep wooden cornices and eaves, painted cream-colour and white; and they have small porches to their doors; these porches are in the shape of cockle-shells. And so let us go forward, till we come to larger houses. These also are old-fashioned. But they are of red brick and with gardens behind them and front walls; these last show here and there among the nectarines the vestiges of an old cloister arch or shaft."

4. Turn the following passage into prose, and show what it loses by the change:—

"Oh, born in days when wits were fresh and clear
And life ran gaily as the sparkling Thames,
Before this strange disease of modern life,
With its sick hurry, its divided aims,
Its heads o'ertaxed, its palsied hearts, was rife—
Fly hence, our contact fear!
Still fly, plunge deeper in the bowering wood!
Averse, as Dido did with gesture stern
From her false friend's approach in Hades turn!
Wave us away and keep thy solitude!"

"Still nursing the unconquerable hope,
Still clutching the inviolable shade,
With a free onward impulse brushing through,
By night, the silver'd branches of the glade,—
Far on the forest-skirts, where none pursue,
On some mild pastoral slope
Emerge, and, resting on the moonlit pales,
Freshen thy flowers, as in former years,
With dew, or listen with enchanted ears,
From the dark dingles, to the nightingales!"

5. Write, in your best English, from half a page to a page of foolscap on *one* of the following subjects:—

- (a.) For forms of government let fools contest;
Whate'er is best administered is best.
- (b.) To forgive is divine.
- (c.) To thine own self be true;
And it must follow, as the night the day,
Thou canst not then be false to any man.
- (d.) Pleasures are like poppies spread;
You seize the flower; its bloom is shed.
- (e.) Heaven lies about us in our infancy.
- (f.) To work is to pray.
- (g.) The labour we delight in physics pain.

6. Place in logical order the ideas you would introduce into an essay on any one of Shakespeare's, Scott's, Thackeray's, or George Eliot's characters.

7. Rewrite the following, so as to avoid its faults :—

“From some academic contests he had been engaged in, during his living in Christchurch in Oxford, where he was always of the first eminency, he had, by the natural faction and animosity of those disputes, fallen under the reproach of holding some opinions which were not then grateful to those churchmen who had the greatest power in ecclesiastical promotions; and some sharp answers and replies he used to make in accidental discourses, and which in truth were made for mirth and pleasantness' sake, as he was of the highest facetiousness, were reported and spread abroad to his prejudice: as, being once asked by a grave country gentleman, who was desirous to be instructed what their tenets and opinions were, what the Arminians held, he pleasantly answered that they held all the best bishoprics and deaneries in England, which was quickly reported abroad as his definition of the Arminian tenets.”

8. Punctuate the following passage :—

This island is now the property of the stamford family having been won it is said in a raffle by sir — stamford during the stock-gambling mania of the south-sea scheme the history of this gentleman may be found in an interesting series of questions unfortunately not yet answered contained in the notes and queries this island is entirely surrounded by the ocean which here contains a large amount of saline substance crystallising in cubes remarkable for their symmetry and frequently displays on its surface during calm weather the rainbow tints of the celebrated south-sea bubbles the summers are oppressively hot and the winters very probably cold but this fact cannot be ascertained precisely as for some peculiar reason the mercury in these latitudes never shrinks as in more northern regions and thus the thermometer is rendered useless in winter the principal vegetable productions of the island are the pepper tree and the bread-fruit tree pepper being very abundantly produced a benevolent society was organised in london during the last century for supplying the natives with vinegar and oysters as an addition to that delightful condiment [note received from dr d p] it is said however that as the oysters were of the kind called natives in england the natives of sumatra in obedience to a natural instinct refused to touch them and confined themselves entirely to the crew of the vessel in which they were brought over this information was received from one of the oldest inhabitants a native himself and exceedingly fond of missionaries he is said also to be very skilful in the cuisine peculiar to the island.

9. Spell the words dictated by the Supervisor.

Part of Paper on English Grammar and Composition.—For Class D.

9. The Supervisor will be so good as to read through and then slowly dictate to the candidates the following words: Octosyllabic, sacrilegious, cavilling, ochre, nuncio, quiescent, abscess, proviso, tyrannous, contumely, idiosyncrasy, sciatica, excursive, vicissitude, obloquy, gnostic, dilettanteism, censorious, impugn, paralytic.

English Grammar and Composition.—For Class E, and for Junior Civil Service. Time allowed: 3 hours.

1. As a test of spelling, write the words and sentences dictated by the Supervisor.

2. Correct or justify the manner in which the following words are divided, giving your reasons in each case: Advi-ser, democ-racy, trus-tee, geo-graphy, extrav-agant, trans-crypt, subur-ban, trans-itive, vigi-lance, glob-ule, ill-egal, hil-lock.

3. Distinguish, with full explanation, the character of the clauses or sentences introduced by “when” in: I was at home when he came. When did he come? I did not know when he would go. It is a pity he came at the very time when I was absent.

4.

These things to hear

Would Desdemona seriously incline:
But still the house affairs would draw her thence;
Which ever as she could with haste despatch
She'd come again, and with a greedy ear
Devour up my discourse: which I observing,
Took once a pliant hour, and found good means
To draw from her a prayer of earnest heart
That I would all my pilgrimage dilate,
Whereof by parcels she had something heard,
But not intently.

Explain the construction of “which I observing.” What is the antecedent to “which”?

Are “would” and “could,” as they occur in the above passage, principal or auxiliary verbs?

Give your reasons.

Parse—*ever, as, devour, once, whereof.*

Write the passage in your own words, so as to show that you understand the meaning.

5. Punctuate the following :—

Tom she said at last in high glee Tom what now said Tom will you look here a moment please as if he hadn't been looking all the time I am going to begin Tom don't you wonder why I butter the inside of the basin not more than you do I dare say replied Tom laughing for I believe you don't know anything about it what an infidel you are Tom how else do you think it would turn out easily when it was done for a civil engineer and land surveyor not to know that my goodness Tom it was wholly out of the question to try to write Tom sat looking on pen in hand with one of the most loving smiles imaginable.

6. Point out and correct anything faulty in the following sentences:—

Whatever it might be with a man, at sixty-two a woman's work was, or ought in her opinion, to be over.

In the sentence "the cat caught the mouse," the cat does something, and therefore is a transitive verb.

The Duke was haughty, proud and uncompromising, but neither destitute of honour or generosity.

The echo of the thunder among the hills, and the roaring of the waters rushing down the streets, made a grand but sublime scene.

They took pleasure in cant terms, and sprinkled them as plentifully in their sermons and prayers as ever did cook in time-honoured Christmas pudding.

7. Rewrite the following so as to tell the story in a more lively way, avoiding the constant repetition of "and" and "he," the ambiguous use of pronouns, and the inclusion of several subjects in the same sentence:—

Blake happened to be at Malaga; and some of his seamen went ashore, and met the Host carried about, and not only paid no respect to it but laughed at those who did: so one of the priests put the people upon resenting this indignity, and they fell upon them and beat them severely. When they returned to their ship they complained of this usage; and upon this Blake sent to the Viceroy to demand the priest who was the chief instrument in that ill-usage. . . . He said that if he had sent a complaint to him of it he would have punished them severely, since he would not suffer his men to affront the established religion of any place at which he touched; but he took it ill that he set on the Spaniards to do it, for he would have all the world know that an Englishman is only to be punished by an Englishman; and so he treated the priest civilly and sent him back, being satisfied that he had him at his mercy.

8. Write a short essay on the saying, "A little learning is a dangerous thing," showing in what respects it is true or false; or

On any work of biography, travel, or history which has interested you.

Part of a Paper on English Grammar and Composition.—For Class E, and for Junior Civil Service.

NOTE.—The Supervisor will be so good as to read through and then slowly dictate the following words and sentences, afterwards reading the whole of them again to afford opportunity for correction.

Irretrievable, icicle, loquacious, dulness, cynical, canoeing, poultices, proselyte, autograph, pamphlet, mutineer, whimsical, financier, mortgagee, phenomenon.

The battalion was defeated with grievous slaughter.

Despondency is often merely a symptom of dyspepsia.

The besieged resorted to a desperate stratagem.

