Educational (1906) Department.

ORDINARY PRINTED.

G.O., No. 37

DATED 20-1-06

(24)

INDEXED. Gazette

[Despatch Abstract.]

College of Engineering, Madras.

Allowance

Amending rule 56 (i) of the rules of the College of Engineering so as to provide for a local allowance of Rs 10 per mensem to military apprentices posted to hill Stations and directing the publication of the amended rule in the Fort St. George Gazette.

BACK PAPERS.

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

FURTHER PAPERS.

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

Government of Madras.

EDUCATIONAL DEPARTMENT.

Reed. } 1906. *Enclosures*

Regd. } *Spare copies*

G.O., No. 37, 20th January 1906.

N. P.

College of Engineering, Madras.

Amending rule 56 of the rules of the College of Engineering so as to provide for a local allowance of Rs. 10 per mensem to military apprentices posted to hill stations and directing the publication of the amended rule in the *Fort St. George Gazette.*

GOVERNMENT OF MADRAS.

EDUCATIONAL DEPARTMENT.

Read—the following paper:—

G.O., No. 2403 W., dated 9th December 1905.

Read—the following papers:—

From the Officiating Consulting Architect to Government, dated 26th September 1905, No. 2968.

From the Examiner, Public Works Accounts, dated 21st October 1905, No. 172 C.

Order—No. 2403 W., dated 9th December 1905.

The Acting Consulting Architect recommends the grant of a local allowance of Rs. 20, for service on the Nilgiris, to Military Apprentice Overseer Corporal Grant.

2. This is the rate allowed to overseers on the permanent establishment, but as military apprentices retain their position of students during their practical year, an additional allowance of Rs. 10 will be granted in their case also as in the case of civil students posted to hill stations—*vide* rule 68 of the College Calendar. This amount will accordingly be passed to Corporal Grant.

3. Orders will be issued in the Educational Department amending the College rules so as to provide for a local allowance of Rs. 10 to military apprentices posted to hill stations.

(True Extract.)

J. P. Davidson,
Secretary to Government.

To the Consulting Architect to Government.
,, Examiner, Public Works Accounts.
,, Educational Department.

Order—No. 37, Educational, dated 20th January 1906.

Communicated to the Director of Public Instruction.

2. Rule 56 of the rules of the College of Engineering will be amended and the following notification published in the *Fort St. George Gazette*:—

NOTIFICATION.

The following shall be substituted for rule 56 of the rules of the College of Engineering:—

"56. During their year of practical study the military apprentices shall retain their "position as students, and shall continue to be borne on college and regimental lists. Their "military pay and clothing shall be drawn from the Military Department by the Executive "Engineers of the divisions to which they are attached. They shall be provided with free "quarters or compensation in lieu, and receive a staff allowance sufficient to bring their total "consolidated pay up to Rs. 80 *per mensem*. They shall, when posted to hill stations, also draw a "local allowance of Rs. 10 per mensem as in the case of civil students. Married men shall receive

"in addition the usual regimental allowances for wife and children. The apprentice overseers, "if favourably reported on, shall, at the termination of the practical year, be transferred, in the "rank of Sergeant, to the unattached list, and posted to the Public Works Department as first-"grade overseers. Any apprentice who is unfavourably reported on shall revert to his regiment. "An out-fit allowance of Rs. 150 will be granted to military apprentices on their appointment "to the department."

3. The rules as revised up to date will be printed as an appendix to this order.

(True Extract.)

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

To the Director of Public Instruction.
,, Public Works Department.
Gazette.

APPENDIX.

COLLEGE OF ENGINEERING, MADRAS.

RULES RELATING TO THE CONSTITUTION AND WORKING OF THE COLLEGE OF ENGINEERING, MADRAS.

[As passed by G.O., No. 366, Educational, dated 28th June 1901, and corrected up to 20th January 1906.]

PREAMBLE.

The following code of rules relating to the constitution and working of the College of Engineering has been sanctioned by Government :—

OBJECT.

1. The college, which is affiliated to the Madras University, affords theoretical and practical instruction in subjects qualifying for the professions and callings of engineer, engineer subordinate, surveyor and draftsman, in view of fitting persons for employment in such capacities by Government, by local boards and municipalities, and by other agencies.

2. Students of the higher course in engineering are, at the same time, prepared for the B.E. degree examination of the Madras University.

CONTROL.

3. The responsibility for the discipline and management of the college is vested in the principal, under the control of the Director of Public Instruction.

STAFF.

4. The staff shall consist of a principal, a professor of civil engineering, a professor of mechanical engineering, a professor of mathematics, an instructor in surveying and drawing, an instructor in civil engineering, an instructor in mechanical engineering, and eight assistants. There shall also be a workshop instructor with foremen assistants and an instructor in gymnastics.

5. Special lecturers may also, when necessary, be employed with the sanction of Government.

6. The principal shall be an engineer, civil or military.

7. The professor of civil engineering shall be a third-grade executive engineer or first-grade assistant engineer of the Public Works department, the professor of mechanical engineering shall be an officer of the Indian Educational Service and the professor of mathematics shall be an officer either of that service or of the Provincial Educational Service.

CLASSES.

8. The college shall contain the following classes :—

(i) *Engineer class*—for the training of civil and mechanical engineers.

(ii) *Engineer Subordinate class*—for the training of upper subordinates for the Public Works department, local boards and municipalities.

(iii) *Sub-Overseer and Surveyor class*—for the training of lower subordinates and surveyors for the Public Works department, the survey department, local boards and municipalities.

(iv) *Draftsman class*—for the training of mechanical draftsmen and estimators.

9. The engineer and engineer subordinate classes constitute the college department, and the other classes the school department.

COURSES OF INSTRUCTION.

(1) *Engineer Class.*

10. The course of instruction shall extend over four years, of which three shall be spent in the college and the fourth chiefly on works. The course in the college shall be both theoretical and practical. Theoretical instruction shall be conveyed by lectures; while the practical work shall consist of surveying in the field, drawing, and work in the workshops and laboratories. Marks for practical work shall be assigned by the college staff, and these marks shall count towards the final total. Students who desire to become civil engineers shall spend the final year in a Public Works division; those who wish to become mechanical engineers shall spend it in an engineering workshop. Students shall receive lessons in riding during the practical course.

11. The subjects of study and the marks assigned to each shall be as follows :—

	Marks.
I. *Mathematics.*—Algebra (75), geometry (100), mensuration (75), plane trigonometry (75), differential and integral calculus (125)	450
II. *Science.*—Physics (325), chemistry (100), practical work (75)	500
III. *Engineering.*—Building materials (50), building construction (100), hydraulic engineering (100), applied mechanics (150), mechanism and the steam engine (100), practical work (200)	700
IV. *Drawing.*—Geometrical and perspective drawing (60), freehand and model drawing (40), building drawing (150), machine drawing (100), estimating (100), practical work (150)	600
V. *Surveying.*—Surveying (75), levelling (75), theodolite (75), topographical drawing (100), practical work (175)	500
VI. *Vernacular Language.*—Tamil or Telugu [a]	150
VII. *Physical Fitness.*—Gymnastics and drill	100
Total ..	3,000

12. Of the total marks, 2,300 shall be awarded by the Board of Examiners for examination work, and 700 by the college staff for practical work and physical fitness. The marks given by the college staff shall, however, be submitted to the Board for approval. Term examinations shall be held at the end of the first and second years, at which, portions of the above subjects shall be finally disposed of by the Board of Examiners. The marks awarded at these examinations shall be included in the final total.

13. In order to pass the examination, students must obtain one-third of the marks assigned to each of the four subjects, namely, (1) mathematics, (2) engineering, (3) drawing, and (4) surveying, one-fourth of the marks assigned to science, and one-half of the total marks awarded by the Board of Examiners and the college staff separately. They must also satisfy the principal of the college in practical surveying. Students who obtain not less than three-fourths of the total marks shall be declared to have passed in the first class, and all other successful students in the second class. Students shall be expected to present themselves for the first examination in engineering of the Madras university at the end of their second year of study, and for the B.E. degree examination at the end of their third year.

