(1) பக்கங்களின் எண்ணிக்கை 20

(2) புதுக்கித் திருப்பிய நாள் 9/89

(3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம்

# தமிழ்நாடு ஆவணக் காப்பகம்.

16

## தமிழ்நாடு அரசு

PWD துறை

அரசாணை எண். —
மு. கோப்புத் தாள் எண். 1268

அச்சகம்
பலவகை

நாள் : 13 5 1889 1988.

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

10 Sheets

ஆவண. கா-1—18,006—15-6-87.

1268

GOVERNMENT OF MADRAS.

# PUBLIC WORKS DEPARTMENT.

General.
Establishment.

READ—the following paper:—

G.O., dated 25th April 1889, No. 315, Revenue.

*Read*—again the following G.O., dated 11th May 1888, Mis. No. 2800, on Proceedings of the Board of Revenue (Land Revenue), dated 12th March 1888, Forest No. 121:—

Order—

The desirability of initiating a special Forest Survey party in this Presidency was stated in para. 11 of G.O., dated 24th February 1888, No. 169, but with the present scarcity of District Forest officers no effect can be given to this decision until Mr. Gamble returns, and it is doubtful whether even then an officer can be spared.

2. The Board offer no opinion on the proposal of the Director of Public Instruction to allow the Preliminary Higher and Advanced Survey examinations of the Technical Education scheme to be substituted for the Lower and Higher Standard tests prescribed in the Forest Code. Mr. Peet thinks this course might be accepted as a temporary measure, but Colonel Walker did not take the trouble to refer to the syllabus.

3. The Board will now be informed that effect cannot be given to their proposals for some time to come, and that it is therefore necessary that they should submit fresh recommendations on the matter. They should also report what effect has been given to para. 1 of G.O., dated 25th May 1887, No. 511, and how many men have applied to be examined by the Higher Standard.

4. With reference to the suggestion made in para. 7 of Colonel Walker's letter, the Board should ascertain whether the Deputy Superintendent of the Madras Party of the Survey of India is willing to permit Forest officers to be attached to that party, and to grant them certificates when he considers them qualified.

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*Read*—also Proceedings of the Board of Revenue (Land Revenue), dated 9th February 1889, Forest No. 90.

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*Order*—dated 25th April 1889, No. 315, Revenue.

The Government approves the proposal of the Director of Public Instruction to substitute the standards in syllabus 9 of the Higher Examinations in Science, Art and Industries for the Lower and Higher Standards of Surveying tests prescribed by the Madras Forest Code. It is desirable, however, that Forest officers who pass the Preliminary Higher examination should have some knowledge of the use of the plane table. Mr. Grigg will be requested to state whether there is any objection to the addition of the following to the Preliminary Higher Syllabus, Practical Side, clause (2):—

"The roads, paths, streams, houses and other topographical features to be filled in by plane table and chain" (Forest Code, section 43).

1

2. The Public Works Department will be requested to arrange for the instruction of Forest officers in levelling.

(True Extract.)

(Signed) C. A. GALTON,
Secretary to Government.

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ORDER—dated 13th May 1889, No. 1268 W., Public Works.

Communicated to Superintending Engineers, who, on requisition from the District Forest officer, will arrange that Forest officers be afforded every facility for obtaining a knowledge of levelling in the field by working with any officer or subordinate who may have, in the course of his duties, such work to do.

(True Extract.)

Captain, R.E.,
Under-Secy. to Govt., P.W.D.

To Superintending Engineers.
To the Revenue Department.

Exd. J. Henricus.
Spare Copies

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2

GENERAL.
ESTABLISHMENT.

# Govt. of {1889} Madras.

PUBLIC WORKS.

*Dated May*, 13*th*.

*Read.* *Encl.*

**G.O., 13th May 1889, No. 1268 W.**

**MAY.**

## Forest Officers

Orders in the Revenue Department issuing instructions in regard to the examination of —, and requesting the Public Works Department to arrange for the officers being instructed in levelling, communicated to Superintending Engineers with instructions.