A sausage and a potato formed my meagre luncheon.

The harassed pedagogue enjoyed his brief leisure.

His demeanour to the yeomen was genteelly supercilious.

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

Paper No. 1.—Composition and Précis.

(All the Questions to be attempted.)

1. Write a short essay on one of the following: (a) The place of The Vicar of Wakefield in the life and work of Goldsmith; (b) The art of The Merchant of Venice; (c) The character of Antonio.

2. Point out the faults of the following, and rewrite it so as to avoid them:—

"The king, as was said before, was even upon the point of charging the enemy, in the head of his guards, when the Earl of Carnewarth, who rode next to him, a man never suspected for infidelity, nor one from whom the King would have received counsel in such a case, on a sudden laid his hand on the bridle of the King's horse, and, swearing two or three full-mouthed Scottish oaths, for of that nation he was, said, 'Will you go upon your death in an instant?' and, before His Majesty understood what he would have, turned his horse round, upon which a word run through the troops that they should march to the right hand, which was both from charging the enemy or assisting their own men."

3. Make an abstract of the accompanying correspondence, [giving the important points of each letter briefly, distinctly, and so as to catch the eye readily. The abstract should contain the date of each letter, the name of its writer and of its receiver, and the subject of it, in as few words as possible.

4. Tell briefly and clearly the facts of the correspondence in narrative form.

[Correspondence for Précis.]

No. 1.

The AGENT-GENERAL to the PREMIER.

SIR,—

7, Westminster Chambers, London, S.W., 14th January, 1887.

I transmit to you herewith copy of a despatch which is going by this mail from the Secretary of State to His Excellency the Governor, on the subject of appointing an officer at Rarotonga of consular rank who will act at the same time as Agent for your Government.

You will see that just before his death Lord Iddesleigh had decided that such an officer should be a full Consul, with a salary of £500 a year; and that, if New Zealand would undertake to pay

that salary for ten years, with an office allowance of £200 a year, and also to provide a consular house if required, the Consul would be appointed.

I need not refer to the importance of this step as an indication of the willingness of Her Majesty's Government to entertain the principle of concerted action between the Imperial and colonial authorities in the Eastern Pacific, which was first raised by New Zealand several years ago in the case of Rapa, and which yourself and your predecessors in office have so constantly desired to see affirmed.

The Hon. the Premier, Wellington.

I have, &c.,

F. D. BELL.

No. 2.

The AGENT-GENERAL to the PREMIER.

SIR,—

7, Westminster Chambers, London, S.W., 25th January, 1887.

After sending my letter of the 14th instant, No. 31, respecting the appointment of an officer of consular rank at Rarotonga, it seemed to me desirable for you to have the earliest information on the matter, and I sent you the telegram of which a copy is enclosed. On looking at my letter I see it did not refer to the late Lord Iddesleigh's wish for further information as to the duties that would belong to the Consul if he were allowed to act also in the character of Agent of your Government; I took care, however, to mention it in the telegram.

The Hon. the Premier, Wellington.

I have, &c.,

F. D. BELL.

Enclosure.

To Premier, New Zealand.

(Telegram, despatched 15th January, 1887.)

RAROTONGA. Despatch, Governor. Consul will be appointed provided salary and expenses, seven hundred, appropriated ten years; also house built when desired. Secondly, before finally deciding Consul act your Agent, further statement proposed duties wanted.

F. D. BELL.

No. 3.

The AGENT-GENERAL to the PREMIER.

SIR,—

7, Westminster Chambers, London, S.W., 21st February, 1887.

I had the honour to receive in due course your telegram of the 7th instant, in reply to mine of the 15th January, relating to Rarotonga, instructing me that you adhered to the proposal for the appointment of a consular officer there which you had made in the memorandum to the Governor enclosed in your letter to myself of the 7th November, 1885. For the present, therefore, I think the matter must be considered at an end, as there is not the least chance of the Imperial Government giving up the nomination of such an officer. I have communicated your decision privately to the Colonial Office, but have thought it advisable not to write officially at this moment, because the position of Rarotonga will be one of the things that will come before the Conference when it takes up the question of Samoa, Tonga, and the other islands of the Eastern Pacific.

The Hon. the Premier, Wellington.

I have, &c.,

F. D. BELL.

Enclosure.

The PREMIER to the AGENT-GENERAL, London.

7th February.

RAROTONGA Consul. We adhere to proposal in enclosure to my letter of 7th November last (A.-1, 1886, No. 10).

ROBERT STOUT.

No. 4.

The AGENT-GENERAL to the PREMIER.

SIR,—

7, Westminster Chambers, London, S.W., 23rd February, 1887.

A fortnight ago there appeared Press telegrams from Wellington, saying that you had asked Admiral Tryon to send a man-of-war to Tonga to inquire into the recent attack upon Mr. Shirley Baker, but that the Admiral had declined to do so. This was followed by telegrams from Melbourne that six natives implicated in the outrage had been executed. On the 21st questions were asked in the House of Commons, in reply to which the Secretary of State, Sir Henry Holland, said the Admiral had reported that the disturbances had subsided. Sir Henry added that Her Majesty's Government would consider, as soon as they were in possession of fuller authentic information, whether the High Commissioner in the Pacific should be ordered to take any action.

To-day a further Melbourne telegram has come, that five more natives have been condemned to death at Tonga, and thirty others were awaiting trial; that the British Consul had succeeded in averting further executions, but beyond that had declined to interfere; that an appeal had been sent to Sir C. Mitchell, Governor of Fiji, to get a man-of-war sent down to the island, as intense excitement prevailed; and that the Roman Catholics had applied for French protection.

The same telegram, referring to affairs in Samoa, stated that the overtures of the Hawaiian Government had failed, the Samoans declining the notion of being annexed to the Sandwich Islands.

Another telegram, just received, says that the Admiral had sent H.M.S. "Diamond" to Tonga.

The Hon. the Premier, Wellington.

I have, &c.,

F. D. BELL.

Enclosures.

[Extract from the *Times*, Friday, 11th February, 1887.]

NEW ZEALAND.

Wellington, 10th February.

THE Hon. Sir Robert Stout, the Premier, has telegraphed to Rear-Admiral Tryon, Commander-in-Chief on the Australian Station, requesting him to despatch a war-vessel to Tonga Island.

[Extract from the *Times*, Monday, 14th February, 1887.]

THE FRIENDLY ISLANDS.

Wellington, 12th February.

REAR-ADMIRAL TRYON, Commander-in-Chief on the Australian Station, in reply to the Hon. Sir Robert Stout, the Premier, requesting him to despatch a war-vessel to Tonga Island, states that he will cause inquiries to be made into the recent attack on the Hon. Shirley W. Baker when a war-vessel proceeds thither, but that he sees no necessity for specially despatching one.

[Extract from the *Times*, Saturday, 19th February, 1887.]

THE FRIENDLY ISLANDS.

Melbourne, 18th February.

ADVICES received here from Tonga Island state that the six natives recently sentenced to death in connection with the attack on the Hon. Shirley Baker have been executed, in presence of the King's son. It has been proved that many Wesleyan students were implicated in the outrage on Mr. Baker, and that the natives have been plotting to murder the King and his family, with a view to placing the King's nephew on the throne.

NOTICES OF MOTIONS AND ORDERS OF THE DAY.—Monday, 21st February.

MR. WALTER JAMES to ask the Under-Secretary of State for the Colonies, whether Her Majesty's Government have received any information concerning the recent disturbances in the Island of Tonga; whether the Hon. Shirley Baker, upon whom the attack was made, was formerly a Wesleyan missionary, and has since organized a Government in Tonga, of which he is the chief member; and whether Mr. Shirley Baker is a British subject; and, if so, whether Her Majesty's Government will direct the High Commissioner in the Pacific to institute an inquiry into his conduct and proceedings.

[Extract from the *Times*, Tuesday, 22nd February, 1887.]

THE GOVERNMENT OF TONGA.

