

Educational (1907) Department.

ORDINARY MS.

G.O., No. //

DATED 9-1-07 ✓

INC. ~~ED.~~

(14)

[Despatch Abstract.]

College of Engineering. Recording letter from the
DP9 submitting explanation of the Principal of the —
as to the failures referred to in the report of the Board of
the Board of Examiners in the final examination of
the College held in December 1905.

BACK PAPERS.

G O	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

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[E]
1,000-9-06.

EDUCATIONAL DEPARTMENT.

CURRENT FILE.

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[P.T.O. FOR PUT UP PAPERS.]

PAPERS PUT UP WITH CURRENT No.

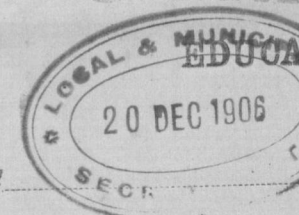
Papers of the department to which the current belongs.

Number.	Date.	Original (=O) or spare copy (=S. C.).	Remarks. (In this column such of the papers as have been removed for copying, printing, etc., should be marked with a cross.)	Initials of Referencer with date in token of return to Reference department.

Papers of other departments.

Department.	Number.	Date.	Original (=O.) or spare copy (=S. C.).	Despatcher to note the return of the papers to the departments concerned.

Stock Form No. 135
3,700-17-6-05.



Received

190 , Registered 20-12-1906

Subject.

Submitting for the information of Government copies of correspondence in re the results of the Final Examinations of the College of Engineering held in December last/1905/ .

ENCLOSURES.

No. 2

Spare copies

Ref on Cur No. 8972/06

Station Madras, Dated the 19th December 1906.

From (Name) The Hon'ble Mr. T. T. Logan, B. A.,

(Designation) Ag: Director of Public Instruction.

Madras.

To The Secretary to the Government of Madras,
Educational Department.

Sr,

With reference to G.O. No. 278 Educational dated 19th April 1906 on the report of the Board of Examiners College of Engineering on the final examinations held in December last I have the honour to submit for the information of Government copies of the marginally noted communications on the subject.

* Colonel Love's letter No. 833/C

dated 25th September 06.

Captain Smyth's letter No. 13

dated 10th October 1906.

I have the honour to be,

Sir,

Your most obedient servant,

[Signature]

For Director of Public Instruction.

N.V.S.

2

V

Copy of a letter from Colonel H.D. Love, R.E. Principal,
College of Engineering, Madras No. 833/C dated 25th September
1906.

W Referring to your endorsement Dis No. 5339 dated 31st
July 1906 communicating a copy of G.O. No. 278 Educational dated
19th April 1906, and to your Proceedings Dis No. 6087 of 06 dated
3rd September 1906, enclosing a copy of the report of the Board
of Examiners on the College Examinations of 1905, I have the
honour to state that, as ordered by Government, I have taken
steps to see that the teaching in the subjects in which there
has been marked failure is improved.

2 On perusing the Board's report I find that one subject
only, viz., Drawing, is unfavourably commented on, and that the
failures on account of this subject are practically limited to
the Draftsman class.

3 I am of opinion that good and careful instruction
was given to the Draftsman class in 1905, and I look in other
directions for the causes of failure in this class.
The first and perhaps the main cause is the low standard of
general education attained by the students, and the absence of
competition for the class. The best of the Lower Secondary
candidates enter the Sub Overseer and Surveyor class, and the
Draftsman class is filled by candidates who pass the entrance
examinations lower down. With their indifferent knowledge of
English the students of the Draftsman class cannot adequately
follow the course of instruction prescribed. Another reason
for unsatisfactory results is the practice adopted by the
Board of Examiners from motives of economy, of using the same
examination papers in certain subjects for both senior and
junior classes. The standard is unconsciously set by the
seniors, so that not only are the question papers beyond the
powers of the juniors, but the standard of marking their answers
becomes more severe than it otherwise would be. A third reason
for failure, which applies not only to the examinations of 1905
but to previous examinations as well, is that the question

3
papers do not always follow the lines of the work done by the different classes.

2 aimed
4 I cannot agree with the Board in the opinion expressed that no candidate in the Draftsman class of 1905 could claim to be anything better than a tracer. If the turning out of tracers were arrived at, the College could supply men who would copy drawings in first class style. Our object for many years past, however, has been to make the students draw with their heads rather than their hands. In carrying out this object with limited time at our disposal, it is inevitable that the mechanical style and finish of drawings should suffer.