1268

25TH APRIL 1889, No. 315, REVENUE.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—again the following G.O., dated 11th May 1888, Mis. No. 2800, Revenue :—

*Read*—the following Proceedings of the Board of Revenue (Land Revenue), dated 12th March 1888, Forest No. 121 :—

J. H. GARSTIN, ESQ., C.S.I.

Read—the following G.O., dated 17th November 1887, No. 628, Educational :—

Read—G.O., dated 25th May 1887, No. 511, Revenue.

Read—the following letter from H. B. GRIGG, Esq., M.A., Director of Public Instruction, Madras, to the Chief Secretary to Government, dated 31st October 1887, No. 7669 :—

In returning the papers referred to me under endorsement No.——, dated 13th July 1887, I have the honor to forward copy of a letter * from the Principal of the College of Engineering, from which it will be observed that there are two important objections to imposing on the college the duty of examining for the higher standard in surveying, (1) that the college staff have not the necessary leisure, (2) that the test does not correspond with that of the College of Engineering.

* No. 208-C, dated 13th August 1887.

2. I endorse Captain Henderson's objections and would further observe that, if the duty of examining is to be committed to the college, it should be performed by the Board of Examiners for the College appointed by Government under article II of the College of Engineering rules. But this board has already heavy work and ought not, I think, to have this extra duty thrown on them.

3. I would, however, suggest an alternative course in regard to the lower and higher standard, viz., to transfer the examination to the Commissioner for the Uncovenanted Civil Service Examinations under notification, 31st March 1886, and require candidates to pass in the preliminary higher examination—theoretical and practical—for the lower standard and the advanced examination—theoretical and practical—for the higher standard. A perusal of syllabus 9 will, I think, satisfy the Government that the tests are sufficient in each case. The examination under article 4 of that notification must be conducted by a board of professional examiners, which, in the present case, would mean superior officers of the Survey and Forest Departments. There is this additional advantage in the course suggested, that the examiners are paid adequately for their work, and consequently are likely to do it more satisfactorily than experience shows, unremunerated examination work is sometimes performed. I would add that in the draft notification for the higher standard examination it is provided that a pass in the surveying test (syllabus 9)—preliminary higher—shall exempt candidates for employment in this department from the test laid down in rule 43 of the Forest Code.

ENCLOSURE.

From Captain C. B. HENDERSON, R.E., Acting Principal, College of Engineering, Madras, to the Director of Public Instruction, dated Madras, 13th August 1887, No. 208-C.

With reference to G.O., dated 25th May 1887, No. 511, Revenue, forwarded to me with your endorsement, No. 4563 of 18th ultimo, I have the honor to report that the higher standard

42 43

examination in surveying as described in the Forest Department Code, section 44, can be conducted at the College of Engineering, but not conveniently. The number of students at the college is large and the members of the staff are fully occupied in teaching; any examinations of outsiders must necessarily take one or more of us away from our ordinary duties, and looking to the reward to be paid for passing, I think that it would be necessary for the Principal himself to supervise the work "in the field" and "in office."

2. The periodical examinations at the College of Engineering do not correspond with paragraph 44 of the Forest Code; it would be necessary to hold separate special examinations for the Forest-officers.

3. I have only lately been able to obtain a copy of the Forest Department Code; hence the delay in replying to your reference.

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Order—dated 17th November 1887, No. 628, Educational.

The foregoing letter with its enclosure will be transferred to the Revenue Department. If the survey test prescribed for officers of the Forest Department could be assimilated to any of the regular examinations held at the College of Engineering, the main objection to imposing the conduct of the test on the college would be obviated. There would be no difficulty in the adoption of the Director's suggestion in paragraph 3 of his letter, if the preliminary higher examination in survey is considered to be suitable for the purpose.

(True Extract.)

(Signed) H. E. STOKES,
Chief Secretary.

To the Revenue Department, with two enclosures.
„ the Director of Public Instruction.

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Endorsement No. 7335.

Referred to the Commissioners of Land Revenue for remarks.

(By Order.)

FORT ST. GEORGE,
30th November 1887.

(Signed) H. A. STUART,
Under Secy. to Government.

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Reference on the above, dated 12th December 1887.

