

Government of Madras.

EDUCATIONAL DEPARTMENT.

Recd.

Regd.

} 1909.

Enclosures

Spare copies

(29)

G.O., No. 49, 26th January 1909.

College of Engineering, Madras.

Sanctioning the abolition of the Board of Examiners for the — and directing that the work hitherto done by the Board be undertaken by the college staff as part of their ordinary duties.

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GOVERNMENT OF MADRAS.

EDUCATIONAL DEPARTMENT.

READ—the following papers :—

I

G.O., No. 413, Educational, dated 29th June 1907.

ABSTRACT.—Requesting the Director of Public Instruction, with remarks, to see that the remuneration to the examiners does not exceed the examination fees and to revise, if necessary, the scale of remuneration approved in G.O., No. 204, Educational, dated 9th April 1902.

II

Letter—from the Hon'ble Mr. T. T. LOGAN, B.A., Acting Director of Public Instruction.

To—the Secretary to Government, Educational Department.

Dated—Madras, the 18th September 1907.

No.—Ref. on Cur. No. 4871.

With reference to G.O., No. 413, Educational, dated 29th June 1907, I have the honour to submit that, owing to the abolition of the entrance examinations of the College of Engineering and the reduction in the number of candidates seeking admission in consequence of the raising of the preliminary general education standard, there will be a considerable fall in the fee income of the college and that it will not be possible to keep the remuneration of the examiners within the fee receipts. The Principal estimates the entrance and the final examination fees for the current year at Rs. 1,967, while the average annual receipts for the last five years under the above items amounted to Rs. 9,900. The cost of the Board of Examiners for the current year cannot be estimated with precision but the Principal states that it will not be less than Rs. 4,800.

2. The present scale of remuneration was fixed in G.O., No. 204, Educational, dated 9th April 1902, with reference to the recommendation contained in Mr. Stuart's letter, Ref. on Cur. No. 3898-01, dated 7th March 1902, from which it will be noticed that there had been a general discontent with the low rates of remuneration previously offered and that it was considered necessary that the rates should be fixed sufficiently high to attract for the examinerships competent men possessing the required special knowledge. As the field of selection is very limited, any reduction in the present scale of remuneration will, I fear, increase the difficulty of securing competent examiners; nor is it advisable to raise the fees for the final examinations which are already sufficiently high. The only feasible course, unless the entrance examinations are re-instituted which I think would be a retrograde step, is to make the necessary provision in the budget for the full remuneration of the examining body and to seek the sanction of the Government of India for the payment of honoraria to the examiners irrespective of the receipts derived from the registration and final examination fees in view of the fact that during the five years ending with 1906 the college made a clear profit of Rs. 5,123 per annum on the average from the examination fees. If, however, the officers of the Public Works Department can be moved to assist in the conduct of the examinations and to accept whatever fee becomes available an attempt may then be made to curtail the scale of remuneration so as to make the examinations self-supporting.

III

Memorandum No. 2332-1, Educational, dated 16th November 1907.

With reference to his R.C. No. 4871, dated 18th September 1907, on the subject of the remuneration to the Members of the Board of Examiners of the College of Engineering, the Director of Public Instruction is requested to state whether the system sanctioned in G.O., No. 443, Educational, dated 16th July 1885, under which only the final examinations were conducted by the Board of Examiners may not be reverted to, the term or sessional examinations being left to be conducted by the College staff. He is also requested to advise to what extent the final examinations for which fees are paid to an independent Board of Examiners may be restricted and how far in that case the fees now levied from the candidates would be sufficient to meet the remuneration payable to the Board. If the fees should fall short of the remuneration, he is requested to state to what extent the fees should be raised, so as to make them cover the remuneration.

H. D. TAYLOR,
Ag. Secretary to Government.

To the Director of Public Instruction.

IV

Letter—from the Hon'ble Mr. A. G. BOURNE, D.Sc., F.R.S., Director of Public Instruction.

To—the Secretary to Government, Educational Department.

Dated—Madras, the 24th March 1908.

No.—Ref. on Cur. No. 4871 of 1907.

In Government Memorandum No. 2332-1, Educational, dated 16th November 1907, the Director was asked to report (1) whether the system sanctioned in G.O., No. 443, Educational, dated 16th July 1885, under which only the final examinations were conducted by the Board of Examiners may not be reverted to; (2) to what extent the final examinations for which fees are paid to an independent Board of Examiners may be restricted and how far in that case the fees now levied from the candidates would be sufficient to meet the remuneration payable to the Board, and (3) that if the fees should fall short of the remuneration, to what extent they should be raised so as to make them cover the remuneration.

2. With regard to (1), I beg to state that the Principal, College of Engineering, who has been consulted in the matter is not in favour of reverting to the old method for the reasons (a) that the sessional examinations though, for the sake of convenience, held in different years, are all of the nature of final examinations, the marks obtained by the students at them being taken into the final total and (b) that the influence of external examiners is of considerable assistance towards keeping the instruction given at the College in touch with the actual conditions met with in practice and that this influence will be diminished to some extent if the number of examinations conducted by the Board is reduced.

3. With regard to the third point raised in the memorandum, I have to state that according to the scale of examination fees fixed in rule 50 of the rules of the College, the receipts with the sanctioned number of students in the several classes are expected to amount to Rs. 1,450 and as the cost of the examinations is estimated to be Rs. 4,500, the enhancement of examination fees so as to meet the cost will be really prohibitive.

4. In respect to the second point, three courses are suggested for the consideration of Government.

The first is to reduce the work now done by the Board to a large extent by transferring the same to the College staff. The scheme is detailed in statements I to IV submitted herewith. Under this scheme, the Board will have to examine in only seven subjects for the Civil Engineering course instead of in twenty subjects at present and in six subjects for the Mechanical Engineering course against 19. For the

—	Setting papers.	Valuing.	Total.
	RS.	RS.	RS.
Engineer class ..	1,360	315	1,675
Upper subordinate ..	510	350	860
Lower subordinate ..	210	300	510
	..	..	3,045

The second scheme which is detailed below shows the extent to which the examinations might be transferred to the College staff without likelihood of weakening the efficacy of the examinations—*vide* statements V to IX. In this scheme, the Board is concerned only with the final papers of all subjects and Mr. James thinks that this course will prevent any tendency for the teaching getting into a groove. But as the total cost of the examination under this scheme would amount to Rupees 4,205 (*vide* statement annexed), I doubt whether this arrangement will be an improvement on the present system as it results in no very appreciable reduction in the present expenditure.

If disregarding other considerations, the matter is simply one of covering the expenditure on examinations by fees, it is suggested that the tuition and the examination fees be grouped together with the sanctioned number of students in each class and taking the fees for the full course the total receipts will be Rs. 18,600. Mr. James thinks that the grouping of the examination fees with the tuition fees in connection with the question of remuneration to examiners is reasonable to a certain extent as the examinations are inseparable from the courses and the students are undergoing examination as far as their practical work is concerned throughout the year. It may also be considered in this connection that in fixing the rates of fees under the new rules, the old rates were almost followed though they seemed to admit of further enhancement. The fees for the Engineer class remain the same as they were before, those for the Upper Subordinate class are only Rs. 30 more than for the Engineer subordinate class although the course has been extended by six months while the fees for the Lower Subordinate class are the same as those for the Sub-overseer class, though the course of instruction has been extended from two to three years. There are, however, objections to raising the fees when trained men are so badly needed. But unless the money paid to examiners is considered as part of the ordinary expenditure on the college, the Principal suggests that the fees might be raised to make up the amount required for the examining work as given below:—

—	Full course.	Per session.	Instalments (nine per session).
	RS.	RS.	RS.
Engineer	420	150	18
Upper subordinate	200	75	9
Lower subordinate	120	50	6

This would give a total income of Rs. 21,200 against Rs. 18,600 and this excess together with the registration fees would almost balance the estimated expenditure of Rs. 3,045 on the Board with the transfer proposed of the greater part of the work to the College staff—*vide* paragraph 4 *supra*.

5. In reply to my enquiry whether in view of the fact that the Engineering students may appear for the examination conducted by the University, the College examinations for that class might not be abolished, the Principal states that the college course is intended as a training for a specific purpose and that a student of ordinary ability who works properly and intelligently during his years of attendance at the college should, in his opinion, receive the college diploma at the end of the course as it is the qualification for appointment in the public and other services.

The University degree, he thinks, should be on quite a different footing and the examination for it should be of such a standard that it should be only possible for the very pick of the students to graduate in Engineering. There is also the further difficulty that a large proportion of the marks has to be awarded during the course by the College staff for practical work and it is a question how this can be worked in with a scheme of examinations controlled by a virtually independent authority.

6. I have put forward above the views of the Principal and in such a matter they are entitled, I submit, to careful consideration.

I cannot, however, help thinking that no great harm would be done if all examinations were conducted by the College and the University.

Speaking generally, the College staff should be in the best position to arrange the students in order of merit, the question arises as to whether they are as capable as an outside body of fixing a border line between success and failure.

As far as the University is concerned, it should not be looked upon as something independent of its affiliated colleges which form part and parcel of it.

There should be no real difficulty in arranging that the University should take into account marks awarded at the college particularly where there is only one affiliated institution in the faculty.

7. The revised rules do not provide for the re-examination of the independent candidates. On this point, however, I shall address a separate communication to Government.

ENCLOSURE.
CIVIL ENGINEER CLASS.
(EXISTING SYLLABUS.)
Distribution during the Course.

Subject.	Allotted by Board of Examiners for examin- ations.	Allotted by College staff for practical work.	Total.	
			Board.	College.
FIRST YEAR.				
BRANCH I.				
<i>Mathematics and Science.</i>				
1. Mathematics—				
Pure	200	..	..	..
Applied	200	..	..	..
2. Science—				
Chemistry	200	100	..	..
Physics	200	100	800	200
BRANCH II.				
<i>Engineering.</i>				
1. Drawing—				
Geometrical	200	100	..	..
Free-hand and Model	..	100	..	..
Building	100	100	..	..
Machine	100	100	..	..
2. Surveying—				
Chain, Compass and Plane Table	100	200	500	600
<i>Physical Exercises</i>	..	150	..	150
Total for first year			1,300	950
			2,250	
SECOND YEAR.				
BRANCH I.				
<i>Mathematics and Science.</i>				
1. Mathematics—				
Pure	250	..	..	..
Applied	250	..	..	..
2. Science—				
Geology	200	100	700	100
BRANCH II.				
<i>Engineering.</i>				
1. Applied Mechanics	400	100	..	..
2. Construction	200	100	..	..
3. Drawing	100	250	..	..
4. Surveying—				
Level	100	200	800	650
<i>Physical Exercises</i>	..	150	..	150
Total for second year			1,500	900
			2,400	
THIRD YEAR.				
BRANCH II.				
<i>Engineering.</i>				
1. Applied Mechanics	400	100	..	..
2. Construction	600	100	..	..
3. Hydraulic Engineering	800	200	..	..
4. Drawing	400	250	..	..
5. Surveying—				
Theodolite	200	200	..	..
6. Engineering Laboratory	..	400	..	..
7. Workshops	..	200	2,400	1,450
<i>Physical Exercises</i>	..	200	..	200
Total for third year			2,400	1,650
			4,050	

ABSTRACT.

Year.	Board.	College.	Total.
First	1,300	950	2,250
Second	1,500	900	2,400
Third	2,400	1,650	4,050
Total	5,200	3,500	8,700

STATEMENT I.

CIVIL ENGINEER CLASS.
Distribution during the course.

Subject.	Allotted by Board of Examiners for examin- ations.	Allotted by College staff for practical work.	Total.	
			Board.	College.
FIRST YEAR.				
BRANCH I.				
Mathematics and Science.				
1. Mathematics—		200	..	..
Pure		200	..	..
Applied				
2. Science—		300	..	..
Chemistry		300	..	1000
Physics				
BRANCH II.				
Engineering.				
1. Drawing—		300	..	..
Geometrical		100	..	..
Free-hand and Model		200	..	..
Building		200	..	..
Machine				
2. Surveying—		300	..	1,100
Chain, Compass and Plane Table				
Physical Exercises		150	..	150
Total for first year		..	..	2,250
SECOND YEAR.				
BRANCH I.				
Mathematics and Science.				
1. Mathematics—		250	..	..
Pure		250	..	..
Applied				
2. Science—		300	500	300
Geology				
BRANCH II.				
Engineering.				
1. Applied Mechanics		500	..	..
2. Construction		300	..	..
3. Drawing		350	..	..
4. Surveying—		300	..	1,450
Level				
Physical Exercises		150	..	150
Total for second year		..	500	1,900
			2,400	
THIRD YEAR.				
BRANCH II.				
Engineering.				
1. Applied Mechanics		400	100	..
2. Construction		600	100	..
3. Hydraulic Engineering		800	200	..
4. Drawing		400	250	..
5. Surveying		200	200	..
6. Engineering Laboratory		..	400	..
7. Workshops		..	200	2,400
Physical Exercises		..	200	200
Total for third year		..	2,400	1,650
			4,050	

ABSTRACT.

Year.	Board.	College.	Total.
First	500	2,250	2,250
Second	1,900	2,400	2,400
Third	2,400	1,650	4,050
Total	2,900	5,800	8,700

MECHANICAL ENGINEER CLASS.

(EXISTING SYLLABUS.)

Distribution during the course.

