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CIVIL SERVICE.—CLASS I. EXAMINATION.

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Copy of Report dated 20th June, 1917, of the Committee appointed by the Lords Commissioners of His Majesty's Treasury to consider and report upon the scheme of examination for Class I. of the Civil Service.

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E7
CLASS I. EXAMINATION.

Report of the Committee appointed by the Lords Commissioners of H.M. Treasury to consider and report upon the scheme of examination for Class I of the Civil Service.

TREASURY MINUTE, Dated the 16th November, 1916.

My Lords are pleased to appoint a Committee consisting of:—

Mr. STANLEY LEATHES, C.B., First Civil Service Commissioner (*Chairman*)
Sir ALFRED EWING, K.C.B., F.R.S., Vice-Chancellor of the University
Edinburgh;

Sir HENRY ALEXANDER MIERS, D.Sc., F.R.S., Vice-Chancellor of the
University of Manchester;

Mr. H. A. L. FISHER, M.A., F.B.A., Vice-Chancellor of the University
Sheffield;

Professor W. G. S. ADAMS, M.A., Gladstone Professor of Political Theo
and Institutions in the University of Oxford;

to consider and report upon the existing scheme of examination for Class I. of the
Home Civil Service:

To submit for the consideration of the Lords Commissioners of His Majesty's
Treasury a revised scheme such as they may judge to be best adapted for the
selection of the type of officer required for that class of the Civil Service, and
at the same time most advantageous to the higher education of this country:

And in framing such a scheme, to take into account, so far as possible, the
various other purposes which the scheme in question has hitherto served, and
consult the India Office, the Foreign Office, and the Colonial Office as to their require
ments, in so far as they differ from those of the Home Civil Service.

My Lords are further pleased to appoint Mr. D. B. Mair, M.A., Director
Examinations to the Civil Service Commissioners, to be Secretary to the Committee.

TREASURY MINUTE, Dated the 4th January, 1917.

My Lords read again Their Minute of the 16th November, 1916, appointing
the Committee to consider and report upon the existing scheme of examination
for Class I. of the Home Civil Service.

They are informed that Mr. H. A. L. Fisher has found it necessary to resign
his membership of the Committee on his appointment as President of the Board
of Education, and they are pleased to appoint in his stead Dr. W. H. Hadow, Prince
of Armstrong College, Newcastle, and Vice-Chancellor of Durham University.

REPORT.

To the LORDS COMMISSIONERS OF HIS MAJESTY'S TREASURY.

May it please Your Lordships,

Your Committee, having carefully considered the existing scheme of examination for posts in Class I. of the Home Civil Service, beg leave to present for Your consideration their Report.

HISTORICAL SUMMARY.

1. The principle of competition by examination for posts in the Home Civil Service was tentatively adopted by the Order in Council of 21st May, 1855, by which the Civil Service Commission was constituted; and from that time forward appointments were made by limited competition to posts in certain of the public offices, candidates being nominated to compete by the heads of the several Departments.

The schemes of examination then applied were various; the following scheme was at a very early date adopted by the Colonial Office for their established posts at home and their writerships in Ceylon, and may be regarded as the ancestor of all schemes for Class I. of the Home Civil Service.

I. *Preliminary Examination.*

1. Exercises designed to test handwriting and orthography.
2. Arithmetic, including vulgar and decimal fractions.
3. Geography.
4. Translation from one of the following languages: Greek, Latin, French, German, Spanish, and Italian, the selection being left to the candidate.
5. The preparation of a precis or abstract of official papers.

Candidates failing to satisfy the Civil Service Commissioners upon each of these subjects will not be permitted to proceed further with their examinations, and will not be entitled to certificates of qualification.

II. *Final Examination.*

1. Languages and literature of Greece and Rome.
2. Languages and literature of France, Germany, and Italy.
3. Modern history, including that of the British Colonies, with exercises designed to test purity and elegance of style.
4. Elements of constitutional and international law, with elements of political economy.
5. Pure and mixed mathematics, not including the highest branches, with accounts and bookkeeping.

Of the five classes of subjects thus defined, candidates are at liberty to select any number not exceeding three, in which they desire to be examined.

2. But the earliest application of the principle of open competition to appointments in the service of the Crown was in 1858, when an open competition was held by the Civil Service Commissioners for posts in the Civil Service of India under the new Act for the Better Government of India. Competitions had previously been held for posts under the India Board.

The scheme was as follows :—

English Language and Literature :—			
Composition	...	...	500
English Literature and History, including that of the Laws and Constitution	...	...	1,000
			1,500
Language, Literature, and History of Greece	...	...	750
" " " Rome	...	...	750
" " " France	...	...	375
" " " Germany	...	...	375
" " " Italy	...	...	375
Mathematics, pure and mixed	...	...	1,000
Natural Science—that is, Chemistry, Electricity and Magnetism, Natural History, Geology, and Mineralogy	...	...	500
Moral Sciences—that is, Logic, and Mental, Moral, and Political Philosophy	...	...	500
Sanskrit Language and Literature	...	...	375
Arabic Language and Literature	...	...	375
			6,875

Candidates were allowed to take any or all of these subjects.

3. By the Order in Council of June 4th, 1870, the principle of open competition was adopted for posts in the Home Civil Service, and was gradually accepted in all the chief Departments, both for higher and lower appointments, with the exception of clerkships in the Foreign Office, which is not generally reckoned as part of the ordinary Civil Service, and in the Board of Education, where up to the beginning of the war "Examiners" were appointed by the nomination of the head of the Department to perform duties similar to those of Class I. clerks in other Departments. Certain classes in various Departments have also been excepted, where professional or technical qualifications were necessary, such appointments being made either by direct nomination or by limited competition among nominated candidates.

4. The earliest scheme of competition for the highest grade in the Home Civil Service (now generally known as Class I.) was as follows :—

It was called Scheme I. The age limits were from 18 to 24; but the examination was, in fact, chiefly intended for candidates who had completed or were completing their university education. There was a preliminary examination (to qualify for admission to the subsequent competition) in Handwriting, Orthography, Arithmetic, and English Composition. The competitive examination was in the following subjects :—

	Marks.
English Composition (including Precis-writing)	500
History of England, including that of the Laws and Constitution	500
English Language and Literature	500
Language, Literature, and History of Greece	750
" " " Rome	750
" " " France	375
" " " Germany	375
" " " Italy	375
Mathematics (pure and mixed)	1,250
Natural Science—that is (1) Chemistry, including heat; (2) Electricity and Magnetism; (3) Geology and Mineralogy; (4) Zoology; (5) Botany	1,000
* * The total (1,000) marks may be obtained by adequate proficiency in any two or more of the five branches of science included under this head.	
Moral Sciences—that is Logic, Mental and Moral Philosophy	500
Jurisprudence	375
Political Economy	375

Candidates are at liberty to name [before a fixed date] any or all of these branches of knowledge. No subjects are obligatory.

5. Schemes for the years 1895 and 1906 showing progressive modification were as follows. The limits of age under both schemes were 22-24:—

1895.

English Composition	...	...	...	...	...	500
Sanskrit Language and Literature	...	...	...	...	...	500
Arabic Language and Literature	...	...	...	...	...	500
[The last two subjects were included in view of the amalgamation of this scheme with that for the Civil Service of India.]						
Greek Language and Literature	...	...	...	...	...	750
Latin Language and Literature	...	...	...	...	...	750
English Language and Literature (including a special period named by the Commissioners)	...	...	...	...	...	500
French Language and Literature	...	...	...	...	...	500
German Language and Literature	...	...	...	...	...	500
Mathematics (pure and applied)	...	...	...	...	...	900
Advanced Mathematical subjects (pure and applied)	...	...	...	...	...	900
Natural Science—i.e., any number not exceeding three of the following subjects:—						
Elementary Chemistry and Elementary Physics	600					} 1,800
[N.B.—This subject may not be taken up by those who offer either Higher Chemistry or Higher Physics.]						
Higher Chemistry	...	...	...	...	600	
Higher Physics	...	...	...	...	600	
Geology	...	...	...	...	600	
Botany	...	...	...	...	600	
Zoology	...	...	...	...	600	
Animal Physiology	...	...	...	...	600	
Greek History (Ancient, including Constitution)	...	...	...	...	...	400
Roman History (Ancient, including Constitution)	...	...	...	...	...	400
English History	...	...	...	...	...	500
General Modern History (period to be selected by Candidates from a list in the syllabus issued by the Commissioners, one period at least to include Indian History)	...	...	...	...	...	500
Logic and Mental Philosophy (Ancient and Modern)	...	...	...	...	...	400
Moral Philosophy (Ancient and Modern)	...	...	...	...	...	400
Political Economy and Economic History	...	...	...	...	...	500
Political Science (including Analytical Jurisprudence, the Early History of Institutions, and Theory of Legislation)	...	...	...	...	...	500
Roman Law	...	...	...	...	...	500
English Law.—Under the head of "English Law" shall be included the following subjects: (1) Law of Contract; (2) Law of Evidence; (3) Law of Constitution; (4) Criminal Law; (5) Law of Real Property; and of these five subjects candidates shall be at liberty to offer any four, but not more than four	...	...	...	...	...	500

Candidates will be at liberty to offer themselves for examination in any or all of these subjects. No subjects are obligatory.

No candidate will be allowed any marks in respect of any subject of examination unless he shall be considered to possess a *competent knowledge* of that subject.

1906.

	Maximum Marks.
English Composition	500
Sanskrit Language and Literature	600
Arabic	600
Greek, not less than two sub-divisions, of which one must be Translation:—	
Translation	300
Composition	300
Literature, &c.	300

	Maximum Marks.
Latin, not less than two sub-divisions, of which one must be	
Translation :—	
Translation	300
Composition	300
Literature, &c.	300
English	600
Italian	600
French	600
German	600
Mathematics	1,200
Advanced Mathematics	1,200
Natural Science— <i>i.e.</i> , any number not exceeding four of the following :—	
Chemistry	600
Physics	600
Geology	600
Botany	600
Zoology	600
Animal Physiology	600
Greek History (Ancient, including Constitution)	500
Roman History (Ancient, including Constitution)	500
English History, either or both sections may be taken :—	
I. to A.D. 1485	400
II. A.D. 1485 to 1848	400
General Modern History	500
[NOTE.—Under this scheme Modern History (including Medieval) was divided into five periods (later six). Candidates took one only at their choice.]	
Logic and Psychology	600
Moral and Metaphysical Philosophy	600
Political Economy and Economic History	600
Political Science	500
Roman Law	500
English Law	500

The marks assigned to candidates in each branch (except in Mathematics and English Composition) will be subject to such deduction as the Civil Service Commissioners may deem necessary in order to secure that a candidate be allowed no credit at all for taking up a subject in which he is a mere smatterer.

[The phrase "mere smatterer" is a conscious reference to Macaulay's Report, mentioned in section 10 below.]

Candidates are at liberty to name any of these branches of knowledge, with the proviso that the maximum number of marks that can be obtained from the subjects chosen is limited to 6,000. If this maximum is exceeded by a candidate's selection he will be required to indicate one of his subjects, the marks for which should, in his case, be reduced so as to bring his maximum marks within the prescribed limit. The marks so reduced will be subject to a correspondingly reduced deduction.

[This last paragraph indicates a material alteration in policy, intended to encourage candidates to follow a regular and systematic course of university study, rather than to devote themselves to preparation for the examination by cramming.]