The Conservators of Forests, Southern and Northern Circles, are requested to furnish the Board with their views on the subject, at an early date.

(Signed) R. S. BENSON,
Acting Secretary.

To the Conservator of Forests, Southern Circle.
„ „ Northern „

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Read—the following letter from Lieut-Colonel I. CAMPBELL WALKER, Conservator of Forests, Southern Circle, to the Secretary to the Commissioners of Land Revenue, dated Madras, 20th January 1888, No. 2481:—

In reply to Reference on Forest Register No. 1658 of 1887, I have the honor to state that, after careful reconsideration and conferring with Mr. Peet on the subject, I doubt if a pass examination by the Principal, Civil Engineering College, or the Commissioner for the Uncovenanted Civil Service Examinations, would ensure the standard of proficiency in forest surveying which we require, and for which, and to cover the expenses incidental to acquiring sufficient practical knowledge of the subjects, the reward for the higher standard was first proposed by the Inspector-General of Forests to the Government of India (*vide* his memorandum of 6th January 1875, not on record in this office).

2. In framing his proposals printed with Board's Proceedings, Forest No. 220 of 15th April 1887, Mr. Cardozo took it for granted that the field work required for the

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higher standard could be done in the forest under the supervision of the District Forest-officer, certified by him to be the work of the candidate and merely checked and examined by the Principal, Civil Engineering College. I concurred in this view at the time, but further consideration and inquiry have induced me to alter my opinion. Our District Forest-officers have not, as a rule, either the time or knowledge to supervise such work, a great deal of which must of necessity be done under the eye of the examining and certifying officer to ensure real proficiency in the use of the instruments, &c.

3. The Principal, Civil Engineering College, points out that it would be difficult for him and his staff to find time for such additional work and that the standard required at the college and that prescribed by our Department Code, paragraph 44, do not correspond, which would involve separate examinations.

4. I have not seen the syllabus referred to by the Director of Public Instruction in paragraph 3 of his letter to the Chief Secretary, but understand from Mr. Peet that it does not include all the matter, a thorough knowledge of which is required by our Code paragraph 44, nor do I see how any examining body in Madras could properly test a candidate's knowledge and competence in topographical surveying over hilly and broken ground covered with forest or scrub.

5. This is a special business and the procedure which has been gradually evolved by the Forest Survey branch, Government of India, differs in many important respects from that ordinarily adopted by the Revenue or Topographical parties of the Survey of India. I know this as a fact and have it both from Major Bailey and Mr. Reynolds, the former and present Superintendents of Forest Surveys under the Government of India, and, therefore, the best authorities on the subject.

It is for this reason that the Government of India Forest Code prescribes for the higher standard certificate being granted by the Superintendent of Forest Surveys and by no one else (*vide* paragraph 52, Government of India Forest Code).

6. We cannot, of course, send candidates for the higher standard from Madras to Mr. Reynolds to be instructed, tested and examined. What we require is a Forest Survey branch with a Forest-officer as superintendent in this Presidency and we shall never secure good progress in forest administration and preparation of working-plans till we get it, for good maps are a *sine qua non*.

I have repeatedly made proposals to this effect and would now ask the Commissioner to press on Government the advisability of very early action in the direction indicated.

If permitted, I would send Mr. Gass, who is already conversant with ordinary surveying, to Dehra Dun next June and let him work with and under Mr. Reynolds there and in the field till he is thoroughly conversant with and able to instruct in Forest surveying in all its branches. Mr. Reynolds will, if necessary, send back with him a small staff of trained demarcators and surveyors to form the nucleus of a Forest Survey branch for this Presidency which would afford every facility for teaching and examining in all the subjects prescribed by our code.

7. Meanwhile, I think the best course to adopt with regard to candidates for the higher standard will be to attach them to the Survey of India party now working in the Presidency in the same manner as candidates for the lower standard are to be attached to a Revenue Survey party and require the Deputy Superintendent, Government of India Survey, to grant the certificate if satisfied that they come up to the proper standard in the subjects prescribed by paragraph 44 of our code.

