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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.
on 10/6/38

G.O. No. <u>1342</u>	Press Mis.
<i>29</i> Dated <u>1-6</u> 18 <u>58</u>	

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
from 1st to 10th June 1859.*

No. 27. Read the following letter from A. J. ARBUTHNOT, Esq., Director of Public Instruction; to the Secretary to Government, in the Department of Public Works, Fort Saint George, dated Madras, 19th May 1859, No. 628.

With reference to the former correspondence which has passed on the subject of the Civil Engineering School, I have the honor to submit, for the consideration and orders of the Honorable the Governor in Council, the annexed draft of rules for regulating the tests for admission and the course of instruction in that institution, which I propose to substitute for the revised prospectus submitted with my letter of the 25th November last. The refusal of the Government of India to sanction for the present any increase to the establishment, renders it impossible that the scheme provided for in that prospectus should be fully carried out, and it appears to me that under present circumstances it will not be advisable to attempt any thing beyond training candidates for the grades of Sub-Overseer and of Assistant Overseer.

2. I have accordingly provided in the rules now submitted for dividing the school into two Departments, in the one of which candidates shall be qualified for employment in the lower, and in the other for the higher of the abovementioned grades. The test for admission into the lower or 2d Department differs but little from that laid down in the prospectus already referred to. That for the 1st Department is somewhat lower than that proposed for the 1st Department in the former scheme; but the latter, it will be remembered, was intended to train candidates for a grade of appointments considerably higher than that of Assistant Overseer. The course of instruction in the 2nd Department will be mainly practical. That in the 1st Department will be more theoretical, but at the same time there will be enough of practical instruction to place the students on a level in this respect with the passed students of the 2nd Department. The scheme of tests for admission and the proposed course of instruction have been seen and approved by the present Chief Engineer and the Principal of the Engineering School.

3. With the view of attracting candidates from different parts of the Presidency, I have named several stations at which candidates may be examined, and propose to award a limited number of free scholarships to the best of the candidates admitted into each Department, maintaining the principle of exacting a schooling fee, which has been already introduced, in the case of those who fail to obtain scholarships. The tests for admission may, I think, be applied to the European candidates for the Stipendiary studentships, the establishment of which was notified in the G. O. G. No. 175, with the exception of the Vernacular grammatical test, which however, I would enforce in the case of Non-Military candidates, European or East Indian, to the limited extent provided for in the rules. It will be absolutely necessary to provide Munshis for the purpose of imparting to the Stipendiary students in question a colloquial knowledge of a Vernacular language, and as their services may be made available for the instruction of the other European or East Indian students, I have not deemed it necessary to lay down, in the case of the latter class of students, a colloquial test on admission; such a test being, if not impracticable, at all events very difficult to apply equally in an examination held at different stations and which consequently, if enforced at all, must be applied by different examiners.

4. In regard to the establishment necessary for carrying out the scheme now submitted, I am disposed to think that if the number of students be limited to 70, the Principal and his present Assistants and two Munshis on Rs. 50 each will be able to do all that is required. It has always been intended that the Principal shall take a part in the instruction and not merely superintend the labors of his Assistants, a duty which can only occupy a comparatively inconsiderable portion of his time. In the event of the course of instruction now proposed being sanctioned, I would assign to the Principal the following subjects, or such of them as on full consideration he thinks he can with advantage undertake.

In the 2nd Department.

Building materials.

Practical Mechanics.

In the 1st Department.

Trigonometry.

Theoretical Mechanics with their practical application,

The theory and application of the Steam Engine,

And the elements of Architecture,

leaving it to him to divide the remaining subjects between his Assistants. If, however, it be considered desirable, with reference to the requirements of the Public Works Department, that the number of students should exceed 70, an additional Master will be requisite, and, in that case, a person should be appointed with higher Mathematical attainments and more experience in Mathematical teaching than either of the present Assistants possess. Had it not been for the prohibition against any increase of expenditure on the Engineering School, I should have recommended the assignment of five Stipendiary scholarships of Rupees 10 each to the 1st Department and of 10 Stipendiary scholarships of Rupees 5 each to the 2d Department, in lieu of the free scholarships provided for in the annexed notification.

NOTIFICATION.

1. The following rules relating to the tests for admission and course of instruction in the Civil Engineering School, have been approved and sanctioned by Government.

2. The School will, for the present, be divided into two Departments, the lowest of which will be designated as the 2d Department.

3. The test for admission and course of instruction in the two Departments, will be as follows:—

2ND DEPARTMENT.

TEST FOR ADMISSION.

(1) ENGLISH.—Ability to write correctly and legibly from dictation, to write a letter on a given subject with tolerable clearness and intelligence and a competent knowledge of grammar.