Subject.	Allotted by Board of Examiners for examina- tions.	Allotted by College staff for practical work.	Total.	
			Board.	College.
FIRST YEAR.				
BRANCH I.				
Mathematics and Science.				
1. Mathematics—				
Pure	200	..	..	..
Applied	200	..	..	..
2. Science—				
Chemistry	200	100	..	..
Physics	200	100	800	200
BRANCH II.				
Engineering.				
1. Drawing—				
Geometrical	200	100	..	..
Free-hand and Model	..	100	..	..
Building	100	100	..	..
Machine	100	100	..	..
2. Surveying—				
Chain, Compass and Plane Table	100	200	500	600
Physical Exercises	..	150	..	150
Total for first year ..			1,300	950
			2,250	
SECOND YEAR.				
BRANCH I.				
Mathematics.				
1. Mathematics—				
Pure	250	..	..	..
Applied	250	..	500	..
BRANCH II.				
Engineering.				
1. Applied Mechanics	400	100	..	..
2. Mechanical Engineering	400	100	..	..
3. Drawing	..	400	..	..
4. Engineering Laboratory	..	100	..	..
5. Electrical Engineering	200	100	..	..
6. Do. do. Laboratory	..	200	..	..
7. Workshops	..	200	1,000	1,300
Physical Exercises	..	150	..	150
Total for second year ..			1,500	1,350
			2,850	
THIRD YEAR.				
BRANCH II.				
Engineering.				
1. Applied Mechanics	400	100	..	..
2. Mechanical Engineering	800	200	..	..
3. Drawing	400	400	..	..
4. Engineering Laboratory	200	100	..	..
5. Electrical Engineering	500	100	..	..
6. Do. do. Laboratory	100	200	..	..
7. Workshops	..	200	2,400	1,300
Physical Exercises	..	200	..	200
Total for third year ..			2,400	1,500
			3,900	

ABSTRACT.

Year.	Board.	College.	Total.
First	1,300	950	2,250
Second	1,500	1,300	2,850
Third	2,400	1,500	3,900
Total ..	5,200	3,800	9,000

STATEMENT II.

MECHANICAL ENGINEER CLASS.

Distribution during the course.

Subject.	Allotted by Board of Examiners for Examinations.	Allotted by College Staff for practical work.	Total.	
			Board.	College.
FIRST YEAR.				
BRANCH I.				
Mathematics and Science.				
1. Mathematics—				
Pure	..	200	..	..
Applied	..	200	..	..
2. Science—				
Chemistry	..	300	..	..
Physics	..	300	..	1,000
BRANCH II.				
Engineering.				
1. Drawing—				
Geometrical	..	300	..	..
Free-hand and Model	..	100	..	..
Building	..	200	..	..
Machine	..	200	..	..
2. Surveying—				
Chain, Compass and Plane Table	..	300	..	1,100
Physical Exercises	..	150	..	150
Total for first year ..	..	..	..	2,250
SECOND YEAR.				
BRANCH I.				
Mathematics.				
1. Mathematics—				
Pure	250	..	500	..
Applied	250	..	..	..
BRANCH II.				
Engineering.				
1. Applied Mechanics	..	500	..	..
2. Mechanical Engineering	..	500	..	..
3. Drawing	..	400	..	..
4. Engineering Laboratory	..	100	..	..
5. Electrical Engineering	..	300	..	..
6. Do. do. Laboratory	..	200	..	..
7. Workshops	..	200	..	2,200
Physical Exercises	..	150	..	150
Total for second year ..	..	..	500	2,350
THIRD YEAR.				
BRANCH II.				
Engineering.				
1. Applied Mechanics	400	100	..	..
2. Mechanical Engineering	800	200	..	..
3. Drawing	400	400	..	..
4. Engineering Laboratory	..	300	..	..
5. Electrical Engineering	500	100	..	..
6. Do. do. Laboratory	..	300	..	..
7. Workshops	..	200	2,100	1,600
Physical Exercises	..	200	..	200
Total for third year ..	..	..	2,100	1,800
			3,900	

ABSTRACT.

Year.	Board.	College.	Total.
First	..	2,250	2,250
Second	500	2,350	2,850
Third	2,100	1,800	3,900
Total ..	2,600	6,400	9,000

UPPER SUBORDINATES.

(EXISTING SYLLABUS).

Distribution during the course.

Subject.		Allotted by Board of Examiners for examinations.	Allotted by College staff for practical work.	Total.	
				Board.	College.
FIRST YEAR.					
BRANCH I.					
Mathematics.					
Arithmetic	.. .. .	150	..	..	..
Mensuration	.. .. .	150	..	..	..
Algebra	.. .. .	150	..	450	..
BRANCH II.					
Engineering.					
Drawing—					
Free-hand	.. .. .	..	50	..	..
Model	.. .. .	..	50	..	..
Geometrical	.. .. .	200	100	..	..
Surveying—					
Chain, Compass and Plane Table	.. .. .	100	150	300	350
Workshop Practice	.. .. .	..	100	..	100
Physical Exercises	.. .. .	..	100	..	100
		..	..	750	550
Total for first year		..	..	1,300	
SECOND YEAR.					
BRANCH I.					
Mathematics.					
Geometry	.. .. .	150	..	..	..
Plane Trigonometry	.. .. .	150	..	300	..
BRANCH II.					
Engineering.					
Drawing—					
Machine	.. .. .	100	50	..	..
Building	.. .. .	100	50	..	..
Applied Mechanics	.. .. .	100	50	..	..
Mechanical Engineering	.. .. .	200	100	..	..
Construction	.. .. .	100	..	..	..
Surveying—					
Level	.. .. .	100	150	700	400
Workshop Practice	.. .. .	..	100	..	100
Physical Exercises	.. .. .	..	100	..	100
		..	..	1,000	600
Total for second year		..	..	1,600	
THIRD YEAR.					
BRANCH II.					
Engineering.					
Drawing—					
Building and Estimating	.. .. .	300	100	..	..
Applied Mechanics	.. .. .	400	50	..	..
Construction	.. .. .	300	100	..	..
Hydraulic Engineering	.. .. .	350	50	..	..
Surveying—					
Theodolite	.. .. .	100	150	1,450	450
Workshop Practice	.. .. .	..	100	..	100
Physical Exercises	.. .. .	..	100	..	100
		..	..	1,450	650
Total for third year		..	..	2,100	
ABSTRACT.					
Year.			Board.	College.	Total.
First	.. .. .	..	750	550	1,300
Second	.. .. .	..	1,000	600	1,600
Third	.. .. .	..	1,450	650	2,100
Total			3,200	1,800	5,000

STATEMENT III.

UPPER SUBORDINATES.

Distribution during the course.

Subject.	Allotted by Board of Examiners for examina- tions.	Allotted by College staff for practical work.	Total.	
			Board.	College.
FIRST YEAR.				
BRANCH I.				
Mathematics.				
Arithmetic	..	150	..	..
Mensuration	..	150	..	..
Algebra	..	150	..	450
BRANCH II.				
Engineering.				
Drawing—	..	50	..	..
Free-hand	..	50	..	..
Model	..	300	..	..
Geometrical	..	..	..	..
Surveying—	..	250	..	650
Chain, Compass and Plane Table	..	..	..	..
Workshop Practice	..	100	..	100
Physical Exercises	..	100	..	100
Total for first year	..	..	..	1,300
SECOND YEAR.				
BRANCH I.				
Mathematics.				
Geometry	..	150	..	..
Plane Trigonometry	..	150	..	300
BRANCH II.				
Engineering.				
Drawing—	..	150	..	..
Machine	..	150	..	..
Building	..	150	..	..
Applied Mechanics	200	100	..	..
Mechanical Engineering	..	100	..	..
Construction	..	100	..	..
Surveying—	..	250	200	900
Level	..	..	..	..
Workshop Practice	..	100	..	100
Physical Exercises	..	100	..	100
Total for second year	..	..	200	1,400
1,600				
THIRD YEAR.				
BRANCH II.				
Engineering.				
Drawing—	300	100	..	..
Building and Estimating	400	50	..	..
Applied Mechanics	300	100	..	..
Construction	350	50	..	..
Hydraulic Engineering	100	150	1,450	450
Surveying	..	..	..	..
Workshop Practice	..	100	..	100
Physical Exercises	..	100	..	100
Total for third year	..	..	1,450	650
2,100				
ABSTRACT.				
Year.	Board.	College.	Total.	
First	..	1,300	1,300	
Second	200	1,400	1,600	
Third	1,450	650	2,100	
Total	1,650	3,350	5,000	

LOWER SUBORDINATES.

(EXISTING SYLLABUS.)

Distribution during the course.

Subject.	Allotted by Board of Examiners for examinations.	Allotted by College staff for practical work.	Total.	
			Board.	College.
FIRST YEAR.				
Drawing—				
Free-hand	..	100	..	..
Model	..	100	..	..
Geometrical	200	100	200	300
Surveying—				
Chain, Compass and Plane Table	100	300	100	300
Workshop Practice	..	75	..	75
Physical exercises	..	75	..	75
	..	..	300	750
Total for first year ..	..	..	1,050	
SECOND YEAR.				
Drawing—				
Machine	150	100	..	..
Building	100	50	250	150
Applied Mechanics	100	50	..	..
Construction	100	50	..	..
Surveying—				
Levelling	100	300	300	400
Workshop Practice	..	75	..	75
Physical exercises	..	75	..	75
	..	..	550	700
Total for second year ..	..	..	1,250	
THIRD YEAR.				
Drawing—				
Building and Estimating	300	150	300	150
Applied Mechanics	200	50	..	..
Construction	300	100	..	..
Surveying—				
Theodolite	100	300	600	450
Workshop Practice	..	100	..	100
Physical exercises	..	100	..	100
	..	..	900	800
Total for third year ..	..	..	1,700	

ABSTRACT.

Year.	Board.	College.	Total.
First	300	750	1,050
Second	550	700	1,250
Third	900	800	1,700
Total ..	1,750	2,250	4,000

STATEMENT IV.

LOWER SUBORDINATES.

Distribution during the course.

Subject.	Allotted by Board of Examiners for examinations.	Allotted by College staff for practical work.	Total.	
			Board.	College.
<i>First year.</i>				
Drawing—				
Free-hand	..	100	..	..
Model	..	100	..	..
Geometrical	..	300	..	500
Surveying—				
Chain, Compass and Plane Table	..	400	..	400
Workshop Practice	..	75	..	75
Physical Exercises	..	75	..	75
Total for first year ..	..	..	..	1,050
<i>Second year.</i>				
Drawing—				
Machine	..	250	..	..
Building	..	150	..	400
Applied Mechanics	..	150	..	..
Construction	..	150	..	..
Surveying—				
Levelling	..	400	..	700
Workshop Practice	..	75	..	75
Physical Exercises	..	75	..	75
Total for second year ..	..	..	..	1,250
<i>Third year.</i>				
Drawing—				
Building and Estimating	300	150	300	150
Applied Mechanics	200	50	..	..
Construction	300	100	..	..
Surveying—				
Theodolite	100	300	600	450
Workshop Practice	..	100	..	100
Physical Exercises	..	100	..	100
			900	800
Total for third year ..	..	..	1,700	

ABSTRACT.

Year.	Board.	College.	Total.
First	..	1,050	1,050
Second	..	1,250	1,250
Third	..	800	1,700
Total ..	900	3,100	4,000

STATEMENT V.
CIVIL ENGINEER CLASS.
Distribution during the course.

Subject.	Allotted by Board of Examiners for examinations.	Allotted by College staff for practical work.	Total.	
			Board.	College.
FIRST YEAR.				
BRANCH I.				
<i>Mathematics and Science.</i>				
1. Mathematics—				
Pure	..	200	..	..
Applied	..	200	..	..
2. Science—				
Chemistry	200	100	..	..
Physics	200	100	400	600
BRANCH II.				
<i>Engineering.</i>				
1. Drawing—				
Geometrical	200	100	..	..
Free-hand and Model	..	100	..	..
Building	..	200	..	..
Machine	..	200	..	..
2. Surveying—				
Chain, Compass and Plane Table	..	300	200	900
Physical Exercises	..	150	..	150
	..	..	600	1,650
Total for first year	..	..	2,250	
SECOND YEAR.				
BRANCH I.				
<i>Mathematics and Science.</i>				
1. Mathematics—				
Pure	250	..	..	..
Applied	250	..	..	..
2. Science—				
Geology	200	100	700	100
BRANCH II.				
<i>Engineering.</i>				
1. Applied Mechanics	..	500	..	..
2. Construction	..	300	..	..
3. Drawing	..	350	..	..
4. Surveying—				
Level	..	300	..	1,450
Physical Exercises	..	150	..	150
	..	..	700	1,700
Total for second year	..	..	2,400	
THIRD YEAR.				
BRANCH II.				
<i>Engineering.</i>				
1. Applied Mechanics	400	100	..	..
2. Construction	600	100	..	..
3. Hydraulic Engineering	800	200	..	..
4. Drawing	400	250	..	..
5. Surveying—				
Theodolite	200	200	..	..
6. Engineering Laboratory	..	400	..	..
7. Workshops	..	200	2,400	1,450
Physical Exercises	..	200	..	200
	..	..	2,400	1,650
Total for third year	..	..	4,050	

ABSTRACT.

Year.	Board.	College.	Total.
First	600	1,650	2,250
Second	700	1,700	2,400
Third	2,400	1,650	4,050
Total	3,700	5,000	8,700

STATEMENT VI.
MECHANICAL ENGINEER CLASS.
Distribution during the course.