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Read—the following letter from A. W. PEET, Esq., Acting Conservator of Forests, Northern Circle, to the Secretary to the Commissioners of Land Revenue, dated Gulleri, 9th February 1888, No. 2100:—

In answer to the Board's Reference on Forest Register No. 1658, dated the 12th December 1887, on G.O., dated the 17th November 1887, No. 628, on the subject of examinations of forest candidates in surveying, I have the honor to state that, in my opinion, any of the proposed or existing systems of examination should be considered to be only temporary and subject to alteration if a Forest Survey branch is established.

2. Forest surveying differs essentially from any other surveying, and at present even the examination by Revenue Survey officers is not really sufficient, as some officers have stated that they can make no arrangements for examination in levelling.

3. Meanwhile, I think that the examination by a board, as suggested by the Director of Public Instruction, would be the best method for conducting the examination. We should still, however, have to provide for forest candidates having a chance of learning surveying by joining a survey party for a time.

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Resolution—dated 12th March 1888, Forest No. 121.

Submitted to Government, with reference to endorsement, dated 30th November 1887, No. 7335, Revenue.

2. The Board concur in the suggestions of Lieutenant-Colonel Walker in paragraphs 6 and 7 of his letter above read and recommend that early steps be taken towards the formation of a Forest Survey branch for this Presidency.

(True Copies and Extract.)

(Signed) R. S. BENSON,
Acting Secretary.

To the Secretary to Government, Revenue Department, with G.O., dated 17th November 1887, No. 628, Educational, and its two enclosures, returned.
Copy to the Conservator of Forests, Southern Circle.
" " Conservator of Forests, Northern Circle.
" " Examiner of Forest Accounts.

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*Order*—dated 11th May 1888, Mis. No. 2800, Revenue.

The desirability of initiating a special Forest Survey party in this Presidency was stated in paragraph 11 of G.O., dated 24th February 1888, No. 169, but with the present scarcity of District Forest-officers no effect can be given to this decision until Mr. Gamble returns, and it is doubtful whether even then an officer can be spared.

2. The Board offer no opinion on the proposal of the Director of Public Instruction to allow the preliminary higher and advanced survey examinations of the Technical Education scheme to be substituted for the lower and higher standard tests prescribed in the Forest Code. Mr. Peet thinks this course might be accepted as a temporary measure, but Colonel Walker did not take the trouble to refer to the syllabus.

3. The Board will now be informed that effect cannot be given to their proposals for some time to come, and that it is therefore necessary that they should submit fresh recommendations on the matter. They should also report what effect has been given to paragraph 1 of G.O., dated 25th May 1887, No. 511, and how many men have applied to be examined by the higher standard.

4. With reference to the suggestion made in paragraph 7 of Colonel Walker's letter, the Board should ascertain whether the Deputy Superintendent of the Madras Party of the Survey of India is willing to permit Forest-officers to be attached to that party and to grant them certificates when he considers them qualified.

(True Extract.)

(Signed) J. F. PRICE,
Secretary to Government.

To the Commissioners of Land Revenue.

1268



READ—also the following Proceedings of the Board of Revenue (Land Revenue), dated 9th February 1889, Forest No. 90 :—

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W. S. WHITESIDE, ESQ.

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*Read*—again the following Proceedings of the Board of Revenue (Land Revenue), dated 7th August 1888, Forest Mis. No. 557 :—

Read—the following letter from J. W. CHERRY, Esq., Acting Conservator of Forests, Southern Circle, to the Secretary to the Commissioners of Land Revenue, dated Madras, 2nd August 1888, No. 3666-1264 :—

Referring to paragraphs 2 and 3 of Government Order, embodied in Board's Proceedings, dated 7th June 1888, Forest Mis. No. 380, I have the honor to state that as the examination for the higher standard in surveying is not compulsory, and as there have been up to date only two applicants, I think it unlikely that there will ever be many candidates. The previous objections of the Superintendent, Madras Survey, appear to have referred to the survey examinations generally, both lower and higher standards, which, as the former is compulsory and involves *many* applications, is not to be wondered at, for it would be difficult to find time for the purpose. But since it has been decided that the examination by the lower standard should be conducted by the Deputy Superintendent of the Madras Survey (*vide* Government Order embodied in Board's Proceedings, dated 27th June 1887, Forest No. 360), the Superintendent would now, perhaps, have no objection to conduct the examination by the higher standard, also seeing that only a few men would appear for it.