IN answer to Mr. W. JAMES, Sir H. HOLLAND said: The last information received as to the attack on Mr. Shirley Baker in Tonga is contained in a telegram from Admiral Tryon of the 11th instant, stating that there had been disturbances in Tongatabu last month, but that, by the last accounts, they had subsided, and the King's orders were being obeyed. Mr. Shirley Baker, to whom reference is made, was formerly a Wesleyan missionary. He is, I believe, styled "the Premier," and controls the government of the islands. He is a British subject, and Her Majesty's Government will consider, as soon as they have full and authentic information respecting the recent transactions, whether the High Commissioner should be instructed to take any action.

[Extract from the *Times*, Thursday, 24th February, 1887.]

THE FRIENDLY ISLANDS.

Melbourne, 23rd February.

INTELLIGENCE received here from Tonga Island announces that five more natives have been condemned to death, and that thirty others are awaiting their trial. The British Consul has succeeded in averting further executions, but has otherwise declined to interfere in the matter. The details of the affair are conflicting. The old Wesleyan party accuse the Hon. Shirley Baker of jury-packing, and of personally conducting the trials of the natives. They have appealed to Sir C. Mitchell, Governor of Fiji, to despatch a war-ship to the island, where intense excitement prevails. The Roman Catholic priests have appealed for French protection. The overtures made by the Hawaiian Embassy to Samoa have failed, the Samoans scouting the idea of annexation to the Sandwich Islands.

4.50 p.m.—Her Majesty's corvette "Diamond" has been despatched to Tonga Island.

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

Paper No. 2.—Literature and Books.

(All the Questions to be attempted.)

1. Point out characteristics that are common to the imaginative English literature of the latter half of last century, and account for them.
2. What changes took place in the style of English poetry and prose during the period? Classify its prose writings according to style and subject.
3. Give an account of the poetry of Gray, Goldsmith, Burns, and Crabbe, and quote any well-known lines from each.
4. What do you know of *Rasselas*, *Reflections on the French Revolution*, *Songs of Innocence*, *Junius*, *The Minstrel*, *The Fleece*, *Rosciad*, *Farmer's Boy*, *The Rivals*, and *Wat Tyler*?
5. Discuss the date of *The Merchant of Venice* and its place amongst Shakespeare's comedies.

6. Analyse the characters of Gratiano and the vicar of Wakefield, and describe the casket scenes in the play and the prison scenes in the novel.

7. What stage of thought and belief had Shakespeare reached when he wrote *The Merchant of Venice*? Does he show tolerance or intolerance towards the Jews? Give his ideas on self-sacrifice, revenge, friendship, justice, young men, and music as they appear in this play.

8. (a) Comment on the following from *The Merchant of Venice* with reference to their context: (a) My wealthy Andrew . . . vailing her high-top; (b) Which makes her seat of Belmont Colchos' strand; (c) Prove it so, let fortune go to hell for it, not I; (d) Hard food for Midas; (e) A Daniel come to judgment! (f) Still quiring to the young-eyed cherubins.

(β) Parse the italicised words in the following: (a) Even now worth *this*; (b) I tell thee *what*, Antonio; (c) As *who* should say, I am Sir Oracle; (d) He lends out money *gratis*; (e) *Content*, i' faith; (f) But alas the *while*!

9. Explain why *The Vicar of Wakefield* has always been so popular a book, and point out and illustrate the chief characteristics of its style.

Arithmetic.—For Class D. Time allowed: 3 hours.

1. An army suffered a defeat in which one-quarter of its men were either killed or wounded; it also lost 1,500 prisoners. In the retreat which ensued, one-fifth of the remainder perished, and then there were 18,000 men left. Find the number in the army at first.

2. Simplify $\frac{3\frac{3}{4} - 1\frac{1}{3}}{2.36 - 1.46} + \frac{5\frac{3}{4} + 4\frac{1}{2} - 6.3142357}{.538461}$.

3. Find the value, correct to five places of decimals, of

$$\frac{1}{3 \times 5 \times 7} + \frac{2}{5 \times 7 \times 9} + \frac{3}{7 \times 9 \times 11} + \frac{4}{9 \times 11 \times 13} + \&c.$$

4. If there are 25.2 francs in a pound, and a dollar is equivalent to 4s. 2d., express a franc as the decimal of a dollar.

5. A metre is equal to 39.37 inches, and a hectare is the area of a square whose side is 100 metres: show that a hectare is nearly equal to $2\frac{1}{2}$ acres, and find the difference.

6. If the simple interest on £2,265 12s. 6d. for 4 years and 146 days be £548 5s. $7\frac{1}{2}$ d., find the rate per cent.

7. If by selling 100 eggs for 5s. 9d. a gain of 15 per cent. be made, what gain per cent. will be made if they are sold at the rate of 9d. a dozen?

8. A bankrupt's debts amount to £6,478 10s.; his assets are £1,253 8s. cash and a bill for £429 due to him in six months. If interest be reckoned at 8 per cent., how much in the pound can he pay?

9. Find the compound interest on £10,000 for two years at 8 per cent., the interest being reckoned and compounded half-yearly.

10. A man has £5,675 stock in 3-per-cent. Consols; when they are 102 $\frac{1}{2}$ he sells out and invests in New Zealand 4-per-cents. If by doing this he increases his annual income by £34 15s., find the price of the New Zealand stock.

11. A barometer tube has one square inch for the area of its section, and contains mercury, which is 13.6 times as heavy as water. Find the weight of the mercury in the tube when the height of the barometer is 29.52 inches, assuming that a cubic foot of water weighs 1,000oz.

12. A circular pond whose radius is 20ft. has a path 6ft. wide running all round it. Find the area of the path, and the cost of asphaltting it at 2s. 3d. a square yard, having given that the area of a circle is found by multiplying the square of the radius by 3.1416.

13. If A can run a mile in 4min. 40sec., B in 4min. 45sec., and C in 4min. 50sec., how many yards' start should A give B and C in a mile race that their chances may be equal?

14. Kepler ascertained that the squares of the times of revolution of the planets round the sun are to one another as the cubes of their distances from the sun. Find the time of revolution of the planet Venus, assuming that her distance from the sun is to that of the earth as 11 to 17.

Arithmetic.—For Class E, and for Junior Civil Service. Time allowed: 3 hours.

(The working to be shown for each Question.)

1. How many years are there in 34560000 seconds?

2. What is a factor? Resolve 362880 into elementary factors. Find the L.C.M. of 1, 2, 3, 4, 5, 6, 7, 8, 9.

3. What different kinds of vulgar fractions are there? Define each clearly, giving illustrations.

Simplify $\frac{3\frac{1}{2} \text{ of } 1\frac{1}{2} + \frac{3\frac{3}{4} \text{ of } 2\frac{1}{2}}{\frac{1}{3} \text{ of } 1\frac{1}{4}} + \frac{2\frac{1}{2} + 1\frac{3}{4}}{\frac{2}{3} \text{ of } 8\frac{3}{4}} - \frac{2\frac{1}{2} + 1\frac{3}{4}}{3\frac{3}{4} - 2\frac{1}{2}}$.

4. Divide 24.109932 by 301.28, and find the value of 0.90625 of a cubic yard.

Express as decimals $\frac{2}{7}$, $\frac{6}{35}$, $\frac{8}{5}$, and find their sum.

5. Find the square root of 18870336, and find to four places the square root of .009.

6. Eleven men were engaged to dig a trench $3\frac{1}{2}$ ft. wide, $5\frac{1}{2}$ ft. deep, and 150yds. long in a certain time, but before they began it was found that the trench had to be $4\frac{1}{2}$ ft. wide, 5ft. deep, and 210yds. long. How many men must be employed that it may be finished in time?

7. Find the value of 75cwt. 3qr. 21lb. of hops, at £2 17s. 9d. per cwt.

8. If the wages of 6 persons for 21 weeks be £120, what will the wages of 14 persons for 46 weeks be?

9. At what rate will £760 amount to £859 4s. in 4 years?

10. By selling tobacco at 1s. 3d. per pound a tobacconist gains 35 per cent.: what does his profit amount to on the sale of 4cwt. 11lb.?
11. A man invests £420 in the 3-per-cents at 90, sells out at 81, and reinvests in the 5-per-cents at 108. What is his last income?
12. Find the compound interest on £540 for 3 years at $2\frac{1}{2}$ per cent.
13. Four merchants, A, B, C, and D, join their capitals in the proportion of $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, and $\frac{1}{5}$. At the end of twelve months they lose £120. What are their respective shares of the loss?
14. If 3 men and 11 boys working together can do 5 times as much work per hour as a man and a boy together, compare the work of a boy with that of a man.