(2) VERNACULAR LANGUAGE.—In the case of Natives, a competent grammatical knowledge of one of the Vernacular languages of this Presidency, ability to translate into English a passage selected from one of the prose works commonly used in schools, and to write correctly from dictation.

In the case of Europeans and East Indians, ability to translate into English easy sentences from one of the Vernacular prose works commonly used in schools.

(3) ARITHMETIC.—Including the four simple and compound rules, Reduction and Vulgar Fractions.

COURSE OF INSTRUCTION.

(1) MATHEMATICS.—(a) *Arithmetic*.—The whole, generally, with the rationale of the processes.

(b) *Elementary Practical Geometry*, as treated in Lund's Geometry as an Art.

(c) *Surveying*.—The application of the elementary principles of Plane Trigonometry in simple practical cases.

(d) *Mensuration*, including the areas of the most important plane figures, and the cubic contents of such solids as occur most frequently in practice.

(2) DRAWING AND SURVEYING.—(a) Copying drawings on a changed scale.

(b) Taking levels, keeping a field book and drawing plans, sections &c.

(c) Surveying with the prismatic compass, and circumferenter, drawing plans, keeping a field book and sections, &c.

(3) BUILDING MATERIALS.—The general nature of different building materials, their advantages and disadvantages under particular circumstances.

(4) MECHANICAL ENGINEERING.—A popular exposition of the application of mechanical principles, as given in Tate's exercises in Mechanics.

(5) ACCOUNTS.—The system of accounts in force in the Department of Public Works.

(6) VERNACULAR LANGUAGE.—European and East Indian students will receive instruction in one of the principal Vernacular languages of this Presidency, viz., Tamil or Telugu, with the view of enabling them to express themselves intelligibly, and to understand what is said to them on topics connected with the duties of a subordinate in the Department of Public Works.

4. The above course of instruction will occupy one year, at the close of which the students will be examined, and such students as may exhibit at the examination a competent knowledge of the several subjects, will receive a certificate of qualification for the grade of Sub-Overseer in the Department of Public Works.

1ST DEPARTMENT.

TEST FOR ADMISSION.

5. A certificate of having passed a successful examination in the course of instruction laid down for the 2d Department.

Or

The following:—

(1) ENGLISH.—A competent knowledge of grammar, ability to write fluently, correctly and legibly to dictation, to write a letter on a given subject in a clear and grammatical style, to explain the grammatical structure and general purport of a passage selected from an easy prose work.

(2) VERNACULAR LANGUAGE.—In the case of Natives, a competent grammatical knowledge of one of the Vernacular languages of this Presidency, including ability to translate into English and to explain the structure of a passage selected from one of the prose works commonly used in schools, and to write correctly from dictation.

In the case of Europeans and East Indians, ability to translate into English easy sentences from one of the Vernacular prose works commonly used in schools.

(3) ARITHMETIC.—Comprehending the four simple and compound rules, Reduction, Vulgar and Decimal Fractions, Proportion and Interest.

(4) ALGEBRA.—To simple Equations inclusive.

(5) GEOMETRY.—Euclid, Books I and II.

(6) GEOGRAPHY.—General Geography, and particularly the descriptive and historical Geography of India.

(7) HISTORY.—The leading facts of the Histories of India and England, as contained in Morris' School Histories and other similar works.

No. 28.

ORDER THEREON, 1st June 1859, No. 1341.

The Director of Public Instruction submits a revised Scheme of Tests for admission into the Civil Engineering School and for the course of instruction there in substitution of the one previously forwarded with his letter of the 25th November 1858. The refusal of the Government of India to sanction any increase to the expenditure on account of Establishments for the Engineering College, renders it impossible, Mr. Arbuthnot says, fully to carry out his former Prospectus, and hence he recommends that the School be restricted for the present to the training of Candidates for the grades of Sub-Overseer and Assistant Overseer in the Department Public Works.

2. The Rules and the several suggestions offered in respect of them are briefly stated. The School is to be divided into two Departments. The Test for the second or lower Department differs but little from that previously laid down; that for the first is somewhat lower than the Test proposed for the similar department in the former Scheme. A limited number of Free scholarships are to be assigned to the best of the Candidates who may be admitted into each Department. The Tests are to be applied to the Candidates for the Stipendiary Studentships contemplated by G. O. G. No. 175 of 1859, with the exception of the Vernacular grammatical Tests which however Mr. Arbuthnot would enforce in the case of non-Military Candidates to the limited extent provided for in the Rules. Two Moonshees are to be employed for the purpose of imparting a colloquial knowledge of a Vernacular language to the Stipendiary Students and for the instruction of the other European and East Indian Students on a salary of Rupees (50) fifty each per mensem. And finally the Principal is to take part in the instruction of the Students in the branches pointed out.