2. It will be observed from paragraph 7 of his letter embodied in Board's Proceedings, dated 12th March 1888, Forest No. 121, that Colonel Walker suggests the advisability of deputing candidates for the higher standard in the same manner as those for the lower "on duty and on full pay." But as the examination in the former is optional, and one which, if passed, carries a reward, I do not share his view and would not grant such concessions at Government expense in addition to loss of the examinee's services during such deputation.

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Resolution—dated 7th August 1888, Forest Mis. No. 557.

Recorded, pending receipt of the reply from the Conservator of Forests, Northern Circle, the submission of which should be expedited.

(A true Copy and Extract.)

(Signed) H. A. SIM,
Acting Secretary.

To the Conservator of Forests, Northern Circle.
Copy to the Conservator of Forests, Southern Circle.

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*Read*—again the following Proceedings of the Board of Revenue (Land Revenue), dated 14th September 1888, Forest Mis. No. 631 :—

Read—the following letter from J. W. CHERRY, Esq., Acting Conservator of Forests, Southern Circle, to the Secretary to the Commissioners of Land Revenue, dated Madras, 1st September 1888, No. 1542 :—

With reference to Board's Proceedings, No. 483, of 10th July 1888, and in continuation of this office No. 3666, of 2nd August 1888, I have the honor to state that, with the exception of the scales, the test in levelling for the survey, lower standard, as laid down in the Forest Code, differs so slightly from that prescribed in the preliminary higher standard syllabus 9 that I consider the latter may be adopted.

Resolution—dated 14th September 1888, Forest Mis. No. 631.

Ordered to lie over, pending receipt of the reply from the Conservator of Forests, Northern Circle, the submission of which should be expedited.

(A true Copy and Extract.)

(Signed) H. A. SIM,
Acting Secretary.

To the Conservator of Forests, Northern Circle.

Copy to the Conservator of Forests, Southern Circle.

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*Read*—also the following letter from A. W. PEET, Esq., Acting Conservator of Forests, Northern Circle, to the Secretary to the Commissioners of Land Revenue, dated Bukkapatnam, 26th September 1888, No. 1452 :—

With reference to the Board's reminders, Mis. No. 557, of the 7th August 1888, and Mis. No. 631, of the 14th September 1888, on original reference to Board's Proceedings, Mis. No. 380, dated the 7th June, I have the honor to state that I have been for some time in communication with the Deputy Superintendent, Survey of India, Madras Branch, on the subject of examinations for the higher standard in survey for forest subordinates, and append his last letter on the subject. I delayed forwarding this, as I wished to talk over matters with Mr. Cherry at the end of my present tour, but forward it now in answer to the reminders.

2. To my mind the matter presents great difficulties, and I am not quite sure if I have all the questions which have been raised from time to time clearly separated. These questions are, I believe—

(*a*) The question of *examination* for the lower standard, for which some sort of provision has been made for the instruction of subordinates, by attaching them for three months to the Revenue Survey.

(*b*) The question of *examination* in levelling, not the question of instruction in that branch.

(*c*) The question of *examination* for the higher standard, *plus* the further question of instruction under the Madras Branch of the Survey of India.

I presume that there is no question now of altering the system (*a*).

3. The questions which remain to be reported on and settled are therefore (*b*) and (*c*). As regards (*b*), the *examination* in levelling, I think it can be conducted as proposed by the Director of Public Instruction; but the matter of instruction is a more difficult matter. It is hard to make an examination compulsory, without providing some method of training; and as the Survey Department cannot undertake either the training or the examination, I see nothing for it but one of three courses—either to ask the Public Works Department to give the training, or to impose this as a burden on the already overworked District Forest-officer, or to provide no training at all; but compel the ranger to pick up his training as he can. In the latter case, it would be hard on some men who are in remote districts and would be hardest on the most hardworked. I am inclined to ask the Public Works Department to assist in the training, and to have the examinations in levelling conducted by the Director of Public Instruction.

