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Government of Madras.

EDUCATIONAL DEPARTMENT

Recd.

Regd.

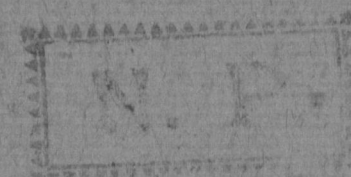
1907.

Enclosures

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(20)

G.O., No. 407, 25th June 1907.



Mr. 20 (20)

Engineering College Rules.

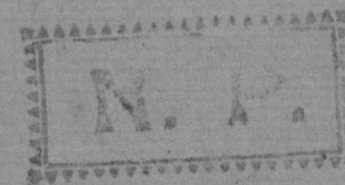
Approving the proposals of the Principal, College of Engineering, in regard to the adoption of separate minima in certain subjects in the different examinations of the College and requesting the Director of Public Instruction to submit drafts of alterations in the — necessitated by these proposals.

Handwritten: []
Educational (1907) Department.

ORDINARY PRINTED.

G.O., No. 407

DATED 25-6-7.



[Despatch Abstract.]

Engineering College rules

Approving the proposals of the Principal
College of Engineering in regard to separate
minima required in certain subjects in the
diff. Semesters of the College & requesting
the D.P.I. to submit drafts of alterations in
the ——— necessitated by these proposals

Approving the proposals of the Principal, College of Engineering, in regard to the adoption of separate minima in certain subjects in the different examinations of the College and requesting the Director of Public Instruction to submit drafts of alterations in the — necessitated by these proposals.

GOVERNMENT OF MADRAS.

EDUCATIONAL DEPARTMENT.

READ—the following paper :—

Letter—from Colonel H. D. LOVE, R.E., Principal, College of Engineering, Madras.
To—the Director of Public Instruction.
Dated—the 23rd April 1907.
No.—121-C.

Referring to G.O., No. 159, Educational, dated 20th March 1907, I have the honour respectfully to request that Government may be moved to reconsider paragraph 1 (3) of the order relating to revised rules 14, 20 and 25, in the light of the following representation.

2. The subjects under which separate minima are required by the order above quoted, and the marks entered against those subjects are—

Engineer Class.								Marks.
Mathematics and Science	..	..	..	..	..	..	..	1,900
Drawing	..	..	..	..	..	..	..	1,200
Hydraulic Engineering	..	..	..	..	..	..	..	200
Mechanical Engineering	..	..	..	..	..	..	..	200

The total marks allotted are 6,000.

Upper Subordinate Class.								Marks.
Mathematics	..	..	..	..	..	..	..	750
Drawing	..	..	..	..	..	..	..	700
Hydraulic Engineering	..	..	..	..	..	..	..	400
Mechanical Engineering	..	..	..	..	..	..	..	300

The total marks allotted are 5,000.

Lower Subordinate Class.								Marks.
Drawing	..	..	..	..	..	..	..	1,350
Surveying	..	..	..	..	..	..	..	900

The total marks allotted are 4,000.

3. The scheme of subjects and marks for the Engineer class is transitory, and it will be substantially altered when the courses of instruction recommended by the College Committee and approved by Government can be introduced. The present scheme is merely a slight modification of that hitherto in vogue. This explains why the marks allotted to *Hydraulic Engineering* and *Mechanical Engineering* are lower than in the Upper Subordinate class.

4. Under the revised scheme, *Drawing* is not an independent subject for any of the classes, and it is, therefore, I submit, undesirable that minimum marks should be prescribed in it. If the revised syllabus of the Upper Subordinate class be examined, it will be found that under each of the following branches of Engineering, viz., (a) *Construction*, (b) *Hydraulic Engineering*, (c) *Mechanical Engineering*, it is provided that the syllabuses connote all *Drawing* and *Design* in those branches. In other words "Drawing" is not a subject in itself, but embraces portions of *Building Construction*, *Hydraulic Engineering* and *Mechanical Engineering*. This contention is confirmed by the circumstance that, though marks are assigned to different sub-heads under *Drawing* for the guidance of the Examiners, no detailed syllabuses are laid down.