14. Students who are successful at the college final examination shall proceed to the practical course. Those who elect to become civil engineers shall be posted to a division where large public works are in progress, and will be regularly instructed in the preparation of materials, the practical details of construction, the management of labour, and in accounts. Those who elect to become mechanical engineers will proceed to the Public Works Workshops but may, if they please, spend the last six months of their practical course at the college workshops. One mechanical engineer student will be permitted each year to join the Madras Railway Locomotive shops at Perambur, the concession being offered in the order of merit at the final examination. The premium will be Rs. 500, of which half will be defrayed by the Educational department, the other half being met by the student. The premium will cover a course of two years, of which one year is obligatory. Other mechanical engineers may attend at Perambur on payment of the full premium.

(2) *Engineer Subordinate Class.*

15. The course of instruction shall extend over three and-a-half years, of which two and-a-half shall be spent in the college, and one year on works or in the workshops. The course in the college shall be both theoretical and practical. Theoretical instruction shall be conveyed by lectures, while the practical work shall consist of surveying in the field, drawing, and work in the workshops. Marks for practical work shall be assigned by the college staff, and these marks shall count towards the final total. The course on works shall be in a division of the Public Works department. Students shall receive lessons in riding during the practical course.

16. The subjects of study and the marks assigned to each shall be as follows :—

	Marks.
I [b] *Mathematics.*—Arithmetic (50), algebra (80), geometry (50), mensuration (80), plane trigonometry (90)	350
II. *Engineering.*—Building materials (50), building construction (100), hydraulic engineering (100), applied mechanics (125), mechanism and the steam-engine (75), practical work (150)	600
III. *Drawing.*—Geometrical and perspective drawing (40), freehand and model drawing (35), building drawing (100), machine-drawing (75), estimating (75), practical work (125)	450

[a] Tamil to be obligatory for natives whose mother tongue is Telugu and *vice versâ*. The choice of one of these two languages to be open to all other students.

[b] The marks under mathematics were reallotted under G.O., No. 488, Educational, dated 2nd September 1901.

	Marks.
IV. *Surveying.*—Surveying (75), levelling (75), theodolite (50), topographical drawing (75), practical work (125)	400
V. *Vernacular Language.*—Tamil or Telugu [a]	125
VI. *Physical Fitness.*—Gymnastics and drill	75
Total ...	2,000

17. Of the total marks, 1,525 shall be awarded by the Board of Examiners for examination work, and 475 by the college staff for practical work and physical fitness. The marks given by the college staff shall, however, be submitted to the Board for approval. Term examinations shall be held at the end of the first and third half-years, at which portions of the above subjects shall be finally disposed of by the Board of Examiners. The marks awarded at these examinations shall be included in the final total.

18. In order to pass the examination, students must 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. They must also satisfy the principal of the college in practical surveying. Students who obtain not less than three-fourths of the total marks shall be declared to have passed in the first class, and all other successful students in the second class.

19. Students who are successful at the college final examination shall be posted to a division where large public works are in progress, and shall be regularly instructed in the preparation of materials, the practical details of construction, the management of labour, and in accounts.

(3) *Sub-overseer and Surveyor Class.*

20. The course of instruction shall extend over two years, and shall be both theoretical and practical. Theoretical instruction shall be given in class, while the practical work shall consist of surveying in the field, drawing, and, when possible, work in the workshops. Marks for practical work shall be assigned by the college staff and these marks shall count towards the final total.

21. The subjects of study and the marks assigned to each shall be as follows :—

	Marks.
I. *Surveying.*—Surveying (100), levelling (100), theodolite (100), topographical drawing (100), practical work (300)	700
II. *Engineering.*—Building materials (75), building construction (150), practical work (50)	275
III. *Drawing.*—Geometrical drawing (75), building drawing (150), estimating (150), practical work (100)	475
IV. *Physical Fitness.*—Gymnastics and drill	50
Total ..	1,500

22. Of the total marks, 1,000 shall be awarded by the Board of Examiners for examination work, and 500 by the college staff for practical work and physical fitness. The marks given by the college staff shall, however, be submitted to the Board for approval. A term examination shall be held at the end of the first year, at which, portions of the above subjects shall be finally disposed of. The marks awarded at this examination shall be included in the final total.

23. In order to pass the examination, students 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. They must also satisfy the principal of the college in practical surveying. Students who obtain not less than three-fourths of the total marks shall be declared to have passed in the first class, and all other successful students in the second class.

(4) *Draftsman Class.*

24. The course of instruction shall extend over two years.

25. The subjects of study and the marks assigned to each shall be as follows :—

	Marks.
I. *Geometrical, etc., Drawing.*—Geometrical and perspective drawing (75) freehand and model drawing (75)	150
II. *Building Construction and Drawing.*—Building construction (125), building drawing (275)	400
III. *Machine drawing*	150
IV. *Estimating*	250
V. *Physical Fitness.*—Gymnastics and drill	50
Total ..	1,000

[a] Tamil to be obligatory for natives whose mother tongue is Telugu and *vice versâ*. The choice of one of these two languages to be open to all other students.

26. Of the total marks, 750 shall be awarded by the Board of Examiners for examination work and 250 (75 for building drawing, 75 for machine drawing, 50 for estimating and 50 for physical fitness) by the college staff. The marks given by the college staff shall, however, be submitted to the Board for approval. A term examination shall be held at the end of the first year, at which, portions of the above subjects shall be finally disposed of. The marks awarded at this examination shall be included in the final total.

27. In order to pass the examination, students must 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. Students who obtain not less than three-fourths of the total marks shall be declared to have passed in the first class and all other successful candidates in the second class.

STRENGTH OF CLASSES.

28. The number of students to be admitted annually shall ordinarily be limited to [a] 20 in the engineer class, 30 in the engineer subordinate class, 35 in the sub-overseer and surveyor class, and 35 in the draftsman class.

ADMISSIONS AND WITHDRAWALS.

29. All applications for admission shall be submitted in a prescribed form.

30. Admissions shall be once a year :—(1) for the engineer class on the 20th January (unless that day falls on a Saturday or Sunday when the students shall join on the following Monday) ; (2) for the engineer subordinate class on the first Monday in July ; and (3) for the sub-overseer and surveyor class, and for the draftsman class on the fourth Monday in January.

31. The principal may refuse admission to any candidate whose previous conduct has not been satisfactory. His order shall be subject to appeal to the Director, whose decision shall be final.

32. Withdrawals in the case of scholarship-holders shall, except for good and sufficient reasons, be allowed only on completion of the course for which the scholarships have been awarded.

QUALIFICATIONS FOR ADMISSION.

(1) *Engineer Class.*

33. Candidates must have passed the first examination in Arts of the Madras university or an examination accepted by Government as equivalent thereto and must be between the ages of 17 and 22 years on the 31st December preceding the year of admission. Candidates otherwise qualified, but whose ages exceed the maximum above laid down, may be admitted with the sanction of the Director of Public Instruction, if the strength of the class permits. Students so admitted shall be ineligible for guaranteed appointments and for prizes and scholarships.

34. Admissions shall be regulated by a competitive examination to be held annually on the third Monday in November and the following day at the college of engineering and at Rajahmundry, Bellary, Kumbakónam, Madura, Calicut and Trivandrum.

35. The scheme of examination shall be as follows :—

	Marks.
Arithmetic (the whole)	100
Algebra (including quadratic equations and the binomial theorem) ..	75
Geometry (Euclid Books I to IV, VI and XI, Propositions 1 to 21) ..	75
Mensuration	50
Trigonometry (including the solution of plane triangles)	100
English composition	80
Hand-writing (to be judged from the paper on English Composition).	60
Elementary drawing	60
Total ..	600

The qualifying minimum shall be 240 marks.

36. The fee for admission to this examination shall be Rs. 20. Applications will be received by the principal up to the third Monday in October.

[b] 37. The first twenty qualified candidates on the list shall be selected for admission, provided that, if five non-Brahmans be not within the first twenty, the number shall be made up, in order of merit, from the other qualified candidates who are not Brahmans. The names of the successful candidates shall be published in the *Fort St. George Gazette*.