4. As regards (*c*), I answer the last part of the paragraph 3 of Government Order, (in Board's Proceedings, dated the 7th June 1888, Forest Mis. No. 380), Mis. No. 2800, dated 11th May 1888, by saying that no one in this circle has appeared for an examination by the higher standard; and on hearing the opinion of the Deputy Superintendent of the Survey of India, summarized in paragraph 2 of his letter enclosed, it does not appear likely that any one taken from the ordinary ranks of forest subordinates will be able to pass it without years of special study. It seems advisable to alter the prescribed subjects for examination in the direction suggested in paragraph 3 of that



letter; and I think that we must face the fact that, in order to produce really efficient surveyors, there must be a certain number of promising rangers definitely attached to the Survey of India for at least a year. If we have men thus thoroughly trained, I think that a Forest Survey branch on a small scale can be adopted in this Presidency with great hopes of success.

5. As regards the question of *examination* for the higher standard, I think that the Superintendent of the Survey of India can arrange for this as a sequel to the training, and that, therefore, the proposal of the Director of Public Instruction to provide for the examination for the higher standard need not be adopted.

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ENCLOSURE.

From Major J. R. McCULLAGH, R. E., Deputy Superintendent, Survey of India, in charge No. 19 Party, to the Acting Conservator of Forests, Northern Circle, dated Ootacamund, 24th August 1888, No. 816.

With reference to the correspondence ending with your No. 71-C, dated the 3rd instant, I have the honor to say that I am willing that a limited number of Forest-officers should be attached to my party to learn surveying and I think the arrangement would be a good one as in course of time a number of your men would probably be sufficiently instructed to make small surveys for themselves, or at least working-plans, or any alterations or additions to existing maps that circumstances might require, but since a portion of my time and that of my assistants would have to be diverted from our legitimate work without any equivalent or corresponding advantage, I am of opinion that it would be necessary to obtain the sanction of Government to the arrangement.

2. Regarding the course of instruction, I may at once say that what has been laid down as the higher standard test appears to me impracticable of attainment and unreasonable to expect, under several years of hard work in a Survey Party, though possibly a superficial knowledge of the subjects might be acquired in a shorter time in a survey school, if such were or could be established.

3. On the principle, therefore, that a little practice is worth any amount of theory, I would recommend that the course be more restricted, but thoroughly practical, that your men should be regularly attached to the party for not less than a year, and after preliminary training have *bonâ fide* work given them to do, which work would have to undergo the same examination and checking as that of any other member of the party.

4. The field portion of the course might include the whole or a part of the following:—

(*a*) Instruction in the use of the chain, theodolite, plane table, circular protractor, and clinometer.

(*b*) Instruction, followed by the carrying out independently of a theodolite traverse and a plane-table traverse.

(*c*) Instruction, followed by the carrying out independently of a survey with the plane table of a given area of country.

The office portion of the course might include the whole or a part of the following:—

(*d*) Instruction in the use of ordinary drawing instruments, pentagraph, and planimeter.

(*e*) The methods of enlarging and reducing plans and taking out areas roughly by squares and triangles.

(*f*) The methods of computing traverses.

(*g*) The computation of heights from clinometer observations.

(*h*) Plotting and drawing.

5. It must be remembered, however, that to learn some of the foregoing pre-supposes a certain knowledge of mathematics which your subordinates may or may not possess.

6. I have suggested a year as the shortest time necessary for the course, for this reason, that all our field work is done at one time, and all the office work at another, though the most convenient time for joining would be in the middle of the recess, which would give three months' office work to begin with, followed by six months of field work and three months more of office to conclude.

7. For this year it is of course too late to give any preliminary office training and any men coming to me would have to commence field work in November.

8. I understand that a reward attaches to passing the higher standard; perhaps something of the kind might be given as a stimulus to hard work and the obtaining of a certificate of competency in the course or a part of the course as above suggested. I think it would also be necessary to reserve the right of remanding any men who would not work, or who, from any cause, were likely to turn out incapable.