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

- Define *prime number, quotient, factor, decimal, ratio, power, cube root, discount.*
- A spirit lamp with a salted wick emits five hundred and ten billions of light-waves per second, the length of each wave being the forty-two thousand five hundredth part of an inch. Hence find the velocity of light in miles per second.
- How many sacks, each containing 1cwt. 1qr. 6lb., are required to make up 40 tons 3cwt. of coal?
- Find the value of $76\frac{2}{15}$ bales of wool at £17 16s. 8d. per bale.
- A sheet of ice is three-fourths of an acre in extent and one inch in thickness: find its weight, taking the weight of a cubic foot of ice to be 918oz.
- Divide the product of $1\frac{1}{4}$ of $(2\frac{1}{2}-1\frac{1}{3})$ and $(7\frac{1}{7}-6\frac{1}{4}) \div (4\frac{3}{4}-3\frac{3}{4})$ by their sum.
- A gentleman's pace is 2ft. 6in., a lady's pace $2\frac{3}{11}$ ft. How often will they step together in walking 1,000 yards?
- Reduce $\cdot 09$ of 1.83 of £1 6s. to the fraction of $\cdot 7027$ of $\cdot 336$ of £4 8s.
- A and B occupied a grass paddock, at a rent of 32 guineas for six months. For four months of the time B's stock was $\frac{5}{11}$ of A's; and for the remaining two months A's stock was $\frac{5}{11}$ of B's. Having given that the number of A's stock remained unaltered during the whole period, find the portion of the rent that each should pay.
- In a mile race "Sultan" can beat "Khedive" by 80 yards, and "Khedive" can beat "Mahdi" by 88 yards. By how much can "Sultan" beat "Mahdi" in a race of the same length?
- Find the amount, at compound interest, of £1,829 5s. for three years, at $3\frac{1}{2}$ per cent.
- A fruiterer, having bought a case of oranges at $4\frac{1}{2}$ d. per dozen, found, on opening the case, one-fifth of the whole to be unsaleable. He divided the rest into two equal portions, which he sold at the rates of eight for a shilling and twelve for a shilling respectively. Find his gain per cent.
- A person finds that he will have an income of £99 16s. 8d. a year more by investing his capital in New Zealand $3\frac{1}{2}$ -per-cents at $97\frac{1}{2}$ than in the Reduced $2\frac{1}{2}$ -per-cent. Consols at 98. How much capital has he to invest?
- An English merchant bought, at Bordeaux, 84 hectolitres of wine at 150fr. per hectolitre. He paid, for freight and charges, $22\frac{1}{2}$ per cent. on the cost price, and 2s. per gallon duty. At what price per dozen bottles must he sell the wine in order to make a profit of 32 per cent.? [1 hectolitre = 22 gallons; 1 gallon = 6 bottles; course of exchange, 25.16fr. for £1.]

Algebra.—Alternative with Arithmetic for Senior Civil Service. Time allowed: 3 hours.

- If $a - \frac{1}{2} = a + b = a - 2c = 0$, find the value of $(b^2 - c^2) \cdot [b^2 + c^2 - b(a - c)]$.
- Divide $\frac{1}{3}x^3 + \frac{1}{2}x^2y - \frac{2}{3}y^3$ by $\frac{1}{2}x + y$.
- If $s = \frac{1}{2}(a + b + c)$, show that $3a(s - b)(s - c) = [(s - b) + (s - c)]^3 - [(s - b)^3 + (s - c)^3]$.
- Resolve $x^5 + x^2$, $x^5 - x$, and $x^5 + x^3 + x$ into simple factors, and write down their lowest common multiple.

5. Simplify—

$$(a.) \quad \frac{a^2 - 3a + 2}{a^2 + 4a^2 - 5}$$

$$(b.) \quad \left\{ 1 - \frac{x^2 + y^2}{2xy} \right\} \div \left\{ 1 - \frac{2xy}{x^2 + y^2} \right\}$$

$$(c.) \quad \frac{1}{x+1 + \frac{1}{3x+1 + \frac{1}{8x}}}$$

6. Find the square root of $46 + 12\sqrt{14}$; also of $1 - x^2$ to four places.

7. Solve the following equations:—

$$(a.) \quad \frac{a}{x-a} - \frac{b}{x-b} = \frac{a-b}{x}$$

$$(b.) \quad 5x - \frac{21}{y-1} = 18; \quad x - (x-7)y = 13.$$

$$(c.) \quad \frac{4-x}{4+x} + \frac{3+x}{3-x} = \frac{2(6-x)}{7+x}$$

8. Divide M pounds among three persons, giving the first a pounds more than the second, and the second b pounds more than the third.

9. A passenger train and a goods train start from a station at the same hour for another station 180 miles distant, and the passenger train, by travelling 8 miles an hour faster than the other, reaches its destination $3\frac{1}{4}$ hours before it. Find the speed of each train.

Geography.—For Class D. Time allowed: 3 hours.

1. Explain fully how the latitude and longitude of a place are ascertained.
2. What is the altitude of the polar star at 45° N. latitude? at the Tropic of Cancer? at the Equator? and at the North Pole? What is that point on the earth's surface from which if a person moves, no matter in what direction, he is going southwards?
3. On what does the length of the degree depend? Why do degrees of longitude vary in length, while those of latitude are, generally speaking, equal? What is the length of a degree of longitude at the Equator? at 45°? and at the Pole?
4. State generally the prevailing direction of the winds (*a*) within the tropics, (*b*) within the middle latitudes, and (*c*) within the high latitudes. Give the reasons in each case. What and where are the Doldrums?
5. Enumerate the principal currents in the Atlantic Ocean, stating the direction of each.
6. Describe the river systems of Europe and North America.
7. Name in order, beginning at the source of the river, six of the principal towns in the Valley of the Rhine; and say for what each is famous.
8. What changes have been made in the geographical boundaries of European countries within the last fifty years? What constitutes a "natural boundary" of a country?
9. Write a brief note on each of the following, stating what and where it is: Alderney, Arkansas, Buda-Pesth, Astrachan, Elbe, Kandy, Callao, Milan, Valetta, Limerick, Shrewsbury, Funen, Xeres, Foulwind, Rangitata, Tekapo, and Kawhia.
10. Draw a map of the Mediterranean Sea, marking as accurately as you can the islands in it, and the countries round its shores with their capitals.

Geography.—For Class E, and for Junior Civil Service. Time allowed: 3 hours.

1. Of the two hemispheres, which is the colder—the Northern or the Southern? Why?
2. In what parts of the world are the four seasons most distinctly marked? Where are there only two? and where only one?
3. Define the following terms: *Avalanche, crater, dune, great circle, isothermal lines, llanos, oasis, snow-line, steppe, zone.*
4. Trace the courses of the Danube and the Ganges, naming their tributaries and the more important towns on their banks.
5. What are the great watersheds of Africa? Show how they trend, what rivers flow from them, and into what oceans these flow.
6. Describe the mountain- and river-systems of South America.
7. Trace the course of the proposed new mail-route from England to New Zealand *via* Vancouver Island and Halifax, naming the oceans, rivers, towns, mountain-ranges, &c., on the way.
8. What and where are the following?—Aleppo, Batavia, Celebes, Dnieper, Elsinore, Foochow, Goulburn, Fremantle, Rockhampton, Kapunda, Molyneux, Tamar, Labuan, Lake Eyre.
9. Name the eight most valuable exports of our colony.
10. Draw a map of Asia, marking off as accurately as you can its various countries, and insert three important towns in each.

History.—For Class D. Time allowed: 3 hours.

(Candidates are expected to attempt all the Questions.)