[a] The number was raised to 20 by G.O., No. 544, Educational, dated 9th November 1903.

[b] Rule as revised by G.O., No. 544, Educational, dated 9th November 1903.

38. The candidates shall join the college on the 20th January (unless that day falls on a Saturday or Sunday when they shall join on the following Monday), and shall each on that day deposit with the principal—

(*a*) the sum of Rs. 100, which shall be drawn against for books and instruments;
(*b*) a health certificate from a gazetted Government medical officer to the effect that the candidate is fit for the outdoor work of the Public Works department, and that he has had small-pox or has been vaccinated;
(*c*) his university certificate;
(*d*) testimonials of good character covering the last two years;
(*e*) his horoscope or other evidence of age;
(*f*) a leaving certificate from his last school.

(2) *Engineer Subordinate Class.*

39. Candidates must have passed the upper secondary examination, or the matriculation examination of the Madras university, or an examination accepted by Government as equivalent thereto and must be between the ages of 16 and 21 years on the 31st December preceding the year of admission.

40. Admissions shall be regulated by a competitive examination, to be held annually on the last Monday in April and the following day at the college of engineering and at Berhampur, Vizagapatam, Rajahmundry, Masulipatam, Bellary, Kurnool, Nellore, Kumbakónam, Madura, Calicut, Mangalore and Trivandrum.

41. The scheme of examination shall be as follows:—

	Marks.
Arithmetic (the whole)	125
Algebra (including quadratic equations)	75
Geometry (the first four Books of Euclid)	100
English composition	80
Hand-writing (to be judged from the paper on English composition)	60
Elementary drawing	60
Total	500

The qualifying minimum shall be 200 marks.

42. The fee for admission to this examination shall be Rs. 15. Applications will be received by the principal up to the third Monday in March.

43. The first thirty qualified candidates on the list shall be selected for admission, provided that, if five non-commissioned officers or soldiers of British regiments, six other Europeans and Eurasians and five Muhammadans be not within the first thirty, the number under each may be made good, in order of merit, from the other qualified candidates. The names of selected candidates shall be published in the *Fort St. George Gazette.*

44. The civilian candidates shall join the college on the first Monday in July, and shall each on that date deposit with the principal—

(*a*) the sum of Rs. 75, which shall be drawn against for books and instruments;
(*b*) a health certificate from a gazetted Government medical officer, to the effect that the candidate is fit for the out-door work of the Public Works department, and that he has had small-pox or has been vaccinated;
(*c*) his university or upper secondary examination certificate;
(*d*) testimonials of good character covering the last two years;
(*e*) his horoscope or other evidence of age;
(*f*) a leaving certificate from his last school.

(3) *Sub-overseer and Surveyor Class.*

45. Candidates must have passed the lower secondary or the late middle school examination, [a] or an examination accepted by Government as equivalent thereto [a] and must be between the ages of 16 and 22 years on the 31st December preceding the year of admission.

46. Admissions shall be regulated by a competitive examination to be held annually on the third Monday in November at the college of engineering and at Berhampur, Vizagapatam, Rajahmundry, Masulipatam, Bellary, Kurnool, Nellore, Kumbakónam, Madura, Calicut, Mangalore and Trivandrum. The scheme of examination shall be as follows:—

	Marks.
Arithmetic (to the end of fractions)	100
English composition	100
Hand-writing (to be judged from the paper on English composition)	100
Drawing (copying a lithographed drawing)	100
Total	400

[a]—[a] These words were inserted by G.O., No. 605, Educational, dated 25th October 1901.

The qualifying minimum shall be 200 marks.

47. The fee for admission to this examination shall be Rs. 10. Applications will be received by the principal up to the first Monday in October.

48. The first thirty-five qualified candidates on the list shall be selected for admission, provided that if four Europeans or Eurasians and three Muhammadans be not within the first thirty-five, the number under each may be made good, in order of merit, from the other qualified candidates. The names of successful candidates shall be published in the *Fort St. George Gazette.*

49. The candidates shall join the college on the fourth Monday in January, and shall each on that day deposit with the principal—

(*a*) the sum of Rs. 75, which shall be drawn against for books and instruments;

(*b*) a health certificate from a Government medical officer to the effect that the candidate is fit for the out-door work of the Public Works department, and that he has had small-pox or has been vaccinated;

(*c*) his lower secondary or middle school examination certificate;
(*d*) testimonials of good character covering the last two years;
(*e*) his horoscope or other evidence of age;
(*f*) a leaving certificate from his last school.

(4) *Draftsman Class.*

50. The rules of admission to the draftsman class shall be the same as those for the sub-overseer and surveyor class, except that the health certificate need testify only to the candidate's fitness for the public service, and that the deposit shall be one of Rs. 60.

MILITARY STUDENTS.

51. Non-commissioned officers and soldiers of His Majesty's British service, desirous of qualifying for employment in the Public Works department, will, to the number of five annually, be admitted to the college by a competitive examination. Candidates must be soldiers of thoroughly good character, well recommended by their commanding officers and under [a] 28 years of age. They must have had not less than two years' service prior to the date of admission to the college. Applications will be received by the principal up to the second Monday in March. Each candidate's application shall be forwarded by his commanding officer to the principal and shall be accompanied by the following documents relating to the candidate:—

(*a*) extract from regimental defaulter's and court-martial books for the whole period of service;

(*b*) extract from the company defaulter's book for the preceding two years;
(*c*) certificate that the candidate has never been dismissed from staff employment;
(*d*) statement whether the candidate is married or unmarried;
(*e*) certificate of perfect eye-sight, sound health and unimpaired constitution, signed by a medical officer in the following form:—

I certify that I have carefully examined *and that to the best of my belief his eye-sight is perfect, and he has no disease, constitutionl affection or bodily infirmity, unfitting him, or likely to unfit him, for active out-door employment as an upper subordinate in the Public Works department.*

Name.

Designation.

52. If these certificates are satisfactory, the principal shall forward to the commanding officer papers of questions for the following examination to be held on the last Monday in April:—

	Marks.
English composition	80
Handwriting	60
Arithmetic (the whole)	125
Algebra (including quadratic equations)	75
Geometry (the first four Books of Euclid)	100
Elementary drawing	60
Total	500

The qualifying minimum shall be 200 marks.

53. The five qualified candidates who stand highest on the list shall be selected and shall join the college in the following July.

[a] The age limit was raised to 28 by G.O., No. 394, Educational, dated 28th June 1904.

On joining the college they shall bring with them—

(*a*) a descriptive roll;
(*b*) the record of service;
(*c*) a last-pay certificate;
(*d*) last clothing and bedding certificates;
(*e*) a certified list of clothing and necessaries in their possession when quitting their regiments;

(*f*) a certificate of the carriage, if any, furnished to them at the Government expense, etc., on leaving their regiments to proceed to Madras.

When not furnished with carriage to enable them to join, a certificate shall be given to this effect and they shall then receive travelling allowance at the rate of one anna per mile. A double allowance shall be granted to married men accompanied by their wives.

54. While studying at the college they shall be considered as doing duty, and shall remain on the strength of their respective regiments, without prejudice to their promotion and other advantages until appointed to the Public Works department. Military students shall be provided with barracks and married quarters at the college, they shall wear the undress or fatigue uniform of their rank and regiment, and they shall be under the command of the principal, or, in his absence, of the superintendent of military students. They shall receive, whilst at the college, the same pay as with their regiments, including good-conduct pay when entitled to it, together with rations or compensation in lieu, and a college allowance of Rs. 11 per mensem to cover extra messing and other expenses. They shall be exempted from the payment of college fees, and shall be supplied *gratis* with drawing instruments and the text-books in use. They shall not compete for civil scholarships, but shall be eligible for medals and prizes. The principal may remand any student to his regiment for insufficient progress or unsatisfactory conduct.