3. The Government have given their careful consideration to the Rules, and the mode in which it is proposed to bring them into operation; these Rules are in perfect accordance with their own views and are approved and sanctioned. The standard of qualification for admission to the two Subordinate grades in the Public Works Department will be raised to a level with the course of instruction thus established for those grades in the Engineering College; and the Chief Engineer will be requested to submit for approval a revised draft of Rules for that purpose, to be substituted for those in the Notification No. 1 of June 23d 1857.

4. The number of Students in the School will be limited to seventy as proposed by Mr. Arbuthnot; and the Principal will take part in their instruction in the branches specified. The employment of two Moonshees to impart instruction in the Vernaculars, on a salary of Rupees fifty each per mensem is sanctioned. This charge will raise the sanctioned expenditure on

account of the Civil Engineering College and School to Rupees 1,295 per mensem, and this increase will be reported to the Government of India for their approval.

(Signed) J. D. BOURDILLON,
Secretary to Government.

No. 29. Ordered in consequence that the following letter be despatched.

From J. D. BOURDILLON, Esq., Secretary to the Government of Fort Saint George; to
Lieutenant-Colonel H. YULE, Secretary to the Government of India, dated 1st June
1859, No. 1342.

Para. 1. I am directed by the Honorable the Governor in Council to acknowledge your letter dated 28th February 1859, which was duly communicated to the Director of Public Instruction and to the Chief Engineer.

2. The Director of Public Instruction has now submitted a revised scheme of tests for admission into the Civil Engineering school and for the course of instruction there, in substitution of the one previously forwarded by him. The refusal of the Government of India to sanction any increase to the expenditure on account of Establishments for the Engineering College renders it impossible, Mr. Arbuthnot says, fully to carry out his former prospectus, and hence he recommends that the School should be restricted for the present to the training of Candidates for the grades of Sub-Overseer and Assistant Overseer in the Department Public Works.

3. The rules and the several suggestions offered in respect of them, are briefly stated. The school is to be divided into two Departments. The test for the second or lower Department differs but little from that previously laid down; that for the first is somewhat lower than the test proposed for the similar Department in the former scheme. A limited number of free scholarships are to be assigned to the best of the Candidates who may be admitted into each Department. The tests are to be applied to the Candidates for the stipendiary studentships contemplated by G. O. G. No. 175 of 1859 with the exception of the Vernacular Grammatical test which however Mr. Arbuthnot would enforce in the case of non-Military Candidates to the limited extent provided for in the Rules. Two Moonshees are to be employed, on a salary of 50 Rupees each per mensem, for the purpose of imparting a colloquial knowledge of a Vernacular language to the stipendiary students and for the instruction of the other European and East Indian students. And finally the Principal is to take part in the instruction of the students in the branches pointed out.

4. This Government have approved and sanctioned these rules as being in perfect accordance with their own views, and have authorized the employment of the two Moonshees, as being absolutely necessary to the usefulness of the school. I am now directed to solicit the sanction of the Government of India to the small additional charge of one hundred Rupees a month which this measure involves.

Public Works Department, Statement of Increase to Establishment in this

[illegible]

Fort Saint George, }
1st June 1859. }

Department recommended for the sanction of the Government of India.

Proposition.						Casual or Extraordinary.	Grounds of Propo- sition.	Local Government's recom- mendation.	Orders of the Govt. of India.			
Permanent.		Temporary.		Period.	Period.				Home Dept.	Financial Depart- ment.		
Increase per month.	Decrease per month.	Increase per month.	Decrease per month.							Remarks.	Remarks.	Orders.
100	0	0					Vide letter to the Secretary to the Go- vernment of India dated 1st June 1859 No. 1342.	Favorable.				
100	0	0										

(Signed) J. D. BOURDILLON,
Secretary to Government.

MADRAS, 19th May 1859.

From,

A. J. ARBUTHNOT, Esq.,

Director of Public Instruction.

To,

THE SECRETARY TO GOVERNMENT,

In the Department of Public Works,

Fort Saint George.

SIR,

With reference to the former correspondence which has passed on the subject of the Civil Engineering School, I have the honor to submit, for the consideration and orders of the Honorable the Governor in Council, the annexed draft of rules for regulating the tests for admission and the course of instruction in that Institution, which I propose to substitute for the revised prospectus submitted with my letter of the 25th November last. The refusal of

the Government of India to sanction for the present any increase to the establishment, renders it impossible that the scheme provided for in that prospectus should be fully carried out, and it appears to me that under present circumstances

it will not be advisable to attempt any thing beyond training candidates for the grades of Sub-Overseer and of Assistant Overseer.