5. Similar considerations hold good *mutatis mutandis* in regard to the Lower Subordinate class, and they will be so in the Engineer class as soon as the revised syllabuses are introduced.

6. Having dealt with *Drawing* considered as a subject for the imposition of a minimum qualification, I pass to two other named subjects, *Hydraulic Engineering* and *Mechanical Engineering*.

7. From what has been said in paragraph 4 *supra*, it follows that *Hydraulic Engineering* and *Mechanical Engineering* cannot be conveniently selected for the prescription of minima. The marks assigned to these branches in the scheme of marks are those for paper work only; but much of the instruction in both is conveyed under *Drawing*, and an important part of the teaching in *Mechanical Engineering* is given under the head *Workshop Practice*. Moreover the number of marks assigned for the paper work is an insignificant fraction of the total; and it is manifestly undesirable to demand a minimum on a fragmentary portion of a branch which carries (as in the Engineer class) only 200 marks, or one-thirtieth part of the total.

8. I beg respectfully to adhere to the view I expressed when I submitted the draft revised rules, viz., that the only minimum which need be prescribed is half the aggregate marks awarded at an examination and any previous sessional examination. In expressing that opinion I took into consideration the facts that, under the new rules—

- (a) a minimum must be obtained at each examination,
- (b) a student failing once loses a year,
- (c) a student failing more than once leaves the college, and loses the privilege now enjoyed of presenting himself as an independent candidate.

Under the present conditions every student who displays reasonable application to his work ought to qualify, but success will often be difficult of attainment if examinations are allowed to bristle with minima.

9. If Government cannot accept my view and desire to introduce minima additional to those which I have ventured to put forward as in my opinion sufficient, then I would urge that *Surveying* be substituted for *Drawing*, and an aggregate of certain Engineering branches for *Hydraulic Engineering* and *Mechanical Engineering*. I suggest the following :—

Engineer Class (transitory scheme).								Marks.
Mathematics and Science	..	..	..	..	..	..	..	1,900
Engineering branches 1 to 7	..	..	..	..	..	..	..	2,700
Surveying	..	..	..	..	..	..	..	1,000
Upper Subordinate Class.								Marks.
Mathematics	..	..	..	..	..	..	..	750
Engineering branches 1 to 5	..	..	..	..	..	..	..	2,900
Surveying	..	..	..	..	..	..	..	750
Lower Subordinate Class								Marks.
Engineering branches 1 to 3	..	..	..	..	..	..	..	2,300
Surveying	..	..	..	..	..	..	..	1,200

Endt. Ref. on Cur. No. 3047, dated 11th May 1907.

Submitted to Government for favour of orders. In the circumstances stated, it appears to me that the proposals in paragraph 9 of Colonel Love's letter which seem to provide for minima in groups of allied subjects may be approved.

T. T. LOGAN,
Ag. Director of Public Instruction.

Order—No. 407, Educational, dated 25th June 1907.

The Government approve the proposals made by the Principal, College of Engineering, in paragraph 9 of his letter No. 121-C., dated 23rd April 1907.

2. The Director of Public Instruction is requested to prepare and submit a draft of the alterations in the rules for the working of the College of Engineering necessitated by the present proposals.

(True Extract.)

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

To the Director of Public Instruction.

EDUCATIONAL DEPARTMENT.

NOTES CONNECTED WITH G.O., No. 407, EDUCATIONAL, DATED 25TH JUNE 1907.

[SUBJECT.—*Reconsideration of the order of Government prescribing separate minima for certain subjects in the different examinations of the College of Engineering.*]

Previous papers.

G.O., No. 655, Educational, dated	3rd October	1905.
" " 37	20th January	"
" " 657	10th October	1906.
" " 159	20th March	1907.