1. Give a brief history of the inroads of the Danes and their influence on England before the Norman Conquest.
2. Sketch the history of the relations of the English kings to the Church between the Norman Conquest and the Reformation.
3. What are the main features of the social, economical, and spiritual life of the English people during the reign of James the First, and how does the literature of the time exhibit and illustrate them?
4. What part did Ireland play in the history of England during the seventeenth century?
5. Discuss the origin of party government in England, and give a short history of its growth.
6. How did English politics and literature affect each other during the latter half of last century?
7. Describe the scientific, economic, and artistic progress made by England during the eighteenth century.
8. Trace the effect of the expansion of the empire on the politics, military affairs, and civilian life of England during the early part of this century.
9. Describe the following battles and define their historical importance: Boyne, Dettingen, Culloden, Quebec, Trafalgar.
10. What is the purport and what have been the main effects of each of the following measures?—Act of Settlement, Septennial Act, Stamp Act, Catholic Emancipation Act.

History.—For Class E and optional for Junior Civil Service. Time allowed: 3 hours.

(Candidates are expected to attempt all the Questions.)

1. What part did each of the following play in English history?—Egbert, Cnut, Richard the Second, Anne Boleyn.

2. Give the date, the names of the combatants, and the results of each of the following battles: Ethandun, Hastings, Bannockburn, Crecy, Bosworth.
3. Show from the reigns of James the First and Charles the First how the Civil War became a necessity.
4. Give an account of Cromwell's administration as Protector.
5. Sketch the character of James the Second and the history of his reign.
6. How did the British dominions increase during the eighteenth century?
7. Compare the characters of the first three Georges.
8. Give an account of the military and political career of Wellington.
9. Show how the Reform Bill and the Catholic Emancipation Bill came to be passed, and give their purport.
10. What do you know of Arabella Stuart, Laud, Monk, Titus Oates, Wolfe, Burke?

History.—Optional for Senior Civil Service. Time allowed: 3 hours.

(Candidates are expected to attempt all the Questions.)

1. What religious difficulties troubled England between 1688 and the death of Anne, and how did the Government meet them?
2. Compare the union of England and Scotland with that of England and Ireland as regards preliminaries and results.
3. Describe and account for the attitude of the heir-apparent towards the King and Government during the reigns of the first three Georges.
4. Give a brief history of the struggle for the freedom of the Press between 1688 and 1837.
5. How did Germany affect the history of England during the eighteenth century?
6. What part did Burke play in the politics of his day? Give a brief account of his speeches and writings, and show how they can be used to throw light upon history.
7. Why did reform come so late in the history of England as 1832, and how far did the Reform Bill fulfil the expectations of its advocates?
8. How did the condition of labourers and the poor change between 1688 and 1837, and what movements arose from it?
9. What place in English history does each of the following take?—(a) Schomberg, (b) Peterborough, (c) Derwentwater, (d) Anson, (e) Lord George Gordon, (f) William Cobbett.
10. What do you know of—(a) Queen Anne's Bounty, (b) Reform of the Calendar, (c) Battle of Camperdown, (d) Berlin Decree, (e) United Irishmen, (f) Cato Street Conspiracy?

Latin.—Optional for Class D, and for Junior and Senior Civil Service. Time allowed: 3 hours.

1. Give the perfects (first person singular indicative only), the infinitives, and supines, if any, of—*video, spargo, aufero, video, haereo, reor, sequor, ordior*.
2. Give the Latin numerals, cardinal, ordinal, and distributive, and the numeral adverbs from one to ten.

Express in Latin—

On the side of the Romans ten thousand men were killed.

He gave the soldiers four hundred sesterces a-piece.

They promised to furnish daily one hundred modii of corn.

3. Explain the use of *num* and *an*, (1) in direct, (2) in indirect questions. Frame instances.

Explain the use of *ne* in direct prohibitions in the second person. Frame instances.

4. Translate into Latin—

(1.) As soon as the people of the town saw what had happened, hoping that aid was at hand, they seized their arms, shut the gates, and hastily manned the walls.

(2.) The chief of the barbarians then delivered a short address to his followers, [reminding them] that if they gained the victory there was an end at once to all their dangers and sufferings, but that, if they allowed themselves to be defeated, not only they but their wives and children would come into the power of most cruel and treacherous enemies.

(3.) Age does not hinder us from cultivating literature.

I am afraid you will not be able to accomplish all that you propose.

He asked whether those things were true or not.

Every one must use his own judgment.

5. Translate into English—

Quid igitur? Marcone Crasso putas utile fuisse, tum cum maximis opibus fortunisque florebat, scire sibi, interfecto Publio filio exercituque deleto, trans Euphratem cum ignominia et dedecore esse pereundum? An Cn. Pompeium censes, tribus suis consulatibus, tribus triumphis, maximarum rerum gloria, laetaturum fuisse, si sciret se in solitudine Aegyptiorum trucidatum iri amisso exercitu; post mortem vero ea consecutura quae sine lacrimis non possumus dicere?

Explain and illustrate the expression *utile fuisse*.

Explain the use of the ablative in *tribus suis consulatibus*, &c.

Explain the meaning of the imperfect tense in *si sciret*.

French.—Optional for Class D, and for Senior and Junior Civil Service. Time allowed: 3 hours.

1. Translate into English—

Un omnibus nous prit avec nos malles, et dans l'idée qu'il nous conduirait fatalement quelque part, nous nous laissâmes emballer de confiance.

L'omnibus intelligent nous déposa devant le meilleur hôtel de la ville, et là, comme disent les journaux de circumnavigation, " nous primes langue avec les naturels." Parmi eux se trouvait un garçon qui parlait français d'une façon suffisamment transparente pour que nous pussions entrevoir son idée, èt qui, chose plus rare, comprenait même quelquefois ce que nous lui disions.

Notre nom écrit sur le registre des voyageurs fut un trait de lumière! On avait prévenu l'hôtesse de notre arrivée, et l'on devait venir nous prendre dès que l'avis de notre apparition serait donné; mais, comme il était tard, nous attendîmes au lendemain. On nous servit à souper un ragoût de perdreaux, sans sucre candi ni confiture, et nous couchâmes sur le canapé, n'espérant pas dormir entre les deux édredons qui composent les lits allemands et danois.

—*Voyage en Russie*: THÉOPHILE GAUTIER.

2. Translate into French—

It so chanced that within half an hour of their departure Miss Compton also paid a visit to the school. Mrs. Sims was one of the persons whom she had saved from severe and probably lasting penury by one of those judicious loans which, never being made without good and sufficient knowledge of the party accommodated, were sure to be repaid, and enabled her to perform a most essential benefit without any pecuniary loss whatever.

There were no excursions which gave the old lady so much pleasure as those which enabled her to contemplate the good effects of this rational species of benevolence, and Farmer Wright never failed to offer her a place in his chaise-cart whenever his business took him near any of the numerous cottages where this agreeable spectacle might greet her. On the present occasion he set her down at the door of the schoolhouse, while he called upon a miller at no great distance; and Mrs. Sims, who was somewhat disturbed in mind by the visit and schemes of Mrs. Barnaby, no sooner saw her enter than she led her through the throng of young stitchers and spellers to the tidy little parlour behind.

—*Widow Barnaby*: MRS. TROLLOPE.

3. Give the plural form of—(1) *À l'autre*; (2) *quel œil*; (3) *un clou de fer*; (4) *toi et lui*; (5) *celui auquel*; (6) *le journal d'aujourd'hui*.

4. Give the feminine of—*Les deux princes*; *cet étranger*; *un pauvre fou*; *l'aimable et vieux duc*; *mon plus grand bienfaiteur*.

5. Give the French for—*Many*; *how many?* *as many*; *so many*; *very many*; *too many*.

6. Give the singular for—*Mes fils*; *les images*; *ces garçons*; *les femmes*; *vos histoires*; *ces enfants*; *les héros*.

7. Write in full the imperative of *être* and the present subjunctive of *avoir*.

8. Give the French for—*I should be*; *I used to be*; *that I might be*; *I should have been*; *I was (preterite)*; *that he may be*.

9. "Adjectives ending in *e* mute have the feminine the same as the masculine." Name any six.

10. Distinguish between—*Ou* and *où*; *eut* and *eût*; *ce* and *cet*; *son* and *le sien*; *un camp* and *un champ*.

11. Give the English for—

Quelle heure est-il?