2. I have accordingly provided in the rules now submitted for dividing the school into two Departments, in the one of which candidates shall be qualified for employment in the lower, and in the other for the higher of the abovementioned grades. The test for admission into the lower or 2d Department differs but little from that laid down in the prospectus already referred to. That for the 1st Department is somewhat lower than that proposed for the 1st Department in the former scheme; but the latter, it will be remembered, was intended to train candidates for a grade of appointments considerably higher than that of Assistant Overseer. The course of instruction in the 2nd Department will be mainly practical. That in the 1st Department will be more theoretical, but at the same time there will be enough of practical instruction to place the students on a level in this respect with the passed students of the 2nd Department. The scheme of tests for admission and the proposed course of instruction have been seen and approved by the present Chief Engineer and the Principal of the Engineering School.

3. With the view of attracting candidates from different parts of the Presidency, I have named several stations at which candidates may be examined, and propose to award a limited number of free scholarships to the best of the candidates admitted into each Department, maintaining the principle of exacting a schooling fee, which has been already introduced, in the case of those who fail to obtain scholarships. The tests for admission may, I think, be applied to the European candidates for the Stipendiary studentships, the establishment of which was notified in the G. O. G. No. 175, with the exception of the Vernacular grammatical test, which however, I would enforce in the case of Non-Military candidates, European or East Indian, to the limited extent provided for in the rules. It will be absolutely necessary to provide Munshis for the purpose of imparting to the Stipendiary students in question a colloquial knowledge of a Vernacular language, and as their services may be made available for the instruction of the other European or East Indian students, I have not deemed it necessary to lay down, in the case of the latter class of students, a colloquial test on admission; such a test being, if not impracticable, at all events very difficult to apply equally in an examination held at different stations and which consequently, if enforced at all, must be applied by different examiners.

4. In regard to the establishment necessary for carrying out the scheme now submitted, I am disposed to think that if the number of students be limited to 70, the Principal and

his present Assistants and two Munshis on Rs. 50 each will be able to do all that is required. It has always been intended that the Principal shall take a part in the instruction and not merely superintend the labors of his Assistants, a duty which can only occupy a comparatively inconsiderable portion of his time. In the event of the course of instruction now proposed being sanctioned, I would assign to the Principal the following subjects, or such of them as on full consideration he thinks he can with advantage undertake.

In the 2nd Department.

Building materials.

Practical Mechanics.

In the 1st Department.

Trigonometry.

Theoretical Mechanics with their practical application,
The theory and application of the Steam Engine,

And the elements of Architecture,

leaving it to him to divide the remaining subjects between his Assistants. If, however, it be considered desirable, with reference to the requirements of the Public Works Department, that the number of students should exceed 70, an additional Master will be required, and, in that case, a person should be appointed with higher Mathematical attainments and more experience in Mathematical teaching than either of the present Assistants possess. Had it not been for the prohibition against any increase of expenditure on the Engineering School, I should have recommended the assignment of five Stipendiary scholarships of Rupees 10 each to the 1st Department and of 10 Stipendiary scholarships of Rupees 5 each to the 2d Department, in lieu of the free scholarships provided for in the annexed notification.

Office of the Director
of Public Instruction,
19th May, 1859.

I have the honor to be,

Sir,

Your most obedient Servant,

G. J. Cunningham
Director of Public Instruction.

NOTIFICATION.

1. The following rules relating to the tests for admission and course of instruction in the Civil Engineering School, have been approved and sanctioned by Government.

2. The school will, for the present, be divided into two Departments, the lowest of which will be designated as the 2d Department.

3. The test for admission and course of instruction in the two Departments, will be as follows:—

2ND DEPARTMENT.

TEST FOR ADMISSION.

(1) ENGLISH.—Ability to write correctly and legibly from dictation. to write a letter on a given subject with tolerable clearness and intelligence and a competent knowledge of grammar.

(2) VERNACULAR LANGUAGE.—In the case of Natives, a competent grammatical knowledge of one of the Vernacular languages of this Presidency, ability to translate into English a passage selected from one of the prose works commonly used in schools, and to write correctly from dictation.

In the case of Europeans and East Indians, ability to translate into English easy sentences from one of the Vernacular prose works commonly used in schools.

(3) ARITHMETIC.—Including the four simple and compound rules, Reduction and Vulgar Fractions.

COURSE OF INSTRUCTION.

(1) MATHEMATICS.—(a) *Arithmetic*.—The whole, generally, with the rationale of the processes.

(b) *Elementary Practical Geometry*, as treated in Lund's Geometry as an Art.

(c) *Surveying*.—The application of the elementary principles of Plane Trigonometry in simple practical cases.