55. The course of study and examinations shall be those of the engineer subordinate class. Those men who pass the final examination shall, in order of merit and to the extent of the requirements of the Public Works department of Madras and Burma, be appointed apprentice overseers for one year. Two appointments as apprentice overseer in the Madras Public Works department will be given every year. In addition an appointment as apprentice overseer in the Burma Public Works department may be expected from time to time. Students who qualify, but do not pass sufficiently high for immediate appointment, shall [a] proceed to take the practical course. On the completion of the practical course they may either be reverted to their regiment pending selection in any subsequent year in which less than the guaranteed number pass the examination or they may with the Chief Engineer's approval be employed on the temporary subordinate staff of the Public Works Department [a].

56. During their year of practical study the military apprentices shall retain their position as students, and shall continue to be borne on college and regimental lists. Their military pay and clothing shall be drawn from the Military department by the executive engineers of the divisions to which they are attached. They shall be provided with free quarters or compensation in lieu and receive a staff allowance sufficient to bring their total consolidated pay up to Rs. 80 *per mensem*. [b] They shall, when posted to hill stations, also draw a local allowance of Rs. 10 per mensem as in the case of civil students [b]. Married men shall receive in addition the usual regimental allowances for wife and children. The apprentice overseers, if favourably reported on, shall, at the termination of the practical year, be transferred, in the rank of Sergeant, to the unattached list and posted to the Public Works Department as first-grade overseers. Any apprentice who is unfavourably reported on shall revert to his regiment. An outfit allowance of Rs. 150 will be granted to military apprentices on their appointment to the department.

57. Military apprentices shall receive travelling allowance at the rate of two annas per mile, or in case of portions of the journey performed by railway, at one anna and a half per mile, for the journey from Madras to the site of the work to which they are posted, and for all journeys performed on transfer during their apprenticeship.

Fees.

58. *Tuition fees.*—The following shall be the fees payable in advance by students while at college. Fees shall, under no circumstances, be returned after a student has been admitted to the institution:—

Class.	Monthly rate.	Per term, if paid in advance.	For the full theoretical course, if paid in advance.
	Rs.	Rs.	Rs.
Engineer class	12	68	360
Engineer subordinate class	6	34	150
Sub-overseer and surveyor class	5	28	100
Draftsman class	4	22	80

[a]—[a] These words were substituted by G.O., No. 511, Educational, dated 26th July 1905.
[b]—[b].—These words were inserted by G.O., No. 37, Educational, dated 20th January 1906.

59. *Special fees.*—A contribution of Rs. 2 per term shall be made by each student to the recreation club. The riding course fee for students of the engineer and engineer subordinate classes shall be Rs. 15. The premium payable by mechanical engineer students at Perambúr is laid down in rule 14.

60. *Examination fees.*—Students shall pay fees at the following rates for admission to the final examinations:—

	Rs.
Engineer class	20
Engineer subordinate class	15
Sub-overseer and surveyor class	10
Draftsman class	10

Scholarships, Stipends and Prizes.

(1) *Engineer Class.*

61. Three scholarships of the monthly value of Rs. 15 each will be annually awarded: two of them will be awarded to the two candidates standing highest at the entrance examination, who are admitted to the class, and the third to a Muhammadan, or a native christian, or a European or Eurasian, in the order mentioned, who is admitted to the class and who does not secure a merit scholarship. The scholarships shall be renewed on the results of each term examination.

62. A gold medal will be awarded to the student who passes first in the final examination.

63. During the year of practical training, subsistence allowances of Rs. 50 per mensem for Europeans and Eurasians, and Rs. 25 per mensem for natives shall [a] ordinarily be granted; [b] but these amounts shall be increased to Rs. 60 and Rs. 37-8-0 per mensem, respectively, in the case of students posted to hill stations [b]. Such allowances shall, however, be contingent on the good conduct and satisfactory progress of the student; and on proof of misconduct or idleness, the allowances may be reduced or withdrawn by the executive engineer. Travelling allowances to students joining or on the works shall be drawn at the rates sanctioned for officers of the third class under the Civil Service Regulations.

(2) *Engineer Subordinate Class.*

64. Three scholarships of the monthly value of Rs. 10 each will be annually awarded to the civilian students: two of them will be awarded to the two candidates standing highest at the entrance examination, who are admitted to the class, and the third to a Muhammadan, or a native christian, or a European or a Eurasian, in the order mentioned, who is admitted to the class and who does not secure the merit scholarship. The scholarships shall be renewed on the results of each term examination.

65. A silver medal will be awarded to the student who passes first at the final examination.

66. The "Walker" scholarship of the value about Rs. 13 per mensem shall be tenable for two and-a-half years by a student of this class who is a native of the Malabar, South Canara, or Nilgiri district, and who possesses a fair knowledge of Malayalam or Canarese.

67. The "Rogers" prize of the value of about Rs. 20 shall be given annually in books to the most distinguished student of the class after the final examination.

68. During the practical course subsistence allowances of Rs. 30 per mensem for Europeans and Eurasians, and Rs. 20 per mensem for natives shall [c] ordinarily be granted; [d] but these amounts shall be increased to Rs. 40 and Rs. 30 per mensem, respectively, in the case of students posted to hill stations [d]. Such allowance shall, however, be contingent on the good conduct and satisfactory progress of the student; and on proof of misconduct or idleness, the allowances may be reduced or withdrawn by the executive engineer. Travelling allowances to students joining or on the works will be drawn at the rates sanctioned for officers of the third class under the Civil Service Regulations.

(3) *Sub-overseer and Surveyor Class.*

69. Three scholarships of the monthly value of Rs. 8 each will be annually awarded: two of these will be awarded to the candidate standing highest at the entrance examination, who is admitted to the class, and the third to a Muhammadan, or a native christian, or a European or Eurasian, in the order mentioned, who is admitted to the class and who does not get the merit scholarship. The scholarships shall be renewed during the second year on the results of the term examination at the end of the first year.

70. A bronze medal will be awarded to the student who passes first at the final examination.

[a], [b]—[b]—[c] and [d]—[d].—These words were inserted by G.O., No. 734, Educational, dated 27th November 1902.

(4) *Draftsman Class.*

71. Three scholarships of the monthly value of Rs. 7 each will be annually awarded on the same conditions as those given in the sub-overseer and surveyor class.

72. A bronze medal will be awarded to the student who passes first at the final examination.

(5) *Special Prizes.*

73. Prizes consisting of instruments or books will be given in all the above classes for special proficiency in particular subjects.

74. Three "Sir Madhava Rau" prizes of the value of Rs. 20 each will be given annually, under certain prescribed conditions, for proficiency in practical work. When possible, one prize will be awarded to a Mahratta Brahman.

(6) *Stipends in Workshops.*

75. Four stipends of the monthly value of Rs. 6 for the first year, Rs. 7 for the second year, and Rs. 8 for the third year will be awarded annually to young men who have passed the elementary technical examination in carpentry or blacksmith's work, and who join the college workshop with a view to be trained as teachers in technical or industrial schools or in school workshops for manual training. The course shall extend over three years during which time the students shall be prepared for the highest technical examination in cabinet-making, or carpentry, or fitters' work. The students shall ordinarily work in the workshop for thirty-five hours per week and will be allowed one month's vacation in the hot weather and the ordinary authorized holidays. They shall be required, if need be, to serve as teachers for two years, and to submit half-yearly reports as to how they are employed for three years after leaving the workshops.

Scholarships and stipends may be reduced or forfeited for misconduct, idleness or want of progress.

TIME TABLE.

76. The hours of attendance at the college shall be from 10 A.M. to 1 P. M. and from 2 to 4-30 P.M. The field work and workshop hours shall, from time to time, be fixed by the principal.

77. The principal shall submit a time table annually for the approval of the Director. No material change shall be made in the time table or in the general arrangement of the college work without his sanction.

VACATIONS AND HOLIDAYS.

78. The college shall be closed for the midsummer vacation from the 1st May to the first Monday in July and for the Christmas vacation from 23rd December to 17th January.

79. The casual holidays allowed in chapter II of the educational rules shall apply to this college in so far as its special character may allow.

LEAVE AND DISMISSAL.

80. Students may obtain leave of absence by application to the principal.

81. Scholarship-holders shall forfeit their scholarships during any period, however short, of absence without leave, and shall be further liable to have their scholarships withdrawn, if they absent themselves without leave for five consecutive working days.