Subject.	Allotted by Board of Examiners for examinations.	Allotted by College staff for practical work.	Total.	
			Board.	College.
FIRST YEAR.				
BRANCH I.				
<i>Mathematics and Science.</i>				
1. Mathematics—				
Pure	..	200	..	..
Applied	..	200	..	..
2. Science—				
Chemistry	200	100	..	..
Physics	200	100	400	600
BRANCH II.				
<i>Engineering.</i>				
1. Drawing—				
Geometrical	200	100	..	..
Free-hand and Model	..	100	..	..
Building	..	200	..	..
Machine	..	200	..	..
2. Surveying—				
Chain, Compass and Plane Table	..	300	200	900
<i>Physical Exercises</i>	..	150	..	150
	..	..	600	1,650
Total for first year	..	..	2,250	
SECOND YEAR.				
BRANCH I.				
<i>Mathematics.</i>				
1. Mathematics—				
Pure	250	..	500	..
Applied	250	..	..	..
BRANCH II.				
<i>Engineering.</i>				
1. Applied Mechanics	..	500	..	..
2. Mechanical Engineering	..	500	..	..
3. Drawing	..	400	..	..
4. Engineering Laboratory	..	100	..	..
5. Electrical Engineering	..	300	..	..
6. " " laboratory	..	200	..	..
7. Workshops	..	200	..	2,200
<i>Physical Exercises</i>	..	150	..	150
	..	..	500	2,350
Total for second year	..	..	2,850	
THIRD YEAR.				
BRANCH II.				
<i>Engineering.</i>				
1. Applied Mechanics	400	100	..	..
2. Mechanical Engineering	800	200	..	..
3. Drawing	400	400	..	..
4. Engineering Laboratory	..	300	..	..
5. Electrical Engineering	500	100	..	..
6. " " Laboratory	..	300	..	..
7. Workshops	..	200	2,100	1,600
<i>Physical Exercises</i>	..	200	..	200
	..	..	2,100	1,800
Total for third year	..	..	3,900	

ABSTRACT.

Year.	Board.	College.	Total.
First	600	1,650	2,250
Second	500	2,350	2,850
Third	2,100	1,800	3,900
Total	3,200	5,800	9,000

STATEMENT VII.
UPPER SUBORDINATES.
Distribution during the course.

Subject.	Allotted by Board of Examiners for examinations.	Allotted by College staff for practical work.	Total.	
			Board.	College.
FIRST YEAR.				
BRANCH I.				
Mathematics.				
Arithmetic	150	..	..	..
Mensuration	150	..	..	..
Algebra	150	..	450	..
BRANCH II.				
Engineering.				
Drawing—		50	..	..
Free-hand	..	50	..	..
Model	..	100	..	..
Geometrical	200	..	..	..
Surveying—		250	200	450
Chain, Compass and Plane Table	..	..	..	..
Workshop Practice	..	100	..	100
Physical Exercises	..	100	..	100
	..	..	650	650
Total for first year	..	..	1,300	
SECOND YEAR.				
BRANCH I.				
Mathematics.				
Geometry	150	..	..	..
Plane Trigonometry	150	..	300	..
BRANCH II.				
Engineering.				
Drawing—		50	..	..
Machine	100	150	..	..
Building	..	150	..	..
Applied Mechanics	..	150	..	..
Mechanical Engineering	200	100	..	..
Construction	..	100	..	..
Surveying—		250	300	800
Level	..	..	..	..
Workshop Practice	..	100	..	100
Physical Exercises	..	100	..	100
	..	..	600	1,000
Total for second year	..	..	1,600	
THIRD YEAR.				
BRANCH II.				
Engineering.				
Drawing—		100	..	..
Building and Estimating	300	50	..	..
Applied Mechanics	400	100	..	..
Construction	300	50	..	..
Hydraulic Engineering	350	..	..	..
Surveying—	100	150	1,450	450
Theodolite	..	100	..	100
Workshop Practice	..	100	..	100
Physical Exercises	..	..	1,450	650
	..	..	..	..
Total for third year	..	..	2,100	

STATEMENT VIII.
LOWER SUBORDINATES.
Distribution during the course.

Subject.	Allotted by Board of Examiners for examinations.	Allotted by College staff for practical work.	Total.	
			Board.	College.
FIRST YEAR.				
Drawing—				
Freehand	..	100	..	..
Model	..	100	..	..
Geometrical	200	100	200	300
Surveying—				
Chain, Compass and Plane Table	..	400	..	400
Workshop Practice	..	75	..	75
Physical Exercises	..	75	..	75
	..	..	200	850
Total for first year	..	..	1,050	
SECOND YEAR.				
Drawing—				
Machine	150	100	..	..
Building	..	150	150	250
Applied Mechanics	..	150	..	..
Construction	..	150	..	..
Surveying—				
Levelling	..	400	..	700
Workshop Practice	..	75	..	75
Physical Exercises	..	75	..	75
	..	..	150	1,100
Total for second year	..	..	1,250	
THIRD YEAR.				
Drawing—				
Building and Estimating	300	150	300	150
Applied Mechanics	200	50	..	..
Construction	300	100	..	..
Surveying—				
Theodolite	100	300	600	450
Workshop Practice	..	100	..	100
Physical Exercises	..	100	..	100
	..	..	900	800
Total for third year	..	..	1,700	

STATEMENT IX.

EXAMINATION WORK TO BE DONE BY THE BOARD.

Engineer classes.

Civil Engineering.				Mechanical Engineering.			
Papers to be set—				Papers to be set—			
* Geometrical Drawing	..	..	(1)	(Same paper as for Civil Engineering.)			
Chemistry	..	..	(1)	(	Do.	do.	)
Physics	..	..	(1)	(	Do.	do.	)
Pure Mathematics	..	..	(1)	(	Do.	do.	)
Applied Mathematics	..	..	(1)	(	Do.	do.	)
Applied Mechanics	..	..	(2)	(	Do.	do.	)
Construction	..	..	(2)	Mechanical Engineering (2)			
Hydraulic Engineering	..	..	(2)	Drawing (2)			
Drawing	..	..	(2)	Electrical Engineering (2)			
Surveying	..	..	(1)				
Geology	..	..	(1)				
Total—20 papers at Rs. 80 + $\frac{1}{2} \times 90$ for * Geometrical Drawing				= Rs. 1,630			
Valuing—(20 × 7 + 10 × 14) at Rs. 1 $\frac{1}{2}$				= 420			
Total ..				2,050			

* (The fee for setting Geometrical Drawing paper is put down at Rs. 90 as it might be made to serve for all three classes with a few special questions for the several classes.)

Upper Subordinate classes.

Papers to be set—				Papers to be set—			
Arithmetic	..	..	(1)				
Mensuration	..	..	(1)				
Algebra	..	..	(1)				
Geometry	..	..	(1)				
Plane Trigonometry	..	..	(1)				
Geometrical Drawing	..	..	(1)	(Same paper as for Engineer.)			
Mechanical Engineering	..	..	(1)				
Machine Drawing	..	..	(1)	(Same paper as for Lower Subordinate.)			
Building Drawing	..	..	(2)	(	Do.	do.	)
Applied Mechanics	..	..	(2)				
Construction	..	..	(2)				
Hydraulic Engineering	..	..	(2)				
Surveying	..	..	(1)	(Same paper as for Lower Subordinate.)			
Total—(12 + $\frac{1}{2}$) at Rs. 60 + $\frac{1}{2} \times 90$ for Geometrical Drawing				= Rs. 870			
Valuing—35 × 17 at Re. 1				= 595			
Total ..				1,465			

Lower Subordinate classes.

Papers to be set—				Papers to be set—			
Geometrical Drawing	...	..	(1)	(Similar to Engineer.)			
Machine Drawing	..	..	(1)	(Similar to Upper Subordinate.)			
Building Drawing	..	..	(2)	(	Do.	do.	)
Surveying	..	..	(1)	(	Do.	do.	)
Applied Mechanics	..	..	(1)				
Construction	..	..	(1)				
Total—(2 + $\frac{1}{2}$) at Rs. 60 + $\frac{1}{2} \times 90$ for Geometrical Drawing				= Rs. 270			
Valuing—60 × 7 at Re. 1				= 420			
Total ..				690			

Total cost—

Engineer class	..	..	..	..	..	..	=	Rs. 2,050
Upper Subordinate class	..	..	..	..	..	..	=	1,465
Lower do.	..	..	..	..	..	..	=	690
Total ..								4,205

STATEMENT IX—cont.

EXAMINATION WORK TO BE DONE BY THE BOARD.

Engineer classes.

Civil Engineers.				Mechanical Engineers.			
Papers to be set—				Papers to be set—			
Pure Mathematics	..	..	(1)	(Same paper as for Civil Engineers.)			
Applied Mathematics	..	..	(1)				
Applied Mechanics	..	..	(2)				
Construction	..	..	(2)				
Hydraulic Engineering	..	..	(2)	Mechanical Engineering (2)			
Drawing	..	..	(2)	Drawing (2)			
Surveying	..	..	(1)	Electrical Engineering (2)			
Total—17 papers at Rs. 80				= Rs. 1,360			
Valuing—20 × 4 + 10 × 13 = 210 at Rs. 1 $\frac{1}{2}$				= 315			
Total ..				1,675			

Examination fees according to present scale = 20 × 20 = Rs. 400.

Upper Subordinate classes.

Papers to be set—				Papers to be set—			
Mechanical Engineering	..	..	(1)	(Same paper for Lower Subordinates.)			
Building Drawing	..	..	(2)				
Applied Mechanics	..	..	(2)				
Construction	..	..	(2)				
Hydraulic Engineering	..	..	(2)	(Same paper for Lower Subordinates.)			
Surveying	..	..	(1)				
Total—7 + $\frac{3}{2}$ = 8 $\frac{1}{2}$ at Rs. 60				= Rs. 510			
Valuing—35 × 10 = 350 at Re. 1				= 350			
Total ..				860			

Examination fees according to present scale = 30 × 15 = Rs. 450.

Lower Subordinate classes.

Papers to be set—				Papers to be set—			
Building Drawing	..	..	(2)	(Same paper as for Upper Subordinates.)			
Applied Mechanics	..	..	(1)				
Construction	..	..	(1)	(Same paper as for Upper Subordinates.)			
Surveying	..	..	(1)				
Total—2 + $\frac{3}{2}$ = 3 $\frac{1}{2}$ at Rs. 60				= Rs. 210			
Valuing—60 × 5 = 300 at Re. 1				= 300			
Total ..				510			

Examination fees according to present scale = 60 × 10 = Rs. 600.

Total cost—							
Engineer classes	..	..	..	..	..	..	Rs. 1,675
Upper Subordinate classes	..	..	..	..	..	..	860
Lower do.	..	..	..	..	..	..	510
Total ..							
3,045							

V

Official Memorandum No. 768-3, Educational, dated 19th May 1908.

With reference to paragraphs 5 and 6 of his letter R.C. No. 4871 of 1907, dated the 24th March 1908, submitting proposals on the subject of the examinations at the College of Engineering, the Director of Public Instruction is requested to ascertain from the Syndicate of the University of Madras whether, in view to the abolition of

the separate college examination for the Engineering class now conducted by the Board of Examiners, arrangements could not be made for taking into account for the First Examination in Engineering and the B.E. Degree examination the marks awarded to the Engineering students during their college course by the staff of the College of Engineering.

2. He is also requested to ascertain and report how the final examinations in force at the Engineering Colleges at Rurki, Sibpur and Poona are conducted and, if there are any independent Examining Boards in these Colleges, how their remuneration is met.

(By Order.)

C. A. SOUTER,
Ag. Secretary to Government.

VI

Memorandum No. 768-5, Educational, dated 3rd July 1908.

With reference to his letter R.C. No. 4871/07, dated 24th March 1908, on the subject of the remuneration to the members of the Board of Examiners of the College of Engineering, the Director of Public Instruction is requested to report in consultation with the Principal of the college whether the registration fees of Rs. 5, Rs. 4 and Rs. 3 charged under rules 33, 36 and 39 of the rules of the college cannot be enhanced to such extent as may be necessary to secure that the total sum realized from examination fees, inclusive of registration fees, shall be sufficient to meet the total remuneration paid to the Board of Examiners.

H. D. TAYLOR,
Secretary to Government.

To the Director of Public Instruction.

VII

Letter—from the Hon'ble Mr. A. G. BOURNE, D.Sc., F.R.S., C.I.E., Director of Public Instruction.

To—the Secretary to Government, Educational Department.

Dated—Madras, the 15th August 1908.

No.—Ref. on Cur. No. 4871 of 1907.

With reference to paragraph 2 of memorandum No. 768-3, dated 19th May 1908, calling for information as to how the final examinations in force at the Engineering Colleges at Rurki, Sibpur and Poona are conducted, I have the honour to report as follows:—

(1) At Rurki, the final examinations are conducted partly by the college staff and partly by outside examiners, the latter being appointed by the Principal for each separate paper and remunerated out of the budget provision "Prizes and Fees". There appears to be no definite Board.

(2) At Sibpur, the college examinations are conducted by the members of the staff, and it does not appear that they have a Board of External Examiners.

(3) At Poona, the students of the higher classes sit only for the University examinations, but it would seem that the college staff is well represented on the University Board and gets as a rule about half the appointments on the Board. For all examinations held during the year, the work is done by the college staff without any extra payment. For the classes for Sub-overseers, Mechanical Engineers and Electrical Engineers, the examinations are conducted entirely by the college staff and without any extra payment.