(d) *Mensuration*, including the areas of the most important plane figures, and the cubic contents of such solids as occur most frequently in practice.

(2) DRAWING AND SURVEYING.—(a) Copying drawings on a changed scale.

(b) Taking levels, keeping a field book and drawing plans, sections &c.

(c) Surveying with the prismatic compass, and circumferenter, drawing plans, keeping a field book and sections &c.

(3) BUILDING MATERIALS. The general nature of different building materials, their advantages and disadvantages under particular circumstances.

(4) MECHANICAL ENGINEERING. A popular exposition of the application of mechanical principles, as given in Tate's exercises in Mechanics.

(5) ACCOUNTS. The system of accounts in force in the Department of Public Works.

(6) VERNACULAR LANGUAGE.—European and East Indian students will receive instruction in one of the principal Vernacular Languages of this Presidency, viz. Tamil or Telugu, with the view of enabling them to express themselves intelligibly, and to understand what is said to them on topics connected with the duties of a subordinate in the Department of Public Works.

4. The above course of instruction will occupy one year, at the close of which the students will be examined, and such students as may exhibit at the examination a competent knowledge of the several subjects, will receive a certificate of qualification for the grade of Sub-Overseer in the Department of Public Works.

1ST DEPARTMENT.

TEST FOR ADMISSION.

5. A certificate of having passed a successful examination in the course of instruction laid down for the 2d Department.

Or

The following :—

(1.) ENGLISH. A competent knowledge of grammar, ability to write fluently, correctly and legibly to dictation, to write a letter on a given subject in a clear and grammatical style, to explain the grammatical structure and general purport of a passage selected from an easy prose work.

(2.) VERNACULAR LANGUAGE. In the case of Natives, a competent grammatical knowledge of one of the Vernacular languages of this Presidency, including ability to translate into English and to explain the structure of a passage selected from one of the prose works commonly used in schools, and to write correctly from dictation.

In the case of Europeans and East Indians, ability to translate into English easy sentences from one of the Vernacular prose works commonly used in schools.

(3.) ARITHMETIC. Comprehending the four simple and compound rules, Reduction, Vulgar and Decimal Fractions, Proportion, and Interest.

(4.) ALGEBRA.—To simple equations, inclusive.

(5.) GEOMETRY.—Euclid, Books I and II.

(6.) GEOGRAPHY.—General Geography, and particularly the descriptive and historical Geography of India.

(7.) HISTORY.—The leading facts of the Histories of India and England, as contained in Morris' School Histories and other similar works.

COURSE OF INSTRUCTION.

(1.) MATHEMATICS. (a) *Arithmetic*. A revision of the whole, with the rationale of the processes.

(b) *Geometry*. Euclid, Books I, II, III and IV.

(c) *Algebra*. Including Quadratic Equations, the Binomial Theorem, Permutations, Combinations and the Progressions.

(d) *Plane Trigonometry*, with the nature and use of Logarithms.

(e) *Mensuration*, as for the 2d Department.

(2) DRAWING AND SURVEYING. As for the 2d Department, together with the theory and use of the theodolite.

(3.) THEORETICAL MECHANICS WITH SIMPLE APPLICATIONS. Elements of Statics, Hydrostatics and Dynamics, with practical applications of the principles studied.

(4.) THE THEORY AND APPLICATION OF THE STEAM ENGINE. Including the laws of heat, and the nature and advantages of different sorts of fuel.

(5.) THE ELEMENTS OF ARCHITECTURE. Including Architectural drawing, and the nature of different building materials with their prices.

(6.) ACCOUNTS. The system of accounts in force in the Department of Public Works.

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6. The course of instruction in this Department will occupy one academical year, at the close of which the students will be examined, and those students who may exhibit a competent knowledge of the several subjects, will receive a certificate of qualification for the grade of Assistant Overseer in the Department of Public Works.

7. No Students will be admissible into the Engineering School under the age of 18, or above the age of 25 years.

8. An examination of candidates for admission into both Departments of the school will be held on the 15th and 16th July at the stations noted in the margin. It will be conducted by means of printed papers prepared by the Principal in communication with the Director of Public Instruction. Applications for admission to the examination, accompanied by testimonials of character, must be made on or before the 15th June. Candidates residing at or near Madras should apply to the Principal of the Civil Engineering School, by whom the examination at the Presidency will be conducted. Candidates residing in the provinces should apply to the District Engineer at one or other of the stations above named, who will inspect the candidate's testimonials and satisfy himself as to his physical fitness or otherwise for employment in the Public Works Department.

Madras
Berhampore.
Tirunelveli.
Rajahmundry.
Masulipatam.
Nellore
Bellary
Bangalore.
Ootacamund.
Salem.
Cuddalore.
Trichinopoly.
Madurai.
Palamcottah.