From the Director of Public Instruction, dated 11th May 1907, No. 3047.

Under rules 13 and 18 of the rules for the working of the College of Engineering printed with G.O., No. 37, Educational, dated 20th January 1906, the students of the *Engineer and Engineer Subordinate classes* of the College of Engineering had, in order to secure a pass, to obtain one-third of the marks assigned to each of the four subjects, namely, (1) Mathematics, (2) Engineering, (3) Drawing and (4) Surveying, and one-half of the total marks awarded by the Board of Examiners and the college staff separately. The Engineer students had also to obtain in addition one-fourth of the marks assigned to Science (Physics and Chemistry).

2. Under rule 23, the students of the *Sub-overseer and Surveyor class* must obtain one-third of the marks assigned to each of the three subjects, namely, (1) Surveying, (2) Engineering and (3) Drawing, and one-half of the total marks awarded by the Board of Examiners and the college staff separately, while students of the *Draftsman class* were required to obtain one-third of the marks assigned to each of the four subjects, namely, (1) Geometrical, etc., drawing, (2) Building construction and drawing, (3) Machine drawing and (4) Estimating, and one-half of the total marks awarded by the Board of examiners and the college staff separately—*vide* rule 27.

3. In the draft revised rules submitted in accordance with G.O., No. 657, Educational, dated 10th October 1906, Colonel Love provided that in order to pass an examination a student of the Engineer and the Upper and Lower Subordinate classes must obtain half the aggregate marks awardable at that examination and any previous sessional examination, but did not provide for any subject minima as in the old rules—*vide* rules 15, 21 and 26 of the draft rules submitted by the Director of Public Instruction for approval.

4. In reply to a reference from the Director of Public Instruction pointing out that the Principal's recommendation for the abolition of the subject minima in the different examinations was not based on the committee's report, Colonel Love stated:—

"The committee lay down in paragraph 8 (1) of their first report that a student must "qualify at each sessional examination and at the final examination, and as nothing is said "about subject minima, it is assumed that the committee did not desire to impose these minima "in addition to the three which they prescribe. If they did so desire or intend, the effect would "be to treble the number of existing minima, which experience shows to be already much too

"large. Considering that, under the new rules, the privilege of appearing as independent candidates is withdrawn from ex-students, and that there will be three examination minima besides a special minimum in practical surveying, I am of opinion that no further minima should be required. If, however, my contention is over-ruled, then I consider that the utmost that should be demanded is a minimum of 33 per cent. of the final totals under Branches I and II separately for the Engineer and Upper Subordinate classes. I do not, however, recommend this further condition".

Vide paragraph 2 of the Director of Public Instruction's letter of the 13th February 1907, on page 2 of G.O., No. 159, dated 20th March 1907.

5. The committee's recommendation referred to by Colonel Love ran thus:—

"A student who fails to obtain qualifying marks in the examination held at the end of the year's course shall not be promoted and must either leave the college or join the class below".

Vide paragraph 8 (1) of the committee's report on page 3 of G.O., No. 655, Educational, dated 3rd October 1905.

6. The Government considered that separate minima might be assigned in certain subjects, as in the old rules, and amended the draft rules by assigning separate minima for Mathematics, Drawing, Hydraulic Engineering and Mechanical Engineering in the case of the students of the Engineer and the Upper Subordinate classes and for Drawing and Surveying in the case of the students of the Lower Subordinate class—vide paragraph 1 (3) of G.O., No. 159, Educational, dated 20th March 1907. Also paragraphs 37 to 42, 56, 57, 68 and 69 of the notes with this Government Order on pages 8, 9, 12, 14 and 15.