The latest scheme runs thus :—

	Marks.
Limits of age, 22-24.	
1. English Composition	500
2. Sanskrit Language and Literature	800
3. Arabic Language and Literature	800
Greek, not less than two sub-divisions, of which one must be	
Translation :—	
4. Translation	400
5. Prose Composition	200
6. Verse Composition	200

	Marks.
7. Literature, &c.	300
Latin, not less than two sub-divisions, of which one must be Translation:—	
8. Translation	400
9. Prose Composition	200
10. Verse Composition	200
11. Literature, &c.	300
12. English Language and Literature	600
13. Italian: Translation, Composition, and Conversation	400
14. Italian: History of the Language and Literature	200
15. French: Translation, Composition, and Conversation	400
16. French: History of the Language and Literature	200
17. German: Translation, Composition, and Conversation	400
18. German: History of the Language and Literature	200
The History of these Languages and their Literatures can only be taken by candidates who also offer themselves for the rest of the examination in those Languages.	
19. Lower Mathematics	1,200
• 20. Higher Mathematics	1,200
Natural Science, <i>i.e.</i> , any number not exceeding <i>four</i> of the following or <i>three</i> if both Lower and Higher Mathe- matics be also taken:—	
21. Chemistry	600
22. Physics	600
23. Geology	600
24. Botany	600
25. Zoology	600
26. Animal Physiology	600
27. Geography	600
28. Greek History (Ancient, including Constitution)	500
29. Roman History (Ancient, including Constitution)	500
English History, either or both sections may be taken:—	
30. I. to A.D. 1485	400
31. II. A.D. 1485 to 1848	400
32. General Modern History	500
(See note on scheme of 1906.)	
33. Logic and Psychology	600
34. Moral and Metaphysical Philosophy	600
35. Political Economy and Economic History	600
36. Political Science	500
37. Roman Law	500
38. English Law	500

From the marks assigned to candidates in each subject such deduction will be made as the Civil Service Commissioners may deem necessary in order to secure that no credit be allowed for merely superficial knowledge.

Consistently with the limitations specified above, candidates are at liberty to name any of the foregoing subjects, provided that the maximum number of marks that can be obtained from the subjects chosen is limited to 6,000. If this maximum is exceeded by a candidate's selection he will be required to indicate one of his subjects, the marks for which should, in his case, be reduced so as to bring his maximum marks within the prescribed limit. The marks so reduced will be subject to a correspondingly reduced deduction.

Moreover, if a candidate's handwriting is not easily legible a further deduction will, on that account, be made from the total marks otherwise accruing to him.

A footnote runs:—

It is notified for general information that the number of marks deducted for bad handwriting may be considerable.

6. In 1895 the scheme of competition for Class I. and the Indian Civil Service became identical, and candidates competed for either or both at their desire, though for some time the limits of age were slightly different.

In 1898 the same competition was adopted for Eastern Cadetships under the Colonial Office; at present such appointments exist in Ceylon, Hong Kong, the Straits Settlements, and the Federated Malay States.

In 1908 the scheme was adopted with considerable modifications for Clerkships in the Foreign Office and posts of Attaché in the Diplomatic Service, and in 1911 with other modifications for appointments to Consular posts in the Far East. Under these schemes Foreign Office and Diplomatic Candidates must reach a high qualifying standard in French and German, and the total of the subjects offered by them must not exceed (in effect) two-thirds in mark value of those offered by candidates for Class I. Candidates for the Consular Service in the Far East have to qualify in French, and are under a similar limitation as to the number of subjects to be taken.

7. The Royal Commission appointed in 1912 to inquire into the method of making appointments in the Civil Service, in their fourth Report, dated April 2nd, 1914, made the following recommendation (22) relative to the scheme of competitive examination for Class I. of the Home Civil Service :—

“ A Committee composed of specially qualified persons should be invited to examine the suitability and methods of the Class I. examination.”

That Report was under the consideration of Your Lordships when war broke out on August 4th, 1914, and propositions for giving effect to this and other recommendations of the Royal Commission were suspended. But as time went on and the termination of the war was indefinitely postponed, it was felt that the revision of the chief Civil Service examination was a measure of reconstruction that should if possible be completed before the peace.

8. Accordingly, on 25th July, 1916, the Civil Service Commissioners caused a letter to be addressed to Your Lordships, the relevant portions of which follow here :—

“ The outbreak of war made it impossible to give immediate consideration to the Report of the Royal Commission as a whole. But the long duration of the war, the great interruption of University studies, the new start which must be made after the war, render it highly desirable in the opinion of the Commissioners that a new scheme should be prepared before peace is restored in order that the studies of intending candidates may be from the first guided in the directions which are judged most advantageous to education in general, and to the selection of suitable entrants for the Civil Service.

“ The present scheme has grown up by the addition of subject after subject until 38 subjects are on the list. This miscellany may permit a well-co-ordinated system of study; it certainly does not suggest or demand anything of the kind. The difficulties of equating with each other Classical studies, Modern Literary studies, Mathematical studies, Scientific studies, with such adjuncts as may be appropriately added to each, are beyond question very great. But it is not in the opinion of the Commissioners impossible to construct a scheme which will be more fair to the various classes of students, more encouraging to the co-ordination of study, and therefore better adapted for the selection of those young men who during the course of a complete and coherent education have made the best use of the best talents.

“ The eminent men, who have combined to bring to the notice of the Government and the country the ‘ Neglect of Science,’ have laid great emphasis on this highest Civil Service Examination. They are of opinion that the revision of the scheme should be considered forthwith, and have urged their views on the Commissioners by two informal deputations. The Commissioners themselves are of opinion that such subjects as language, literature, and history, are, on the whole and for the most part of young men, the best preparation for the Higher Civil Service. But, without committing themselves to any specific line of reform, they consider that the representations of this Committee require attention, and they concur in the view that reform should be considered at once in order that the young men who go up or return to the Universities after the war and desire to work for the Home Civil Service should start at once with a knowledge of the new conditions. Some interim and temporary measures will be needed during the two years or so after the war. When this transition period is over the new scheme should come into force at once. . . .”

The Commissioners therefore proposed that a small Committee should be nominated to consider the Class I examination and recommend a new scheme. In the composition of the Committee they submitted that the various interests and studies should be adequately represented by the selection of members to speak for the newer as well as for the older Universities, for scientific studies as well as for literary, and for modern studies as well as for those based on the learning of Greece and Rome.

9. By Treasury letter of 23rd August, 1916, Your Lordships concurred, and this Committee was constituted in due course with reference and composition as above.

ORIGINAL CONCEPTION AND DEVELOPMENT OF THE CLASS I. SCHEME.

10. The theory underlying the proposition of selection by open competitive examination among candidates for posts in the public service of the Crown was formulated by Lord Macaulay in a Report of a Committee on the Indian Civil Service dated November, 1854.

The following dicta still deserve to be borne in mind :—

“ Our opinion is that the examination ought to be confined to those branches of knowledge to which it is desirable that English gentlemen who mean to remain at home should pay some attention. . . . ”

i.e., to subjects of liberal education rather than to those which might be held specifically more useful to Indian Civil Servants.

“ Nothing can be further from our wish than to hold out premiums for knowledge of wide surface and of small depth. We are of opinion that a candidate ought to be allowed no credit at all for taking up a subject in which he is a mere smatterer. . . . ”

“ The marks ought, we conceive, to be distributed among the subjects of examination in such a manner that no part of the kingdom and no class of schools shall exclusively furnish servants to the East India Company. . . . ”

“ The youth who does best what all the ablest and most ambitious youths about him are trying to do well will generally prove a superior man. . . . ”

11. The theory stated by Lord Macaulay was constructed on the basis of facts which no longer exist, or have been greatly modified in the process of time.

The Consultative Committee of the Board of Education in their Interim Report on Scholarships dated 19th May, 1916, speak as follows :—

“ The joint examination for the Home Civil Service and the Indian Civil Service, which is also used for the Eastern Cadetships of the Colonial Office and, with modifications, for the Foreign Office, is an examination designed to suit men who have completed or are completing a full University course. When these examinations were instituted there was practically for all Englishmen only one course of Higher Education, a course of Classics and Mathematics. It was easy therefore to construct a competitive examination which would be equal for all trained competitors, and would select the best men, so far as examination can distinguish the best.

“ Since that time subject after subject has been added to the list of University courses. In 1855, when the Civil Service Commission was established, there were only three teaching Universities in England; there are now ten, besides University Colleges. The history of Cambridge since that time is typical of the general movement. At Cambridge there were then two Triposes, the Mathematical and the Classical. It was necessary to obtain honours in the Mathematical Tripos as a condition of admission to the Classical Tripos. Now there are at Cambridge eleven separate Triposes, in each of which severally an Honours Degree can be obtained. So far has specialisation been carried in Higher Education.

“ The Civil Service Commissioners have endeavoured to adapt their examination to these changes by adding subject after subject to their list, until their schedule contains 38 different subjects. Though Mathematics and Science together have great weight in the competition, neither Mathematics alone nor Science alone can command success. Taken together, the two require to be supplemented by Law, or History, or some literary or philosophic subjects. The examination is, in fact, devised as a test of general education rather than of specialised ability; but it has become more and more difficult to adapt the test to the conditions of modern Higher Education. . . . ”

“The Civil Service examination should be framed with conjoint reference to the needs of the Services and to the selection under the existing scheme of National Education of the candidates who have turned the best talents to the best advantage under that scheme. It should not be deflected in order to further the aims either of educational reformers or educational conservators. It is possible that the needs of India may be to some extent different from those of the Home Civil Service. But for both services the examination should continue to be a test of general rather than highly-specialised ability and education, so far as that is compatible with our system of National Education. It should be a test of training as well as a test of knowledge. It should include a *viva voce* examination. Finally, most germane to our present purposes, we suggest that, while a scientific and mathematical training is good for Civil Servants just as languages, History, Economics, and Law indubitably are, scientific and mathematical training are not enough by themselves for Civil Servants, but require to be supplemented by training in the use of words, and by knowledge of the institutions, the thoughts and the life of men.”

12. It may be added that the main subjects of education in Macaulay's time are among those which lend themselves most readily to processes of written examination and admit of tests leading to a relatively just distribution of numerical marks. Apart from the great multiplication of subjects of self-contained university study indicated in the last section, and apart from the great difficulty of valuing performance in disparate subjects to a just standard by numerical marks (for instance, in French as against Philosophy), many modern subjects of university study do not admit so exact a valuation of results as Greek translation and composition or certain branches of Mathematics. In History, for instance, one examiner may look for a mass of accurate and specific knowledge, another may lay more stress on intelligent analysis and synthesis, originality, order, and lucidity of expression. The syllabus of each subject has to be generalised to suit the methods of a great number of universities and a still greater number of teachers and students all working in freedom and independence. It is inevitable that the syllabus should be better suited to some institutions and to certain groups of candidates than to others. Just treatment of all candidates is more difficult than in the early days of the Civil Service Commission. Much greater elaboration of the scheme is required; and the task now imposed upon us who are called upon to advise, and on the Civil Service Commissioners who will have to administer, is far more complex than any that was contemplated by Macaulay. The scheme which we shall propose below will be found even more complicated than the existing scheme of the Civil Service Commissioners, but it is not more complicated than the circumstances with which it is intended to correspond.

THE EXISTING SCHEME.