82. In cases of severe illness certified to by a competent medical authority, sick leave with scholarship may be given by the principal for a fortnight. If such leave is granted for a period exceeding a fortnight, the excess period shall be leave without allowances.

83. Any student who has obtained admission into the college by means of a false certificate or by false representations of any kind, or who has been found guilty of grave misconduct, shall be summarily dismissed; the fact of such dismissal and the reasons for it being at once reported to the Director.

84. Leave may be granted during the practical course for a period or aggregate of periods not exceeding one month per annum. Such leave shall not entail forfeiture of stipend, but any leave in excess of one month shall involve loss of stipend and the practical course shall be extended by a period equal to the excess over one month per annum of the leave taken.

EXAMINATIONS.

85. All term and final examinations shall be conducted by an independent Board of Examiners, consisting of a president and two members appointed by Government, on the recommendation of the Director of Public Instruction, for a term of three years. When necessary, the Board may, with the sanction of Government, employ assistant examiners. The decision of the Board of Examiners in regard to the qualifications of any student appearing for examination

shall be final. The names of all students declared by the Board to have passed a final examination shall be published in the *Fort St. George Gazette*. After completing the annual examinations, the Board shall submit a report to Government, through the Director of Public Instruction, summarising the results of the examinations. It may record in the report any observations of a general nature bearing on the working of the college, or make any suggestions it may consider expedient, provided such observations or suggestions arise naturally out of the examination work which the Board has to perform. The report shall be signed by the president and members of the Board.

86. The examinations for admission to the several classes shall be conducted by the college staff.

DIPLOMAS AND CERTIFICATES.

87. *Engineer and Engineer Subordinate classes.*—On the completion of the course in the college a provisional certificate signed by the principal and the president of the Board of Examiners, shall be issued, showing that the candidate has passed the final examination. On the satisfactory completion of the practical course, a diploma signed by the principal and the Director of Public Instruction shall be issued, setting forth the qualifications of the student for employment as a civil engineer, a mechanical engineer, or as an engineer subordinate.

88. *Sub-overseer and Surveyor class and Draftsman class.*—On the completion of the course, a certificate signed by the principal and the president of the Board of Examiners shall be issued, stating that the student has passed the final examination and is qualified for employment as a sub-overseer and surveyor or as a draftsman. A student who has passed the final examination of the engineer subordinate class, and who elects not to proceed to the practical course, shall be granted a certificate of qualification as a sub-overseer.

EMPLOYMENT OF PASSED STUDENTS.

89. *Engineers.*—One appointment annually as apprentice engineer shall be conferred on the student who passes highest at the final examination. The apprenticeship shall commence on the 1st January following the examination, and shall ordinarily extend over twelve months, when the apprentice, provided he has passed the B.E. degree examination of the Madras University and fulfilled the conditions of paragraph 11, chapter II, volume I, Public Works department code, shall be brought on the permanent establishment of the Public Works department, provincial service, as third-grade assistant engineer. Other engineer students, who have satisfactorily completed the practical course, shall be eligible for appointment to the temporary upper subordinate establishment of the Public Works department, whence transfers may be made to the permanent establishment to fill existing vacancies on the recommendation of superintending engineers. Fully qualified engineer students may also be appointed assistant engineers under local boards.

90. *Engineer Subordinates.*—One appointment annually as overseer, third-grade, in the permanent upper subordinate establishment of the Public Works department shall be conferred on the civilian engineer subordinate student who passes highest at the final examination, provided he has satisfactorily completed his practical course and provided a vacancy exists for such appointment. Other civilian engineer subordinate students, who have satisfactorily completed the practical course and for whom there are vacancies, shall be eligible for appointment to the temporary upper subordinate and lower subordinate establishments of the Public Works department, whence transfers may be made to the permanent upper subordinate establishment to fill existing vacancies on the recommendation of superintending engineers. No person will be eligible for appointment to the permanent upper subordinate establishment unless he be a fully qualified engineer or engineer subordinate. Appointments as delta superintendent, minor irrigation overseer and as overseer to district boards and municipalities are also open to qualified engineer subordinates. Qualified military students required for the Public Works department shall be appointed apprentice overseers at the commencement of their practical course—*vide* rule 55. In alternate years, one appointment to the engineer establishment, provincial service, will be offered to a senior selected upper subordinate of the Public Works department.

91. *Sub-Overseers and Surveyors.*—Qualified sub-overseers and surveyors will be appointed to the Public Works department as sub-overseers as vacancies occur. They will be eligible also for employment as channel superintendent in the Public Works department and as deputy surveyor in the Survey department. When the services of temporary men are required for special surveys not undertaken by the Public Works subordinate staff, the Public Works officers in charge are instructed to select for such employment none but qualified surveyors of the college.

92. *Draftsmen.*—Qualified draftsmen will be appointed to the Public Works department as draftsmen and estimators as vacancies occur.

93. Students of the engineer and engineer subordinate classes who pass sufficiently high to merit guaranteed appointments shall, before appointment, produce certificates of physical fitness for the work of the Public Works department. The medical examination for such certificates shall be held at the end of the practical course. Other qualified students will, on appointment to the Public Works department, be required to produce certificates of physical fitness under the ordinary rules of the public service.

94. The guaranteed appointments referred to are reserved for statutory natives of India, provided that natives of pure Asiatic descent shall be admitted only if their parents or guardians are domiciled in the Madras Presidency or the Native States of Travancore, Cochin, Pudukkóttai, Sandúru, Banganapalle and Mysore.

95. It shall be the duty of the principal to render all reasonable assistance to passed students who may not be appointed to the Public Works department, in seeking employment under local boards and municipalities and other agencies. With this view lists of qualified men, with remarks as to their attainments, conduct, etc., shall be circulated annually to local boards and municipalities, with recommendations that they may be employed in suitable posts when opportunities offer, and the attention of such boards should be invited to G.O., No. 2773 L., dated 12th December 1893.

Casual Students.

96. Applicants who pass the entrance examination, and who produce certificates of good health and good character, make the usual deposit and pay the prescribed fees may be admitted as casual students to the engineer class, provided that accommodation is available for them. They may present themselves for the term and final examinations, and if they pass they will receive provisional certificates issued to successful students at the end of the college course; but they shall not be eligible for guaranteed appointments or for scholarships or prizes or for the free practical course.

97. Other casual students may also be admitted to the engineer class for one or more terms, on payment of the prescribed fees, for instruction in special subjects, provided that they possess sufficient general education to follow and profit by the instruction given and that accommodation is available for them. They shall not be eligible for any of the college examinations, but may receive a certificate of attendance.

[a] 97-A. Any duly qualified teacher employed in a departmental institution or in any school recognised by the Madras Educational Department may, with the sanction of the Director of Public Instruction, receive a course of training in any subject taught in the college, free of charge.

[a] 97-B. A teacher who is in Provincial or Local or Municipal employment may, with the sanction of the Director or President or Chairman, as the case may be, be allowed during the course of training a portion not exceeding one-half of the pay of his substantive appointment. Certificated teachers in receipt of salary grants whom a manager may wish to attend a course will be eligible for the continuance of their grants during such course, provided that the Principal of the college certifies that their conduct has been good and their progress satisfactory.

[a] 97-C. Teachers employed in Government, Local or Municipal schools who are required to receive a course of training shall be entitled (subject in the case of the last two classes to the sanction of the Board or Municipal Council concerned) to draw travelling allowances from Provincial, Local or Municipal funds, respectively, for a single journey on joining and on leaving the college, at rates which shall follow the classes to which the teachers belong as defined in the Civil Service Regulations. Other students shall not be allowed travelling expenses from public funds.

Independent Candidates.

98. A student who has failed to obtain a certificate from the Board at the final examination, may appear before the Board for examination in any subsequent year, provided he is certified to have put in the necessary attendance at the college, and pays a fee as follows:—

	Rs.
Engineer candidates	30
Engineer subordinate candidates	24
Sub-overseer and surveyor candidates	18
Draftsman candidates	12

99. Candidates who qualify in this way shall receive the certificates referred to in rules 87 and 88, and their names shall be published in the *Fort St. George Gazette* in a separate list. Engineer and engineer subordinate independent candidates shall not be eligible for diplomas until they have satisfactorily completed the practical course.

