

Educational (1900) Department.

ORDINARY MS.

G.O., No. 410

DATED 31-8-00

INDEXED.

[Despatch Abstract.]

According sanction to the revised
Syllabus in applied mechanics
for the Engineer Subordinate class
of the College of Engineering, Madras

BACK PAPERS.

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

FURTHER PAPERS.

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

1900

Educational (189) Department.

CURRENT No. 1115
to 4440 of 96 hrs



From
The Director of Public Instruction,
Madras.

No. 8012

Dated 14 August 1900.

Received 15 AUG 1900

Registered 80

Enclosures

Spare copies

SUBJECT.

Recommending that the revised Syllabus in Applied Mechanics for the Engineer Subordinate class proposed by the Principal, College of Engineering, and approved by the Chief Engineer, P.W.D. be sanctioned.

Order No. H10 21.8.00
The revised syllabus in applied mechanics for the Engineer Subordinate class of the College of Engineering, submitted with Director's endorsement read above, is sanctioned.

20/8/00

To

21/9

BACK PAPERS. 1

G.O.	No.	Department.	Date.

FURTHER PAPERS. 2

G.O.	No.	Department.	Date.

CURRENT No. 1115

No 8012 dated 14 August 1900.

Submitted to Government and recommended that the revised Syllabus in Applied Mechanics for the Engineer Subordinate class proposed by the Principal, College of Engineering, and approved by the Chief Engineer, Public Works Department, be sanctioned.

2. The existing syllabus was prescribed in G.O. No 444, Educational, dated, 22nd July 1896.

G. H. Stuart

Director of Public Instruction.

Exd
ms

Enclosure to DP L^o no 8012 PR No 9175/90
 Public Works (1900.) Department.

CURRENT No. 5277.



No. 2979 C d/17 July 00.
 From.

The Director of
 Public Instruction

No. 5995

Returned to the Director
 of Public Instruction with the remark
 that the modifications proposed by the
 Principal of the College of Engineering
 are in the right direction. The theory of
 applied mechanics is beyond the ^{engineer} ~~scope~~
 subordinate class, and it will be sufficient
 if the students learn to apply the formulae
 intelligently. The proposal is accordingly
 supported.

Dated 23-6-00.
 Received }
 Registered } 25.6.00.
 Enclosures { Plans
 { Others 1 } Total. /
 Spare copies

W.L. 13/7/00
 L. H. H. H. H.
 Chief Engineer P.W.D.

may
 To The Director of Public Instruction
 with papers in originals returned.

SUBJECT.
 Syllabus in Applied
 Mechanics for the
 Engineer Subordinate
 Class. — For forwarding
 a revised — for
 favour of an expression
 of opinion

G.O.	No.	Department.	Date.
	444	Encl.	22-7-96
	548C		25-1-99
	138C		6-1-99
	3615C		16-8-98
	2745C		6-6-98
	25-23W		30-9-98

[illegible]

D. Applied Mechanics (125)

- (1) Statics. Forces acting in one plane at a point; parallelogram of forces by experiment; triangle and polygon of forces; simple examples solved graphically. Forces acting in one plane on a body; principle of moments by experiment; simple examples solved as far as possible graphically. Principle of work applied to simple machines; efficiency of simple machines determined experimentally.
- (2) Frames. Stress diagrams for simple frames. Application to frames for minor roofs and small road-bridges. Wind pressure on roofs.
- (3) Strength of Materials. Tension; working stress; factor of safety; Hooke's law. Compression; working stress; Gordon's formula. Shear; working stress; simple pin and rivetted joints.
- (4) Bending. Strength and stiffness of timber beams by empiric formulae; application to rafters. Design of timber beams with the aid of tables. Strength of rolled beams, small plate girders, and cast iron beams by empiric formulae.
- (5) Masonry structures. Distribution of compressive stress at a joint; modes of failure. Pressure of water and earth; sections of small retaining walls for

water and earth. Thrust of small arches; section of abutment.

I. Thane. Lt. Col. R.L.,
Principal, C.M. of Engg?

Department of Public Instruction.



COLLEGE OF ENGINEERING, MADRAS.

No. 368/c, 12th June 1900.

Despatched 12th June 1900.
Received

Enclosures. one

Spare copies.

Subject.

Submitting for approval ~~the~~ a revised
syllabus in 'Applied mechanics'.

No 5995 Dated 23rd June 1900
Forwarded to the Chief Engineer, P. W. D. for
favour of an expression of opinion on the
Change proposed by Lt. Col. Lone

G. H. S. S. S.
Director of Public Instruction.



5277/00
1-3-91

No. 368/C



Dated 12th June 1900.

From

LIEUT.-COLONEL H. D. LOVE, R.E.,

PRINCIPAL, COLLEGE OF ENGINEERING, MADRAS,

To

The Director of
Public Instruction, Madras

SIR,

Among the changes made in the revised syllabuses which were introduced for the different College classes in January 1897, the subject "Statics" was removed from the Mathematical course for the Engineer Subordinate class, while so much of the subject as was needed as an introduction to the subject of "Applied Mechanics" was incorporated in the syllabus of the last mentioned subject. Some reduction was at the same time made in the Applied Mechanics syllabus as it originally stood.

2. Subsequent experience has shown

that the present Applied Mechanics syllabus for the Engineer Subordinate class is still too extensive. It leads to questions being set by the Examiners which, while within the scope of the wording of the syllabus, are beyond the powers of the students to deal with, and beyond the course of instruction which is given. I consider that the investigation of bending stress by the consideration of bending and resisting moments and of shearing stress is too advanced for the students of this class, and that it should be replaced by empiric formula. In other respects the present syllabus is needlessly detailed. I have the honour accordingly to recommend ~~that~~ the substitution of the enclosed draft syllabus for that now in use.

I have the honour to be,

Sir,

Your most obedient servant,

H. D. Love. Lt Col R.E.,

Principal.

m.

that the present difficulty is not a difficulty
in the proper distribution of the class is still too
extensive. It tends to question the scope of
the examination which, while within the scope of
the knowledge of the syllabus, are beyond the
powers of the student to deal with, and require
the course of instruction which is given to consider
that the investigation of working time of the
examination is a very important and necessary element
of the examination. It is too advanced for the
student of this class and that it should be
replaced by a more practical and useful subject.
The present subject is a very important and useful
subject. The course is very helpful to the student
that the student of the class should be
able to deal with the subject.

When given for copying _____
When copied _____
When examined _____
When signed _____

190 .

READ AGAIN G.O., No. _____, DATED
190 .

CURRENT No.

ENCLOSURES TO C. No.

ORDER OF GOVERNMENT A A A A A A A

LETTER OF GOVERNMENT.

STATEMENT WITH DIUTO.

PAPERS NOT FILED UP, BEING MEANT FOR DESPATCH
IN ORIGINAL.

N.B.—
A = Copy in full.
B = Not to be copied.
P = Copy abstract only.
Q = Copy heading only.