2. As regards paragraph 1 of the memorandum under reply, I beg to state that I have addressed the Registrar, Madras University, and that his reply is awaited. I am reminding him.

VIII

Letter—from the Hon'ble Mr. A. G. BOURNE, D.Sc., F.R.S., C.I.E., Director of Public Instruction, Madras.

To—the Secretary to Government, Educational Department.

Dated—the 15th August 1908.

No.—Ref. on Cur. No. 4871/07.

With reference to Memorandum No. 768-5, dated 3rd July 1908, I have the honour to report that the Principal, College of Engineering, considers, and I agree with him, that it will not be practicable to increase the registration fees to the extent necessary to balance the expenditure. Under the new rules the number of those that register will scarcely exceed the number admitted. The registration fees this year—the first under the new rules with admission to all the three classes—amounted in all to Rs. 369 only. The examination fees at the present rates with the maximum number of students sanctioned for the several classes will be Rs. 1,450 (Engineer class, 20 at Rs. 20, Rs. 400; Upper Subordinate, 30 at Rs. 15, Rs. 450; and Lower Subordinate, 60 at Rs. 10, Rs. 600). The total income from registration and examination fees will therefore be about Rs. 1,800. In my letter Ref. on Cur. No. 4871/07, dated 24th March 1908, the total cost of the examinations with the transference of a considerable portion of the examination work to the college staff was worked out at Rs. 4,205 and the difference, it will be seen, is too great to be covered by any feasible increase in the registration fees.

2. Mr. James suggests, however, the following course:—

"The Board of Examiners as at present constituted consists of three members with two members of the college staff as advisory members. It might be altered by forming a board of six members—three external members and three internal unpaid members, who would be members of the staff. The latter would act as ordinary members and one or other would submit half the questions for each paper for the consideration of the board, the acceptance of any question, however, to rest solely with the external examiners. The work to be done by the external examiners in connection with the setting of papers would therefore be halved and the remuneration might be reduced correspondingly.

"I may add that this constitution of boards with internal and external examiners, the advantages of which are obvious, is very usual with modern Universities at home, and is found to work well in practice.

"The accompanying statement shows how, by increasing the examination fees to Rs. 10, Rs. 8 and Rs. 5 per session for the Engineer, Upper Subordinate and Lower Subordinate classes, respectively, and the registration fees to Rs. 15, Rs. 12 and Rs. 10 and adopting the above principle together with a slight reduction in the rates for marking papers, the expenditure and income may be approximately balanced."

This suggestion seems to me to be "a feasible one and to furnish a satisfactory solution" of the difficulty without working undue hardship on the students.

ENCLOSURE.

Income.

Examination fees.

	Present scale.		Proposed scale.	
	RS.	RS.	RS.	RS.
Engineer class	20	20 = 400	20	15 per session = 300
Upper Subordinate class ..	30	15 = 450	30	12 " = 360
Lower do.	60	10 = 600	60	7 " = 420
Paid only in final year		1,450		
∴ per annum		483	Per annum	1,080

(b) Registration fees.

	Present scale.		Proposed scale.	
	RS.	RS.	RS.	RS.
Engineer class	20	5 = 100	20	15 = 300
Upper Subordinate class..	30	4 = 120	30	12 = 360
Lower do.	60	3 = 180	60	10 = 600
		400		1,260
Total income ..	883		Total ..	2,340

EXPENDITURE.

Distribution according to statement accompanying letter No. 1638-C., dated 5th March 1908, copy herewith, but with reconstituted Board so that half the work only of setting papers is done by external examiners:—

	RS.
Setting papers for Engineer class $\frac{1}{2}$ (20 papers at Rs. 80 + $\frac{1}{2}$ at Rs. 90)	815
Valuing (20 $\times$ 7 + 10 $\times$ 14 at Re. 1 per paper)	280
	1,095
Setting papers for Upper Subordinate class $\frac{1}{2}$ (* 10 + $\frac{1}{2}$ at Rupees 60 + $\frac{1}{2}$ at Rs. 90)	375
Valuing (35 $\times$ 17 at As. 12)	413
	788
Setting papers for Lower Subordinate class $\frac{1}{2}$ (2 + $\frac{1}{2}$ at Rs. 60 + 1 at Rs. 90)	135
Valuing (60 $\times$ 7 at As. 12)	315
	450
	RS.
	Total cost of examinations.
	RS.
Engineer classes	1,095
Upper Subordinate classes	788
Lower do.	450
	2,333
	Income.
	RS.
	600
	720
	1,020
	2,340

* Two papers will be sufficient in Mathematics for first year and one in second year.

IX

Letter—from the Hon'ble Mr. A. G. BOURNE, D.Sc., F.R.S., C.I.E., Director of Public Instruction.

To—the Secretary to Government, Educational Department.

Dated—Madras, the 28th September 1908.

No.—Ref. on Cur. 4871/07.

With reference to paragraph 1 of Memorandum No. 768-3, Educational, dated 19th May 1908, and in continuation of my letter, Ref. on Cur. No. 4871/07, dated 15th August 1908, on the subject of the examinations at the College of Engineering, I have the honour to state that the Registrar of the Madras University informs me that the Board of Studies in Engineering who has been consulted by the Syndicate in the matter considers that the question of taking college work into account in University Examinations is a very large one and that it is not in favour of introducing such a principle with regard to examinations in Engineering.

Order—No. 49, Educational, dated 26th January 1909.

Under rules 36, 42 and 47 of the rules for the working of the College of Engineering, which were in force before 1st April 1907, fees were levied for the entrance examinations at the rates of Rs. 20, Rs. 15 and Rs. 10, respectively, for the several classes, while for the final examinations also similar fees were levied (rule 60). The final examinations as well as the term examinations for which no fees were levied were conducted by a Board of Examiners, while the entrance examination in respect of which fees were levied was conducted by the college staff.

2. Under the revised rules issued in G.O., No. 159, Educational, dated 20th March 1907, the entrance examination for which fees were levied has been abolished. The selection of candidates for the several classes is made by the Principal, registration fees of Rs. 5, Rs. 4 and Rs. 3, respectively, being levied from the candidates in the place of the old entrance examination fees. The fees for the final examinations are the same as before, namely, Rs. 20, Rs. 15 and Rs. 10, respectively. In view of the abolition of the entrance examinations, it was anticipated that there would be a considerable fall in the total receipts from fees and the Director of Public Instruction was requested to see that the remuneration to the examiners did not exceed the receipts from examination fees and to revise, if necessary, the scale of remuneration approved in G.O., No. 204, Educational, dated 9th April 1902. The Director of Public Instruction considers that it would be undesirable either to enhance the examination fees or to reduce the remuneration to the examiners so as to make these examinations self-supporting. The Government will accordingly make no change in respect of the current examinations.

3. The Governor in Council after careful consideration is, however, of the opinion that for the future the system of external examiners now in force need no longer be maintained, the conduct of the examinations being left as in Bombay and Bengal to the college staff and the certificate of the Principal of the College of Engineering being accepted according to the prescribed standard as a qualification for the public service in this Presidency. For posts in which a University qualification is needed, there will be no change, as the University exacts its own standard, imposes its own examination, and appoints its own examiners. The Governor in Council accordingly resolves to direct that for the future the special Board of Examiners for the College of Engineering be abolished and that the work hitherto done by the Board be undertaken by the college staff as part of their ordinary duties.

4. The Government further direct that the fees now charged for these examinations be abolished as separate fees and that they be added to the tuition fees which shall be raised by an equal amount. On this point the Director will report the scale which should for the future be fixed.

5. The plan of examinations at present in force in the college appears to be in some respects unnecessarily complicated, and the Director of Public Instruction will be requested to advise, after consultation with the Principal, in what directions he thinks it may be advantageously simplified or reorganized so that the work done by a student during his college course may be allowed its full weight in deciding whether he should be given a college certificate or not.

6. The Director of Public Instruction will be further requested to prepare and submit for the approval of Government a draft of the alterations in the rules of the college which are rendered necessary by these orders.

(True Extract.)

A. BUTTERWORTH,
Ag. Secretary to Government.

To the Director of Public Instruction.
" Public Works Department.
Editors' Table (order only).

EDUCATIONAL DEPARTMENT.

NOTES CONNECTED WITH O.M., No. 49, EDUCATIONAL,
DATED 26TH JANUARY 1909.

[SUBJECT.—Rate of remuneration to the Members of the Board of Examiners,
College of Engineering.]

Previous papers.

G.O., No.	443	Edl., dated	16th July	1885.
" "	349	Edl. "	11th June	1898.
" "	530	Edl. "	22nd Aug.	"
" Nos.	547-48	Edl. "	22nd "	1899.
" No.	511	Edl. "	11th Sept.	1901.
" "	204	Edl. "	9th April	1902.
" "	37	Edl. "	20th Jan.	1906.
" "	102-R.	Edl. "	20th April	"
" "	841	Edl. "	27th Dec.	"
" "	159	Edl. "	20th Mar.	1907.
" "	413	Edl. "	29th June	"
" "	320-R.	Edl. "	29th "	"

From the Director of Public Instruction, dated 18th September 1907, No. 4871.

In G.O., No. 413, Educational, dated 29th June 1907, the Government observed that, as the new rules for the College of Engineering had done away with the entrance examinations for which fees of Rs. 20, Rs. 15 and Rs. 10 were being levied from the candidates, the income from examination fees at the College of Engineering would be greatly reduced, and they requested the Director of Public Instruction to see that the remuneration to the Board of Examiners of the College did not exceed the fees and to revise, if necessary, the scale of remuneration approved in G.O., No. 204, Educational, dated 9th April 1902.

2. The Director of Public Instruction reports that, as observed by Government, there will be a considerable fall in the income from examination fees, but that it will not be possible to keep the remuneration of the examiners within the fee receipts. He estimates the income from examination fees during the current year at Rs. 1,967 and the remuneration to the examiners at Rs. 4,800.

3. The question of reducing the scale of remuneration to the examiners has previously been under the consideration of Government on more occasions than one.

4. In 1898 while sanctioning the grant of certain honoraria to Messrs. Ashpitel and Scovell for having conducted the final examinations of the College of Engineering, Madras, the Secretary of State suggested the desirability of raising the fees payable by the candidates so as to make the examination self-supporting. Accordingly in G.O., No. 349, Educational, dated 11th June 1898, the Director of Public Instruction was requested to report on the question.

5. Subsequently, however, while passing orders on the revised rules of the College of Engineering—vide paragraph 2 (4) of G.O., No. 530, Educational, dated 22nd August 1898—the Government considered that it was inadvisable to raise the scale of fees for the final examination in view of the fact that the students were

generally poor and of the proposal then under consideration to raise the term fees for the Sub-overseer and Surveyor class. They accordingly requested the Director of Public Instruction to report whether in order to make the examination, as nearly as possible, self-supporting the examiners' stipends could not be reduced.

6. The Director of Public Instruction, Dr. Duncan, then reported that he had considered the question in consultation with the Principal of the College and the President of the Board of Examiners, and had come to the conclusion that it was not expedient either to raise the fees paid by the candidates or to reduce the Examiners' stipends. He pointed out that the introduction of entrance examination for the Sub-overseer and Surveyor and the Draftsman classes, which were conducted by the College staff free of charge, had reduced the net cost of the examinations and that to wipe off the small net cost to Government it would be necessary to adopt one of the following courses namely:—

- (1) To reduce the rates of remuneration to the examiner.
- (2) To reduce the number of question papers by giving a common paper in certain subjects to two or more classes.
- (3) To convert full unit papers into papers of half a unit. (A three hours' paper was taken as unit paper.)

7. The Director of Public Instruction however was against adopting any of the courses. As regards the first course he said that the rates of remuneration were already low and that if they were further reduced it would not be practicable to secure the services of capable men as examiners. As regards the other suggested courses he pointed out that the adoption of the second course was not practicable and that the adoption of the third course would be detrimental to the interests of the College and of the Public Works Department. He remarked that the Madras College of Engineering was one of the most economically managed institutions of the kind and that any proposal to reduce the expenditure would only stultify the efforts made towards the development of Engineering education in the Presidency. The Government however did not agree with the Director of Public Instruction and ordered a reduction in the rates of remuneration to the examiners—*vide* G.O., No. 547, Educational, dated 22nd August 1899. The rates, as then revised, stood as follows:—

	Engineer and Engineer Subordinates classes.	Draftsman and Surveyor class.
	RS.	RS. A. P.
For setting a unit question paper	50	40 0 0
For valuing an answer paper	1	0 8 0

8. The reduced rates were in force for four years and in March 1902 the late Mr. G. H. Stuart pointed out that there had been a general discontent that the rates of remuneration offered to the examiners were low; that when a new Board of Examiners had to be appointed in 1900, he experienced considerable difficulty in getting competent men, so much so that the examinations could not be conducted at the proper time; and that as the work to be done required special knowledge and as there were not many men who could do it, the field of selection was very limited. Mr. Stuart also stated that as the examination had become more than self-supporting, the object aimed at by Government in reducing the rates of remuneration had been effected by an increase in the fee income. Mr. Stuart accordingly proposed a revised scale of remuneration and the Government approved it. This scale which is still in force is given below:—

Subject.	Duration of paper.	Rates now approved.	
		Setting paper.	Valuing paper.
	HOURS.	RS.	RS.
Differential and integral calculus	3	80	2
Mechanics	3	80	1½
Hydro-mechanics and heat	3	80	1½
Theodolite surveying	3	80	1½
Hydraulics	4	80	2
Topographical drawing	3	40	1
Applied mechanics	4	100	2
Mechanism and steam-engine	3	80	1½
Chemistry	1½	40	1½
Algebra	3	60	1
Plane trigonometry	3	60	1
Geometry and mensuration	3	60	1½
Building construction	3	60	1½
Building materials	3	40	1
Chain compass and plane table survey	3	60	1½
Levelling	3	60	1½
Language	3	40	1
Geometrical and perspective drawing	3	60	1
Building drawing (2 papers)	4 each.	60	1
Machine drawing	3	60	1
Free-hand and model drawing	3	40	1
Estimating	4	60	2
Chemistry (practical)	..	..	1½
Language (oral)	..	..	1

* Four hours for engineer class and three hours for the other classes.