13. In reporting on the existing scheme we are not invited to discuss the system of selection for the public service by open competitive examination. If we were so invited, we might be constrained to declare that the question was not open to free discussion on its abstract merits. Public opinion demands that such coveted appointments as those of Class I. should be made impartially without regard to class or connexions or any kind of influence. It would prefer that they should be made by merit, but it would hardly be satisfied unless merit for such purposes were determined objectively; and the results of public examination are held to possess such objectivity. Though it cannot be claimed for examination that it uniformly selects the best from among the candidates who present themselves, it may be admitted on the other hand that we do not need every year for the public administration the twenty or thirty most able and industrious and energetic and well-trained men that the nation can produce. To take all the best would be an injustice to all the other forms of national activity, which reckoned all together are many times more important than departmental administration. It would be an injustice to the men, the most part of whom could never hope to reach any position worthy of their talents, and a waste of invaluable material. We want as entrants to the Higher Civil Service vigorous, sound, well-educated men of good intelligence. If among those selected by open competition there are not always to be found a sufficient number who, after many years of

service, are, by virtue of their initiative, force of character, freshness of mind, and constructive ability, fit for the highest posts, the fault may lie in the system of training after entry, and in the conditions of subordinate service; it need not be with the competitive system. (See Sir George Murray's evidence, Appendix to the First Report of the Royal Commission on the Civil Service (C.D. 6210), questions 1955, 1958-1960.)*

14. On the other hand the faith in competitive examination is not what it was twenty years ago. Cambridge, the original home of "order of merit," has abandoned strict order of merit in most of its public examinations. The Senior Wrangler and the other Wranglers are merged in certain first classes or divisions of classes. There has been no Senior Classic for thirty-five years. Examiners, whose attention has thus been directed to classification rather than to arrangement in order of merit, have come to see that mere addition of numerical marks produces results not even in accordance with such justice as an examination is capable of dispensing. When numerical marks are applied not to one common schedule of subjects, but to the immense number of combinations that are permissible under the existing scheme, the degree of approximation to accuracy must be still less. When subjects such as History, Mathematics, and Natural Science, have to be brought to a common standard, that standard cannot be accepted as fully reliable. It will not be possible for us to recommend a simpler system without departing entirely from the conceptions on which this scheme is based. We might recommend that all candidates who had obtained first-class Honours in an approved course at any University should compete in some further examination designed to test the common results of an entire education, rather than the several results of many specialised forms of education. The germ of such an examination may be seen in our proposed Section A. below (Paragraph 36, p. 19). But we do not consider that the time has come for so complete a revolution.

15. Accepting the principle of open competitive examination, we regard the existing scheme as designed to test the results of University education in general, and not the results of a special education preparatory to public service. It would no doubt be possible to construct a scheme of examination comprising only subjects directly useful in the Home Civil Service, another such for the Indian Civil Service, another for the Foreign Office, and so forth. But we agreed with the Consultative Committee (Paragraph 11 above) that the examination should continue to be a test of general rather than specialised ability and education, and that it should be a means of selecting under the existing scheme of National Education those candidates who have used the best talents to the best advantage under that scheme. We consider that the best qualification for a Civil Servant is good natural capacity trained by a rational and consistent education from childhood to maturity. We consider that the first requisite for a successful competition is a good field of candidates, and that such a field can best be obtained by adapting our scheme to the chief varieties of University education; so that candidates while working for University honours will be at the same time preparing themselves to join in the competition if when the time comes they are attracted by it. We do not wish candidates to adapt their

* 1955. (*Mr. Boutwood.*) At the commencement of your evidence you said something—I forget the exact words—but it amounted to this: That you had some temptation to feeling disappointed with the men in Class I. What led you to that; what was the nature of the temptation; what did you find in them that made you inclined to feel disappointed?—(*Sir George Murray.*) What I was thinking of was this: That while the men who are drawn from the Class I. examination are, I think, very good for the purposes for which they are required for the first ten, or twelve, or fifteen years of their official life, I have at times been rather disappointed at finding how few of them emerge satisfactorily from the ruck and come out as really capable heads of departments.

1958. (*Chairman.*) Will you just explain a little further. Is there, do you think, anything defective in the original way of selecting the first division men, which explains the fact you mentioned of their turning out badly when they get to fifteen or twenty years' service?—(*Sir George Murray.*) I did not wish to say that I thought they turned out badly as a body, but merely that I should have expected that more of them would have been better qualified for the best places that were open to them. But I do not think that anything that you could do in prescribing the subjects for examination, or in making any change in the method of appointment, could possibly affect that.

1959. Might it be quite accidental that in a particular year, or two or three years, you might get a rather inferior lot of men by the examination. That has happened in the Indian Service to my own knowledge?—They do vary a good deal. As you know, the examination is the same for both the Home and the Indian Civil Service, and no doubt the same results take place.

1960. Has there been any change in the age of recruitment for your service which might probably furnish a clue?—I do not think there has been any material change.

education to the examination; on the contrary, the examination should be adapted to the chief forms of general education. We consider it highly important that candidates who sit for this competition and are unsuccessful should be as well qualified, at least, for other non-technical professions as if they had never thought of it. For all these reasons we hold that any scheme that we propose should be accommodated to University education as it at present exists rather than to some scheme of instruction specially devised for the public service. But we think it necessary to give in our scheme duly proportionate weight to the various sides of University education; and in particular:—to give due value to the results that should be expected from a good general education; to attach higher value than at present to certain University subjects that seem to provide suitable knowledge and training, such as history, economics, law, and politics; and throughout to ensure that sufficient attention should be paid to modern conditions.

16. The existing scheme has been condemned on the ground that it gives an excessive advantage to candidates chiefly trained in the learning of ancient Greece and Rome. Some no doubt would wish us to put the Classics at a disadvantage, or to exclude them altogether from the examination. We are not inclined, nor do we think it to be our duty, to put any handicap on the widest, the most systematic, and the most consistent humanistic education that at present exists in this country. We shall make the attempt to put similar and equivalent learning related to modern peoples on an equal footing with Classical learning. But we cannot thereby alter existing conditions, though we may assist by our action the improvement and development of a consistent and continuous education in the language, literature, and history, of the most important European nations. We cannot expect forthwith to find many candidates thoroughly trained in the language, the scholarship, the thought, the social and economic history even of France, as men are now trained in the like learning that appertains to Greece. There will not soon be candidates whose knowledge of France has been built up systematically through twelve or fourteen years; the standard and tradition of scholarship in such studies will not be quickly built up to the Classical level. To teach the Classical learning and develop Classical scholarship there was at work in 1914 a great band of scholars equipped by the tradition, the organised learning, and the experience, of four hundred years. We cannot create for the Modern Languages an equivalent staff of teachers by altering an examination. A large proportion of the most able students have gone in the past to Classics, and we cannot alter the national habits, the prepossessions, and the system, that have caused the most gifted among literary students to follow the ancient studies. But we can give an equal opportunity to modern studies; the schools and Universities must do the rest; if the nation desires enlightenment and sound training to proceed from modern studies it will no doubt in course of time obtain what it desires provided it is prepared to use the requisite means. We do not reckon the influence of this competition to be so great as it is sometimes said to be; but so far as its influence extends we think it should be used to encourage modern studies, though not by accepting an inferior equipment in modern languages, literature, and history, as the equivalent of a much higher equipment in similar Greek and Latin learning and scholarship. Our scheme should be based as Macaulay suggested on the existing scheme of national education; but at the present conjuncture, and with the present needs, we think it may be usefully employed to strengthen elements that still are weak; and by setting up a high standard that may for a time be seldom attained, we conceive that we shall be aiding rather than impeding the healthy development of modern studies; and in the words of our reference adopting means "most advantageous to the higher education of this country."

17. The existing scheme has also been condemned on the ground that it does not give equivalent weight to Natural Science. That contention is either true or not true according as Mathematics and Natural Science are reckoned separately or together. Taken together, in the scheme of 1906 Mathematics and Natural Science had great weight, receiving altogether 4,800 out of 6,000 possible maximum. The Civil Service Commissioners feared indeed that among the candidates obtaining the highest places too many would be found who showed little proof "of training in the use of words and knowledge of the institutions, the thoughts, and the life of men" (Consultative Committee, *loc. cit.* section 11 above). They accordingly used the only device that their scheme permitted to secure greater width of outlook, and

reduced the proportion of marks obtainable by the combination of Mathematics and Natural Science from 4,800 to 4,200. Even under these conditions a fair number of candidates whose chief strength lay in Mathematics or Science or both obtained very high places; but we recognise that it is no longer permissible to assume that Mathematics and Natural Science form one single University whole. We consider that both Mathematics and Natural Science should be put on an equal level for the purposes of this examination with all other first-rate non-technical University studies, and we propose to obtain evidence of general education suitable to Civil Servants by a separate section of the examination common to all candidates alike. We do not wish to divert from research and industry Mathematicians and men of Science who may be needed more elsewhere than in the general administrative work of the Civil Service; but we think that the encouragement of scientific study at the University resulting from equal treatment may be at least equivalent to any diversion of talent from more suitable occupations that may result; a sense of injustice will be removed, and thus we trust harmony among men of learning may be promoted to the benefit of all forms of learning alike.

18. It has also been represented that the existing scheme gives an undue advantage to Oxford and Cambridge over the other Universities of the United Kingdom. The system of scholarships at Oxford and Cambridge attracts to those places of learning a great proportion of the ablest and best trained students. If the results of the competition did not correspond to this fact, something would be wrong with the competition. Moreover, the conception of the existing scheme requires a wide range of instruction, and the Classical course of Oxford, and to a less degree, that of Cambridge, are the widest of University Courses. Both these Classical courses require a high standard of attainment in two languages, and a wide knowledge of two literatures; the Oxford course also requires a thorough training in the eventful history of two races; and, in order to obtain full benefit from the conditions of the competition, Classical candidates must also show good proficiency in Philosophy. No other University course offers a like diversity of coherent training. But all Universities have admitted a high degree of specialisation in studies other than the Classical group, and we are of opinion that these should be treated on equal terms in the Civil Service examination. We propose an expedient which will, we hope, be a corrective at once to the narrowness of interests and knowledge and the lack of useful accomplishments which may be the defects of the specialist, and to the ignorance of modern conditions which may be the defect of students too exclusively devoted to ancient learning. If our tests, designed for all candidates, work as we intend them to work, the candidate who is best educated and who has best educated himself, whatever may have been the bent of his principal studies, will obtain an advantage in Section A, and the mere specialist, whether in Classics or in any other subject, will find himself left behind by those who have kept their minds open to the acquirement of necessary knowledge and accomplishments. By this proposal we conceive that we have done justice to all Universities and provided machinery which should select for the Civil Service the class of men who are needed for the work of the Departments.

19. The Civil Service Commissioners, by their letter of 25th July, 1916 (Section 8, above) show that they themselves are not satisfied with the existing scheme. The last revision was brought into force in 1906, and was a step in the right direction, though it probably was impossible at that time to establish equality of studies and more systematic co-ordination. That revision having been carried through, further changes were undesirable until some time had elapsed; frequent alterations in a scheme affecting many institutions and some hundreds of intending candidates have a disturbing effect; but when the Royal Commission was appointed in 1912 time was ripe for a more complete reconstruction, and but for the war some such Committee as this would very likely have been set up in 1914, and would have completed its work two years ago. But it will probably be admitted that the effects of the war in suspending University studies, breaking up traditions, and shaking preconceived ideas, render possible changes more fundamental than any Committee would have proposed in ordinary times and than the various vested interests would have tolerated before the war. The Civil Service Commissioners inform us that they are prepared to welcome a reform more drastic than they could have accomplished by their own initiative.

THE SCHEME PROPOSED BY THIS COMMITTEE.

Section B. (Paragraph 36, p. 19, below.)

20. We have already indicated that we consider that this scheme should be established on a basis of equality of studies; that is, of the chief studies which are pursued by students at the University up to the conclusion of an Honours course. We propose to place on an equal footing the main schools of: Classical languages, history, and literature; Modern languages, with history and literature; History; Mathematics; and the Natural Sciences. The Classical subjects will be valued at 800 marks; History and Mathematics at the same; candidates in Natural Science taking one main subject up to the higher level and two subsidiary subjects on the lower level can obtain the same totals; while two Modern languages studied as comprehensively as the Classics will be worth the same. It is possible, however, that for some time candidates able to take full advantage of this last opportunity may be few. We propose that the candidate coming from any one of these Schools shall be encouraged—it might almost be said constrained by the force of competition—to offer one or two other additional subjects estimated by us as the equivalent of one fourth part of his whole main subject. This addition, valued at 200 marks, may be made up in many ways, and we do not propose to limit in any way the free choice of candidates. There is also a great range of University studies—political, legal, economic, and philosophical—which have not been as yet, so far as we know, consolidated into one Honours School, though the courses offered by the London School of Economics may cover the most part of them. We have greatly increased the individual and collective weight of these studies, but we do not consider it desirable that candidates for the Civil Service should study exclusively either politics, law, economics, or philosophy; however, for students whose chief interest lies in two or more of these subjects we offer a varied field of selection which is fully equivalent to that appertaining to any of the Schools mentioned above.