9. Lists of such candidates as may be pronounced eligible for examination, prepared in the annexed form, should be forwarded without delay to the Principal of the Engineering School.

10. An Officer of the Public Works Department will be nominated by the Chief Engineer to superintend the examination, the duty of such Officer being confined to seeing that the candidates execute their papers without aid, and to reading out the passages for dictation.

11. At the close of each day's examination, the papers of each candidate will be forwarded in sealed covers by the Officer superintending the examination to the Principal of the Engineering School.

12. The candidates will be ranked according to their attainments, as exhibited at the examination, and will be admitted in the Department of the school for which they may be considered qualified.

13. The first five candidates who may be placed in the 1st Department, and the first ten candidates who may be placed in the 2nd Department, will be admitted as free scholars and will be furnished with text books gratis.

14. Other students will be required to pay a schooling fee of Rupees 3 per mensem, and to purchase the text books prescribed for the Department to which they belong.

15. The students now in the school will be admitted to the examination, and will be subjected to such one of the three tests laid down for admission into the two Departments as they may select, viz:

(a) the test for admission into the 2nd Department.

(b) the test for obtaining a certificate of having completed the course of instruction prescribed for the 2nd Department.

(c) the literary and mathematical test for admission into the 1st Department.

26. The European Stipendiary students to be selected from H. M. British and Indian Regiments, under the G. O. G. No. 175 of 1859, will be admitted into one or other of the two departments of the school according to their qualifications, but on the result of a separate examination.

B. J. Cantwell
Director of Public Instruction.

1ST DEPARTMENT.

TEST FOR ADMISSION.

5. A certificate of having passed a successful examination in the course of instruction laid down for the 2d Department.

Or

The following :—

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(b) *Geometry*. Euclid, Books I, II, III and IV.

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Trichinopoly.
Madurai.
Palamcottah.

9. Lists of such candidates as may be pronounced eligible for examination, prepared in the annexed form, should be forwarded without delay to the Principal of the Engineering School.

10. An Officer of the Public Works Department will be nominated by the Chief Engineer to superintend the examination, the duty of such Officer being confined to seeing that the candidates execute their papers without aid, and to reading out the passages for dictation.

11. At the close of each day's examination, the papers of each candidate will be forwarded in sealed covers by the Officer superintending the examination to the Principal of the Engineering School.

12. The candidates will be ranked according to their attainments, as exhibited at the examination, and will be admitted in the Department of the school for which they may be considered qualified.

13. The first five candidates who may be placed in the 1st Department, and the first ten candidates who may be placed in the 2nd Department, will be admitted as free scholars and will be furnished with text books gratis.

14. Other students will be required to pay a schooling fee of Rupees 3 per mensem, and to purchase the text books prescribed for the Department to which they belong.

15. The students now in the school will be admitted to the examination, and will be subjected to such one of the three tests laid down for admission into the two Departments as they may select, viz:

(a) the test for admission into the 2nd Department.

(b) the test for obtaining a certificate of having completed the course of instruction prescribed for the 2nd Department.

(c) the literary and mathematical test for admission into the 1st Department.

26. The European Stipendiary students to be selected from H. M. British and Indian Regiments, under the G. O. G. No. 175 of 1859, will be admitted into one or other of the two departments of the school according to their qualifications, but on the result of a separate examination.

B. J. Cantwell

Director of Public Instruction.

1.

15

to the expenditure on

By the Council

I am sure
 regretful to see that
 the time passed in para
 of the anticipation of
 my letter of the 19th
 has produced application
 for admission to the
 Engineering School in
 the State as the anticipation
 cannot be put back till
 the summer & many more

to the expenditure on
account

Indorsed.
June 1859

[illegible]

June 19th 1850
Dec. 23rd 1849.

J. O. S.

Wm. J. C. C. C.

containing a series
 volume of the 8th year;
 a series of letters of
 subscription in the first
 - improving edition, &c.
 recommending that the
 colored be the present
 restricted to the other
 containing considerable
 in the paper of such
 number and of such
 character as to be
 of great value.

to published till Friday
next.
Whereas therefore it may
be as well to allow the
day for the transmission
to the 1st & 2nd brigades
the day for presenting
applications to the 1st
July.

Yours very truly
G. F. Benthall
Secretary

N:1344

For Orders - January 21st
Public Works Department N:1329
Frederick J. Arbutnot Esq. Director of
Public Instruction of 19 May 1857.