9. The Director of Public Instruction (the Hon'ble Dr. A. G. Bourne) now states that the field of selection is still very limited and that any reduction in the scale of remuneration will increase the difficulty of securing competent examiners. He considers that the fees for the final examinations are already sufficiently high and that it is not advisable to raise them. He therefore suggests that the examiners may, with the sanction of the Government of India, be remunerated irrespective of the fees realized or that officers of the Public Works Department may be appointed to conduct the examinations and to divide among themselves whatever fee becomes available.

10. Under rule 70 of the revised rules for the College of Engineering the Board of Examiners has to conduct all sessional and final examinations of the college. The final examinations are those held at the end of the course of the Engineer and the Upper and Lower Subordinate classes; the sessional examinations are those held at the end of the first and second years of the courses for the several classes.

11. In connection with the appointment of the President and a member for the Board in May last, the Honourable Member noted:—

“Why should this examination not be conducted by the Professors as in college examinations at a University; except such examinations as give a professional qualification? These latter would be only final examinations.”

It was then pointed out that the term or sessional examinations held in the College of Engineering were not analogous to the class examinations in other colleges and that as at these sessional examinations portions of the subjects prescribed for the several courses of study were finally disposed of by the Board of Examiners and the marks awarded at the examinations were added to those obtained at the final examinations

for the purpose of determining the success of the candidates, they partook of the nature of final examinations so far as the subjects finally dealt with at these examinations were concerned.

12. Under the rules in force previous to April 1907, the Professors of the College conducted the entrance examinations for the several classes. According to the revised rules there is no entrance examination and the College Professors are relieved of some amount of work in that respect. It is therefore for consideration whether they (the Professors) may not be associated in future with the Board of Examiners so as to reduce the cost of the examinations. If this is considered to be open to objection, then the only feasible course seems to be to adopt either of the suggestions of the Director of Public Instruction. The adoption of the first suggestion of the Director of Public Instruction, viz., to pay the examiners irrespective of the amount of fees paid by the

The object of an independent Board of Examiners is to see that no one examines in the subjects in which he lectures.

H. D. TAYLOR.

In the case only of Government servants? candidates, will involve frequent reference to the Government of India and the Secretary of State and must on that

H. D. TAYLOR.

account be avoided. As regards the second suggestion, viz., to entrust the examinations to the officers of the Public

I don't think this is a practicable solution. The selection of officers, unless placed on special duty, would be invidious, and the work would be scamped.

H. D. TAYLOR.

Works Department and to make them divide among themselves whatever fee is realized, the Public Works Department may, it is submitted, be consulted u.o. as to whether the course proposed is feasible.

T.K.—14-10-07.

K. RANGASWAMI AIYANGAR—15-10-07.

C. A. SOUTER—28-10-07.

Please note the present constitution of the Board of Examiners, Engineering College, and the date of appointment of each. For how long does the appointment hold good? Is there any fixed remuneration apart from the setting and valuation of papers?

H. D. TAYLOR—29-10-07.

Under Rule 70 of the rules for the working of the College of Engineering issued under G.O., No. 159, Educational, dated 20th March 1907, the Board of Examiners of the College of Engineering is to consist of "a President and two members appointed by Government on the recommendation of the Director of Public Instruction for a term of three years. The President and members shall ordinarily be Engineers."

2. The Board is now composed of the following gentlemen:—

President.

Appointed 2nd July 1907—G.O., No. 320 R., dated 29th June 1907.

Mr. A. B. Strange, Deputy Chief Engineer, Madras Railway.

Members.

Appointed 24th April 1906—G.O., No. 102 R., dated 20th April 1906.

(1) Mr. R. Ll. Jones, Professor of Physics, Presidency College (on leave).

Appointed 2nd July 1907—G.O., No. 320 R., dated 29th June 1907.

Mr. C. W. Lloyd Jones, Assistant Engineer, Nizam's Guaranteed State Railway (acting), during the absence of Mr. R. Ll. Jones.

Why was an outsider appointed?

G. S. F[ORBES].

Appointed 24th April 1906—G.O., No. 102 R., dated 20th April 1906.

(2) Mr. H. T. Keeling, Executive Engineer, Coimbatore.

3. None of the members of the Board appears to be paid a fixed remuneration independent of the rates fixed for setting and valuing papers.

The rates are given in the appendix on page 4 of G.O., No. 204, Educational, dated 9th April 1902—*vide* page 3 *supra*.

K. RANGASWAMI AIYANGAR—1-11-07.

C.A.S.—2-11-07.

Please see my note of 6th June 1907 on page 11 of G.O., No. 413, dated 29th June 1907, as to the old and new scale of fees levied from candidates for registration and for the final examination of the College of Engineering.

2. The fees under the new rules do not, even approximately, cover the cost of the remuneration to examiners.

If an independent Board of Examiners is retained suitable men will not accept the office if there is any further reduction in the fees. It is submitted that it is desirable that there should be an independent Board outside the professorial staff of the College.

3. The alternatives are—

(a) to entrust the examinations entirely to the College staff;

(b) to apportion the work to selected officers of the Public Works Department not connected with the College and to divide the actual receipts from fees amongst them.

4. In the case of the Medical College it has been held undesirable that College Professors and lecturers should examine in subjects in which they lecture. The same principle would apply here.

The second alternative, to insist on the work being done by selected Public Works Department officers not connected with the College, would be certain to cause discontent, unless those officers were placed temporarily on deputation for the purpose. This would probably be found inconvenient, but if the Honourable Member thinks it desirable to pursue this suggestion, the Public Works Department may be consulted.

5. Another alternative would be to raise the fees for the final examination to, say, Rs. 30, 20, 15 respectively from Rs. 20, 15, 10 in view of the relief caused by the non-levy of fees for the entrance examination which has been abolished. Including registration fees, the men would then pay Rs. 35, 24, 18 as against Rs. 40, 30 and 20 under the old rules — or, as an alternative, the registration fees might be increased.

H. D. TAYLOR—3-11-07.

The Secretary of State has virtually laid down that the examination fees must cover the cost of the examinations. Especially is this justified in the case of a professional college, where the results qualify for the candidates' future livelihood.

My doubt has always been whether the examinations held by the outside examiners might not be curtailed. In the Universities at home it is only the actual degree examinations that are conducted by outside examiners: all other examinations are conducted by the professors themselves as part of their ordinary duty.

At technical colleges such as the School of Mines or Royal College of Science at South Kensington, I do not know what the rule is. A qualification there is accepted by the professions, etc., concerned.

Before raising the fees for examinations, I should be disposed to inquire further why the orders of 1885 (G.O., No. 443, Educational, dated 16th July 1885) quoted in paragraph 6 of office-note on page 9 of K.W. G.O., R. No. 320, dated 29th July 1907, should not be reverted to. That order contemplated only the final and not the term examinations also which were added apparently in 1898 (*vide* paragraph 7 of the office-note *ibid*).

Even if the term examinations are to a certain extent and in some cases final, the final examination proper seems to be a sufficiently independent test to satisfy all public requirements.

B Perhaps the Director of Public Instruction will advise to what the final examinations for which fees are paid to an independent Board may be restricted: and how far even then the fees now payable are sufficient: and if not to what they should be raised.

It is on other grounds desirable to restrict so far as possible these independent examinations. It is difficult to get outside examiners in this country: and the professors themselves are more experienced and satisfactory examiners than can readily be obtained outside. And we can trust the Principal to act as a moderator on the term or sessional papers which his professors may set, and see that the examinations are conducted honestly.

G. S. F[ORBES]—7-11-07.

Please draft reference to the Director of Public Instruction on points **A** on page 5 and **B** *supra*.

H. D. TAYLOR—11-11-07.

A draft is submitted for approval.

T.K.—12-11-07.

K. RANGASWAMI AIYANGAR—13-11-07.

C. A. SOUTER—14-11-07.

H. D. TAYLOR—15-11-07.

[Memorandum No. 2332-1, dated 16th November 1907.]

From the Director of Public Instruction, dated 24th March 1908, No. 4871.

Please see the remarks of the Hon'ble Mr. Forbes *supra*.

2. In Memorandum No. 2332-1, dated 16th November 1907, the Director of Public Instruction was requested to report—

(1) whether the system of examinations at the College of Engineering sanctioned in G.O., No. 443, Educational, dated 16th July 1885, under which only the final examinations were conducted by a Board of Examiners might not be reverted to, the term or sessional examinations being left to be conducted by the college staff;

(2) to what extent the final examinations for which fees are paid to an independent Board of Examiners might be restricted and how far in that case the fees now levied from the candidates would be sufficient to meet the remuneration payable to the Board; and

(3) to what extent the fees should be raised so as to make them cover the remuneration.

3. *Reversion to the old system of conducting the examinations.*—The Director of Public Instruction reports that the Principal of the College of Engineering (Mr. James), whom he consulted, is not in favour of such reversion for the following reasons:—

(1) the sessional examinations though, for the sake of convenience, they are held in different years, are all of the nature of final examinations, the marks obtained by the students at them being taken into the final total, and

(2) the influence of external examiners is of considerable assistance towards keeping the instruction given at the College in touch with the actual conditions met with in practice and that this influence will be diminished to some extent if the number of examinations conducted by the Board is reduced.

4. Previous to 1885, the final examinations for the first and second departments

Vide page 36 of the Engineering College Calendar put up (1907-1908).

of College of Engineering (corresponding to the Engineer and Engineer Subordinate classes) were conducted by "gentlemen

"unconnected with the College", while those for the draftsman and surveyor classes were conducted by the staff of the College, who also appear to have conducted the term examinations for all the classes.

5. Article II of the rules for the working of the College sanctioned in G.O., No. 443, Educational, dated 16th July 1885, however, provided that "all final examinations shall be conducted by an independent Board of Examiners, consisting of a President and two members to be appointed by Government for a term of three years, who were to receive such remuneration as was from time to time to be fixed by Government." When the rules were revised in 1898, this rule which became article XV provided that "all term and final examinations shall be conducted by an independent Board of Examiners," etc.

6. Under rule 85 of the rules for the working of the College of Engineering printed with G.O., No. 37, Educational, dated 20th January 1906, which were in force in 1906, the Board of Examiners conducted only the term and final examinations. The examinations for admission* to the several classes (*Cf.* rules 34, 40* and 46) were conducted by the College staff—*vide* Rule 86. The term examinations held in the College of Engineering are not analogous to the class examinations in other colleges. At these term examinations portions of the subjects prescribed for the several courses of study are finally disposed of by the Board of Examiners, and the marks awarded at these examinations are added to those obtained at the final examinations for the purpose of determining the success of the candidates. It will thus be observed that these term examinations are of the nature of final examinations so far as the subjects dealt with at those examinations are concerned—*vide* rules 12, 17, 22 and 26 of the rules on pages 5 to 7 of G.O., No. 37, Educational, dated 20th January 1906. A similar provision exists in the revised rules sanctioned in G.O., No. 159, Educational, dated 20th March 1907, the term examinations being here styled "sessional examinations".

* Under the rules sanctioned in G.O., No. 159, Educational, dated 20th March 1907, these admission examinations have been abolished.

K.R.

7. It will thus appear that any change in the existing system of the sessional and final examinations does not seem to be expedient.

C. A. SOUTER.

8. *Reduction in the examinations at present conducted by the Board and the consequent reduction in the amount of fees payable.*—In regard to this point, Mr. James suggests three alternative courses:—

FIRST—*To reduce the work now done by the Board to a large extent by transferring the same to the College staff.*—Under the proposed scheme the Board will examine in seven subjects for the Civil Engineering course, instead of in 20 as at present, and in six subjects for the Mechanical Engineering course against 19. For the Upper and Lower Subordinate courses, the Board will examine in six and four subjects, respectively, against 18 and 11. The proposals are summarized in the following abstract:—

Classes.	Existing number of subjects in which the Board examines.	Number of subjects in which the Board will examine as per the present proposal.	Remuneration.			Expected fee as per rule 50 of the College rules.	Net cost.
			Setting papers.	Valuing papers.	Total.		
Engineer Class .. { Civil	20	7	rs.	rs.	rs.	rs.	rs.
Mechanical	19	6	1,360	315	1,675		
Upper Subordinate	18	6	510	350	860	1,450	1,595
Lower	11	4	210	300	510		
Total ..	68	23	2,080	965	3,045	1,450	1,595

Under this scheme the charges for remuneration will exceed the fee receipts by Rs. 1,595 and this sum will have to be met from other sources. The Principal, however, fears that this arrangement might result in lowering the present standard of efficiency.