21. While grouping subjects as above, and expecting that on the whole the main choice of candidates will be in one or other of the groups, we retain for subjects of University study the old freedom of selection. Whatever limits we imposed upon the choice of candidates, we should still be confronted by the difficulty of equating disparate subjects; *e.g.*, Language including literature and history, Mathematics, History, Natural Sciences. That difficulty has to be solved as best it may by the Civil Service Commissioners and their permanent and occasional staff. It will be no greater under our proposed scheme than it is under the existing scheme. Moreover, we think it would be difficult to make up a list of subjects under our proposed scheme which would not secure a useful University education, either narrower or wider.

Section A. (Paragraph 36, p. 19, below.)

22. But we do not consider it necessary to confine our tests to the results of University study alone. The young men who will be examined by the Civil Service Commissioners will have spent not only three or four years at the University, but ten or more years at school; and the best of them will have had abundant leisure in which to educate themselves and pick up knowledge and accomplishments useful to them in the work of life. Much that they have learnt at school they will quite rightly have forgotten, but that knowledge should have served its purpose; and we do not propose to examine our candidates in school subjects. But we consider that a sound and systematic education should show certain results at University-leaving age; and that candidates who, while devoting themselves to their individual studies, have nevertheless retained an alert and acquisitive mind and have kept their eyes open to the most important facts in the world around them, should have seized and retained a certain amount of knowledge—scientific, economic, and political. We consider it also highly desirable that all Civil Servants should have a good working knowledge—that is, a reading and translating knowledge—of at least one modern foreign language, preferably two.

23. On this basis we have constructed a separate section that all candidates must take. We consider that all well-educated young men should be able to use the English language skilfully and accurately and to grasp its meaning readily and correctly. This accomplishment is specially valuable for Civil Servants, but any form of education that has not developed it has failed in a principal part of its purpose. We therefore propose in the first place that all candidates should

write an essay. This test in the existing scheme was optional, though nearly all candidates took it, perhaps because they thought it required no special study. To construct an essay and work out therein a line of thought with suitable words, logical order, and just proportions is a severe criterion of ability. But it is found by experience that an excellent candidate may on any one occasion fail to do justice to his powers. We therefore propose that candidates should have in other papers opportunities of manifesting like powers of arrangement and effective expression. One of these papers should be a test in English (Section A, subject 2), the nature of which may best be understood by reference to the specimen paper, Appendix A, below. That specimen is somewhat longer than we should think it necessary to set as a rule; it was devised to give some idea of the variety of questions that may be constructed, which is in fact much greater than could be shown even in four or five such papers. But the paper should not be too short. It is desirable that these young men should be able at a glance to seize the nature of a printed passage, to judge what is required of them in connexion with it, and whether it is suited to their tastes. Those who have to spend much time in reading even such a paper as we submit cannot be expert readers of English. Severe economy of words with consecutive and coherent exposition will be required in the exercises. Candidates who have a taste for verse will have a chance to show their skill. If Latin verses have been held by many generations of Englishmen to be an exercise conducive to the mastery of the Latin language, English verses may have a like value as practice in restrained and balanced composition.

24. Further, we propose a paper (3) in modern subjects, social, political, and economic. A specimen paper is printed below (Appendix B). It may be found that many—perhaps most—young men of our country are unduly ignorant of such matters. But the existence of this test should encourage many to turn their attention to these subjects and accumulate in their leisure much useful information. Effective and skilful exposition will be expected, and the young man who has hastily acquired a few facts will not shine beside him who has an easy command of principles and well-digested knowledge. It should be noted throughout this Section A that no candidate will be disqualified for failure in any part, or in the whole of the Section: though, since we allow 500 marks for the written part of the Section, there is much advantage to be gained or lost thereby in the whole competition.

25. We have received from the Government Committee on Science in the Educational System of Great Britain the following resolution:—

The Committee have had under their consideration certain proposals for remodelling the Competitive Examination for admission to Class I. of the Civil Service at home and in India or in the Colonies. They are unanimous in thinking that it is indispensable that a course in Science extending over several years shall have formed a serious part of every candidate's previous education. They are, however, not prepared to trespass on the province of the Committee which is dealing in detail with this Examination. They feel strongly that if the men with high scientific qualifications who will undoubtedly be needed in the Service to a greater or less extent are to be secured at a comparatively early age by this Examination, then candidates offering Science only (without Mathematics) should in future be placed on complete equality with other candidates, and that this is not the case at present. But they recognise that there may be advantages in obtaining also by other methods scientific advisers for the Service at a greater age and with practical professional education.

With the trend of this resolution we find ourselves in general agreement; and we desire to make it clear that by placing Science, as we have endeavoured to do, on a complete equality with other subjects of a University course, we do not expect to make it possible for certain Departments to dispense with scientific advisers selected in maturer age and possessed of practical experience and of knowledge of a kind that may have to be obtained elsewhere than at a University. And in some Departments specialists in one or another branch of Science will doubtless be selected by tests of a less general kind than that with which we are concerned. The young men selected under our scheme partly for their knowledge of Natural Science, unless they happen to be employed in a scientific branch of the Department in which they are working, may have no opportunity of exercising their scientific acquire-

ments and their knowledge may pass out of date. They should, however, not lose a just estimate of scientific knowledge, and they should know when and where it may with advantage be sought.

We must, however, make one reservation to the terms of this resolution. The "indispensable" requirement of a School course in Science must apply rather to the future than to the present. We cannot now correct the defective education of the past or rule out from our competition for some years to come all those useful candidates who may not satisfy this demand of the Science Committee. Perhaps later it may be possible to require of all candidates some form of School Certificate which may be evidence of suitable training in this and some other subjects not tested by the Examination.

26. However, we think we may even now go so far as this. We can give a substantial advantage in the competition to those candidates who by whatever means have obtained and retained a sound knowledge of some of the principles, methods, and applications of Science, and are able to give a lucid and intelligent account of their knowledge. Our specimen questions for Subject 4 will be found in Appendix C below. It is hoped that the inclusion of this Subject in the scheme will encourage all candidates to make themselves acquainted with the general principles of Science. This paper will also be a test of orderly, effective, and exact expression.

27. Finally, we propose to allot 100 marks for a translation paper from some modern foreign language. We intend this paper to be a serious test of capacity to understand and translate accurately passages from the foreign language. We do not propose to limit the scope; verse may be set as well as prose; but nothing that is antiquated should appear; the candidate should be able to master any passage that is likely to occur in books of ordinary difficulty written in the living tongue; passages dealing with history and politics may be set; but not any technical matter. This, like Subjects 3 and 4 in the Section, should be not only a test of specific knowledge, but also a test of capacity to use the English language with skill and accuracy. For this reason we have assigned a somewhat higher maximum to translation in this section than may possibly be accorded to it in the relative subjects of Section B. The languages mentioned in our list (Subject 5, Section A) are those which appeared to us most likely among European languages to afford information useful to students or to Civil Servants, or to both. We include Latin as an option for those candidates who take two modern languages in B because Latin is commonly imposed at school upon those pupils who take Modern Languages, and we do not wish to lay any unnecessary burden on the Modern Language Candidates. In any case, for candidates who have mastered two languages, classical or modern, there should be no hardship and much advantage in acquiring a third.

Extra Numerum Languages (at the end of our scheme, page 21, below.)

28. Since it is of high importance that Civil Servants should have ready use of two modern languages, we include among our recommendations that any candidate who wishes to offer a second Modern Language on the same terms as in Section A should be permitted to do so beyond the limit of the subjects prescribed in Section A and those permitted in Section B. To acquire a modern language for reading and translation purposes should not be a difficult task for any well-educated man; it can be done in leisure time with a little assistance. But some adequate motive is needed to induce the effort; an effort which should be made by students of History, Natural Science, Politics, Economics, and, indeed, of almost all the subjects in our schedule, but in fact is not always made. We trust that in course of time all our candidates will be prepared to offer two modern languages up to a useful standard, but we do not at present propose to make two compulsory. We hold out an advantage to those who offer two, but success will be possible with only one, and in some cases perhaps without any.

THE *VIVA VOCE* EXAMINATION.

29. The Royal Commission expressed a cautious inclination towards a *viva voce* Examination, but made no definite recommendation. The Consultative Committee in their Report (Section 11 above) say that there should be a *viva voce* Examination. On this point, as on almost every point of our Report, we are unanimous. We believe

that qualities may be shown in a *viva voce* examination which cannot be tested by a written examination, and that those qualities should be useful to public servants. It is sometimes urged that a candidate—otherwise well qualified—may be prevented by nervousness from doing himself justice *viva voce*. We are not sure that such lack of nervous control is not in itself a serious defect, nor that the presence of mind and nervous equipoise which enables a candidate to marshal all his resources in such conditions is not a valuable quality. Further, there are undoubtedly some candidates who can never do themselves justice in written examinations, just as there are others who under the excitement of written competition do better than on ordinary occasions. We do not consider that it is desirable to forgo the *viva voce* test for the advantage of a few weak vessels. As we say below (page 19), we consider that the *viva voce* can be made a test of the candidate's alertness, intelligence, and intellectual outlook, and as such is better than any other. The *viva voce* examination has been proved by experience to redress in certain cases the results of written examination. The examination should, of course, be skilfully conducted by carefully selected examiners accustomed to handle young men and to put them at their ease. We consider that the *viva voce* examination should not be in matters of academic study, but in matters of general interest, on which every young man should have something to say. We think that the marks assigned under this heading should be a valuable corrective to the results of the written papers, and should not infrequently help a useful man to success or save the State from a bad bargain.

“SMATTERING DEDUCTION.”

30. In our opinion the practice of the Commissioners of deducting a proportion of marks from the gross totals obtained by candidates in the several subjects and readjusting the remnant should be applied to all the subjects in our schedule. The result of this device, besides eliminating the smatterer, is to give a higher premium for excellence in any individual subject and to depress those who reach only a moderate level in all. We see no reason why the practice should not be explained for the information of all concerned. It consists of deducting one-fifth of the maximum from every candidate's marks and adding thereto one-fourth of the remainder. Thus on a maximum of 100 a candidate who obtained 20 or less would be credited with none. A candidate who gained 52 would get $32 + 8 = 40$; a candidate who received full marks would be credited with $80 + 20 = 100$, and thus suffer no deduction at all. In other words, the candidate's deficit from full marks is increased by a quarter.

UNIT OF VALUE AND NUMBER OF PAPERS.

31. The unit of marks throughout our valuation is 100; some subjects and some parts of some subjects are valued at two units; two parts of Mathematics each at four units; and the total maximum that candidates may compete for in Section B (the optional section) is 10 units; that is, 1,000 marks. The inconvenience is thus avoided which arises from the incommensurate units of the existing scheme. That scheme comprises units of 200, 300, 400, 500, 600, and multiples of those units, and necessitates the inconvenient and illogical device of reducing the valuation of some particular subject for those candidates whose selection cannot be otherwise made to correspond with the present fixed maximum of 6,000. The marks assigned to each subject indicate the valuation which we place upon it for purposes of this competition. The question of the number of papers by which any individual subject should be examined is a question for the Commissioners and their assistant examiners. One unit of 100 may require two papers; another like unit may be examined satisfactorily in one.

LIMITS OF AGE.

33. We propose no change in the limits of age, which are at present not less than 22 nor more than 24 on the 1st August in the year in which the competition is held. Under existing practice the examination begins on the 1st of August or on the 2nd of August if the first is a Sunday. We consider this time of year convenient for University candidates.

HANDWRITING AND SPELLING.