Il est sept heures et demie.

Il est midi.

Il est trois heures moins un quart.

Vers les onze heures du soir.

Au point du jour.

12. Give the positive of—*Moins*; *le plus*; *mon meilleur*; *le moindre*; *pire*; *mieux*; *le pis*.

13. Distinguish between—(1) *Anoblir* and *ennoblir*; (2) *ailleurs* and *d'ailleurs*; (3) *il est beau* and *il fait beau*; (4) *quoique* and *quoi que*; (5) *tous les livres, tout le livre, tout livre*.

14. Give the French for—

His father and mother.

He and I.

His sister and mine.

She who.

Is that for her?

My daughters or his.

15. In which of these words is the *h* aspirated?—*Hôtel, hasard, heureux, hiver, hirondelle, halle, haut, homme, histoire, hibou*.

[Candidates for the Junior Civil Service need not reply to the following.]

16. What is the French spelling identical with—*Captain, judge, garrison, infantry, example, admiral, cannon, tyrant, ability?*

17. What are the French terms for the natives of—*La France, la Belgique, l'Autriche, l'Écosse, l'Espagne, la Prusse, l'Allemagne, le Pérou?*

18. State fully the rule of concord as applicable to each participle in the following:—

(1.) *Je regrette vivement la peine que j'avais prévu que cette affaire vous causerait.*

(2.) *Les soins que vous m'avez recommandé de lui donner sont sacrés pour moi.*

(3.) *La perte de la bataille est attribuée au peu d'habileté qu'a montré le général.*

German.—Optional for Class D and for Junior and Senior Civil Service. Time allowed: 3 hours.

1. Translate into English—

(1.) *Mir hat er das Buch geschickt.*

(2.) *Ich habe mich um die Stelle beworben.*

(3.) *Wochenlang habe ich auf Antwort gewartet.*

3—E. 1A.

- (4.) Ungewissheit ist ein peinliches Gefühl.
 - (5.) Es ist noch nicht aller Tage Abend.
 - (6.) Unabhängigkeit ist ein köstliches Ding.
 - (7.) Unser Leben ist kurz und fährt schnell dahin.
 - (8.) Hast du jemals wieder an mich gedacht?
 - (9.) Der Mond hat immer einen grossen Reiz für mich.
 - (10.) Ich habe niemals den Fürsten Bismarck gesehen.
2. Translate into German—
- (1.) He introduced me to his friend.
 - (2.) The man speaks very indistinctly.
 - (3.) The Dunedin Exhibition is considered attractive.
 - (4.) Do you not recollect the matter?
 - (5.) Have you given up studying mathematics?
 - (6.) Who could help reproving the impudent youth?
 - (7.) Pictures and books are a great ornament.
 - (8.) There were plenty of candidates.
 - (9.) I wish to know whether he will set out for Cologne.
 - (10.) Can you guess which of the two is the bride?
3. Grammatical questions:—
- (1.) Decline in full: *der Leiter, die Leiter, die Tochter, die Schwester.*
 - (2.) Conjugate the present indicative of *haben, sein, werden.*
 - (3.) Translate: "he has fallen;" "he has felled;" "he has felt."
 - (4.) Give three prepositions used with the dative case.
 - (5.) Translate: "in 1889;" "you think" (in two ways); "he is the seventy-seventh."
 - (6.) Give the principal parts of *kennen, können, stehen.*
 - (7.) What is the difference between "to become" and *bekommen*?
 - (8.) Translate: "my elder brother's wife;" "how do you do, gentlemen?"
4. Translate into English—
- (1.) Denk' ich an Deutschland in der Nacht,
So bin ich um den Schlaf gebracht.
 - (2.) Es reden und träumen die Menschen gar viel
Von besseren und künftigen Tagen.
 - (3.) Ich lieb' sie nicht mehr; ich liebe alleine
Die Kleine, die Feine, die Reine, die Eine.
 - (4.) Ich gehe durch den Todesschlaf
Zu Gott ein als Soldat und brav.
 - (5.) Die Botschaft hör' ich wohl, allein es fehlt der Glaube.
 - (6.) Als müsste in dem Garten,
Voll Rosen weiss und roth,
Meine Liebste auf mich warten
Und ist doch lange todt!
 - (7.) Ende gut, Alles gut.

Maori.—Optional for Senior Civil Service. Time allowed: 3 hours.

1. Translate into English the following:—

Haere noa ake a Tawhaki ki te rangi, kua tupu tana tamaiti a Wahieroa, ka moe i a Kura, ka puta ki waho, ko Rata. Ka kohurutia a Wahieroa e Matukutakotako, ka mate. Mate noa ake ia, kua tupu tana tamaiti a Rata: mana e takitaki te mate o tana matua, o Wahieroa. Ka tupu te whakaaro i a Rata, ka karanga atu ki tona iwi, "Ka haere au ki te rapu i te tangata nana nei i patu toku matua." Haere ana ia, rokohanga atu e ia te Kai-tiaki o te Toi, ka uia atu e ia, "Kei whea te tangata nana i patu toku matua?" Ka ki mai taua tangata nei, "Kei raro, i waiho atu e ia hei tohu mo te aranga o te marama, hei reira ka puta ia ki runga ki te kai tangata mana."

—*Sir G. Grey: Legends.*

2. Translate into Maori the following:—

Tauai and Tekaraka, with their respective families and adherents, were exiled by the chief Aeru, of that division of the tribe Ngariki bearing the name Vaeruarangi. . . . It is believed that they reached the northern island of New Zealand in safety,—that the Tekaraka referred to is the veritable Tekaraka who figures in Maori history. It may be a corroboration of this that the New Zealanders at once fraternise with the Hervey Islanders, and address them as "ai tuakana" or "elder brethren." Besides, there is a remarkable correspondence between various Maori names and the names of places on the south of Mangaia—Mangonui, Waikato, Waitangi, Waitotara; only in the Hervey Group dialect we print V for the W. The pronunciation of these names is identical. The distance to the nearest part of New Zealand would not be much more than that traversed by Elikana in 1862, in his involuntary voyage from Manihiki to Nukuraerae.

—"The Exiles:" from "Savage Life in Polynesia," by Rev. W. W. Gill, B.A.

3. Put the following into Maori:—

When do you think that we two shall reach the settlement?

Ropata says that we are going to have a hot summer, because the easterly winds set in earlier than usual this year.

Those persons who planted their potatoes early in the season should have a fair crop.

I was late in planting mine; perhaps they will be all dried up with the heat of the sun.

There will be much sickness soon if it does not rain.

4. Put the following into English:—

Kua kino te waka i te paru. Kua pakaru to waka i te ngaru. Me wero e koe. Ehara koe i te rangatira noku. Rongo kau ahau i to karanga, ka haere mai ahau. Timata kau matou te mahi, ka timata hoki te ua. Ahakoa haere koe, ahakoa noho, he nui ano te mahi mau. I tu ia ki te tatau kia kua ai tetahi e tomo ki roto ki te whare. I hoki rawa mai koe i hea?

5. Give examples in Maori, with translation, of the use of “*tino pai rawa*,” “*kino whakaharahara*,” “*tini whakaharahara*,” and also of the particles *atu*, *mai*, *ai*, *ano*.

6. Write a letter as from Maoris, addressed to the Governor, welcoming him to New Zealand, and assuring him of their continued loyalty to the Queen. Give rendering of same in English.

Algebra.—Optional for Class D, and for Junior Civil Service. Time allowed: 3 hours.

1. If $a=5$ and $x=2$, find the numerical values of

$$(i.) \frac{a^2+2ax-x^2}{3a-2x} + \frac{3ax-a^2}{a+x};$$

$$(ii.) \frac{\sqrt{5a+4x+3}}{3\sqrt{a+x+1}}.$$

2. Multiply together $5ax^3-7bx^2y+6cxy^2+3y^3$ and $4cx^3+2axy-3by^2$. Arrange your result in descending powers of x , collecting coefficients of like powers in brackets.