7. Colonel Love now requests a reconsideration of the above order assigning separate minima for certain subjects.

8. The reasons urged by him for a reconsideration of the order are—

(1) Under the revised scheme "Drawing" is not an independent subject for any of the classes. In other words "Drawing" is not a subject in itself, but embraces portions of Building construction, Hydraulic Engineering and Mechanical Engineering. This will be apparent from the fact that, though marks are assigned to different sub-heads under "Drawing" for the guidance of the examiners, no detailed syllabuses are laid down. It is therefore undesirable that a separate minimum should be prescribed for *Drawing*.

Very well.

G. S. F[ORBES].

(2) For the reasons given in (1), "Hydraulic Engineering" and "Mechanical Engineering" cannot be conveniently selected for the prescription of minima.

But these are.

G. S. F[ORBES].

The marks assigned to these subjects in the scheme of marks are those for paper work only; but much of the instruction in both the subjects is conveyed under "Drawing" and an important part of the teaching in "Mechanical Engineering" is given under "Workshop Practice". The number of marks assigned for the paper work is an insignificant fraction of the total and it is manifestly undesirable to demand a minimum on a fragmentary portion of a subject.

9. Colonel Love adheres to the opinion which he expressed when he submitted the draft of the revised rules, viz., that the only minimum which need be prescribed is half the aggregate marks awarded at an examination and any previous sessional examination. He contends that under the new rules—

Cf. Rules 14, 20 and 26.

(1) a minimum must be obtained at each examination;

Do. do.

(2) a student failing once loses a year;

Do. do.

(3) a student failing more than once leaves the college and loses also

the privilege of appearing as an independent candidate, this privilege having been withdrawn under the revised rules.

10. If Government cannot consent to restore the rules as originally drafted, Colonel Love suggests that "Surveying" may be substituted for "Drawing" and an aggregate of certain Engineering branches for "Hydraulic Engineering" and "Mechanical Engineering" and that separate minima may be prescribed as shown below on the following groups:—

Engineer Class.

						Maximum marks.
Vide page 8 of G.O., No. 159, dated 20th March 1907.	Mathematics and Science	..	..	..	..	1,900
	Engineering branches 1 to 7	..	..	..	..	2,700
	Surveying	..	..	..	..	1,000
	Total	..	..	..	..	5,600

Upper Subordinate Class.

Vide page 9 of G.O., No. 159, dated 20th March 1907.	Mathematics	..	..	..	..	750
	Engineering branches 1 to 5	..	..	..	..	2,900
	Surveying	..	..	..	..	750
	Total	..	..	..	..	4,400

Lower Subordinate Class.

Vide page 9 of G.O., No. 159, dated 20th March 1907.	Engineering branches 1 to 3	..	..	..	..	2,300
	Surveying	..	..	..	..	1,200
	Total	..	..	..	..	3,500

11. The Director of Public Instruction considers that the above proposals of Colonel Love to provide for minima in groups of allied subjects may be approved.

12. From the notes on the margin of paragraphs 39 to 42 of K.W., G.O., No. 159, Educational, dated 20th March 1907, it is observed that the Government are in favour of prescribing separate minima in individual subjects. The recommendations now made by Colonel Love, which are supported by the Director of Public Instruction, may, it is submitted, be approved.

T.K.—4-6-07.

K.R.—4-6-07.

C. A. SOUTH—5-6-07.

Colonel Love's reasons for grouping Engineering subjects and for substituting Surveying for Drawing seems sound but if this grouping is adopted it would seem that more than one-third should be prescribed as the minimum in the Engineering group. If a man in the Engineer class only got one-third, i.e., 900, in the Engineering group, he would have to get about 68 per cent. in the other two groups in order to secure a pass, or in the Upper Subordinate class he would have to get 1,230 out of 1,500 in Mathematics and Surveying, i.e., 80 per cent. The minimum in the Engineering group may be raised to 40 per cent. and Colonel Love's grouping adopted.

H. D. TAYLOR—6-6-07.

The object of a professional college is to secure for the public men thoroughly qualified in their profession, not men who by some manipulation of marks can scrape through somehow. There is no objection to rearranging the subjects for minima so as to secure a competent knowledge in each essential head of professional knowledge; and I am prepared to accept Colonel Love's proposals in paragraph 9 of his report.