33. We are informed that some improvement in handwriting has been observed since the deduction for bad handwriting was instituted; though the examination comes too late in the life of the candidates for any conspicuous influence to be perceived. Really bad spelling has been very infrequent in this competition; we admit that some rare individuals of distinguished ability have been unable to spell, but we think such an idiosyncrasy disadvantageous in Civil Servants, and the system of deductions should be continued.

THE FOREIGN OFFICE, THE INDIA OFFICE, AND THE COLONIAL OFFICE.

34. We have consulted these Departments informally, sending copies of our draft Scheme with such explanatory notes as seemed needed. In each case very careful consideration was given to the question whether the Scheme as proposed was suitable or could be adapted for use in their Competitions as heretofore.

The Colonial Office consider that the selection of Eastern Cadets by means of the Class I. Examination has had good results, and they would be very sorry to discontinue that method. They are, therefore, prepared to accept the scheme if it goes through approximately as submitted to them.

For the Foreign Office, whose use of the Class I. Scheme has been in a very much modified form, a rough scheme was drawn up embodying what were believed to be their principal requirements. They consider the proposed Scheme very suitable for Foreign Office clerkships and posts of Attaché in the Diplomatic Service, and are satisfied that it can be adapted to their needs without difficulty. They suggest certain alterations to which our Scheme can be fitted without in any way impairing its character. Such details would be for discussion between the Foreign Office and the Civil Service Commissioners, should our Scheme be adopted for Class I. The Consular Service and the manner of selection thereto is under consideration with a view to revision; no decision can therefore be given as to the scheme of selection for the Consular Service of the far East (*see* Paragraph 6, above).

The India Office have under consideration the Report of the Royal Commission on the Indian Public Services, in consultation with the Indian Government. Should the proposals of that Commission for the Indian Civil Service be adopted the India Office will be no longer able to use the Class I. Scheme, since their candidates would then be selected at school-leaving age, and not at university-leaving age. If simultaneous recruitment for the Home and Indian Civil Service continues, the India Office state that they would no doubt accept what is best for the Home Civil Service for the Indian Civil Service also so far as Europeans are concerned. They point out that the Scheme, as given in paragraph 36, presents several serious disadvantages for Indian candidates, some of which they enumerate. Our Scheme as it stands was not designed to meet the needs of Indian candidates, but we have kept those needs in view, and we see no difficulty in adding for Indian Civil Service candidates such subjects as are mentioned in the India Office letter, or in making such substitutions in other cases as they desire. Other points may require adjustment, but we see no reason to doubt that such adjustment is entirely practicable.

35. We may now lay before Your Lordships the schedule of our scheme as a whole. The practice has been that the scheme when approved by Your Lordships is gazetted, and cannot be changed without your consent. But the explanatory syllabus has always been under the complete control of the Civil Service Commissioners, who can alter the detail of any part of the scheme year by year as experience suggests. We consider that this discretion must continue to remain with the Commissioners, who have always given due notice of any important change; and we therefore postpone our suggestions as to syllabus until the schedule has been set forth in full, when we shall subjoin such notes on the treatment of individual subjects as we propose on our own motion, or on the suggestion of the Sub-Committees which have reported to us.

36. SCHEME OF EXAMINATION PROPOSED BY THE COMMITTEE

*Section A.**To be taken by all Candidates.*

<i>Subjects.</i>	<i>Marks.</i>
1. Essay	100
2. English	100
3. Questions on contemporary subjects, social, economic, and political	100
4. Questions on general principles, methods, and applications of Science	100
5. Translation from one of the following languages not taken in Section B., viz., French, German, Spanish, Italian, Portuguese, Dutch, Norwegian, Swedish, Danish, Russian; Latin being also an option for those who take two modern languages in B.	100
6. A <i>viva voce</i> Examination	300
Total for Section A...	800

This Section is intended to test the candidates' knowledge of the English language and their capacity for its skilful use, their accurate command of knowledge which they should have acquired in the course of a systematic education and self-education, and should have retained to assist them in their future work, and their equipment in one foreign language at least for working purposes. The languages selected are those most likely to afford information useful to public servants. As circumstances change others should be added at the discretion of the Civil Service Commissioners.

The *viva voce* should be a test, by means of questions and conversation on matters of general interest, of the candidate's alertness, intelligence, and intellectual outlook, his personal qualities of mind and mental equipment.

It is not intended that any candidate should be disqualified for failure in any of the parts of this Section or in the Section as a whole, but that the Section should count substantially in the competition.

*Section B.**Optional Subjects.*

Candidates to be allowed to take up subjects in this section up to a total of 1,000 marks.

Languages with History and Literature.

<i>Subjects.</i>	<i>Marks.</i>
7. Latin, translation, and prose or verse composition	200
8. Roman history and Latin literature	200
9. Greek, translation, and prose or verse composition	200
10. Greek history and literature	200
11. French, translation, free composition, set composition, and conversation	200
12. French history and literature	200
13. German, translation, free composition, set composition, and conversation	200
14. German history and literature	200
15. Spanish* or Italian,* translation, free composition, set composition, and conversation	200
16. Spanish* or Italian* history and literature	200
17. Russian,* translation, free composition, set composition, and conversation	200
18. Russian* history and literature	200

The history and literature subject associated with each of these languages (7-18) can only be taken by candidates who also offer themselves for examination in the relevant language in Section B.

* Papers on these languages should only be prepared on evidence presented one year in advance and satisfactory to the Civil Service Commissioners that at least one candidate will present himself who is likely to be fit for examination on a standard equivalent to those in French and German.

Subjects (continued).

	Marks.
19. English literature, 1350-1700	200
20. English literature, 1660-1914	200

History.

21. English History to 1660, social, economic, political, constitutional	200
22. British History, 1660-1914, social, economic, political, constitutional	200
23. European History, 1494-1763	200
24. European History, 1763-1914	200

Economics, Politics, Law, and Philosophy.

25. General Economics	200
26. Economic History	100
27. Public Economics, including Public Finance... ..	100
28. Political Theory	100
29. Political Organisation	100
30. The Constitutional Law of the United Kingdom and of the British Empire, and the Law of English Local Government	100
31. English private Law	200
32. Roman Law	100
33. Public International Law and International Relations	100
34. Moral Philosophy	100
35. Metaphysical Philosophy	100
36. Logic	100
37. Psychology	100

Mathematics and Science.

38. Mathematics, Lower	400
39. Mathematics, Higher	400
40. Astronomy	200
41. Statistics	100
42. Chemistry, Lower	200
43. Chemistry, Higher	200
44. Physics, Lower	200
45. Physics, Higher	200
46. Botany, Lower	200
47. Botany, Higher	200
48. Geology, Lower	200
49. Geology, Higher... ..	200
50. Physiology, Lower	200
51. Physiology, Higher	200
52. Zoology, Lower	200
53. Zoology, Higher	200
54. Engineering	400
55. Geography	200
56. Physical Anthropology, Prehistoric Archæology and Technology	100
57. Social Anthropology	100
58. Agriculture	200
59. Experimental Psychology	100

A candidate desiring to offer any of the subjects 42-54 or 59 must produce evidence satisfactory to the Commissioners of Laboratory training in an institution of University rank. For (40) Astronomy, (41) Statistics, (55) Geography, (56)

Physical Anthropology, &c., and (58) Agriculture, other equivalent training will be required. There will be no laboratory test as a part of the examination.

Extra Numerum.

Candidates may take, in addition to the above, one of the translation papers of Section A. in a language not already taken by them in that section, not more than one of the Scandinavian languages, nor more than one of the three, Spanish, Italian, Portuguese, being offered by the same candidate; for this 100 marks will be awarded not included in the 800 of Section A. or the 1,000 of Section B.

37. NOTES ON THE SCHEME PROPOSED BY THIS COMMITTEE.

Section A. There is nothing to be added to the remarks in Paragraphs 23-30 above.

Section B. Subjects 7-18. *Languages with History and Literature.* The proper position of Latin and Greek verse in this competition has been for a long time very difficult to decide. So long as candidates had spent so large a part of their time of study in perfecting themselves in these difficult accomplishments, it seemed hard to refuse them any recognition. But for many years an option was allowed. Candidates were permitted to offer in lieu of verse a prose essay in Greek or Latin. This option did not seem to the Commissioners of 1908 a fair equivalent. They were of opinion that verse composition should be either omitted from the competition, or allowed separate credit. In 1909 it was decided to give it separate credit, and in 1911 this change came into effect.

Having regard to the present aims of Classical Education it seemed to us that the fairest course would be to make verse composition an alternative to prose. It may be expected that a large majority of candidates will offer the latter, but there is no need that those who excel in verse should be denied their opportunity.

It seems desirable that in every case history and literature should be brought into close relation; it may be noted that this principle was adopted in the earlier schemes (Paragraphs 1, 2, and 4) but afterwards, as it seems to us, unhappily abandoned. The questions on literature should require first-hand knowledge of the authors; and the authors dealt with should be those which candidates ought to have read. For the modern languages it may be desirable to publish a list of authors with whom candidates should be acquainted. It may be convenient to set passages of literature for comment on matters of social, political, legal, or other historical importance. Questions on grammar should not, in our opinion, be set in this examination. The grammar is part of the scaffolding by which scholarship is built up. The scholarship should be tested, but not the means by which it was acquired. Questions on philology and the older forms of the languages may be set, but should not be compulsory.

Subject 8. *Roman History.*—The outlines of the history and development prior to 133 B.C. should be known; but the main stress should be laid on the period 133 B.C. to 180 A.D.

Subject 10. *Greek History.*—The main stress should be on the period 510 B.C. to 323 B.C.

Subject 12. *French History.*—The outlines of the history and development prior to 1589 should be known; the period 1589-1660 in somewhat more detail; but the main stress should be on the period 1660 to the present day.

Subject 14. *German History.*—Candidates should know in outline the history of the Medieval Empire, of the growth of the German cities, of the Reformation in Germany, and of the Thirty Years War; but the main stress should be on the period from the accession of Frederick the Great to the present day.

Subjects 15, 16. The similarity of the Spanish and Italian languages being great, it is not thought desirable that candidates should offer both in this examination.

Subject 16. *Spanish History.*—The main stress should be laid on the periods from the Union of Castile and Aragon under Ferdinand and Isabella to the liberation of the Netherlands, and again from 1800 to the present day.

Italian History.—The main stress should be on the 15th century and the first half of the 16th century, and again on the period from 1789 to the present day. Sufficient should be known of the earlier period to understand the position of the Pope and the Emperor in Italy, the rise of the towns, and the position of Dante in history.

Subject 18. *Russian History*.—Something should be known of the history since the accession of Peter the Great, but the main stress should be laid on the period from 1800 to the present day. Only the broadest outlines of the history prior to Peter the Great should be required.

Subjects 19, 20. *English Literature*.—The subject presents great difficulty of examination treatment, but we felt that it deserved an important place both on its intrinsic merits and as the subject of a separate School in several Universities. Aided by the recommendations of a Sub-Committee, we recommend the division of the subject chronologically, with an overlapping period, so that Milton and Bunyan can be taken with the earlier period, Dryden with the later. We do not recommend the inclusion of the history of the language before Chaucer, nor, in general, of its morphological or phonological changes since his time; we do not consider the grammatical and philological study of our language suitable to this competition, though the history of workmanship, style, and prosody, should not be excluded. Candidates should be prepared to show a first-hand knowledge of some of the works of the following authors and of their place in the history of their country:—

1350–1700.

Chaucer.	Bacon.
Malory.	Milton.
Spenser.	Bunyan.
Shakespeare.	

1660–1914.

Dryden.	Johnson.	Shelley.
Congreve.	Goldsmith.	Keats.
Defoe.	Burns.	Dickens.
Swift.	Scott.	Carlyle.
Addison.	Jane Austen.	Tennyson.
Pope.	Wordsworth.	Browning.
Fielding.	Coleridge.	