Registers and Accounts.

100. The following registers shall be kept:—

(1) Register of admissions and withdrawals for each class.

(2) Monthly register of attendance, fees and fines for each class.

(3) Acquittance roll and pay abstract.

[a] These rules were inserted by G.O., No. 209, Educational, dated 11th May 1903.

(4) Library catalogue and register and inventory of valuable stock.

(5) Register of scholarships.

(6) Register of expenditure on contingencies.

101. The register of valuable stock shall be scrutinized every year, the work being entrusted in rotation to one of the senior members of the staff, who shall certify to the correctness of the stock and the entries in the register.

Miscellaneous.

102. All civilian students shall provide themselves with the prescribed books and drawing instruments. They will be non-resident. Strict observance of the standing orders of the institution as regards attendance, discipline, etc., shall be required from all.

103. The practical course will extend over a complete year, and this period will be reckoned from the dates on which the students join their divisions. Students during their practical course shall not be under the supervision of the principal, but officers under whom such students are serving will be required in the Public Works department to furnish to the principal half-yearly reports of their progress in such form as may from time to time be prescribed by Government. All allowances during the practical course shall be debited to the Public Works department.

104. The provisions of the educational rules relating to accommodation and sanitation, discipline, dress, periodical examinations and punishments shall apply *mutatis mutandis* to the college, in so far as its special character permits of their application.

105. The principal shall invariably obtain the previous sanction of the Director for any deviation from the prescribed rules.

106. Extracts from this code of rules with such alterations as may have been sanctioned during the preceding twelve months shall be published every year by the principal in the first issue of the *Fort St. George Gazette* in January.

APPENDIX.

Forms of Application for Admission to the College—*vide* Rule 29.

N.B.—1. Every application must be accompanied by—

(*a*) Treasury receipt;
(*b*) Copy of conduct certificate covering at least the two years preceding the date of application;
(*c*) Copy of conduct certificate from the head of the college or school which the candidate is attending or attended last;
(*d*) Copy of horoscope or baptismal certificate or other evidence of age.

2. Unless the abovementioned documents are received, the application will not be accepted.

3. Printed forms will be supplied on application.

I.—Application for admission to the Engineer class, College of Engineering, Madras.

Candidate's name *in full*.	Candidate's address.	Name and address of father or guardian.	Date of birth.	Race and religion.	Year of passing F.A. examination.	Register number and rank in F.A. examination.	Whether passed B.A. examination or appeared for it, or about to appear.	List of documents enclosed.	Place at which candidate desires to appear for entrance examination.

Place.

Date. *Signature of Candidate.*

II.—Application for admission to the engineer subordinate class, College of Engineering, Madras.

Candidate's name *in full.*	Candidate's address.	Name and address of father or guardian.	Date of birth.	Race and religion.	Examination passed, viz., First Arts, upper secondary or matriculation.	Year of passing examination and register number and rank.	List of documents enclosed.	Place at which candidate desires to appear for entrance examination.

Place.

Date. *Signature of Candidate.*

III.—Application for admission to the sub-overseer and surveyor class, College of Engineering, Madras.

Candidate's name *in full.*	Candidate's address.	Name and address of father or guardian.	Date of birth.	Race and religion.	Year of passing lower secondary or late middle school examination.	Register number and rank in examination.	Whether passed matriculation or higher examination; if so, date and register number.	List of documents enclosed.	Place at which candidate desires to appear for entrance examination.

Place.

Date. *Signature of Candidate.*

IV.—Application for admission to the draftsman class, College of Engineering, Madras.

Candidate's name *in full.*	Candidate's address.	Name and address of father or guardian.	Date of birth.	Race and religion.	Year of passing lower secondary or late middle school examination.	Register number and rank in examination.	Whether passed matriculation or higher examination; if so, date and register number.	List of documents enclosed.	Place at which candidate desires to appear for entrance examination.

Place.

Date. *Signature of Candidate.*

EDUCATIONAL DEPARTMENT.

NOTES CONNECTED WITH G.O., No. 37, EDUCATIONAL, DATED 20TH JANUARY 1906.

[SUBJECT.—*Local allowance to Military apprentice overseers posted to hill stations.*]

From the Public Works Department, No. 2403 *W., dated 9th December* 1905.

The draft placed below is submitted for approval.

N.L.R.—5-1-06.

With reference to the Examiner's remarks on page 2 of the notes stitched with the current, the Public Works Department has not communicated its order to the Government of India for information. Should the Educational order go ?

P. T. THARYAN—5-1-06.

The order may go.

C. A. SOUTER—6-1-06.

To the Public Works department for acceptance.

H. D. TAYLOR—7-1-06.

PUBLIC WORKS DEPARTMENT.

The draft may be accepted in the Public Works Department.

R. PARSONS—11-1-06.

Accepted in the Public Works Department.

J. P. DAVIDSON—11-1-06.

To the Educational Department.

EDUCATIONAL DEPARTMENT.

To the Financial Department for acceptance.

H. D. TAYLOR—12-1-06.

FINANCIAL DEPARTMENT.

May be accepted.

C. M. SCHMIDT—14-1-06.

Accepted.

M. HAMMICK—16-1-06.

To the Educational Department.

EDUCATIONAL DEPARTMENT.

For approval.

2. Please see paragraph 3 of G.O., No. 2403 W., dated 9th December 1905, and notes therewith.

H. D. TAYLOR—17-1-06.

G. S. F[ORBES]—18-1-06.

Issue.

H. D. TAYLOR—19-1-06.

[G.O., No. 37, Educational, dated 20th January 1906.]

[E.]
1,500—12

CURRENT FILE.

CONTENTS.

	From	Number.	Date.	Pages.
[12]	The Public Works Department	2403 W	9-12-05	1-5

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

PAPERS PUT UP WITH CURRENT No. 12

Papers of the department to which the current belongs.

Number.	Date.	Original (=O) or spare copy (=S. C.).	Remarks. (In this column such of the papers as have been removed for copying, printing, &c., should be marked with a cross.)	Initials of Referencer with date in token of return to Reference department.
734	27-11-02	SC		
529	2-9-02	O		
366	28-6-01	SC		

Papers of other departments.

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

2

ASSIST. SECY. TO GOVT. MILIT. SOL. & LEG. DEPTTS. 4-JAN 1906

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

READ—the following papers :—

From the Offg. Consulting Architect to Government, dated 26th September 1905, No. 2968.
„ Examiner, Public Works Accounts, dated 21st October 1905, No. 172 C.

ORDER—No. 2403 W., dated 9th December 1905.

The Acting Consulting Architect recommends the grant of a local allowance of Rs. 20, for service on the Nilgiris, to Military Apprentice Overseer Corporal Grant.

2. This is the rate allowed to overseers on the permanent establishment, but as Military apprentices retain their position of students during their practical year, an additional allowance of Rs. 10 will be granted in their case also as in the case of Civil students posted to hill stations—*vide* rule 68 of the College Calendar. This amount will accordingly be passed to Corporal Grant.

3. Orders will be issued in the Educational Department amending the College rules so as to provide for a local allowance of Rs. 10 to Military apprentices posted to hill stations.

(True Extract.)

(Signed) J. P. DAVIDSON,
Secretary to Government.

To the Consulting Architect to Government.
„ Examiner, Public Works Accounts.
„ Educational Department.

Forwarded to the Educational Department.

(By order.)

P. K. Subba Gupta
2-1-06
Deputy Registrar.

Exd. K. Murugasen.

fo 529: 2-9-02 Mis
" 734: 27-11-02 Edl
" 366 of or copy

CURRENT No. 12

GENERAL.
ESTABLISHMENT.

Government {1905} of Madras.

PUBLIC WORKS.

Recd. 4-12-05 } 1905.
Regd. do }

Enclosures

Spare copies 4 Spare Copies.

G.O., No. 2403 W., 9th December 1905.