3. Divide—

$$(i.) 3x^2-2y^2+12z^2-13xz-5yz+5xy \text{ by } 3x-y-4z.$$

$$(ii.) (2x-y)^3-6y(2x-y)^2+12y^2(2x-y)-8y^3 \text{ by } (2x-3y)^2.$$

4. Resolve into factors $(x-x^2y)^2$, $(2x-3y+z)^2-(x+2y-z)^2$, x^4+4y^4 , $4x^2+9y^2+3y-2x-6xy$.

5. Simplify—

$$(i.) 2(x-a)(2x-b)-(2a-x)(2x-b)-x[a-x-(a+\overline{b-x})].$$

$$(ii.) 2x-\frac{1}{2}(3y-z)-\frac{1}{3}[2x-4y+(y-\frac{z}{2})]-\frac{3x+\frac{1}{2}(-y-3z)}{4}.$$

6. Find the value of $\frac{x+y}{x-y}-\frac{x-y}{x+y}$ in terms of a and b when $x=\frac{a}{a+b}$, $y=\frac{b}{a-b}$.

$$\text{Simplify } 2+\frac{3}{2-\frac{3}{1+\frac{1}{2-x}}}.$$

7. Solve the equations—

$$(i.) \frac{3x+2}{5} + \frac{\frac{2x-1}{3} - \frac{2x+4}{5}}{\frac{2}{3x+2} - \frac{5}{4x+7}} = \frac{6x+9}{10};$$

$$(ii.) \frac{ax-b}{a+b} + \frac{bx-a}{b-a} = x.$$

8. A man travels for a hours at the rate of x miles an hour; he then rests for n hours, and then travels for b hours at the rate of y miles an hour. He returns the whole distance at the rate of z miles an hour, and finds that he has been absent altogether c hours. Write down the equation which expresses this fact.

9. The populations of two countries are in the ratio of m to n ; after the population of the first has increased by a per cent., and that of the second by b per cent., the populations are in the ratio of p to q . Prove that $mq(100+a)=np(100+b)$.

Euclid.—Optional for Class D, and for Junior Civil Service. Time allowed: 3 hours.

1. Name and define the different kinds of quadrilateral figures.

2. Explain the following geometrical terms: postulate, hypothesis, problem, corollary, indirect demonstration.

3. If two triangles have the three sides of the one respectively equal to the three sides of the other, the triangles shall be equal in every respect.

Prove that the opposite angles of a rhombus are equal, and that its diagonals bisect one another at right angles.

4. If one side of a triangle be produced, the exterior angle is greater than either of the interior opposite angles.

Hence show that any two exterior angles of a triangle are together greater than two right angles.

5. If two triangles have two sides of the one equal to two sides of the other, each to each, but the angle contained by the two sides of one of them greater than the angle contained by the two sides equal to them of the other, the base of that which has the greater angle shall be greater than the base of the other.

6. Parallelograms upon the same base and between the same parallels are equal to one another.

Explain how this proposition furnishes the means of calculating the area of a parallelogram or a triangle.

7. If a straight line be divided into any two parts, the squares of the whole line, and of one of the parts, are equal to twice the rectangle contained by the whole and that part, together with the square of the other part.

What is the algebraical equivalent of this proposition?

8. If a straight line be bisected, and produced to any point, the square of the whole line thus produced, and the square of the part of it produced, are together double of the square of half the line bisected, and of the square of the line made up of the half and the part produced.

ABC is a right-angled isosceles triangle. The hypotenuse BC is produced to any point D, and AD is joined. Show that $2AD^2 = BD^2 + CD^2$.

Euclid, Books I.-IV.—Optional for Senior Civil Service. Time allowed: 3 hours.

1. If one side of a triangle be produced, the exterior angle is greater than either of the two interior opposite angles.
2. If a straight line fall on two parallel straight lines it makes the alternate angles equal, and the exterior angle equal to the interior opposite angle on the same side of the line, and the two interior angles on the same side of the line together equal to two right angles.
Two circles are in the same vertical plane, and the highest point A of one is joined to the lowest point B of the other. Prove that the radii to the remaining intersections of AB with the circles are parallel.
3. If a straight line be divided into any two parts, the squares on the whole line and on one of the parts are together equal to twice the rectangle contained by the whole line and that part, together with the square on the other part.
4. If from any point within a rectangle straight lines are drawn to the angular points, the sum of the squares on one pair of lines drawn to opposite angles is equal to the sum of the squares on the other pair.
5. If a quadrilateral be inscribed in a circle its opposite angles are together equal to two right angles.
6. Angles in the same segment of a circle are equal to one another.
Find a point in a given straight line such that two given points subtend at it the greatest angle.
7. Inscribe a circle in a given triangle.
Show also how to describe a circle touching one side of a triangle and the other two produced.

Trigonometry.—Optional for Senior Civil Service. Time allowed: 3 hours.

1. Define the tangent of an angle, and trace the changes in magnitude and sign which the tangent undergoes as the angle increases from zero to two right angles.
2. Prove the relations,—

$$\sec^2 \theta = 1 + \tan^2 \theta.$$

$$(\sec^2 A + \tan^2 A)(\operatorname{cosec}^2 A + \cot^2 A) = 1 + 2 \sec^2 A \cdot \operatorname{cosec}^2 A.$$

$$\operatorname{vers}^2 A - 2 \operatorname{vers} A + \sin^2 A = 0.$$
3. Prove that—

$$\tan(180^\circ + A) = \tan A.$$

$$\cos\left(\frac{3\pi}{2} + A\right) = -\sin A.$$
4. Prove the relations—

$$(\sin \alpha + \sin \beta)(\cos \alpha + \cos \beta) = \sin(\alpha + \beta)[1 + \cos(\alpha - \beta)].$$

$$\cot 3A \cdot \tan 5A - \cot 3A \cdot \tan 2A - \tan 5A \cdot \tan 2A = 1.$$

$$\cos A + \cos 3A + \cos 7A + \cos 9A = 4 \cos A \cdot \cos 3A \cdot \cos 5A.$$
5. Show that in any triangle $\cos A = \frac{b^2 + c^2 - a^2}{2bc}$, and deduce that $\tan \frac{A}{2} = \sqrt{\frac{(s-b)(s-c)}{s(s-a)}}$

when s is half the sum of the sides.

6. Investigate the formulæ for completely solving a triangle when two sides and the included angle are given.

If $b = 7235$, $c = 1592$, $A = 50^\circ$, find B and C , having given

$$\operatorname{Log}. 5.643 = .7515101$$

$$\operatorname{Log}. 8.827 = .9458131$$

$$\operatorname{Log}. \tan 65^\circ = 10.3313275$$

$$\operatorname{Log}. \tan 53^\circ 53' = 10.1368805$$

$$\operatorname{Log}. \tan 53^\circ 54' = 10.1371459.$$

7. At A and B the angles of elevation of an object, P , are observed to be α and β respectively. The distance between A and B is c , and the angle between AB and the line joining A to the foot of P is θ . Prove that the height, h , of P is given by the quadratic,

$$h^2(\cot^2 \beta - \cot^2 \alpha) + 2ch \cot \alpha \cdot \cos \theta = c^2.$$

Mechanics.—Optional for Class D, and for Junior and Senior Civil Service. Time allowed: 3 hours.

1. Define *momentum*, *moment*, *mass*, *weight*, *centre of gravity*, *centre of pressure*, *specific gravity*.

2. Explain the principle of the composition of velocities.

A ship finds herself at noon 180 miles to the north, and 240 miles to the east, of the position which she occupied at noon of the previous day. Supposing her course to have remained unaltered, find her average rate of sailing per hour.

3. Define the units of *acceleration*, *force*, and *work*.

Find the velocity which a force equal to the weight of 5lb. will impart to a mass of 40lb. in 10 seconds.

Find, also, the work done by the force in imparting this velocity.

4. A steam-engine of 5-horse power is employed to raise water by a forcing-pump to the height of 150 feet. How many gallons of water will it raise per day of 10 hours? [1-horse power = 550 foot-pounds per second; 1 gal. = 10lb.]

5. What is meant by the "resultant" of two or more forces?

Find the resultant of two forces, each equal to the weight of 12lb., which act upon a particle at an inclination of 60° to one another.