Questions on other writers should not be excluded, but, on the whole, the questions should be directed to the best-known authors and their best-known works, and questions on text-book knowledge should be avoided so far as possible. Candidates should know so much of the history as is necessary to understand the literature in its relation to other activities of the nation; and we hope that candidates whose main strength lies in English literature will also fit themselves to take the papers on English History. We consider that both the historical and the literary studies would benefit thereby.

History.

The examinations in History in the various Universities differ so widely that we have had no option but to generalise the subject in four divisions, two of English History, and two of European History. We do not consider that the authorities set since 1906 for the special periods of European History have been a success, and we propose to drop prescribed books. Candidates should know something of the original authorities, of the principles of historical criticism, and of the principles and the facts of geography in relation to the history.

Subjects 21, 22. *English History and British History*.—We have adopted a somewhat different line of division from that hitherto usual, partly because the later period should include the history of the British Empire and will, therefore, be more heavily weighted, partly because throughout we have desired to give more weight where possible to the modern. The period of the first two Stewarts can either be taken as the beginning of the new age or the end of the old. We have preferred to regard it in the latter aspect. We consider that for our purposes, at any rate, English History should be taken as a whole and not separately, as political, constitutional, economic, &c. There is advantage in teaching and studying the history in these various aspects, but when it comes to testing the results, politics,

economics, and constitution, must be considered as mutually affecting each other and all together as the outcome of the common life of the nation. As history should have some position as of right in the English literature subjects, so literature also should not be excluded from the history subjects. Candidates should be expected to know so much of European history as will make the external action of this country fully intelligible and will explain those movements at home which had their beginnings abroad, *e.g.*, the Renaissance, the Reformation, and the reactions in this country of the French Revolution.

Subjects 23, 24. *European History*.—With regret we have omitted from our scheme the medieval history of Europe. We consider that we cannot expect our candidates to be masters both of the modern history and of the medieval, and, as some part must be sacrificed, we think it should be the medieval. We do not think that the influence of this examination is likely to be so far-reaching that medieval studies will suffer appreciably if our recommendation is adopted. Candidates who study both English and European History should have a sufficient knowledge of those aspects of medieval history, which are most necessary to an intelligent understanding of more modern times, *e.g.*, the history and position of the Catholic Church in Western Europe. It should be made clear to candidates that, although a fixed date is given for the beginning of a period, they may fairly be expected to know in general outline how the initial position was reached. We have taken the intervention of the French in Italy as a convenient starting point for modern European history, and the end of the Seven Years' War as a convenient beginning for the most modern part, but we do not desire that either period should be treated as quite watertight. The history of the American continent, of India, and of the Far East, should be included in so far as it influences European fortunes in an important degree.

Economics, Politics, Law, and Philosophy.

Subject 25. *General Economics*.—We recommend that General Economics be made a single subject, since it is difficult and undesirable to separate the theory from what is sometimes called descriptive or realistic economics. We desire that candidates should be prepared to illustrate the theory by the facts and to analyse the facts by the help of the theory. No further definition of General Economics seems to be needed beyond that which is implied by the separation of Public Finance and of Statistics. This last subject, so important for Civil Servants, we have separated for thorough treatment, and, acting on the advice of our Economics Sub-Committee, we have included it in the Mathematical and Scientific group, as implying a wider conception of the art and science of Statistics than if we were to treat them merely in their economic bearing. The history of economic thought will receive some attention under the head of General Economics, but it was thought that it need not be specially mentioned in the syllabus.

Subject 26. *Economic History*.—Candidates should be expected to have a general acquaintance with the early economic history of England; but special attention should be paid to the economic development of the British Isles and other portions of the Empire during the last 200 years, and so much knowledge of European and American conditions should be expected as is necessary for the understanding of British economic history.

Subject 27. *Public Economics*.—The questions should deal with the main forms of State action, central and local, in the economic sphere, together with public finance.

Subject 28. *Political Theory*.—Candidates should be expected to show a knowledge of political theory and its history, political theory being understood to mean not only the theory of legislation, but also the general history of the State and its connection with kindred studies such as Ethics, Psychology, Jurisprudence, Public International Law, and Economics; and candidates will be expected to show a knowledge of original authorities.

Subject 29. *Political Organisation*.—This should include Constitutional Forms (Representative Government, Federalism, &c.) and Public Administration, central

local. Although the history of institutions is not included, candidates should be expected to know the earlier stages from which existing institutions have directly developed.

Subject 30. *Constitutional Law, etc.*—The description seems sufficiently precise, but it will be desirable that examiners in 28, 29, 30 should work in close accord in order that the proper limits may be observed and overlapping avoided.

Subject 31. *English Private Law, i.e., the Law of Real and Personal Property (including the Law of Succession), Contracts, and Torts.*—It was not thought desirable by the Sub-Committee on Law and Politics to include Criminal Law and the Law of Evidence.

Subject 32. *Roman Law.*—No specific definition seems required. Passages should be set for translation and comment, but credit should not be given merely for capacity to translate the texts.

Subject 33. *Public International Law, etc.*—Candidates should be expected to show a knowledge of the principal treaties which have affected international relations from 1815 inclusive to the present day.

Subjects 34-37. The Sub-Committee recommended the subdivision of Philosophy into four subjects. In this recommendation we concur, since candidates who have another main subject may wish to take one or more of the subdivisions without taking the whole number, and it is desirable that this should be encouraged; and some candidates may wish to take Logic with Metaphysics, rather than Moral Philosophy with Metaphysics, which has been hitherto required. The phrase in the present syllabus—"the history of the subject will be included"—should be applied to each of the four subjects. It should be understood that candidates will have an opportunity of showing their strength either in Ancient Philosophy or in Modern Philosophy. In Logic questions on mathematical logic may be included; *i.e.*, on the Logic of Mathematics, Symbolic Logic, and the Logic of probability. The Sub-Committee raised no objection to the recognition of Experimental Psychology in the examination, but considered that it should have its place with the Scientific Group.

Mathematics and Science.

Subjects 38, 39. *Mathematics.*—Allowing to Mathematics the equivalent of other main subjects, we arrange it in two divisions, higher and lower, either or both of which may be taken. The following description should suffice:—

Higher Mathematics.—Geometry, Elementary Analysis (*viz.*, Algebra, Infinitesimal Calculus, properties of simple functions of a complex variable), solution of Differential Equations, Mechanics, Hydromechanics, Electricity (including Magnetism).

Lower Mathematics.—Geometry, after the methods of Euclid and Descartes, with the elements of the method of Monge (*viz.*, the representation of three-dimensional figures by plan and elevation), Algebra (including Horner's solution of numerical equations), Plane Trigonometry, Infinitesimal Calculus, Mechanics (including liquids and gases). Candidates should understand the meaning of a differential equation.

The use of the slide-rule and of mathematical tables should be allowed.

Subject 40. *Astronomy.*—This subject is now an Honours degree subject in certain Universities. We consider that it should be included; no definition appears necessary.

Subject 41. *Statistics.*—See also notes on Subject 25.

The questions to be set should cover:—

(1) Elementary theory of statistics, not depending mainly on the theory of probability nor requiring a knowledge of the calculus:—frequency distributions, averages, percentiles, and simple methods of measuring dispersion; graphic methods; elementary treatment of qualitative data, *e.g.*, investigation of association by comparison of ratios, consistency of data; the practice of the simplest graphic and algebraic methods of interpolation.

(2) Practical methods used in the analysis and interpretation of statistics of prices, wages and incomes, trade, transport, production and consumption, education, *etc.*; the more elementary methods of dealing with

population and vital statistics; miscellaneous methods used in handling statistics of experiments or observations.

(3) Elements of modern mathematical theory of statistics:—frequency curves and the mathematical representation of groups generally; accuracy of sampling as affecting averages, percentages, the standard deviation; significance of observed differences between averages of groups, *etc.*; the theory of correlation for two variables.

A considerable choice of questions should be given especially as to paragraph (2), and it should be possible for a candidate without advanced mathematical knowledge to obtain full marks by answering questions under paragraphs (1) and (2).

Subjects 42-53. We think it undesirable to issue special or detailed syllabuses in scientific subjects, which, owing to the progress of scientific investigation, are continually growing and changing, and we are anxious not to fetter the Universities by any limitations which would interfere with their freedom of development. The general notion of treatment for these Sciences is that candidates whose main subject is Science should take one subject up to a higher standard (in which case both the higher and the lower division of the subject should be taken) and two as subsidiary, on the lower standard. We believe that this is most nearly conformable to the practice of the different Universities, though there is nothing in our proposals to prevent candidates from taking two on the higher standard, or one on the higher with three subsidiary, or even four or five on the lower standard.

As between higher and lower we cannot define more closely than in the following words:—

The standard of the higher division of a science should be that which is required in the main subject for an Honours degree at the Universities.

The standard for the lower division of a science should be that required in a subject subsidiary to the main subject whether required at the final degree examination or at a preceding examination.

Botany should include Vegetable Physiology. Geology should include Mineralogy.

Subject 54. *Engineering*.—This subject should, we think, be included, as forming in most Universities a main Honours subject and as affording a sufficiently comprehensive intellectual discipline. Candidates who have spent their University time in studying engineering should, we consider, have the opportunity of competing for Civil Service appointments if they desire to do so. The subjects should be:—Applied Mechanics, Strength of Materials, Heat Engines, Hydraulics, Civil Engineering including Surveying, Applied Electricity; and candidates should take four of these. We do not consider it desirable to divide Engineering into Higher and Lower.

Subject 55. *Geography*.—We feel that Geography is of much importance in the Civil Service and elsewhere, but we do not see our way to include it among the subjects compulsory for all candidates. The amount of knowledge is too great, and the technicalities are too severe. The principles of Geography should have an important place in the History subjects.

The Sciences which we have valued at four units are those which are generally recognised as Honours degree subjects in the Universities. We have been urged to recommend the same treatment for Geography, but, in our opinion, the position of Geography at the Universities does not yet warrant this. Our Sub-Committee were opposed to any definition in the Syllabus except with reference to the conception accepted at the Universities. They were also opposed to any division of the subject into two sections, one chiefly concerned with non-human factors, the other with political, economical, and historical geography.

Subjects 56, 57. *Anthropology*.—This subject should be of great value to Indian Civil Servants (if the India Office continues to use this examination) and to Eastern Cadets.

The divisions we propose divide the subject into sharply marked compartments; the first inviting laboratory and museum work, consisting mainly in the handling and study of specimens and exhibits; the second involving work which is mainly literary. We are informed that many students take the second of our two divisions by itself, though benefit is of course derived from the study of both divisions in their common bearing on problems of racial and cultural distribution. The

study has special, but not exclusive, reference to peoples of rude culture, including prehistoric civilisation. With these remarks we can leave the scope of the subjects as divided to be defined by reference to University practice.

Subject 58. *Agriculture*.—This subject now qualifies for a University degree in Honours. It may be of importance for India and the Far East, and it is hoped that the Board of Agriculture may use this competition for the recruitment of some of its superior staff. See paragraph 38 below.

Subject 59. *Experimental Psychology*.—This subject has received some University recognition, and appears to deserve a place on our list. It does not require specific definition.

Note on all the Science Group.

Competitive examinations in practical laboratory work have proved unsatisfactory in experience. It is not always possible to give the same tests to all the candidates, and, if it is possible, only a part of their capacity can be tested under examination conditions. Thus a very great element of luck is introduced. We hope that the conditions proposed by us will serve to secure that all candidates taking Sciences which need experimental training shall have done the necessary laboratory work. The task will be imposed upon the Commissioners of deciding what institutions should be reckoned as of "University rank." We suggest that at least two years' laboratory training should be required of those who desire to take a subject on the Higher Standard, and at least one year for the Lower.