Submitting a printed Scheme of tests
for admission & course of instruction in the Civil
Engineering School & recommending that the
School be for the present restricted to the object
of training candidates for the grades of Sub
Overseer & of Assistant Overseer in the Department
of Public Works -

I went over these Papers in great
detail with Mr Arbutnot and
Captain Winslow - Several modifications
were made at my suggestion and
I entirely approve of what is
now

the one previously forwarded
with his letter of the 25th
November 1858. The refusal
of the Government of India
to sanction any increase
to the expenditure on
account

proposed. The standard of
qualification for admission to
the two subordinate grades
in the Public Works Department
with, of course, be raised
to a level with the courses
of Instruction proposed for
those grades in the Engineering
College

W. T. M. M. M.

20 May 1859

N: 1344-
Proceedings of the Madras Government
Under date the 1st May 1859.

Read the following
letter from S. J. Arbutnot,
Esq. Director of Public
Instruction.

(Here entered 19th May 1859 N: 628)

The Director of
Public instruction submit
a revised scheme of tests
for admission into the
Civil Engineering School &
for the course of instruction
there in substitution of
the one previously forwarded
with his letter of the 25th
November 1858. The refusal
of the Government of India
to sanction any increase
to the expenditure on
account

account of establishments
for the Engineering ~~and~~
College, renders it im-
possible, Mr. Arbutnot
says, fully to carry out
his former prospectus,
and hence he recom-
mends that the school
be restricted for the
present to the training
of Candidates for the
grades of Sub Overseer
and Assistant Overseer
in the Department Public
Works.

2 The Rules and
the several suggestions
offered in respect of
them are briefly stated.
The school is to be con-
sidered into two de-
partments. The test
for the second or lower
department differs but
little

little from that previ-
ously laid down; that
for the first is some-
what lower than the
test proposed for the
similar department
in the former scheme.
A limited number
of three scholarships
are to be assigned to
the best of the Candi-
dates who may be
admitted into each
department. The
tests are to be ap-
plied to the Candi-
dates for the stipen-
diary Studentships
contemplated by G. O. F.
No 175 of 1859 with the
exception of the Vernac-
ular grammatical
tests which however
Mr. Arbutnot would
enforce

enforce in the case of
new Military Candi-
dates to the limited
extent provided for in
the Rules. Two or
three Monks are to be
employed for the purpose
of imparting a colloquial
knowledge of a Vernacu-
lar language to
the stipendiary stu-
dents and for the
instruction of the
other European
and East Indian
Students on a salary
of Rupees 50/fifty
each per mensem -
And finally the
Principal is to take
part in the instruc-
tion of the students
in the branches
pointed out.

The

3. The Government
have given their careful
consideration to the Rules
and the mode in which
they proposed to bring
them into operation. These
Rules are in perfect ac-
cord with their own views
and are approved and
sanctioned. The standard
of qualification for ad-
mission to the two sub-
ordinate grades in the
Public Works Department
will be raised to a level
with the course of Instruc-
tion thus established
for those grades in the
Engineering College; and
the Chief Engineer will
be requested to submit for
approval a revised draft
of rules for that purpose,
to be substituted for those
in the Notification No. 1
of June 23/57.

4. The number of
students in the School
will be limited to seventy
as proposed by Mr. Arbuthnot
and the Principal will

take

take part in their instruction in the branches specified. The employment of two mechanics to impart instruction in the Use of machinery, on a salary of Rupees fifty each per mensem is sanctioned. This charge will ^{raise} ~~increase~~ the sanctioned expenditure in account of the Civil Engineering College and schools to Rupees 1295 per mensem. & this increase

with no reference to the

Govt of India

their approval—

10 Copies to the Chief Justice & District ^{15th}
3 — — — — — Dir. of Public Instruction 1st
1 — — — — — Accountant Genl
1 — — — — — Civil and Cr.

Revised Opus Diff^o to the
above Dec^r 14

Ann. K. 11

Public Works 1859 and 1860.
Consolidated.

Conc 10. 2nd Div.

210/341

of the Chandrahari
Tiffin (June) 59.

Stiller Anne/59.

of whom Chief Engineer of
 1st July 1859 Chief Engineer
 16th July 1859 Chief Engineer
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 of the Pacific Mail Co. —
 in the Pacific Mail Co. —
 of the Pacific Mail Co. —

1st July 1859 Chilly 33 mi. }
16th July 1859 - - - - - }
16th July 1859 - - - - - }

16^E Schaffsky M. 9.9.107

From the State of Georgia —

23 June 54 161982
in 23 July 1954 161982

dealing orders on the

Scheme of State for admin:

iron and sand of mi-

Wednesday with Bird

24 January 1964

✓

From District of Columbia

Setback 57 cm 27.5% - 3/4" level

10/10/10

With Love & the Best

9. *Agave* *au* *le* *1* *9*

16359. No 1343.

2

Public Works Department - Statement of Increase to Establishment in this Department recommended for the sanction of the Govt of India