*Resolution*—dated 9th February 1889, Forest No. 90.

In G.O., dated 11th May 1888, No. 2800, the Government asked the Board to report on the proposal of the Director of Public Instruction to allow the preliminary higher and advanced survey examinations of the Technical Education scheme to be substituted for the lower and higher standard tests prescribed in the Forest Code. The Government also asked what effect had been given to paragraph 1 of G.O., dated 25th May 1887, No. 511. This order approved of the proposal to depute Forest-officers to survey parties to learn surveying and to substitute Deputy Superintendent's certificates for the examination hitherto held (Board's Proceedings, dated 27th June 1887). They further asked whether the Superintendent of the Madras Party of the Survey of India was willing to permit Forest-officers to be attached to that party and to grant them certificates.

2. Under the code, two sets of examinations are prescribed in surveying; the higher standard, which is voluntary on all candidates, and the lower standard, which is compulsory on all officers of the subordinate staff. For the higher standard there have hitherto been only two *applicants*, but for the lower there are of course many. Effect has been given to the orders of Government conveyed in G.O., dated 25th May 1887, No. 511.

3. As regards the method of conducting these examinations, there bas been much correspondence. The Government sanctioned the arrangement under which, instead of the Superintendent of Revenue Survey holding examinations for the grant of survey certificates, Forest-officers were to undergo a course of training in the field with the Deputy Superintendent and receive certificates. The question as to whether the examination for the higher standard should be conducted by the Civil Engineering College authorities was referred to the Director of Public Instruction, through the Educational Department. The Board subsequently recommended that the instruction in levelling, which the Deputy Superintendent of Survey professed his inability to teach, should be taught by the officers of the Department of Forests and the examination conducted by the Public Works Department. The Director of Public Instruction then expressed objections to the examination, higher standard survey, being given to the Engineering College, and suggested that the two general survey examinations instituted under notification, dated 31st March 1886, viz., preliminary higher and advanced, should be substituted for the higher and lower standards of the Forest Code, and Mr. Peet accepted the suggestion as a temporary measure, while Colonel Walker objected to it. The Public Works Department afterwards expressed their readiness to examine any forest subordinate officers in levelling, but *not* to teach them (G.O., dated 3rd May 1888, No. 1308 W). The Board now submit the above papers from the Conservators to Government, and express their view that the preliminary higher examination in surveying, which appears to correspond almost precisely with the forest lower standard test, may be substituted for that test. That examination is, as the Director has shown, likely to be a far more thorough test of knowledge than the coarse and the rough examination now existing. The Board think that the Public Works Department should, as Mr. Peet suggested, teach the necessary levelling. As regards the higher standard, the Board recommend a reconsideration by the Forest Code committee of the subjects laid down in the code for this test, in the face of the opinion expressed by the Deputy Superintendent, Government of India Survey, and suggest that that officer should arrange for the examination for that certificate for the present. Candidates are not likely to be numerous for some time to come. As long as the men with the Survey party gave satisfaction they should, the Board think, receive the pay of their rank.

(True Copies and Extract.)

(Signed) M. HAMMICK,
Secretary.

To the Secretary to Government, Revenue Department.
Copy to the Conservator of Forests, Southern Circle.
" " " Northern "
" " Examiner of Forest Accounts.



ORDER—dated 25th April 1889, No. 315, Revenue.

Forest, No. 39.

The Government approves the proposal of the Director of Public Instruction to substitute the standards in syllabus 9 of the Higher Examinations in Science, Art and Industries for the lower and higher standards of surveying tests prescribed by the Madras Forest Code. It is desirable, however, that Forest-officers who pass the preliminary higher examination should have some knowledge of the use of the plane table. Mr. Grigg will be requested to state whether there is any objection to the addition of the following to the preliminary higher syllabus, practical side, clause (2):—

"The roads, paths, streams, houses and other topographical features to be filled in by plane table and chain" (*Forest Code, section* 43).

2. The Public Works Department will be requested to arrange for the instruction of Forest-officers in levelling.

(True Extract.)

Secretary to Government.