38. We think it worthy of consideration whether an individual Department requiring special qualifications in its entrants should not be permitted to increase the proportion of marks allotted to one or other of the Subjects on our list for the purpose of competition for its own places; *e.g.*, the Colonial Office might desire to double the allowance for Anthropology for its Eastern Cadets, or the Board of Agriculture might desire to double or even treble the allowance for Agriculture when it had a place or places to offer.

39. We wish to express our gratitude to all those who have kindly assisted us on our Sub-Committees and otherwise by advice, and to Professor Graham Wallas and Mr. P. J. Hartog, who have submitted valuable Memoranda. We wish also to record our appreciation of the services of our Secretary, Mr. D. B. Mair, whose high ability in Mathematics was of special value. We recommend to the consideration of Your Lordships the revised scheme for the Class I. examination, set forth in Paragraph 36 of our Report; and should this scheme be adopted by the Civil Service Commissioners and approved by Your Lordships we recommend to the consideration of those Commissioners the observations set forth in Paragraph 37.

STANLEY LEATHES, *Chairman.*

J. A. EWING.

HENRY A. MIERS.

W. H. HADOW.

W. G. S. ADAMS.

D. B. MAIR, *Secretary.*

June 20, 1917.

APPENDIX A.

(SPECIMEN PAPER FOR SUBJECT 2 OF SECTION A.)

ENGLISH PAPER.

Time : 3 hours.

This is intended to be a test of the understanding of English and the workmanlike use of words.

Candidates should do Question 1 and are recommended to do two others. Each candidate's work on the paper will be valued as a whole, but it is inadvisable to present answers to less than two or more than four questions. It is probable that a first rate paper of answers can be composed in not more than a thousand words. Concision and precision should be studied, with order and due proportion in the construction, and accuracy in the phrasing and wording. The answers and the parts of the answers must be written in consecutive English, and should be carefully directed to the precise points raised by the questions.

Technical terms should be avoided, or if used should be explained. Work that is not intended to stand should be struck out.

Question 1.

Read the following passage carefully. Then summarise in about 200 words, first the main facts as stated, then the reasons given for the mental condition of the Greeks of Constantinople in the Middle Ages.

"In our modern education, the painful though necessary attainment of two languages which are no longer living may consume the time and damp the ardour of the youthful student. The poets and orators were long imprisoned in the barbarous dialects of our Western ancestors, devoid of harmony or grace; and their genius, without precept or example, was abandoned to the rude and native powers of their judgment and fancy. But the Greeks of Constantinople, after purging away the impurities of their vulgar speech, acquired the free use of their ancient language, the most happy composition of human art, and a familiar knowledge of the sublime masters who had pleased or instructed the first of nations. But these advantages only tend to aggravate the reproach and shame of a degenerate people. They held in their lifeless hands the riches of their fathers, without inheriting the spirit which had created and improved that sacred patrimony; they read, they praised, they compiled, but their languid souls seemed alike incapable of thought and action. In the revolution of ten centuries, not a single discovery was made to exalt the dignity or promote the happiness of mankind. Not a single idea has been added to the speculative systems of antiquity, and a succession of patient disciples became in their turn the dogmatic teachers of the next servile generation. Not a single composition of history, philosophy, or literature, has been saved from oblivion by the intrinsic beauties of style or sentiment, of original fancy, or even of successful imitation. In prose, the least offensive of the Byzantine writers are absolved from censure by their naked and unassuming simplicity; but the orators, most eloquent in their own conceit, are the farthest from the models whom they affect to emulate. In every page our taste and reason are wounded by the choice of gigantic and obsolete words, a stiff and intricate phraseology, the discord of images, the childish play of false or unseasonable ornament, and the painful attempt to elevate themselves, to astonish the reader, and to involve a trivial meaning in the smoke of obscurity and exaggeration. Their prose is soaring to the vicious affectation of poetry; their poetry is sinking below the flatness and insipidity of prose. The tragic, epic, and lyric muses were silent and inglorious; the bards of Constantinople seldom rose above a riddle or epigram, a panegyric or tale; they forgot even the rules of prosody; and with the melody of Homer yet sounding in their ears, they confound all measure of feet and syllables in the impotent strains which have received the name of *political* or city verses. The minds of the Greeks were bound in the fetters of a base and imperious superstition, which extends her dominion round the circle of profane science. Their understandings were bewildered in metaphysical controversy; in the belief of visions and miracles they had lost all principles of moral evidence, and their taste was vitiated by the homilies of the monks, an absurd medley of declamation and Scripture. Even these contemptible studies were no longer dignified by the abuse of superior talents; the leaders of the Greek church were humbly content to admire and copy the oracles of antiquity, nor did the schools or pulpit produce any rivals of the fame of Athanasius and Chrysostom.

In all the pursuits of active and speculative life, the emulation of states and individuals is the most powerful spring of the efforts and improvements of mankind. The cities of ancient Greece were cast in the happy mixture of union and independence, which is repeated on a larger scale, but in a looser form, by the nations of modern Europe: the union of language, religion, and manners, which renders them the spectators and judges of each other's merit: the independence of government and interest, which asserts their separate freedom, and excites them to strive for pre-eminence in the career of glory. The situation of the Romans was less favourable; yet in the early stages of the republic, which fixed the national character, a similar emulation was kindled among the states of Latium and Italy; and in the arts and sciences they aspire to equal or surpass their Grecian masters. The empire of the Caesars did undoubtedly check the activity and progress of the human mind: its magnitude might indeed allow some scope for domestic competition; but when it was gradually reduced, at first to the East, and at last to Greece and Constantinople, the Byzantine subjects were degraded to an abject and languid temper, the natural effect of their solitary and insulated state. From the North they were oppressed by nameless tribes of barbarians, to whom they scarcely imparted the appellation of men. The language and religion of the more polished Arabs were an insurmountable bar to all social intercourse. The conquerors of Europe were their brethren in the

Christian faith; but the speech of the Franks or Latins was unknown, their manners were rude and they were rarely connected, in peace or war, with the successors of Heraclius. Alone in the universe, the self-satisfied pride of the Greeks was not disturbed by the comparison of foreign merit; and it is no wonder if they fainted in the race, since they had neither competitors to urge their speed, nor judges to crown their victory."

Question 2.

Read carefully the following passage. First give in your own words an explanation, not exceeding the length of the original, of the three passages in italics, numbered (1) (2) (3) in the margin. Then set out very concisely the contribution of each speaker to the debate.

AGAMEMNON

Princes,

What grief hath set the jaundice on your cheeks?
 The ample proposition that hope makes
 In all designs begun on earth below
 Fails in the promised largeness: checks and disasters
 Grow in the veins of actions highest rear'd,
 As knots, by the conflux of meeting sap,
 Infect the sound pine and divert his grain
 Tortive and errant from his course of growth.
 Nor, princes, is it matter new to us
 That we come short of our suppose so far
 That after seven years' siege yet Troy walls stand;
 (1) *Sith every action that hath gone before,*
Whereof we have record, trial did draw
Bias and thwart, not answering the aim,
And that unbodied figure of the thought
That gav'e't surmised shape. Why then, you princes,
 Do you with cheeks abash'd behold our works,
 And call them shames? which are indeed nought else
 But the protractive trials of great Jove
 To find persistive constancy in men:
 The fineness of which metal is not found
 In fortune's love; for then the bold and coward,
 The wise and fool, the artist and unread,
 The hard and soft, seem all affined and kin:
 But, in the wind and tempest of her frown,
 Distinction, with a broad and powerful fan,
 Puffing at all, winnows the light away;
 And what hath mass or matter, by itself
 Lies rich in virtue and unmingled.

NESTOR

With due observance of thy godlike seat,
 Great Agamemnon, Nestor shall apply
 Thy latest words. In the reproof of chance
 Lies the true proof of men: the sea being smooth,
 How many shallow bauble boats dare sail
 Upon her patient breast, making their way
 With those of nobler bulk!
 But let the ruffian Boreas once enrage
 The gentle Thetis, and anon behold
 The strong ribb'd bark through liquid mountains cut,
 Bounding between the two moist elements,
 Like Perseus' horse: where's then the saucy boat
 Whose weak untimber'd sides but even now
 Co-rivall'd greatness? Either to harbour fled,
 Or made a toast for Neptune. Even so
 Doth Valour's show and valour's worth divide
 In storms of fortune; for in her ray and brightness
 The herd hath more annoyance by the breeze (*the gad-fly*)
 Than by the tiger; but where the splitting wind
 Makes flexible the knees of knotted oaks,
 And flies flee under shade, why, then the thing of courage
 As roused with rage with rage doth sympathize,
 And with an accent tuned in selfsame key
 Retorts to chiding fortune.

ULYSSES

Agamemnon,

Thou great commander, nerve and bone of Greece,
 Heart of our numbers, soul and only spirit,
 In whom the tempers and the minds of all
 Should be shut up, hear what Ulysses speaks.

AGAMEMNON

Speak, Prince of Ithaca; and *be't of less expect* (2)
That matter needless, of importless burden,
Divide thy lips, than we are confident,
When rank Thersites opes his mastic jaws,
We shall hear music, wit and oracle.

ULYSSES

Troy, yet upon his basis, had been down,
And the great Hector's sword had lack'd a master,
But for these instances.
The speciality of rule hath been neglected :

- (3) *When that the General is not like the hive
To whom the foragers shall all repair,
What honey is expected? Degree being vizarded,
The unworthiest shows as fairly in the mask.*
The heavens themselves, the planets and this centre
Observe degree, priority and place,
Insisture, course, proportion, season, form,
Office and custom, in all line of order ;
And therefore is the glorious planet Sol
In noble eminence enthroned and sphered
Amidst the other ; whose medicinable eye
Corrects the ill aspects of planets evil.
* * * Neglection of degree it is
That by a pace goes backward, with a purpose
It hath to climb. The General's disdain'd
By him one step below, he by the next,
That next by him beneath ; so every step,
Exempl'd by the first pace that is sick
Of his superior, grows to an envious fever
Of pale and bloodless emulation ;
And 'tis this fever that keeps Troy on foot,
Not her own sinews. To end a tale of length,
Troy in our weakness stands, not in her strength.

Question 3.

The following lines are taken from Tennyson's *Ulysses*. The poem expresses the restlessness of a world-wanderer living a life of retirement after a career of quest and danger. Ulysses speaks the lines as he is about to leave the island in the company of other veterans of the Great War. The lines, which run continuously in the poem, have been selected to give Ulysses' idea of (a) what is his duty in life, (b) what is the duty of Telemachus.

(i) Give your conception of the characters of Ulysses and Telemachus deduced from the lines quoted, giving proof in support of your opinion. (ii) State whether Ulysses' view of the duty of Telemachus is consonant—applied to men in general—with his view of his own duty. (iii) Accepting Ulysses' views as valid, and supposing that an Empire contains men of both types, state briefly how best their relative services may be utilised for the advancement of mankind.

How dull it is to pause, to make an end,
To rust unburnished, not to shine in use !
As tho' to breathe were life. Life piled on life
Were all too little, and of one to me
Little remains : but every hour is saved
From that eternal silence, something more,
A bringer of new things ; and vile it were
For some three suns to store and hoard myself,
And this grey spirit yearning in desire
To follow knowledge like a sinking star,
Beyond the utmost bound of human thought.

This is my son, mine own Telemachus,
To whom I leave the sceptre and the isle—
Well-loved of me, discerning to fulfil
This labour, by slow prudence to make mild
A rugged people, and thro' soft degrees
Subdue them to the useful and the good.
Most blameless is he, centred in the sphere
Of common duties, decent not to fail
In offices of tenderness, and pay
Meet adoration to my household gods,
When I am gone. He works his work, I mine.

Question 4.

The following passage is taken from the *Text-book of Psychology* of William James. The writer expresses a theory. You have yourself experienced some of these emotions. Discuss the theory expressed by referring directly to your own experience, showing why you agree or disagree.