9. SECOND—*To entrust the Board only with the final papers in all subjects.*—This scheme would work out as in the following abstract:—

Classes.	Number of papers to be set specially.	Fees for setting papers.	Fees for valuing papers.	Total.	Expected fees.	Net cost.
		RS.	RS.	RS.	RS.	RS.
Engineer Class	20	1,630	420	2,050	1,450	..
Upper Subordinate	12	870	595	1,465		
Lower	2	270	420	690		
Total ..				4,205	1,450	2,755

This scheme is better than the first in that the transfer of the examination work to the teaching staff is not likely to weaken the efficiency of the examination, but it does not result in any appreciable reduction of expenditure. No information is available as to what system is in force in the Thomason College, Roorkee, and in the Sibpur College, Bengal. Perhaps the Director of Public Instruction may be asked to obtain information on this point.

10. THIRD—To group the tuition and the examination fees together.

Classes * as per old rules.	Fees † according to the old rules.				Extent of terms.	Classes as per new rules.	Fees ‡ according to the existing rules.				Extent of terms.	Enhanced fees now proposed.		
	Full course.	Per term.	Instalment.				Full course.	Per session.	Instalment			Full course.	P. r session.	Monthly.
	RS.	RS.	RS.	YRS.		RS.	RS.	RS.	YRS.		RS.	RS.	RS.	
Engineer class ..	360	68	12	4	Engineer class ..	360	130	12	4	420	140	18		
Engineer Subordinate class ..	150	34	6	3½	Upper Subordinate.	180	65	6	4	200	75	9		
Sub-Overseer and Surveyor	100	28	5	2	Lower „	100	37½	4	3	120	50	6		
Draftsman	80	22	4	2										

* Page 4 of G.O., No. 37, dated 20th January 1906.

† - 10 of

12 of G.O., No. 159, dated 20th March 1907.

By the adoption of this scale of fees the Principal expects to realize an income of Rs. 21,200 against Rs. 18,600 now realized. This excess together with the registration fees would, he considers, almost balance the estimated expenditure of Rs. 3,045 on the Board with the proposed transfer of a greater portion of its work to the College staff.

11. This proposal would tend to make these examinations self-supporting in the sense that the remuneration to the examiners will be met from the extra collections under school fees and from the registration fees. But it does not appear that the adoption of this course will obviate the necessity to go up to India or the Secretary of State whenever the remuneration in the case of Government servants appointed on the Board of Examiners exceed Rs. 500 or Rs. 1,000 as the case may be. Under article 72 (d) of the Civil Service Regulations such sanction would be unnecessary only if the receipts from the fees levied from the candidates appearing at the examinations cover the honoraria. But under the proposed arrangement there will be no separate fees for examination, and it is doubtful whether it would be correct to take the registration fees into account for the purposes of the calculation. Attention is in this connection invited to the notes of the Hon'ble Mr. Hammick (then Educational Secretary) on pages 2 and 3 of the notes with G.O., No. 204, Educational, dated 9th April 1902.

12. *The raising of the examination fees so as to cover the remuneration.*—The estimated receipts from examination fees from the sanctioned number of candidates in the several classes is Rs. 1,450. The estimated cost of the examinations is Rs. 4,500. The enhancement of the examination fees so as to cover the remuneration will, Dr. Bourne thinks, be prohibitive.

13. The Director of Public Instruction raises another point in this connection. He observes that he made a reference to the Principal enquiring whether, in view of the fact that the Engineer students may appear for the B.E. Degree examination of the University, the College examination for that class might not be abolished.

Paragraph 5 of Director of Public Instruction's letter.

appointments in the public service, and that a student of ordinary ability who works properly and intelligently during his years of attendance at the College should, in his (Principal's) opinion, receive the College diploma at the end of the course, as it is the qualification for appointment in the public and other services. The University degree, the Principal considers, should be on quite a different footing and the examination for it should be of such a standard that it should be only possible for the very pick of the students to graduate in Engineering. He also points out the following further difficulty in regard to the above proposal. A large proportion of the marks for the final examination has to be awarded during the course by the College staff for practical work and he doubts whether this system can be worked in with a scheme of examinations controlled by the University, a virtually independent authority.

14. The Director of Public Instruction, however, thinks that no great harm would be done if all the examinations were conducted by the College and the University. He considers that the University should not be looked upon as something independent of its affiliated colleges which form part and parcel of it, and that there should be no real difficulty in arranging that the University should take into account marks awarded at the College, particularly where there is only one affiliated institution in the faculty.

15. It is submitted that the papers may be first forwarded unofficially to the Chief Engineer, Public Works Department, for remarks on the several points raised.

K. RANGASWAMI AIYANGAR—25-4-08.

Yes.

C. A. SOUTER—27-4-08.

To the Public Works Department.

PUBLIC WORKS DEPARTMENT.

The most feasible proposal appears to me to be that of the Director of Public Instruction to do away with the special College examination, its place being taken by the University B.E. degree examination. I do not think the idea is to be encouraged that what is wanted for the public service (that is, the Public Works Department) so far as Engineering knowledge is concerned is something special. What we want are properly educated engineers and the Madras University B.E. degree should be sufficient to secure this. I take it that arrangements could be made to take account of College work as suggested by the Director of Public Instruction.

F. J. WILSON—2-5-08.

To the Educational Department.

EDUCATIONAL DEPARTMENT.

It is submitted that the file may be forwarded to the Director of Public Instruction u.o. for further consideration of the question raised in the Chief Engineer's note *supra*, with special reference to the portion marked C in the Hon'ble Mr. Wilson's note.

K. RANGASWAMI AIYANGAR—7-5-08.

C. A. SOUTER—8-5-08.

To the Director of Public Instruction.

OFFICE OF THE DIRECTOR OF PUBLIC INSTRUCTION.

Mr. Wilson agrees with me that arrangements could be made to take the College work into account at the University examinations. I am not able to say exactly how this should be done; it is a matter for the Board of Studies in Engineering of

What are these?

C. A. SOUTER—11-5-08.

Please see below.

K.R.

(B.A. University Calendar, 1907-1908, page 125) "the candidate shall submit his laboratory note-books containing the record of all his practical work performed during the period of study for the examination. The record shall be countersigned by the professor or professors under whom the candidate has worked, etc." Marks are awarded in regard to these note-books.

Mr. James' difficulty is that the B.E. degree examination is too hard for the bulk of the students, but I do not see why it should not be made to bear the same relation to the Engineering College course as the B.A. degree examination does to the courses in an Arts College. If the matter is to be further considered, it may

* *Vide* page 18 of G.O., No. 841, Educational, dated 27th December 1906.

D be referred to the Board of Studies through the Syndicate * (Regulation 141).

A. G. BOURNE—10-5-08.

Orders are solicited whether a reference may be made to the Board of Studies through the Syndicate as at D in Dr. Bourne's note above. Mr. James, the Principal of the College of Engineering, is the Chairman of the Board for Engineering and the Hon'ble Mr. Wilson is one of its members.

K. RANGASWAMI AIYANGAR—11-5-08.

Dr. Bourne's proposal may be approved.

C. A. SOUTER—12-5-08.

Very well. Let us see whether the University will help us. Meanwhile it would be a good thing to ask how Roorkee and the other Engineering Colleges manage their final examination and how their examining Boards are paid. Please find this out. If any other way is impossible I do not see why the Government should not state that so much of the "tuition fees" should be credited towards the examination fees, that is, to rule that a certain portion of the tuition fees is really paid to meet the cost of the sessional examination; and so make a larger sum available for paying the examiners. This would probably satisfy the Accountant-General and get over the difficulty.

I think it would in any case be a great mistake to lower the standard of the examination in any way, on the other hand it would be a mistake to raise the fees. I don't see why the plan I suggest above should not be followed; the change could be made by the addition of a note to rule 48.

M. H[AMMICK]—15-5-08.

Draft please.

C. A. SOUTER—16-5-08.

A draft official memorandum to the Director of Public Instruction is submitted for approval.

2. As regards the suggestion in the Honourable Member's note above as to crediting a portion of the tuition fees towards the examination fees the file may, it is submitted, be forwarded to the Financial Department for remarks.

T.K.—16-5-08.

K. RANGASWAMI AIYANGAR—16-5-08.

Issue.

C. A. SOUTER—18-5-08.

[Memorandum No. 768-3, dated 19th May 1908.]

To the Financial Department.

FINANCIAL DEPARTMENT.

The subject for decision in this case is how to adjust the expenditure on account of remuneration to the members of the Board of Examiners of the College of Engineering, Madras, and the receipts from examination fees levied from the students in the several classes in the College, so that both may be almost equal.

2. The several fees now levied in the College are—

(i) Registration fees (rules 33, 36 and 39 on pages 10 and 11 of G.O., No. 159, Educational, dated 20th March 1907).

(ii) Tuition fees (rule 48 on page 12 of G.O., No. 159, Educational, dated 20th March 1907).

(iii) Special fees (rule 49 on page 12 of G.O., No. 159, Educational, dated 20th March 1907).

(iv) Examination fees (rule 50 on page 12 of G.O., No. 159, Educational, dated 20th March 1907).

Of these only (iv) examination fees are set apart for the payment of remuneration to the Board of Examiners. The remaining fees go to the credit of the College.

3. Under present conditions the estimated total receipts from examination fees are Rs. 1,460 while the estimated cost of the examinations is Rs. 4,500. The fees do not, therefore, cover the cost of conducting the examinations and consequently under the last sentence of article 72 (d) of the Civil Service Regulations which runs—

"If fees are levied from the candidates appearing at an examination, and the amount of such fees is sufficient to cover the honoraria of the examiners, the reference required by clause (b) [of article 72] to the Government of India or the Secretary of State in certain cases shall not be necessary."

it becomes necessary to obtain the sanction of the Government of India or the Secretary of State as the case may be for each payment of remuneration to the members of the Board of Examiners who are mostly Government servants.

4. The proposal was, therefore, made either to lower the scale of remuneration to the Board of Examiners or to enhance the examination fees. The former course is considered by the Director of Public Instruction and by the Educational Department to be inadvisable. As regards the examination fees, it is suggested by Educational, as an alternative course, to group the tuition and the examination fees together and to set apart a fixed proportion of the compounded fees as "Examination" fees sufficient to meet the remuneration to examiners. It is this question that is now remitted to Financial for consideration.

5. The practical result of this proposal will be the appropriation of a portion of the *tuition* fees for purposes of examination, or, to put it in another way, the receipts from *tuition* fees will be decreased, while the receipts from examination fees will be correspondingly raised. There will then be a fall in the receipts of the college shown in the budget estimate under the minor head.

* There will be no fall in the total receipts. All fee receipts from the college are shown under XIX.-B. FEES, GOVERNMENT COLLEGES, PROFESSIONAL (page 19, Civil Budget estimate) and all expenditure under 22-D. GOVERNMENT COLLEGES, PROFESSIONAL (page 136, Civil Budget estimate).

C. M. SCHMIDT.

XIX.-B. EDUCATION FEES, GOVERNMENT COLLEGES, PROFESSIONAL. If Government decide to adopt this course there is no account objection, nor will the Accountant-General demur to it on *audit* grounds. If the tuition and examination fees are compounded at the rates given by the Director of Public Instruction at the end of paragraph 4 of his letter R.C. No. 4871, dated 24th March 1908, the total income from this source will be Rs. 21,200, while the cost of remunerating the examiners is Rs. 4,500 or Rs. 3,045 if some of the examination work is transferred from the Board to the College staff as proposed by the Director of Public Instruction.

6. If, however, it is proposed to raise the present rates of examination fees (Rs. 20 for Engineering class, Rs. 15 for Upper Subordinate class and Rs. 10 for Lower Subordinate class), these rates will, it is submitted, be increased nearly by $1\frac{1}{2}$ times so as to cover the remuneration to examiners. This, the Director of Public Instruction $\dagger$ thinks, will be prohibitive. It is, however, submitted for consideration as an alternative if, instead of apportioning a fixed percentage of the compounded tuition and examination fees for the examination, it would not be better to increase the rates of examination fees and reduce the rates of tuition fees so that the students may not feel it burdensome on the whole.

$\dagger$ Paragraph 3 of Director of Public Instruction's letter, R.C. No. 4871, dated 24th March 1908.

A.H.—8-6-08.

This department need not, it is submitted, raise any objection to a portion of the tuition fees being ear-marked as examination fees. The proportion is for Educational to fix, but it should be fixed once for all and not annually so as to produce an income which with the examination fees proper will cover the cost of the examinations. It would seem better on the whole to reduce the tuition fees and to raise the examination fees and to continue to treat each separately.

C. M. SCHMIDT—17-6-08.

The Financial Department must accept the decision of Educational that the examination fees cannot be raised, and the remuneration to examiners cannot be reduced. Government will therefore continue to be out of pocket on the examinations, and the only object aimed at apparently is to allocate the gross fee receipts in such a way as to avoid the necessity of constant references to the Government of India or the Secretary of State for sanction to payment of examiners' stipends in excess of the examination fees. This is a matter for Educational rather than Financial, since the financial interests of Government are not really concerned. But I should imagine that the Accountant-General's criticisms are less likely to be evoked by the proposal in paragraph 6 on page 11 than by that to divert part of the tuition fees to examiners' remuneration.