There is no need to alter the minima in Engineering as suggested above. We can't exact less than one-third in the other two subjects and ordinarily a student may be expected to make much more than one-third in the Engineering subjects: he should ordinarily get more than half marks. If he gets less he should show special talent in one or both of the other two heads. The standard required is not one-third but a half; and if half marks are not attained in one subject, they must be made good by superiority in one of the others. A third only indicates that in no case should a student who attains so low a standard under one of the three heads be deemed fitted for professional work of the kind which the examination is designed to test.

G. S. F[ORBES]—21-6-07.

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Draft please.

H. D. TAYLOR—22-6-07.

A draft is placed below for approval.

T.K.—24-6-07.

K. RANGASWAMI AIYANGAR—24-6-07.

C. A. SOUTER—24-6-07.

Issue.

H. D. TAYLOR—25-6-07.

[G.O., No. 407, Educational, dated 25th June 1907.]

CURRENT FILE.

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Papers of the department to which the current belongs.

Received 190 , Registered 190

Submitting for orders of Government a communication from the Principal, College of Engineering, Madras requesting a reconsideration of para 1/3/ of the order relating to revised rules of the institution in the light of the representations made therein

No. _____

Ref on Cur No. 3 0 4 7/07

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Station M a d r a s, Dated the 11th May 1907

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

(Designation) Ag: Director of Public Instruction,

M a d r a s.

To the Secretary to the Government of Madras,
Educational Department

Sir,

No. 121/C.

College of Engineering,

Madras, 23rd. April 1907.

From

Colonel H.D. LOVE, R.E.,

Principal, College of Engineering,

Madras.

To

The Director of Public Instruction,

Madras.

Sir,

Referring to G.O. Educational, No. 159, dated 20th March 1907, I have the honour respectfully to request that Government may be moved to reconsider paragraph 1(3) of the order relating to revised rules 14, 20, and 25, in the light of the following representation:-

2. The subjects under which separate minima are required by the order above quoted, and the marks entered against those subjects are -

Engineer Class

	<u>Marks.</u>
Mathematics and Science	1900
Drawing	1200
Hydraulic Engineering	200
Mechanical Engineering	200

The total marks allotted are 6000.

Upper Subordinate Class.

Mathematics	750
Drawing	700
Hydraulic Engineering	400
Mechanical Engineering	300

The total marks allotted are 5000.

Lower Subordinate Class.

Drawing	1350
Surveying	900

The total marks allotted are 4000.

10 10 28

3. The scheme of subjects and marks for the Engineer class is transitory, and it will be substantially altered when the courses of instruction recommended by the College Committee and approved by Government can be introduced. The present scheme is merely a slight modification of that hitherto in vogue. This explains why the marks allotted to Hydraulic Engineering and Mechanical Engineering are lower than in the Upper Subordinate Class.
4. Under the revised scheme, Drawing is not an independent subject for any of the classes, and it is, therefore, I submit, undesirable that minimum marks should be prescribed in it. If the revised syllabus of the Upper Subordinate class be examined, it will be found that under each of the following branches of Engineering, viz., (a) Construction (b) Hydraulic Engineering (c) Mechanical Engineering, it is provided that the syllabuses connote all drawing and design in those branches. In other words "Drawing" is not a subject in itself, but embraces portions of Building Construction, Hydraulic Engineering and Mechanical Engineering. This contention is confirmed by the circumstance that, though marks are assigned to different sub-heads under Drawing for the guidance of the examiners, no detailed syllabuses are laid down.
5. Similar considerations hold good, mutatis mutandis in regard to the Lower Subordinate Class, and they will be so in the Engineer class as soon as the revised syllabuses are introduced.
6. Having dealt with Drawing considered as a subject for the imposition of a minimum qualification, I pass to two other named subjects, Hydraulic Engineering and Mechanical Engineering.
7. From what has been said in paragraph 4 supra, it follows that Hydraulic Engineering and Mechanical Engineering cannot be conveniently selected for the prescription of minima. The marks assigned to these branches in the scheme of marks are those for paper work only; but much of the instruction in both is conveyed