5 In two respects the Report of the Board is I consider misleading. A point is made of the failures among independent candidates. The college is in no way responsible for these candidates who are not students. Emphasis is given to the absence of students passing in the "first class." The "first class" represents a very high standard, and it cannot be attained by any but exceptional men. The numbers passing in the first class during the last five years have been:- Engineers, one; Engineer subordinates, none; Suboverseers and Surveyors, two; Draftsmen, three;.

W
6 I have the honour to ask that the reasons herein assigned for the failures in the examinations of 1905 may be submitted to Government with reference to G.O. No. 278 Educational dated 19th April 1906.

/True Copy/

A. H. ...

For Director of Public Instruction.

N.V.S.
F.I.

4 6

Copy of a letter from Captain W. Carew Smyth, R.E.
President Board of Examiners, College of Engineering, Madras
No. 13 dated 10th November 1906.

With reference to your endorsement No. 7397 dated 11th October 1906 I have the honour to offer the following remarks on the letter No. 833/C of the 25th September from the Principal of the College of Engineering:-

Para 3. With reference to the poor standard in Drawing I agree entirely with the Principal that the results are due to the low standard of education of the candidates. The pay offered to Draftsmen in the Madras Presidency is low and as a consequence the better educated natives avoid this branch. It was found in previous years that the practice of setting one paper common to Engineer, Engineer Subordinate and Draftsmen classes in Geometrical and Perspective Drawing was unsatisfactory. I therefore arranged to set a separate paper for the Engineer class. I consider that Draftsmen should be able to answer the same paper in this subject as Engineer Subordinates. The other drawing papers do not require much mental work but neatness and accuracy are necessary hence it was not thought necessary to set separate papers for the different classes though owing to the present low standard of education of the Draftsman class they produce very poor results.

Great care is always taken to keep the questions within the syllabus but while doing so it frequently occurs that an examiner puts questions in a form very different from what the students expect. The examiners have no knowledge of the manner in which subjects are taught and this is, I consider, an advantage as it leads to the exercise of intelligence on the part of the student when he finds questions put before him in an unexpected form.

Para 4 It was the great want of accuracy that was chiefly found fault with; inaccuracy generally accompanies untidiness and I think greater stress should be laid on this in

5.

Arbeitslehre für

N. V. S.

18.

C. No. 2089 From the D. P. I.

No. 8972, dated 19-12-1906.

SUBJECT. The failure of students at the Final examinations of the College of Engineering.

W
In G.O. no. 278 Edl of 19th April 1906, the Govt. said that the report of the Bd. of Examiners on the final examinations of the College of Engineering held in Dec. 1905 was disappointing and unsatisfactory and that the Principal of the College should take steps to see that the teaching in the subjects in which there had been marked failure was improved.

2. The D. P. I. now submits for the information of Govt. the Principal's explanation of the failures referred to in the report of the Bd. of Examiners together with the comment thereon by the President of the Bd. of Examiners.

W p. 2
3. In the final examination of 1905, the Draftsman class fared very badly; 28 College students and 15 "independent" candidates appeared for the examination - of the former 13 passed, all in the 2nd class and of the "independent" candidates none passed. With ref. to this the Bd. observed "the results are very bad, the chief cause of failure being Drawing, in which subject the whole of the candidates displayed great ignorance, inaccuracy and untidiness. In fact there did not appear to have been a single candidate who could claim to be anything better than a tracer and certainly not one who could

" Could be called a draftsman in the proper sense of the word "

The Bd. also said that "on the whole, the standard of ability throughout all classes was low, not one student passing in the first class".

"Independent" candidates fared very badly at the examination; but with regard to this the Bd. did not make any particular remark. ["Independent" candidates are former students of the College, who having failed to obtain certificates from the Board at the final examination ^(at the end of their course) appear before the Bd. for examination in any subsequent year - vide rule 98 of the College of Eng. Rules printed with G.O. no. 37 2d L. 8 20th. Jan'y 1906] One independent candidate appeared for the Engineer examination and failed; for the Engineer Subordinate examination eight appeared and failed; for the Sub-Overseer and Surveyor Examn. eleven appeared and only two passed; for the Draftsman Examn. 15 appeared and all failed.

4. The Principal of the College of Engineering reports that he has taken steps to see that the teaching in the subjects in which there has been marked failure is improved. He states that the failures in Drawing were practically limited to the Draftsman class and were due to three causes, viz. (1) the low standard of general education attained by the students, and the absence of competition for the class; (2) the practice adopted by the Bd of Examiners from motives of

C. p. 14

Cf. p. 2

economy of using the same examination papers in certain subjects for both senior and junior classes and (3) the question papers not always following the lines of the work done by the different classes.