M. P.

DECEMBER.

Local Allowance

of a — of Rs. 10 *per mensem* to Military Apprentice service on the Nilgiris.

Page 11 of fo no. 366 Edl C 28-6-01

Edl w.o. Dns 13 8-1-06.

P.W. Lr. Rc. No 45 9-1-06

Recd

6

19 1P

[E. 2.] 180—20-7-04.

EDUCATIONAL DEPARTMENT.

[Note connected with G.O. No. 37 Edl dy 20-1-06]

C. No. 12 From the P. W. D. No. 24030 dated 9-12-1905.

RECEIVED 9 JAN 1906 SECRETARIAT TO GOVERNMENT. PUBLIC WORKS DEPARTMENT.

SUBJECT.
Local allowance to Military apprentice overseers posted to hill Stations.

The draft places below is submitted for approval.

2. The addition made to rule 56 of the rules of the College of Engineering has been underlined in red ink in the draft ~~places below~~.

NAD
5/1/6

With reference to the Examiner's remarks on page 1 of the note stitched with the current the P.W.D has not ~~forwarded~~ communicated its order to the Govt of India for information. Should the Educational order go?

See.

PH
5/1/6

The order may go.

Ces
6/1/06

P.W.D to prepare

7-1-06

W

The d

the P.W.D

accepted – P.W.O. 11/1/06

LOCAL & MUNICIPAL
12 JAN 1906
SECRETARIAT.

To Edcl W.O.

Int. W.O. for acceptance

11.1.06

Returned 12.1.06.

Edl W.O. Dno 39
12.1.06.

CURRENT NO.
0212
FINANCIAL

Regd 12/1/06

C.S.

May be accepted
Cus
14.1.06

Accepted
14.1.06

Print 212
16+B

To the Edl (W.O.) deptt

Educational departt.

Returned 12-1-06.

Please see para 3 of G.O 240 3W & 9th Dec 05 (p2 e. file) & note

LOCAL & MUNICIPAL
17 JAN 1906
SECRETARIAT

Clerk with

For approval

17-1-06

K+H 06

[E. 12.]

1,000—14-6-05.

EDUCATIONAL DEPARTMENT.

READ AGAIN G.O., No. ....., dated ..... 190 .

" " " " ....., " ..... 190 .

READ ALSO:—

C. No. 12, From the P. W. D., No. 2403W, dated 9-12- 190

" " ....., " " ....., " ....., " ..... 190 .

" " ....., " " ....., " ....., " ..... 190 .

ORDER No. 37, dated 20-1- 1906.

P.S.

Communicated to the D.P.I.

2. Rule 56 of the rules of the College of Engineering will ~~accordingly~~ be amended and the following Notification published in the Fort St. George Gazette:—

Notification.

The following shall be substituted for rule 56 of the rules of the College of Engineering

" 56. The ...

" the ...

1878

"and regimental lists. Their military
"pay and clothing shall be drawn from
"the Military Department by the Execu-
"tive Engineers of the divisions to which
"they are attached. They shall be provided
"with free quarters or compensation in
"lieu, and receive a staff allowance
"sufficient to bring their total consoli-
"dated pay up to Rs. 80 per mensem. They
"shall, when posted to hill Stations, also
"draw a local allowance of Rs. 10 per mensem
"as ~~is allowed~~ in the case of Civil Students.
"Married men shall receive in addition
"the usual regimental allowances for
"wife and children. The apprentice over-
"seers, if favourably reported on, shall,
"at the termination of the practical year,
"be transferred, in the rank of Sergeant,
"to the Unattached list, and posted to the
"Public Works Department as first grade
"overseers. Any apprentice who is un-
"favourably reported on shall
"
"
"
"
"

APPENDIX.

College of Engineering, Madras.

RULES RELATING TO THE CONSTITUTION AND WORKING OF THE COLLEGE OF ENGINEERING, MADRAS.

[*As authorised from* 1*st January* 1899—vide *G.O., No.* 530, 22*nd August* 1898—*and corrected up to* ~~31st December 1903~~ 20th January 1906.]

PREAMBLE.

The following code of rules relating to the constitution and working of the College of Engineering has been sanctioned by Government :—

OBJECT.

1. The college, which is affiliated to the Madras University, affords theoretical and practical instruction in subjects qualifying for the professions and callings of engineer, engineer subordinate, surveyor and draftsman, in view of fitting persons for employment in such capacities by Government, by local boards and municipalities, and by other agencies.

2. Students of the higher course in engineering are, at the same time, prepared for the B.E. degree examination of the Madras University.

CONTROL.

3. The responsibility for the discipline and management of the college is vested in the principal, under the control of the Director of Public Instruction.

STAFF.

4. The staff shall consist of a principal, a professor of civil engineering, a professor of mechanical engineering, a professor of mathematics, an instructor in surveying and drawing, an instructor in civil engineering, an instructor in mechanical engineering, and eight assistants. There shall also be a workshop instructor with foremen assistants and an instructor in gymnastics.

5. Special lecturers may also, when necessary, be employed with the sanction of Government.

6. The principal shall be an engineer, civil or military.

7. The professor of civil engineering shall be a third-grade executive engineer or first-grade assistant engineer of the Public Works department, the professor of mechanical engineering shall be an officer of the Indian Educational Service and the professor of mathematics shall be an officer either of that service or of the Provincial Educational Service.

CLASSES.

8. The college shall contain the following classes :—

(i) *Engineer class*—for the training of civil and mechanical engineers.

(ii) *Engineer Subordinate class*—for the training of upper subordinates for the Public Works department, local boards and municipalities.

(iii) *Sub-Overseer and Surveyor class*—for the training of lower subordinates and surveyors for the Public Works department, the survey department, local boards and municipalities.

(iv) *Draftsman class*—for the training of mechanical draftsmen and estimators.

9. The engineer and engineer subordinate classes constitute the college department, and the other classes the school department.

Courses of Instruction.

(1) *Engineer Class.*

10. The course of instruction shall extend over four years, of which three shall be spent in the college and the fourth chiefly on works. The course in the college shall be both theoretical and practical. Theoretical instruction shall be conveyed by lectures; while the practical work shall consist of surveying in the field, drawing, and work in the workshops and laboratories. Marks for practical work shall be assigned by the college staff, and these marks shall count towards the final total. Students who desire to become civil engineers shall spend the final year in a Public Works division; those who wish to become mechanical engineers shall spend it in an engineering workshop. Students shall receive lessons in riding during the practical course.

11. The subjects of study and the marks assigned to each shall be as follows:—

	Marks.
I. *Mathematics.*—Algebra (75), geometry (100), mensuration (75), plane trigonometry (75), differential and integral calculus (125) ..	450
II. *Science.*—Physics (325), chemistry (100), practical work (75)	500
III. *Engineering.*—Building materials (50), building construction (100), hydraulic engineering (100), applied mechanics (150), mechanism and the steam engine (100), practical work (200)	700
IV. *Drawing.*—Geometrical and perspective drawing (60), freehand and model drawing (40), building drawing (150), machine drawing (100), estimating (100), practical work (150).	600
V. *Surveying.*—Surveying (75), levelling (75), theodolite (75), topographical drawing (100), practical work (175)	500
VI. *Vernacular Language.*—Tamil or Telugu *	150
VII. *Physical Fitness.*—Gymnastics and drill	100
Total ..	3,000

12. Of the total marks, 2,300 shall be awarded by the Board of Examiners for examination work, and 700 by the college staff for practical work and physical fitness. The marks given by the college staff shall, however, be submitted to the Board for approval. Term examinations shall be held at the end of the first and second years, at which, portions of the above subjects shall be finally disposed of by the Board of Examiners. The marks awarded at these examinations shall be included in the final total.

13. In order to pass the examination, students must obtain one-third of the marks assigned to each of the four subjects, namely, (1) mathematics, (2) engineering, (3) drawing and (4) surveying, one-fourth of the marks assigned to science, and one-half of the total marks awarded by the Board of Examiners and the college staff separately. They must also satisfy the principal of the college in practical surveying. Students who obtain not less than three-fourths of the total marks shall be declared to have passed in the first class, and all other successful students in the second class. Students shall be expected to present themselves for the first examination in engineering of the Madras university at the end of their second year of study, and for the B.E. degree examination at the end of their third year.