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under Drawing, and an important part of the teaching in Mechanical Engineering is given under the head Workshop Practice. Moreover the number of marks assigned for the paper work is an insignificant fraction of the total; and it is manifestly undesirable to demand a minimum on a fragmentary portion of a branch which carries (as in the Engineer class) only 200 marks, or one-thirtieth part of the total.

8. I beg respectfully to adhere to the view I expressed when I submitted the draft revised rules, viz., that the only minimum which need be prescribed is half the aggregate marks awarded at an examination and any previous sessional examination. In expressing that opinion I took into consideration the facts that, under the new rules.

(a) a minimum must be obtained at each examination.

(b) a student failing once loses a year.

(c) a student failing more than once leaves the college, and loses the privilege now enjoyed of presenting himself as an independent candidate.

Under the present conditions every student who displays reasonable application to his work ought to qualify, but success will often be difficult of attainment if examinations are allowed to bristle with minima.

9. If Government cannot accept my view and desire to introduce minima additional to those which I have ventured to put forward as in my opinion sufficient, then I would urge that Surveying be substituted for Drawing, and an aggregate of certain Engineering branches for Hydraulic Engineering and Mechanical Engineering. I suggest the following:-

Engineer Class (transitory scheme).

	Marks.
Mathematics and Science	1900
Engineering branches 1 to 7	2700
Surveying	1000

5

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Upper Subordinate Class.

Mathematics	750
Engineering branches 1 to 5	2900
Surveying	750

Lower Subordinate class.

Engineering branches 1 to 3	2300
Surveying	1200

I have the honour to be,

Sir,

Your most obedient servant,

(Sd.) H.D. Love, Col., R.E.,

Principal.

=====

Submitted to Government for favour of orders. In the circumstances stated, it appears to me that the proposals in para. 9 of Col. Love's letter which seem to provide for minima in groups of allied subjects may be approved.

Prerna Chandra

For Director of Public Instruction.

B.P.
10-5-07

K.P.D.

Notes connected with G.O. No. 1107, Educational, dated 25th June 1906

Educational Department.

C. No. 1124, from the Director of Public Instruction, No. 3047, dated 11-54

Subject.

Reconsideration of the order of Government prescribing separate minima for certain subjects in the different examinations of the College of Engineering

Under rules 13 and 18 of the rules for the working of the College of Engineering printed with G.O. No. 37, Educational, dated 20th January 1906, the students of the Engineer and Engineer Subordinate classes of the College of Engineering had, in order to secure a pass, to obtain one-third of the marks assigned to each of the four subjects, namely, (1) Mathematics, (2) Engineering, (3) Drawing and (4) Surveying, and one-half of the total marks awarded by the Board of Examiners and the College staff separately. The Engineer students had also to obtain in addition one-fourth of the marks assigned to Science (Physics and Chemistry).

2. Under Rule 23, the students of the Sub-overseer and surveyor class must obtain one-third of the marks assigned to each of the three subjects, namely, (1) Surveying, (2) Engineering and (3) Drawing, and one-half of the total marks awarded by the Board of Examiners and the College staff separately, while students of the draftsman class were required to obtain one-third of the marks assigned to each of the four subjects, namely, (1) Geometrical etc. drawing, (2) Building construction and drawing, (3) Machine drawing and

E. pages 5 & 6

E. page 6

E - page 7

7

O. pages 5, 7 & 8

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(4) Estimating, and one-half of the total marks awarded by the Board of Examiners and the College staff separately - vide Rule 27.