"Our natural way of thinking about these emotions (*anger, fear, love, hate, joy, grief, shame, pride, and their varieties*) is that the mental perception of some fact excites the mental affection called the Emotion, and that this latter state of mind gives rise to the bodily expression. My theory, on the contrary, is that *the bodily changes follow directly the perception of the exciting fact, and that our feeling of the same changes as they occur IS the emotion*. Common-sense says, we lose our fortune, are sorry and weep ; we meet a bear, are frightened and run ; we are insulted by a rival, are angry and strike. The hypothesis here to be defended says that this order of sequence is incorrect, that the one mental state is not immediately induced by the other, that the bodily manifestations must first be interposed between, and that the more rational statement is that we feel sorry because

we cry, angry because we strike, afraid because we tremble, and not that we cry, strike or tremble because we are sorry, angry or fearful as the case may be. Without the bodily states following on the perception, the latter would be purely cognitive in form, pale, colourless, destitute of emotional warmth. We might then see the bear and judge it best to run, receive the insult and deem it right to strike, but we should not actually *feel* afraid or angry.

Stated in this crude way, the hypothesis is pretty sure to meet with immediate disbelief. And yet neither many nor far-fetched considerations are required to mitigate its paradoxical character."

Question 5.

The first (a) of these passages is from Edmund Burke. The second (b) from H. G. Wells. Sum up as a good judge the conflicting views of the two writers, not omitting to direct the jury as to the principles on which their decision should be based.

(a) "You see, Sir, that in this enlightened age I am bold enough to confess, that we are generally men of untaught feelings; that instead of casting away all our old prejudices, we cherish them to a very considerable degree, and, to take more shame to ourselves, we cherish them because they are prejudices; and the longer they have lasted, and the more generally they have prevailed the more we cherish them. We are afraid to put men to live and trade each on his own private stock of reason; because we suspect that this stock in each man is small, and that the individuals would do better to avail themselves of the general bank and capital of nations and of ages. Many of our men of speculation, instead of exploding general prejudices, employ their sagacity to discover the latent wisdom which prevails in them. If they find what they seek, and they seldom fail, they think it more wise to continue the prejudice, with the reason involved, than to cast away the coat of prejudice, and to leave nothing but the naked reason; because prejudice, with its reason, has a motive to give action to that reason, and an affection which will give it permanence. Prejudice is of ready application in the emergency; it previously engages the mind in a steady course of wisdom and virtue, and does not leave the man hesitating in the moment of decision, sceptical, puzzled, and unresolved. Prejudice renders a man's virtue his habit; and not a series of unconnected acts. Through just prejudice his duty becomes a part of his nature."

(b) "We marshal and order men into classes entirely with regard to the past, we draw shame and honour out of the past; against the rights of property, the vested interests, the agreements and establishments of the past, the future has no rights. Literature is for the most part history, or history at one remove; and what is culture but a mould of interpretation into which new things are thrust, a collection of standards, a sort of bed of King Og, to which all expressions must be lopped or stretched. Our conveniences, like our thoughts, are all retrospective. We travel on roads so narrow that they suffocate our traffic; we live in uncomfortable, inconvenient, life-wasting houses out of a love of familiar shapes and familiar customs and a dread of strangeness; all our public affairs are cramped by local boundaries impossibly restricted and small. Our clothing, our habits of speech, our spelling, our weights and measures, our coinage, our religious and political theories, all witness to the binding power of the past upon our minds."

Question 6.

The following passage leads up to a discussion of the value of history as the basis of the knowledge of man, the knowledge of whom cannot for us be brought within the certainties of science. Follow on from the point reached at the end of the passage and indicate briefly your own view of the respective values of history and science as sources of enlightenment.

"Perhaps, if we were atoms ourselves, we should find that each atom was endowed with a different individuality. Then we should be unable to forecast with certainty the behaviour of other atoms, each by each or in the lump. It may be that the uniformity of nature, the certainty of physical law, are illusions of human minds, effects of distance. Or it may be that the caprice of human nature, the uncertainty of human action, the pleasing hazard of human affairs, disappear not only in the sight of God but in the sight of beings infinitely less remote. As seen by man, however, man is above all things diverse and incalculable; material nature as seen by man appears to obey fixed laws. The caprice of matter, the immutable laws of human conduct, are things which may exist, but have not been by us observed.

"Human nature craves for certainty. Given a judgement, man elevates it into a precedent. Given a hint, he stiffens it to a rule. Given a principle, he kills it and calls its stuffed image a law. Given a wise man's teaching, he establishes a system. Granted a vision of the Eternal, he formulates an Athanasian orthodoxy.

"But in the realm of human affairs not certainty but probability is king. Of two men of business, equal in courage, accuracy, industry, and knowledge, he who guesses best will succeed. The great leader may dazzle with his rhetoric, his logic, his wide information, but he convinces by confidence in his own speculative forecast. Analyse as we may the daring conjectures that have changed the world, after examining the processes of research, logic, and invention by which the trail was found, we still must acknowledge something beyond these, some flash of soul which lays the East at the feet of Alexander, opens a new world to Columbus, or reveals the cosmic laws to Newton. Man has a gift of guessing; the slave of certainty is an unprofitable servant, who lets his talent tarnish in a napkin."

Question 7.

Write in blank verse or in rhymed and metrical verse a poem on the theme of either extract given below:—

- (i) The lost leaves measure our years; they are gone as the days are gone, and the bare branches silently speak of a new year, slowly advancing to its buds, its foliage, and fruit. Deciduous trees associate with life as this yew never can. Clothed in its yellowish-green needles, its tarnished green, it knows no hope or sorrow; it is indifferent to winter, and does not look forward to summer. With their annual loss of leaves, and renewal, oak and elm and ash and beech seem to stand by us and to share our thoughts.

- (ii) The short January evening is of but a few minutes duration ; just now it was only dusky, and already the interior of the wood is impenetrable to the glance. There rises a loud though distant clamour of rooks and daws, who have restlessly moved in their roost-trees. Darkness is almost on them, yet they cannot quite settle. The cawing and dawing rises to a pitch, and then declines ; the wood is silent, and it is suddenly night.

RICHARD JEFFERIES.

Question 8.

Read carefully the appended poem. (i) State what, in your opinion, is the dominant idea of the poem, the idea which was in the poet's mind as he wrote. (ii) Comment briefly on the logical sequence of the stanzas showing why you agree or disagree with the order, and state whether, and why, any stanza might have been omitted without weakening the expression of the dominant idea. (iii) Comment briefly on the interior construction of the stanzas, showing by a few well-chosen examples how the poet helps the expression of his idea by his choice of vocabulary, by his arrangement and by the sound.

COME HOME.

Come home, come home, and where is home for me,
Whose ship is driving o'er the trackless sea ?
To the frail bark here plunging on its way,
To the wild waters, shall I turn and say
To the plunging bark, or to the salt sea foam,
You are my home ?

Fields once I walk'd in, faces once I knew,
Familiar things so old my heart believed them true
These far, far back, behind me lie, before
The dark clouds mutter, and the deep seas roar,
And speak to them that 'neath and o'er them roam
No words of home.

Beyond the clouds, beyond the waves that roar,
There may indeed, or may not be, a shore,
Where fields as green, and hands and hearts as true,
The old forgotten semblance may renew,
And offer exiles driven far o'er the salt sea foam
Another home.

But toil and pain must wear out many a day,
And days bear weeks, and weeks bear months away,
Ere, if at all, the weary traveller hear,
With accents whispered in his wayworn ear,
A voice he dares to listen to, say, Come
To thy true home.

Come home, come home ! And where a home hath he
Whose ship is driving o'er the driving sea ?
Through clouds that mutter, and o'er waves that roar,
Say, shall we find, or shall we not, a shore
That is, as is not ship or ocean foam,
Indeed our home ?

CLOUGH.

APPENDIX B.

SPECIMEN PAPER FOR SUBJECT 3 OF SECTION A.

SOCIAL, POLITICAL AND ECONOMIC SUBJECTS.

Time : 3 hours.

Accuracy and order in exposition will have weight in valuation. Accuracy in fact will not be less important. Each candidate's answers to the paper will be valued as a whole and candidates who present answers to less than three or more than four questions will be presumed to do so in knowledge of the value of the answers which they are able to give on the questions they choose. The answers should be written in continuous language ; punctuation and paragraphing should receive careful attention.

1. Compare the Parliament of this country in respect of constitution and working with that of (a) France, or (b) Germany, or (c) Italy.
2. What are the chief powers and functions of (a) County Councils (b) Local Education Authorities (c) Local Magistracies ?
3. State and discuss the main arguments for and against Free Education.

- Either (a) What are the chief minerals (other than the precious metals) which are imported into England? Whence do they come and for what purposes are they used? Or (b) Discuss the effects of foreign competition on British agriculture.
5. Examine the influence of Colonial expansion on European political relations since 1880.
 6. "No question of public policy can be purely economic." Discuss.
 7. Discuss the "justice" of the present system of taxation in the United Kingdom.
 8. Compare the party system in England with that in the United States of America.
 9. Estimate the value to Oceanic transport of the Panama Canal.
 10. Discuss the principle of Proportional Representation.
 11. Describe the stages through which, in the English Parliament, a bill becomes law.
 12. What surprises has the present war occasioned in matters of public finance?

APPENDIX C.

SPECIMEN QUESTIONS FOR PAPER NO. 4 IN SECTION A.

GENERAL SCIENCE.

Time : 3 hours.

Accuracy and order in exposition will have weight in the valuation. Accuracy in fact will not be less important. Each candidate's answers to the paper will be valued as a whole, and any candidate who presents answers to less than three or more than four of the questions will be presumed to do so in knowledge of the value of the answers which he is able to give to the questions he chooses. Answers must be written in continuous language; punctuation and paragraphing should receive careful attention.

N.B.—This list is only intended to show the kind of questions that may be set. The actual paper need not consist of more than 12 questions.

- (1.) In what sense is there Conservation of Energy? Discuss this by tracing transformations of the energy supplied (in fuel) to an electric power station. Apart from fuel, what other natural sources of energy are available for the use of man?
- (2.) *Omne vivum ex vivo.* On what general evidence is this dictum accepted, and what are some of its practical applications?
- (3.) What is meant by a scientific hypothesis? Give an example of a working hypothesis which has been generally abandoned, and explain why.
- (4.) Give some account of the chief discovery associated with the name of one of the following :—
(a) Darwin, (b) Pasteur, (c) Mme. Curie, (d) Dalton.
- (5.) What do you understand by the kinetic theory of gases? Explain by reference to this theory how the pressure of a gas contained in a closed vessel is affected (1) by pumping more gas into the vessel, (2) by raising the temperature.
- (6.) What are the general relations between electricity and magnetism?
- (7.) What do you understand by the wave theory of light? How do you explain reflection and refraction?
- (8.) Discuss fully why an ordinary coal fire is wasteful.
- (9.) What is the importance of (a) the nitrogen, (b) the carbon dioxide, (c) the oxygen, in the atmosphere?
- (10.) What are the chief circumstances that determine the climate of either (a) England or (b) India?
- (11.) What are cyclones and anticyclones? Illustrate your answer by reference to a map showing distribution of atmospheric pressure, and show how a knowledge of this distribution contributes towards weather forecasting.
- (12.) Describe generally the phenomena of the tides, and indicate their chief causes.
- (13.) What evidence is there that the distribution of animals or plants upon the earth in past times differed from that which prevails now?
- (14.) What do you know of the structure and function of the heart in man?
- (15.) What is the importance to plants of the visits of bees and other insects to their flowers?
- (16.) How is Time measured, and by reference to what standard?
- (17.) How are curves used to exhibit the variation of one quantity with respect to another? Explain by reference to such a curve the meaning of differentiation and integration.
- (18.) What principles are involved in the construction and use of any one of the following :—(a) The safety lamp, (b) the photographic camera, (c) the induction coil?

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