To the Commissioners of Land Revenue.
" the Educational Department.
" the Public Works Department. Sent in Bill
Copy to the Commissioner of Revenue Settlement, Land Records and Agriculture.
" " Superintendent, Revenue Survey.
" " Accountant-General.

Exd. A. D. Xavier.

100 Copies.

Govt. of {1889} Madras.

REVENUE.

Issued

Recd. 3.5.89 Encl.

G.O., 25th April 1889, No. 315.

APRIL.

**Surveying tests prescribed by the Madras Forest Code.**

The substitution of the standards in syllabus 9 of the Higher Examinations in Science, Art and Industries for the — approved, and the Public Works Department requested to arrange for the instruction of Forest-officers in levelling.

1268

Revenue Department

Proceedings of the Madras Government

Read again the follow-
ing Mis C.C. dated 11th May 1888, No 2300 on Protd-
ings of the Board of Revenue (Land Revenue) dated
12th March 1888, Forest No 121-

Order- The desirability of initiating a Special Forest Survey Party in this Presidency was stated in para 11 of G.O. 24th February 1888, No 169, but with the present scarcity of District Forest officers no effect can be given to this decision until Mr. Gamble returns and it is doubtful whether even then an officer can be spared.

2. The Board offer no opinion on the proposal of the Director of Public Instruction to allow the preliminary higher and advanced Survey examinations of the Technical Education Scheme to be substituted for the Lower and Higher Standard tests prescribed in the Forest Code. Mr Peet thinks this course might be accepted as a temporary measure, but Col Walker did not take the trouble to refer to the Syllabus.

3. The Board will now be informed that effect cannot be given to their proposals for some time to come, and that it is therefore necessary that they should submit fresh recommendations on the matter. They should also report what effect has been given to para 1 of G.O. 25th May 1887, No 511, and how many men have applied to be examined by the higher standard.

4. With reference to the suggestion made in para 7 of Col: Walker's letter the Board should ascertain whether the Deputy Superintendent of the Madras Party of the Survey of India is willing to permit forest officers to be attached to that party, and to grant them certificates when he considers them qualified.

Read also Proceedings* of the (Board of Revenue (Land Revenue) dated 9th February

*copy attached

February 1889, Forest No 90.

Order thereon, 25th April 1889, No 315

The Government approves the proposal of the Director of Public Instruction to substitute the standards in Syllabus 9 of the Higher Examinations in Science, Art and Industries for the Lower and Higher Standards of Surveying tests prescribed by the Madras Forest Code. It is desirable, however, that Forest officers who pass the Preliminary Higher Examination should have some knowledge of the use of the plane table. Mr Grigg will be requested to state whether there is any objection to the addition of the following to the Preliminary Higher Syllabus, Practical Side, Clause (2):—
"The roads, paths, streams, houses and other topographical features to be filled in by plane table and chain" (Forest Code, Section 43)

2- The Public Works Department will be requested to arrange for the instruction of Forest Officers in levelling:—

(True Extract)

[signature]
Secretary to Government

To
The Commrs of L.R.
" Educational Deptt.
" Public Works Deptt.
Copy to the Commr of R.S. L.R. & Agric:
" " Superintendent Revenue Survey
" " Accountant General

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C. No 4006

P.W.D.

Proceedings of the Madras Govt.

Read the following:—

Proceeding in the Rev Dept. No 315 dd April 25. 1889

1268

Communicated to Supdg: Engrs:, who, on requisition from the District Forest officer, will arrange that Forest officers be afforded every facility for obtaining a knowledge of levelling in the field by working with any officer or subordinate who may have, in the course of his duties, such work to do.

[signature]
8.5.89

[signature]
13.5.89

S. Engrs.
Rev. Dept
despd 22/5/89

9

1268

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Govt. of (1889) Madras.

PUBLIC WORKS.

18/5

Dated

Recd.

Encl.

G.O., 13 May 1889 No. 1268 W

Forest officers

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Orders in the Rev. Dept. giving instructions in regard to the examination of —, & requesting the [illegible] Dept to arrange for the officers being instructed in levelling, [illegible] to S. Engrs with instructions.

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180
k2

Cd 13/5

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