J. N. ATKINSON—18-6-08.

So far as I can see the proposals mostly amount to robbing Peter to pay Paul. The principle which has been laid down by the Secretary of State is that the fees paid must cover the remuneration to examiners. Experience shows that the

remuneration to examiners cannot be reduced, but some ways of cheapening the cost of the examinations (1) by throwing more of the burden on the College staff, (2) by throwing the final examinations on the University have been proposed.

But what I want to point out is that the whole difficulty arises from the abolition of the Entrance Examination fees. These fees were 20, 15 and 10, the same as the final examination fees (G.O., No. 413, Educational, dated 29th June 1907), and in their place registration fees of 5, 4 and 3 (Rule 31, etc., in G.O., No. 159, dated 20th March 1907) are now levied, i.e., the fees now levied from students are reduced from 40, 30 and 20 to 25, 19 and 13. Nice for the students but an unnecessary sacrifice of public money. What these registration fees are for I do not know but they plainly take the place of the old Entrance Examination fees and in my opinion the proper course is to increase these fees and impose them to meet the cost of examination in the College.

Seeing that the cost of the Entrance Examination is saved and if the cost of the College Examinations are cheapened in the manner proposed in the notes, probably registration fees of 10, 8 and 6 would provide the extra cost required.

I am not prepared to assent to the increase of the net cost of the College to Government as the above papers show no good reason or any necessity for this course

G. S [TOKES]—22-6-08.

J. N. ATKINSON—23-6-08.

To the Educational Department.

EDUCATIONAL DEPARTMENT.

Please see the Hon'ble Mr. Stokes' remarks at E and F above.

Orders are solicited as to whether the registration fees should be enhanced, and created as examination fees.

The point was referred to by me in my note on page 11 of G.O., No. 320, dated 29th June 1907.

2. One of my suggestions in connection with the Decentralization Commission was that power should be delegated to the Local Government to a larger extent to sanction payment of honoraria to examiners, where the honoraria were not covered by the receipts.

H. D. TAYLOR—25-6-08.

Better ask the Director of Public Instruction what he thinks of this proposal after consultation with the Principal of the College and then we can consider it.

M. H [AMMICK]—29-6-08.

Please draft reference.

H. D. TAYLOR—29-6-08.

A draft memorandum to the Director of Public Instruction is placed below for approval.

2. It is submitted that the registration fees under the new rules of the College have not, as observed by the Hon'ble Mr. Stokes, taken the place of the entrance examination fees under the old rules. Formerly candidates for admission into the

Vide Rules 34, 40 and 46 on pages 7 and 8 of G.O., No. 37, Educational, dated 20th January 1906.

College were selected on the results of a competitive examination and a fee was charged for admission to that examination. The examination was conducted

by the College staff as part of their duty and the fees charged for it were utilized for the purpose of remunerating the Board of Examiners. Under the new rules the Educational standard for admission to the several classes of the College has been raised and the competitive examination which used to be held for the selection of candidates has been abolished.

Vide notes on page 18 of K.W., G.O., No. 159, Educational, dated 20th March 1907.

With the abolition of the competitive examination the fee charged for it has also disappeared. The registration fee now charged under the new rules is an entirely new one and was prescribed on the recommendation of Colonel Love who, when submitting the new rules for sanction, observed that it was necessary to prescribe a registration fee as a guarantee of an applicant's good faith and intention to join the College, if selected. The Government accepted Colonel Love's recommendation—*vide* the notes on page 18 of K.W. G.O., No. 159, Educational, dated 20th March 1907. In these circumstances it does not appear that the registration fee can very well be raised.

T.K.—30-6-08.

K. KANGASWAMI AIYANGAR—1-7-08.

Official memorandum may issue.

C. A. SOUTER—2-7-08.

H. D. TAYLOR—3-7-08.

[Memorandum No. 768-5, Educational, 3rd July 1908.]

From the Director of Public Instruction, dated 15th August 1908, R.C. No. 4871-67.

In Memoranda Nos. 768-3, Educational, dated 19th May 1908, and 768-5, dated 3rd July 1908, the Director of Public Instruction was requested to furnish the following information:—

(1) Whether in view to the contemplated abolition of the separate examination for the Engineering class of the College of Engineering now conducted by the Board of Examiners, the Syndicate of the University of Madras could arrange for taking into account for the First Examination in Engineering and the B.E. Degree Examination the marks awarded to the Engineering students during their College course by the staff of the College of Engineering;

(2) How the final examinations in the Engineering Colleges at Rurki, Sibpur and Poona are conducted and, if there are any independent Examining Boards in these Colleges, how their remuneration is met; and

(3) whether the registration fees of Rs. 5, Rs. 4 and Rs. 3 charged under rules 33, 36 and 39 of the rules of the College of Engineering cannot be enhanced to such an extent as may be necessary to secure that the total sum realized from examination fees, inclusive of registration fees, shall be sufficient to meet the total remuneration paid to the Board of Examiners.

2. With regard to the first point, namely, *the taking into account for the University examinations the marks awarded to the Engineering students during their College course by the staff of the College*, the Director of Public Instruction states that he has

They won't.

M. [HAMMICK].

addressed the Registrar of the Madras University on the subject and is awaiting the latter's reply. Dr. Bourne says that he is reminding the Registrar.

3. As to the second point, namely, *how the final examinations in the Engineering Colleges at Rurki, Sibpur and Poona are conducted*, the Director of Public Instruction reports as follows:—

(1) At Rurki, the final examinations are conducted partly by the college staff and partly by outside Examiners, the latter being appointed by the Principal for each separate paper and remunerated out of the budget provision "Prizes and Fees." There appears to be no definite Board.

(2) At Sibpur, the College examinations are conducted by the members of the staff and it does not appear that they have a Board of External Examiners.

(3) At Poona, the students of the higher classes sit only for the University examinations, but it would seem that the College staff is well represented on the University Board and gets as a rule about half the appointments on the Board. For all examinations held during the year, the work is done by the College staff without any extra payment. For the classes for Sub-overseers, Mechanical Engineers and Electrical Engineers, the examinations are conducted entirely by the College staff and without any extra payment."

4. On the third point, namely, *the enhancement of the Registration fees*, the Director of Public Instruction states that it will not be practicable to increase the registration fees to the extent necessary to balance the expenditure. Dr. Bourne observes that under the new rules, the number of candidates who register their names for admission into the College "will scarcely exceed the number admitted," and states that the registration fees during the current year amounted in all to Rs. 369 only.

	Maximum number of students.
* Engineer class	20
Upper Subordinate class	30
Lower " "	60

$$+ 20 \times 20 + 30 \times 15 + 60 \times 10 = 1,450$$

$$+ Rs. 1,450 + 369 = 1,819 \text{ or Rs. 1,800 in round figures.}$$

Paragraph 9 of office-note on page 7 *supra*.

minus Rs. 1,800) or Rs. 2,405 is too great to be covered by any feasible increase in the registration fees.

5. The Director of Public Instruction further states that Mr. James, the Principal of the College of Engineering, makes the following further suggestion for the conduct of the examinations:—

"The Board of Examiners as at present constituted consists of three members

Vide rule 70, page 14 of G.O., No. 159, Educational, dated 20th March 1907.

with two members of the College staff as advisory members. It might be altered by forming a Board of six members—three external members and three internal

unpaid members, who would be members of the staff. The latter would act as ordinary members and one or other would submit half the questions for each paper for the consideration of the Board, the acceptance of any question, however, to rest solely with the external examiners. The work to be done by the external examiners in connection with the setting of papers would therefore be halved and the remuneration might be reduced correspondingly.

"I may add that this constitution of Boards with internal and external examiners, the advantages of which are obvious, is very usual with modern Universities at home, and is found to work well in practice.

"The accompanying statement shows how, by increasing the examination fees to Rs. 10, Rs. 8 and Rs. 5 per session

§ That is to Rs. 30, 24 and 15, against Rs. 20, 15 and 10, the rates now in force.

§ for the Engineer, Upper Subordinate and Lower Subordinate classes, respectively, and the registration fees

to Rs. 15, Rs. 12 and Rs. 10 and adopting the above principle together with a slight reduction in the rates for marking papers, the expenditure and income may be approximately balanced."

6. The proposal referred to in the preceding paragraph works out as follows:—

INCOME.				
Examination fees.				
		Present scale.		Proposed scale.
		RS.	RS.	RS.
Engineer class	..	20 × 20 = 400	20 × 15	per session = 300
Upper Subordinate class	..	30 × 15 = 450	30 × 12	" = 360
Lower do.	..	60 × 10 = 600	60 × 7	" = 420
Paid only in final year		1,450		
.. per annum	..	483	Per annum	1,080

(b) Registration fees.

		Present scale.		Proposed scale.
		RS.	RS.	RS.
Engineer class	..	20 × 5 = 100	20 × 15	= 300
Upper Subordinate class	..	30 × 4 = 120	30 × 12	= 360
Lower do.	..	60 × 3 = 180	60 × 10	= 600
		400		
Total income		883	Total	2,340

EXPENDITURE.

Distribution according to statement accompanying letter No. 1638-C., dated 5th March 1908, but with reconstituted Board so that half the work only of setting papers done by external examiners:—

		RS.
Setting papers for Engineer class $\frac{1}{2}$ (20 papers at Rs. 80 + $\frac{1}{3}$ at Rs. 90)	..	815
Valuing (20 × 7 + 10 × 14 at Re. 1 per paper)	..	280
		1,095
Setting papers for Upper Subordinate class $\frac{1}{2}$ (*10 + $\frac{4}{2}$ at Rupees 60 + $\frac{1}{3}$ at Rs. 90)	..	375
Valuing (35 × 17 at annas 12)	..	413
		788
Setting papers for Lower Subordinate class $\frac{1}{2}$ (2 + $\frac{4}{2}$ at Rs. 60 + $\frac{1}{3}$ at Rs. 90)	..	135
Valuing 60 × 7 at annas 12	..	315
		450
		—
		Total cost of examinations.
Engineer classes	..	1,095
Upper subordinate classes	..	788
Lower do.	..	450
		2,333
		Income.
		600
		720
		1,020
		—
		2,340

* Two papers will be sufficient in Mathematics or first year and one in second year.

7. This suggestion, the Director states, seems to him to be a feasible one and to furnish a satisfactory solution of the difficulty without working undue hardship on the students.

8. The total income from fees under this scheme will be Rs. 2,340 and the total remuneration Rs. 2,333—*vide* statement above.

9. It is for consideration whether the last scheme proposed by Mr. James for the conduct of the sessional and final examinations of the College of Engineering may be accepted or whether the file may lie over till a reply is received from the University to the inquiry whether they could arrange to take into consideration for the University examinations the marks awarded to the Engineer students during their College course by the staff of the College of Engineering.

T.K.—11-9-08.

K. RANGASWAMI AIYANGAR—12-9-08.

Mr. James' scheme seems a feasible one, but before deciding, it would seem as well to have the University's views on the proposal sent to them.

C. A. SOUTER—14-9-08.

When are the next College examinations held and when is the next batch of students admitted?

H. D. TAYLOR—15-9-08.

Vide page 16 of the Engineering College Calendar for 1908-1909. The next college examinations are to be held in the second week of December 1908.

2. The next batch of students are to be admitted on the 15th July 1909—*vide* rule 28 of the rules on page 10 of G.O., No. 159, Educational, dated 20th March 1907.

H. D. TAYLOR.

There is time to wait till the end of October perhaps.

C. A. SOUTER—15-9-08.

H. D. TAYLOR—16-9-08.

I have spoken with Director of Public Instruction.

He does not see any reason why all the ordinary examinations should not be conducted by the college staff. In England it is only *degree* examinations that are held by outsiders. There can be no possible objection to accepting the college certificates for the various qualifications, subordinate to the University degree which are required for the public service. As Dr. Bourne points out, Mr. James is just as

I did not know this.

M. H[AMMICK].

any fees required from the students unless a very small fee to cover the actual cost of paper, practical tests, outside, etc., but probably the cost of these is so insignificant that the ordinary contingent fund of the college will cover it easily.

But outside examiners are used at Roorkee which produces, I believe, men of a higher stamp than either Sibpur or Poona.

M. H[AMMICK].

Neither at Sibpur (Bengal) nor at Poona is there any External Board; and the origin of it in this Presidency is not far to seek.

The University will of course impose its own tests for Engineering degrees, but these are and should be quite independent of the college.

G. S. F[ORBES]—1-10-08.

Please add to the file the reply of the Syndicate since received; and draft accordingly.

H. D. TAYLOR—2-10-08.

The Syndicate's reply has been added to the file and a draft order is submitted for approval. If approved, the draft may be sent to the Public Works Department for acceptance.

T. K.—6-10-08.

K. RANGASWAMI AIYANGAR—12-10-08.

C. A. SOUTER—15-10-08.

For approval.

H. D. TAYLOR—16-10-08.

Please send me the Regulations of the Royal College of Science (old school of mines) S. Kensington, London: and the rules under which certificates of Associate are given.

G. S. F[ORBES]—26-10-08.

Please comply.

H. D. TAYLOR—26-10-08.

Information relating to the Royal College of Science will be found on pages 352 to 355 of the London University Calendar for 1907-1908. It is observed from page 354 of the calendar that a degree of A. R. C. S. is held by some of the recognized teachers of the Royal College of Science. The rules relating to the grant of the Associateship are given on page 507 of Hazell's Annual, 1908.

K. RANGASWAMI AIYANGAR—27-10-08.

Submitted. This is all the information in the office.