33

Charges
Your Ordry. Exceeding Total:

Nature of change

Proposition

Permanent Temporary
Increase Decrease Increase Decrease
per per per per
Month Month Month Month

Grounds of Proposition

Local Government
Recommendation
Orders of the Govt of India
Home Department
Financial Department
Remarks
Remarks
Orders

Present Scale

Proposed Scale

R. A. D.

R. A. D.

Principal 600 1 Principal 600

House rent for de 150 House rent for de 150

1 Head Master of the 1 Head Master of the

2nd Department 200 2nd Department 200

Assistant de 70 1 Assistant de 70

2 Moonshers @ 50 Rs each 100

2 Peons @ 6 Rs each 12 2 Peons @ 6 Rs each 12

4 Lascars @ 5 Rs each 20 4 Lascars @ 5 Rs each 20

1 Sweeper 3 1 Sweeper 3

Rent of College Buildings 140

Rent of College Buildings 140

Total Expenses 1195

Total Expenses 1295 100

Vide letter to the Secretary
to the Government of India
dated 1st June 1839 N 1342.

Favorable

Secy to Government

Fort St George
1st June 1839

Extract from
Home
Dept. of Govt
of India

Date

Office to which the
Proposed

Machas Civil Engineering College

1839. No 1342-1

P. W. Dept

35

No 1312/2

12 Copies
Dispersed
with 1200
with 1200

Lieutenant Colonel F. Gule
Secretary to the Government of
India.

Sir,
I am directed by the
Honorable the Governor in
Council to acknowledge your
letter dated 28th February 1887,
which ^{was duly} ~~has been~~ communicated
to the Director of Public In-
struction and ^{to} the Chief En-
gineer.

The Director of Public In-
struction has now submitted a
revised scheme of tests for ad-
mission into the Civil En-
gineering school and for the
course of instruction there, in
substitution of the one previous-
ly forwarded by him. The
refusal of the Government of
India to sanction any increase
to

to the expenditure an account
of the establishment of the
Engineering College renders it
impossible, Mr. Arbuthnot says,
fully to carry out his former pro-
posals and hence he recommends
that the School should be res-
tricted for the present to the
training of candidates for the
grades of Sub-Overseer and Assist-
ant Overseer in the Depart-
ment Public Works.

3. The Rules and the se-
veral suggestions offered in
respect of them, are briefly sta-
ted. The school is to be divided
into two departments. The test
for the second or lower depart-
ment differs but little from
that previously laid down,
that for the first is somewhat
lower than the test proposed
for the similar department
in the former scheme. A li-
mited number of ^{free} Scholarships
are

to be on a salary of 50 Rupees
each per mensem,

37
are to be assigned to the best
of the candidates who may be
admitted into each depart-
ment. The tests are to be ap-
plied to the candidates for the
stipendiary studentships
contemplated by G.O. No. 175
of 1889 with the exception of the
Vernacular Grammatical test
which however Mr. Arbuthnot
would enforce in the case of non-
Military candidates to
the limited extent provided
for in the Rules. Two Moon-
shis are to be employed for
the purpose of imparting a
colloquial knowledge of a
Vernacular language to the
stipendiary students and
for the instruction of the
other European and East-
Indian students. ~~and salary~~
~~of Rs. 50 fifty each per~~
~~mensem.~~ And finally
the Principal is to take part
in

in the instruction of the students
in the branches pointed out.

The Government have
approved and sanctioned these
rules as being in perfect accord-
ance with their own views and
have ~~also~~ authorized the em-
ployment of ^{the} two Moonchees, as being absolutely

The charge on this account will
raise the expenditure on ac-
count of the Civil Engineering
College and school to Rupees
1245 per mensem. The scheme
has been wholly modified to
avoid the increase of charge
formerly proposed, but Moon-
chees are quite necessary to the

usefulness of the school. ~~and~~ I am ^{now} directed to submit
the sanction of the Govt.
of India to the ^{charge} of one ^{month} which
this measure involves.

the Government hope that their
Proceedings will be approved
and confirmed.

Fort St. George
8th June 1859

Public Works 1859 Departt.
Cons 10th June.

No 1342.

To the Secretary to the
Government of India.

Of 1st June/59.
From the Secy to the Govt of India
Of 15th June/59 Lt 131829 in Cons:
29th July/59 Lt 5462

Rules for admission
into the Civil Engineering School
and for the courses of instruction
there, approved and sanctioned
employment of 2 Lloons here to
superintend instruction in the vernacular
authorised - sanctioned
to the small additional charge
of 100 Rs per month to which
this measure involves
solicited.

No 29-