6. When three parallel forces are in equilibrium, show that the algebraical sum of the moments of the forces about any point in the plane of the forces is equal to zero.

7. Find the relation of the power to the weight in the "first system" of pulleys (that in which each pulley hangs by a separate string).

In the system of pulleys in which each string is attached to the weight, the power is 18lb., and the weight is 270lb. What is the number of moveable pulleys?

8. Show how it may be proved, experimentally, that a pressure applied to any portion of the surface of a confined fluid is transmitted equally in every direction through the whole fluid.

9. Describe the method of determining the specific gravity of a solid by the hydrostatic balance, explaining the principle on which the method depends.

In a glass of spirits, whose specific gravity is 0.91, a cork floats with five-sevenths of its volume unimmersed. What is the specific gravity of the cork?

10. Describe the action of the air-pump.

Physics.—Optional for Class D, and for Junior and Senior Civil Service. Time allowed: 3 hours.

1. Distinguish between "temperature" and "quantity of heat," and explain how each is measured.

2. What is meant by the term "latent heat"?

Steam at 100° C. is passed into a vessel containing 1lb. of snow at 0° C. till the snow has been melted and the temperature of the resulting water raised to 34° C. Supposing the heat absorbed by the vessel to be negligible, find the weight of steam that has been condensed.

3. Define "specific heat." How is the specific heat of a substance affected by temperature, and by change of state? What relation has been found to exist between the specific heat of simple substances and their atomic weights?

4. Explain the phenomena of "resonance," "beats," and "harmonics" in the theory of sound.

5. When the flame of a candle is placed in the axis of a concave mirror at the distance of 2ft., its image is formed at the distance of 16in. from the mirror: find the radius of curvature of the mirror.

6. State the law of the refraction of light. Under what circumstances does "total reflection" take place at the bounding surface of a transparent body? Construct the "critical angle" for the common surface of water and air.

7. Distinguish between a "magnet" and a "magnetic substance." What is a "diamagnetic substance"? Describe how a steel bar may be magnetized, (1) by means of a magnet, (2) by means of an electric current.

8. Explain the action of a frictional electrical machine.

9. What are the chief effects of the electric current? Which of these effects is the most convenient for measuring the intensity of the current? Describe the several means that are employed to increase the sensitiveness of a galvanometer.

10. Define the practical units of E.M.F. and resistance. On what circumstances does the resistance of a conductor depend?

If the resistance of an iron telegraph wire, $\frac{1}{8}$ in. in diameter, be 11 ohms per mile, what will be the resistance of 100yds. of copper wire, $\frac{1}{16}$ in. in diameter, supposing the specific resistance of iron to be six times as great as that of copper?

Chemistry.—Optional for Class D, and for Junior and Senior Civil Service. Time allowed: 3 hours.

1. Starting with phosphorus, how would you make (a) phosphoric anhydride, (b) ordinary phosphoric acid?

2. Explain how nitrous oxide gas is made. Give the equation.

3. Given the three gases, oxygen, nitrous oxide, nitric oxide, how would you distinguish them from each other?

4. What is the composition of atmospheric air? How is it proved that it is a mixture of gases, and not a compound?

5. Describe (giving equations) the manufacture of ammonia on the large scale.

6. Write down the names and formulæ of all the compounds that hydrogen forms with each of the other non-metallic elements.

7. Write down the names and symbols and atomic weights of all the members of (a) the halogens, (b) the oxygen family, (c) the nitrogen family of elements.

8. In what respects do sulphur, selenium, and tellurium resemble each other?

9. In what respects do chlorine, bromine, and iodine (a) resemble each other, and (b) differ from each other?

10. What are the various methods of preparing hydrogen gas for experimental purposes? Give the equations.

Elementary Biology.—Optional for Class D, and for Junior Civil Service. Time allowed: 3 hours.

[Zoology.—Alternative with Botany.]

1. Describe the minute structure of the lungs. What is the purpose of the respiratory process, and how is it effected?

2. What are glands? Describe the chief types of structure found in glands. Enumerate the various kinds of glands found in the body, and give their function.
3. What is the source of the heat of the body? How is the body maintained at a constant temperature?
4. What are the functions of the spinal cord, and how can they be demonstrated?
5. What are the sources of loss and gain of material to the blood?
6. Give an account of the lymphatic system.
7. Explain how the erect position of the body is maintained.
8. Give an account of the process of digestion. What do you understand by digestive ferments? What is their chemical nature, and how could you show their properties experimentally?
9. Describe the organ of smell. Under what conditions may the senses of taste and smell be confused with one another?

[Botany.—Alternative with Zoology.]

1. Describe fully the minute structure of a leaf, and show how its characteristic features are related to the life of the plant.
2. Explain the various contrivances found in plants for enabling them to climb, and show how far these contrivances may be regarded as modifications of organs existing in all ordinary plants.
3. What do you understand by a fibro-vascular bundle? Describe the elements found in an ordinary open fibro-vascular bundle, and show how they are related to simple undifferentiated cells.
4. What is chlorophyll? In what parts of plants, and in what form, does it occur? Give all the evidence you know of which throws light upon its function, describing the experiments.
5. What do you understand by transpiration? Show its importance in the life of the plant. What tissues are concerned in transpiration? How can it be measured?
6. What do you understand by true and spurious fruits? Give examples of as many of the chief types of fruits as you can.
7. Describe the chief forms of inflorescences. Give examples, taking them, so far as you are able, from native plants.
8. Explain fully the differences which exist between Monocotyledons and Dicotyledons.
9. Write an account of the following orders of plants: Coniferæ, Rosaceæ, Gramineæ. Give examples of each order.

Shorthand.—Optional for Junior and Senior Civil Service. Time allowed: 3 hours.

INSTRUCTIONS TO SUPERVISORS.

1. Inform candidates before the time for taking up this subject that they may use pen or pencil as they please for taking notes, which should be written on ruled paper, but that they must transcribe those notes into longhand with pen and ink.

2. Inform candidates that when once you have commenced to dictate you cannot stop until the passage is finished.

3. Dictate the passages at the following rates of speed:—

Junior	{	(a.) 50 words per minute.	Senior	{	(a.) 80 words per minute.
		(b.) 80 " "			(b.) 120 " "
		(c.) 100 " "			(c.) 150 " "

N.B.—It will be well to practise reading these aloud some time beforehand, looking at a watch or clock, so as to accustom yourself to the speed.

4. Candidates are at liberty to take down the three passages, if they choose. If they do so, all the passages are to be dictated to them before they commence transcribing. If a candidate takes only one or two of the passages he is to commence transcribing as soon as he has finished taking notes.

5. Inform candidates that rapidity in transcribing notes into longhand is essential, and note carefully on the transcribed copy the exact time taken in transcription.

6. Inform them also that the clearness and accuracy of the shorthand notes (which must in every case be sent in attached to the transcript) will be taken account of by the examiner.

PASSAGES FOR DICTATION.

Junior.

- (a.) At the rate of 50 words per minute. Takes 10 minutes.
"It affords me great pleasure . . . steadily advanced in England." (*Hansard*, No. 1, 1889, pp. 1, 2.)
- (b.) At the rate of 80 words per minute. Takes 10 minutes.
"In rising this evening . . . which they have effected." (*Hansard*, No. 1, 1889, p. 5.)
- (c.) At the rate of 100 words per minute. Takes 5 minutes.
"When they took up . . . it is proposed to have some reform." (*Hansard*, No. 1, 1889, pp. 5, 6.)

Senior.

- (a.) At the rate of 80 words per minute. Takes 10 minutes.
"I believe that our . . . and I trust we shall." (*Hansard*, No. 1, 1889, pp. 6, 7.)
- (b.) At the rate of 120 words per minute. Takes 10 minutes.
"We know that at the present . . . accuracy of facts." (*Hansard*, No. 4, 1889, pp. 219, 220.)
- (c.) At the rate of 150 words per minute. Takes 5 minutes.
"Such an objection . . . and the results." (*Hansard*, No. 6, 1889, pp. 340, 341.)

[Approximate Cost of Paper.—Preparation, nil; printing (3,200 copies) £8 11s.]