As regards the remark of the Bd of Examiners concerning the general ability of the Draftsman Students the Principal does not agree that they are no better than tracers. Col. Love states that if ~~they~~ ^{the College} aimed at turning out tracers, ~~they~~ ^{it} could supply men who would ~~supply~~ copy drawings in first class style; but that ~~the~~ ^{its} object has been to make the students draw with their heads than with their hands and that in carrying out this object with the limited time at ~~their~~ disposal it was inevitable that the mechanical style and finish of drawings should suffer.

With ref. to the observation of the Bd. that none of the Students passed in the first class, Col. Love states that the first class represents a very high standard and that it cannot be attained by any but exceptional men.

With regard to the failures among independent Candidates, Col. Love states that the College is in no way responsible for those candidates who are not students.

5. The Comments of Capt. Carew Smyth, R.F. President of the Bd of Examiners, on Col. Love's remarks are as follows -

He agrees entirely with Col. Love that the

Then apparently
the College has
failed
87

These men of this
high standard have
not been turned
out
87

9 4 7
bad results of the Draftsman class was due to the low standard of education of the candidates. The pay offered to Draftsmen is low and as a consequence the better educated native avoids this branch.

As regards Col. Lowe's complaint of using the same question paper for both senior and junior classes, Capt. Carew Smyth says that it was found in previous years that the practice of setting one paper common to Engineer, Engineer Subordinates and Draftsman classes in Geometrical and perspective drawing was unsatisfactory and that he therefore arranged to set a separate paper for the Engineer class. He considers that Draftsman should be able to answer the same paper in Geometrical and perspective drawing as Engineer Subordinates. The other drawing papers he says do not require much mental work but only neatness and accuracy; hence no separate papers were set for the different classes.

With ref. to the form of the questions put Capt. Carew Smyth states that great care is always taken to keep the questions within the Syllabus but that it frequently happens that an examiner puts questions in a form very different from what the students expect. This he considers, an advantage as it leads to the exercise of intelligence.

With regard to the general ability of the Draftsman students Capt. Carew Smyth states that it was the great want of accuracy that was

Accuracy
877

Chiefly bound fault with; inaccuracy generally accompanies untidiness and he thinks greater stress should be laid on this in teaching.

As regards the failure of the Independent Candidates Capt. Carew Smyth states that their remarks concerning it were not intended to be a slur on the College teaching but that the reverse was implied. He makes no comments on the failure of the students to pass in the first class.

T.H.
22.12.06

Under the scheme of re-organization of the College of Engineering sanctioned by Govt. none but matriculates can be admitted to the Lower Subordinate class which will include the present draftsman class. The main cause of the unsatisfactory results of that class will then be removed.

Submitted that the ^{present} papers may be simply recorded.

P.H.
23/12/06

Secy.

The papers may be recorded.

Clun
27/12/06

W.M.

W.S.
31.12.06

This is the old game. Col Love cannot bear the slightest criticism of his college

Record the papers with the remark that Col the Govt are glad to observe that Col Love

Para. 3 & 8 of O. No 655 of 1905
dtd 3rd October 1905. B.

has taken steps to improve the teaching of the subject in which failure at the recent exams was marked

S. F. 5

Memorandum
7-1-07

A draft order is placed below for approval.

R.R.
7-1-07

7/1/07

Aug 10 8-1-07

Chiefly found fault with, necessary generally a comprehensive examination and he thinks greater stress should be laid on this in teaching. As regards the failure of the students to pass the exam. Capt. Carr says that this was due to the fact that the students were not interested in the subject. He makes no comment on the failure of the students to pass in the first class.

Under the scheme of re-organization of the classes of engineering students in the school of engineering it is proposed to divide the students into two classes. The first class will include the students who are in the first year of the course. The second class will include the students who are in the second year of the course. It is proposed that the students in the first class should be taught the subjects of mathematics, physics, and chemistry. The students in the second class should be taught the subjects of mechanics, electricity, and magnetism. It is proposed that the students in the first class should be taught the subjects of mathematics, physics, and chemistry. The students in the second class should be taught the subjects of mechanics, electricity, and magnetism.

Am. 8-1-07

Aug 10 8-1-07

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C. No. 2089. From the S.P. 4. , No. 8972, dated 19-12-1906.

" " , ", " , "

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Muse

No. 11, dated 9 - 1 - 1907

Recorded with the remark that the Govt are glad to observe that Col. Love has taken steps to improve the teaching of the subjects in which failure at the recent examination was marked. A/

7.107

Ch
7/1/07

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21.0

The Director of Public Instruction

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 When signed _____

READ AGAIN G.O., No. _____, DATED
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CURRENT No.

ENCLOSURES TO C. No.

ORDER OF GOVERNMENT A A A A A A A

LETTER OF GOVERNMENT.

STATEMENT WITH DIUTO.

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