3. In the draft revised rules submitted in accordance with G.O. No.657, Educational, dated 10th October 1906, Colonel Love provided that in order to pass an examination a student of the Engineer and the upper and lower Subordinate classes must obtain half the aggregate marks awardable at that examination and any previous sessional examination, but did not provide for any subject-minima as in the old rules - vide rules 15, 21 and 26 of the draft rules submitted by the D.P.I. for approval.

4. In reply to a reference from the D.P.I. pointing out that the Principal's recommendation for the abolition of the subject minima in the different examinations was not based on the Committee's report, Colonel Love stated

"The Committee lay down in paragraph 8 (1) of their first report that a student must qualify at each sessional examination and at the final examination, and as nothing is said about subject minima, it is assumed that the Committee did not desire to impose these minima in addition to the three which they prescribe. If they did so desire or intend, the effect would be to treble the number of existing minima, which experience shows to be already much too large. Considering that under the new rules, the privilege of appearing as independent candidates is withdrawn from ex-students, and that there will be three examination minima besides a special minimum in practical surveying, I am of opinion that no further minima should be required. If however my contention is overruled, then I consider that the utmost that should be demanded is a minimum of 33 per cent. of the final totals under Branches I and II separately for the Engineer and Upper Subordinate classes. I do not however recommend this further condition."

vide para.2 of the D.P.I.'s letter of the 13th February 1907, on page 2 of G.O.No.159, d/20-3-07.

5. The Committee's recommendation referred to by Colonel Love ^{can thus} ~~is the following~~

"A student who fails to obtain qualifying marks in the examination held at the end of the year's course shall not be promoted and must either leave the College or join the class below" - vide para.8(1) of the Committee's report on page 3 of G.O. No.655, Ed1., dated 3rd October 1905.

3. 8 15 3P

6. The Government considered that separate minima might be assigned in certain subjects, as in the old rules, and amended the draft rules by assigning separate minima for Mathematics, Drawing, Hydraulic Engineering and Mechanical Engineering in the case of the students of the Engineer and the Upper Subordinate classes and for Drawing and Surveying in the case of the students of the Lower Subordinate class - vide para.1(3) of G.O. No.159, Educational, dated 20th March 1907. Also paras.37 to 42, 56, 57, 68 and 69 of the notes with this G.O. on pages 8, 9, 12, 14 and 15.

7. Colonel Love now requests a reconsideration of the above order assigning separate minima for certain subjects.

8. The reasons urged by him for a reconsideration of the order are--

(1) Under the revised scheme "Drawing" is not an independent subject for any of the classes. In other words "Drawing" is not a subject in itself, but embraces portions of Building construction, Hydraulic Engineering, Mechanical Engineering. This will be apparent from the fact that, though marks are assigned to different sub-heads under "Drawing" for the guidance of the examiners, no detailed syllabuses are laid down. It is therefore undesirable that a separate minimum should be prescribed for Drawing.

(2) For the reasons given in (1), "Hydraulic Engineering" and "Mechanical Engineering" cannot be conveniently selected for the prescription of minima. The marks assigned to these subjects in the scheme of marks are those for paper work only; but much of the instruction in both the subjects

Page 2 of C.F.

Page 3 of C.F.

Very well 8/7
Page 3 of C.F.

But these are

4-9 10 4 P

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7. Colonel Love adheres to the opinion which he expressed when he submitted the draft of the revised rules, viz., that the only minimum which need be prescribed is half the aggregate marks awarded at an examination and any previous sessional examination. He contends that under the new rules

of Rules 14, 20 & 26 -
do do

- (1) a minimum must be obtained at each examination,
- (2) a student failing once loses a year,
- (3) a student failing more than once leaves the College and loses also the privilege of appearing as an independent candidate, this privilege having been withdrawn under the revised rules.

do do

Page 4 of C. F.