C. A. SOUTER—28-10-08.

The Associateship of the Royal College of Science or of Mines is given on the Where is this information given? I cannot result of class and college examinations, trace it. and there is no reason why the certificates

M. H[AMMICK]—25-11-08.

Vide page 507 of Hazell's Annual.

K.R.—26-11-08.

of the Principal of the Engineering College here should not be accepted for the public services in this Presidency. This will do away with all the difficulties which are constantly arising as to external examiners. In colleges at home the class examinations are accepted everywhere. Nor are there external examiners in the Engineering Colleges in Bengal or Bombay. For posts in which a University qualification (B.E., etc.) is needed, there will be no change, as the University exacts its own standards and imposes its own examinations.

The cost to students of the college course will be very greatly reduced and in the matter of a practical study such as engineering this is of great importance. They had to find over Rs. 7,000 in 1906-1907.

The question remains however whether some fee should be paid for the qualifying certificate—the produce of such fees to go towards a fund for the improvement and extension of the college in directions in which teaching is now behindhand and in obtaining apparatus, etc. I think this would be fair and the present fees of Rs. 20, Rs. 15 and Rs. 10 might be reduced by about one half to, say, Rs. 12, Rs. 10 and Rs. 5 respectively for the corresponding certificates. The draft may meantime be held over.

G. S. F[ORBES]—13-11-08.

Circulated.

H. D. TAYLOR—16-11-08.

Please put up Hazell's Annual for 1908.

M. H[AMMICK]—22-11-08.

Please comply.

H. D. TAYLOR—24-11-08.

Hazell's Annual for 1908 is put up.

K. RANGASWAMI AIYANGAR—24-11-08.

C. A. SOUTER—24-11-08.

I cannot trace among the papers where my Honourable Colleague finds the information to the effect that the College of Science gives its Associateship on the result of its college and class teaching and does not employ outside examiners. In Manchester, and I think in other Universities in England, the system of external examiners exists—and I don't think it can be said generally that the system of outside examiners is not largely used in England.

What has influenced me in this matter is the fear that if the body of external examiners is abolished here, the result may be a lowering of the standard.

It is of course true that the best people to know whether the students have profited by the college teaching are the teachers themselves, and that from the fact that external examiners must depend chiefly on the results of paper examination, their tests must be inferior to the tests applied by the teachers which includes the term work.

On the other hand, there is to my mind a considerable advantage in having the work at the college tested by practical Engineers who have nothing to do with the college work—such men as Railway Engineers or such a man as for instance the present Water and Drainage Engineer in the Municipality. As to Mr. Keeling's qualification I know nothing.

Dr. Bourne of course is inclined to minimise all examination work as a test. His support of the Final School scheme is based on the same reason that examination is very unsatisfactory test of merit—and no doubt if you are quite sure the teaching staff in the college is of such a standard as to make it certain that its opinion will not be affected by a desire to make the college tests easier than they should be, the grant of the college diplomas on their authority alone would be the best course to take.

I notice Mr. James himself is apparently much in favour of some system of external examiners.

However if as I understand to be the case a large number of the Engineer students who pass out from the college take an Engineering degree at the University and if as I understand to be the case the college diploma is merely to the effect that the student has passed through the college and passed out satisfactorily, I am ready to accept Mr. Forbes' proposal and abolish altogether the external examining body.

The use of external examiners in any case is, I think, only of importance in the case of the Engineers; as regards the subordinates and lower subordinates, the external examining body seems quite unnecessary.

I therefore agree to Mr. Forbes' proposal.

I don't understand however what can be done with any fees in the way of improving the college. Such fees cannot be funded in any way. My Honourable Colleague probably only means that we are justified in charging something over and above the actual cost of the college, because we propose to spend money on improving the facilities offered there. The Account Code will prevent any separate fee fund being started.

I am against lowering the fees myself, and if they can no longer be levied as examination fees, I would levy them in some other way as entrance fees or by slightly raising the term fees. As a matter of fact if all the expenses of the college are taken account of, i.e., pensions, cost of machinery and so on, I don't suppose the college pays its way and I would not lower the total fees levied.

One advantage of altering the system of examination will no doubt be a simplifying of the examinations. The statements of examination papers set, which are put up in the current, are appallingly complicated.

If it is finally determined to abolish the Examination Board, I think the Director should be told to see that the present system of examinations is simplified and reorganised, especially with a view of seeing that term work has its full weight in deciding whether the diplomas should be given or not.

M. H[AMMICK]—26-11-08.

H. D. TAYLOR—27-11-08.

As to the future conduct of the examinations, I agree with my Honourable Colleagues. As to the fees I agree that the total cost to the students should not be lowered.

If examination fees are abolished, then I think that either the entrance fees or the term fees should be increased.

A. L[AWLEY]—12-12-08.

Draft please.

H. D. TAYLOR—14-12-08.

The draft order placed below is for approval.

I see no objection to laying on Editors' Table, but the draft should be seen by Hon'ble Messrs. Forbes and Hammick.

A. BUTTERWORTH—4-1-09.

2. Orders are solicited whether it should be placed on the Editors' Table.

K. RANGASWAMI AIYANGAR—23-12-08.

Yes.

G. S. F[ORBES].

The Government Order might go to Editors' Table.

C. A. SOUTER—27-12-08.

G. S. F[ORBES]—22-1-09.

M. H[AMMICK]—25-1-09.

Issue and lay on Editors' Table.

A. BUTTERWORTH—26-1-09.

[G.O., No. 49, Educational, dated 26th January 1909.]

Read again G.O., No. 413, Educational, dated 29th June 1907.

Read also C.Nos. 2332 of 1907, and C.Nos. 768, 1822, 1823 and 2140 of 1908.

ORDER: 49 of 26-1-09
P. S.

Under rules 36, 42 and 47 of the rules for the working of the College of Engineering, which were in force before 1st April 1907, fees were levied for the entrance examinations at the rates of Rs 20, Rs 15 and Rs 10 respectively for the several classes, while for the final examinations also similar fees were levied (Rule 60). The final examinations, as well as the term examinations, for which no fees were levied, were conducted by ^a the Board of Examiners, while the entrance examination in respect of which fees were levied was conducted by the College staff.

2. Under the revised rules issued in G.O. No. 159, Edl., dated 20th March 1907, there is no entrance examination and ^{the} payment of fees has been abolished. The selection of candidates for the several classes is made by the Principal, registration fees of Rs 5, Rs 4 and Rs 3, respectively,

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respectively, being levied from the candidates in the place of the old entrance examination fees. The fees for the final examinations are the same as before, namely, ₦20, ₦15, and ₦10, respectively. In view of the abolition of the entrance examinations, it was anticipated that there would be a considerable fall in the total receipts ~~from fees, which in 1906-07 amounted to ₦7,157 against an expenditure of ₦5,500 on account of remuneration~~ ~~from fees and to the examiners.~~ The Director of Public Instruction was requested to see that the remuneration to the examiners did not exceed the receipts from examination fees and to revise, if necessary, the scale of remuneration approved in G.O., No. 204, Edl., dated 9th April 1902.

3. While agreeing with the Director of Public Instruction in considering that it would be undesirable either to enhance the examination fees or to reduce the remuneration to the examiners so as to make these examinations self-supporting ~~the Government~~ ~~can see no reason why the system of external examiners now in force~~ ~~should be discontinued~~ ~~the conduct of the examinations~~ ~~being~~

The Govt. will accordingly make no change in respect of the current exams. 3. The Govt. after careful consideration are inclined to accept this view. but consider that the system of external examiners now in force is a part from any consideration of cost, and as a matter of general principle, there appears to be

as in Boulevar
see all
here

according to the
prescribed standard

appoints to our
Examiners

On this point the Director
will report the scale
of ex. for the future be
fixed

as in Bombay Bengal
being left ~~exclusively~~ to the College
staff and the certificates of the Prin-
cipal of the College of Engineering
being accepted ^a as a qualification for the
public services in this Presidency.
~~In Colleges in England, the certifi-~~
~~cates of the College authorities are~~
~~accepted everywhere. Nor are there~~
~~external examiners in the Engineering~~
~~Colleges in Bengal or Bombay. For posts~~
~~in which a University qualification~~
~~(the B.E. Degree examination) is~~
~~needed, there will be no change, as the~~
~~University exacts its own standard~~
~~and imposes its own Examination.~~ The
Governor in Council accordingly resolves
to direct that for the future the
special Board of Examiners for the
College of Engineering be abolished
and that the work hitherto done by the
Board be undertaken by the College
staff as part of their ^{ordinary} duties.

4. The Government further direct
that the fees now charged for these
examinations be abolished as separate
fees and ^{that they} be added to the tuition fees
which shall be raised by an equal
amount. ~~so as not to lower the present~~
~~cost to the students.~~ 5. The plan of
examinations at present in force in the
College appears to be ^{in some respects} unnecessarily
complicated, and Government take this
opportunity

27 268

after consultation with
the Principal

to be requested

advise in what directions
he thinks it may be
advantageously simplified
or reorganized

and
 opportunity to request the Director of
 Public Instruction to ~~reorganize~~ ^{reorganize} and
 simplify it so that the work done by
 a student during his college course ^{may}
 be allowed its full weight in deciding
 whether he should be given a college
 certificate or not.

6. The Director of Public
 Instruction will be ^{further} requested to pre-
 pare and submit for the approval of
 Government a draft of the alterations
 in the rules of the college ^{which are deemed necessary} with
 reference to these orders.

RD
 24.12.08

Ad
 27.12.08

Ad
 4/1

577
 22

Copies sent
 23/2/19

The D.P. 9
 P.W. D.

27/1/19

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Please send proof in triplicate. The papers have been carefully edited.

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(b) Three copies of proof of all notes should be sent for approval, except when instructions are given to the contrary.

SPECIAL INSTRUCTIONS.

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Ed.

29

ORDINARY.

PREFERENCE.

EDUCATIONAL
LEGISLATIVE DEPARTMENT.

URGENT. (a)

INSTRUCTIONS FOR THE
SECRETARIAT.

(a) If a paper is marked to be printed urgently, the Superintendent of the section concerned should sign the Press slip. The Superintendent should exercise a careful discretion in the matter.

(b) Each letter, memorandum, or order, or set of orders, in the file of correspondence should be headed in succession with the Roman numeral I, II, III, etc., the number being written in red ink or blue chalk above the item. The particular papers to be printed in the special issue-copies should be indicated by the Roman numeral (I, II, etc.) by which that item has been headed in the correspondence file. All matter, including marginal remarks or references, to be printed should be written in ink and matter which should not be printed should be encircled. Initials and signatures that are not quite legible should be re-written distinctly.

(b¹) For rules regarding printing of notes, see the rules in G.O., No. 1220, Public, dated 30th November 1900.

(c) The number of copies and the details of distribution should be filled in by the Superintendent or Referencer concerned.

(d) In the absence of special instructions to the Press to keep matter standing for a specified period, ordinary papers of 8 pages and under will be kept standing for one week, and larger papers for two weeks only. The type of notes and of all confidential papers is distributed immediately after striking.

(e) This slip, properly and completely filled in, should accompany every paper sent to Press; it will be returned by the Press when proofs are furnished; it should be sent to the Press when a call is made for revised proofs or when a corrected proof is sent for striking. When finally returned by Press it should be filed with the original order or letter.

INSTRUCTIONS FOR THE PRESS.

(a) If, in the opinion of the Superintendent of the Press, a paper has been marked urgent unnecessarily, he should send the Press slip to the Deputy Registrar with a remark to that effect.

(b) Unless a note to the contrary is made against the matter, pencil entries should not be printed. The Superintendent of the Press may bring to the notice of the Deputy Registrar any instance of incomplete or careless editing.

(c) Signature copies of letters to the Secretary of State or to the Government of India should be printed on hand-made paper.

(d) This slip should be returned by the Press to the Secretariat when proofs are furnished; it will be sent back to the Press when proofs are returned corrected and should be finally returned to the Secretariat when struck-off copies are supplied.

(e) The names of the Secretary and Members should be printed in full when they occur on the right hand side, but only the first time when they appear on the left side, the initials alone being printed later.

Current No....., dated.....190

G.O., No. 119....., dated 26-1-1909.

Number of MS. pages sent { Correspondence including order or orders
(b¹)
Notes.....

Docket: College of Engineering, Madras. 15th Nov. 1909.

Not to be printed in the current issue of the G.O. and that the original of this copy should be left to the collector and not submitted as a draft of the alterations in the rules of the College which are under consideration.

Number (c) of copies required when struck off (not including copies for volumes and editors' table which are retained in the Press).

FOR RECORD.*

Madras Records	...	30	15
Ooty Records	...	1	15
For filing with original	...	1	15
Total	...	32	45

FOR ISSUE.†

	Letter only.	Complete G.O.	Special issue copies of G.O. (b)		Notes.
			No.	Papers.	
Signature copies.....					
India Office.....					
Govt. of India.....Dept.					
Public Department.....					
Judicial Department.....					
Financial Department.....					
Revenue Department.....		5			
Public Works Department.....					
Local and Municipal Department.....Dept.					
Total					

Spare copies.

The Director of Public Instruction.....		5			
The Comr. for Govt. Examinations.....					
The Superintendent, Govt. Museum.....					
The Surgeon-General.....					
The Accountant-General.....					
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* Copies distributed on.....*(Press Clerk.)

† Copies distributed on.....*(Despatcher.)