9. If Government cannot consent to restore the rules as originally drafted, Colonel Love suggests that "Surveying" may be substituted for "Drawing" and an aggregate of certain Engineering branches for "Hydraulic Engineering" and "Mechanical Engineering" and that separate minima may be prescribed as ^{shown} in the following ---

on the following groups

Five p. 8 of
S. 6. 159 - M.
24/3/07

Engineer Class.
Mathematics and Science
Engineering branches 1 to 7
Surveying

Minimum
Marks.
1900
2700
1000 ✓
5600
Upper

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M

2200
966
234

10

17 54

Upper Subordinate Class.

Mathematics
Engineering branches 1 to 5
Surveying

Lower Subordinate Class.

Engineering branches 1 to 3
Surveying

Minimum

Marks.

750 ✓

2900

750 ✓

4400

2300

1200

3500

10. The D.P.I. considers that the above proposals of Colonel Love to provide for minima in groups of allied subjects may be approved.

11. From the notes on the margin of paragraphs 39 to 42 of K.W. G.O. No.159, Edl., dated 20th March 1907, it is observed that the Government ^{are} ~~were~~ in favour of prescribing separate minima in ^{are} ~~some~~ ^{undivided} ~~of the~~ subjects. The recommendations now made by Colonel Love, which are supported by the D.P.I., may it is submitted, be approved.

74.
4-6-07

Rep
4-6-07

Lee
Chs
5-6-7.

Col. Love's reasons for grouping Engineering subjects - for substituting sciences for drawing seem sound - but if this grouping is adopted it would seem that more than 1/3 should be prescribed as the minimum in the Engineering group. If a man in the Engineering class only 50% 1/3 - is 900, in the Engineering group he would have to get about 68% in the other two groups in order to secure a pass, or in the Upper Sub class he would have to get 1230 out of 1500. In Mathematics & Surveying 1200 is 80 percent. The minimum in the Engineering group may

be raised to 40% and Col. Love's growing
as opposed

644

1408
667
644

The object of a professional College
is to secure for the public, men
thoroughly qualified in their
profession, not men who
by some manipulation of
marks can scrape through
somehow. There is no objection
to arranging the subjects for minimum
so as to secure a competent knowledge
in each essential head of professional
Knowledge: & I am prepared to
accept Col. Love's proposals in
para. 9 of his report.

There is no need to alter
the minimum in Surg. is suggested
above. ~~Now~~ we can't exact less
than $\frac{1}{3}$ in the other two subjects.
& ordinarily a student may be
expected to make much more
than $\frac{1}{3}$ in ^{the} Surg. subjects: he sh.
ordinarily ~~make~~ ^{get} more than halfmarks
If he gets less he should show
special talent in ~~the~~ one or both of the
other two heads. The standard required

127 978 19

is not $\frac{1}{3}$ but a half; & if half marks are not attained in one subject, they must be ^{made by superiority} good in one of the others. A third only indicates that in no case sh^d. a student who attains so low a standard under ^{the} one of three heads be deemed fitted for professional work of the kind ~~for~~ wh. the examⁿ is designed to test.

G. F. 21/6/07

Draft please

Adg
22608

A draft is placed below for approval.

7.4.
24607
Adg
24607

Lee
Adg
24.6.07
honey
Adg
24.6.07

[96, No. 1, 07, 24.6.07, 25.6.07]

7.4.
22607

13

EDUCATIONAL DEPARTMENT.

E.
12.
1,000-6-12-06.

407 E-9

READ AGAIN G.O., No. 159 Col, dated 20th march 1907.

READ ALSO:-

C. No. 1124, From the D.P.I., No. 3047, dated 11. 5. 1907.

190
190

ORDER.

No. 407, dated 25-6-1907.

dp 25/6/07 P.S.

pp 2 to 5 of cf.

The Principal, College of Engineering,

The Govt approve the proposals made by Col. Lane in paragraph of his letter No. 121-C, dated 23rd April 1907.

2. The D.P.I. is requested to prepare and submit a draft of the alterations in the rules for the working of the College of Engineering necessitated by the present proposals.

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