14. Students who are successful at the college final examination shall proceed to the practical course. Those who elect to become civil engineers shall be posted to a division where large public works are in progress, and will be regularly instructed in the preparation of materials, the practical details of construction, the management of

* Tamil to be obligatory for natives whose mother tongue is Telugu and *vice versâ*. The choice of one of these two languages to be open to all other students.

labour, and in accounts. Those who elect to become mechanical engineers will proceed to the Public Works workshops but may, if they please, spend the last six months of their practical course at the college workshops. One mechanical engineer student will be permitted each year to join the Madras Railway Locomotive shops at Perambúr, the concession being offered in the order of merit at the final examination. The premium will be Rs. 500, of which half will be defrayed by the Educational department, the other half being met by the student. The premium will cover a course of two years, of which one year is obligatory. Other mechanical engineers may attend at Perambúr on payment of the full premium.

(2) *Engineer Subordinate Class.*

15. The course of instruction shall extend over three and-a-half years, of which two and-a-half shall be spent in the college, and one year on works or in the workshops. The course in the college shall be both theoretical and practical. Theoretical instruction shall be conveyed by lectures, while the practical work shall consist of surveying in the field, drawing, and work in the workshops. Marks for practical work shall be assigned by the college staff, and these marks shall count towards the final total. The course on works shall be in a division of the Public Works department. Students shall receive lessons in riding during the practical course.

16. The subjects of study and the marks assigned to each shall be as follows:—

	Marks.
I. *Mathematics.*—Algebra (75), geometry (75), mensuration (100), plane trigonometry (100).	350
II. *Engineering.*—Building materials (50), building construction (100), hydraulic engineering (100), applied mechanics (125), mechanism and the steam engine (75), practical work (150)	600
III. *Drawing.*—Geometrical and perspective drawing (40), freehand and model drawing (35), building drawing (100), machine drawing (75), estimating (75), practical work (125) ..	450
IV. *Surveying.*—Surveying (75), levelling (75), theodolite (50), topographical drawing (75), practical work (125)	400
V. *Vernacular Language.*—Tamil or Telugu * ..	125
VI. *Physical Fitness.*—Gymnastics and drill	75
Total ..	2,000

17. Of the total marks, 1,525 shall be awarded by the Board of Examiners for examination work, and 475 by the college staff for practical work and physical fitness. The marks given by the college staff shall, however, be submitted to the Board for approval. Term examinations shall be held at the end of the first and third half-years, at which portions of the above subjects shall be finally disposed of by the Board of Examiners. The marks awarded at these examinations shall be included in the final total.

18. In order to pass the examination, students must 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. They must also satisfy the principal of the college in practical surveying. Students who obtain not less than three-fourths of the total marks shall be declared to have passed in the first class, and all other successful students in the second class.

19. Students who are successful at the college final examination shall be posted to a division where large public works are in progress, and shall be regularly instructed in the preparation of materials, the practical details of construction, the management of labour, and in accounts.

* Tamil to be obligatory for natives whose mother tongue is Telugu and *vice versâ*. The choice of one of these two languages to be open to all other students.

(3) *Sub-overseer and Surveyor Class.*

20. The course of instruction shall extend over two years, and shall be both theoretical and practical. Theoretical instruction shall be given in class, while the practical work shall consist of surveying in the field, drawing, and, when possible, work in the workshops. Marks for practical work shall be assigned by the college staff and these marks shall count towards the final total.

21. The subjects of study and the marks assigned to each shall be as follows :—

	Marks.
I. *Surveying.*—Surveying (100), levelling (100), theodolite (100), topographical drawing (100), practical work (300)	700
II. *Engineering.*—Building materials (75), building construction (150), practical work (50) ..	275
III. *Drawing.*—Geometrical drawing (75), building drawing (150), estimating (150), practical work (100)	475
IV. *Physical Fitness.*—Gymnastics and drill ..	50
Total ..	1,500

22. Of the total marks, 1,000 shall be awarded by the Board of Examiners for examination work, and 500 by the college staff for practical work and physical fitness. The marks given by the college staff shall, however, be submitted to the Board for approval. A term examination shall be held at the end of the first year, at which, portions of the above subjects shall be finally disposed of. The marks awarded at this examination shall be included in the final total.

23. In order to pass the examination, students 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. They must also satisfy the principal of the college in practical surveying. Students who obtain not less than three-fourths of the total marks shall be declared to have passed in the first class, and all other successful students in the second class.

(4) *Draftsman Class.*

24. The course of instruction shall extend over two years.

25. The subjects of study and the marks assigned to each shall be as follows :—

	Marks.
I. *Geometrical, &c., Drawing.*—Geometrical and perspective drawing (75), freehand and model drawing (75)	150
II. *Building Construction and Drawing.*—Building construction (125), building drawing (275) ..	400
III. *Machine Drawing*	150
IV. *Estimating*	250
V. *Physical Fitness.*—Gymnastics and drill ..	50
Total ..	1,000

26. Of the total marks, 750 shall be awarded by the Board of Examiners for examination work and 250 (75 for building drawing, 75 for machine drawing, 50 for estimating and 50 for physical fitness) by the college staff. The marks given by the college staff shall, however, be submitted to the Board for approval. A term examination shall be held at the end of the first year, at which, portions of the above subjects shall be finally disposed of. The marks awarded at this examination shall be included in the final total.

27. In order to pass the examination, students must obtain one-third of the marks assigned to each of the four subjects, namely, (1) geometrical, &c., 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. Students who obtain not less than three-fourths of the total marks shall be declared to have passed in the first class and all other successful candidates in the second class.

STRENGTH OF CLASSES.

28. The number of students to be admitted annually shall ordinarily be limited to ~~15~~ 20 in the engineer class, 30 in the engineer subordinate class, 35 in the sub-overseer and surveyor class, and 35 in the draftsman class.

ADMISSIONS AND WITHDRAWALS.

29. All applications for admission shall be submitted in a prescribed form.

30. Admissions shall be once a year :—(1) for the engineer class on the 20th January (unless that day falls on a Saturday or Sunday when the students shall join on the following Monday); (2) for the engineer subordinate class on the first Monday in July; and (3) for the sub-overseer and surveyor class, and for the draftsman class on the fourth Monday in January.

31. The principal may refuse admission to any candidate whose previous conduct has not been satisfactory. His order shall be subject to appeal to the Director, whose decision shall be final.

32. Withdrawals in the case of scholarship-holders shall, except for good and sufficient reasons, be allowed only on completion of the course for which the scholarships have been awarded.

QUALIFICATIONS FOR ADMISSION.

(1) *Engineer Class.*

33. Candidates must have passed the first examination in Arts of the Madras university or an examination accepted by Government as equivalent thereto and must be between the ages of 17 and 22 years on the 31st December preceding the year of admission. Candidates otherwise qualified, but whose ages exceed the maximum above laid down, may be admitted with the sanction of the Director of Public Instruction, if the strength of the class permits. Students so admitted shall be ineligible for guaranteed appointments and for prizes and scholarships.

34. Admissions shall be regulated by a competitive examination to be held annually on the third Monday in November and the following day at the college of engineering and at Rajahmundry, Bellary, Kumbakónam, Madura, Calicut and Trivandrum.

35. The scheme of examination shall be as follows :—

	Marks.
Arithmetic (the whole)	100
Algebra (including quadratic equations and the binomial theorem)	75
Geometry (Euclid Books I to IV, VI, and XI, Propositions 1 to 21)	75
Mensuration	50
Trigonometry (including the solution of plane triangles)	100
English composition	80
Hand-writing (to be judged from the paper on English composition)	60
Elementary drawing	60
Total ..	600

The qualifying minimum shall be 240 marks.

36. The fee for admission to this examination shall be Rs. 20. Applications will be received by the principal up to the third Monday in October.

37. The first ~~fifteen~~ qualified candidates on the list shall be selected for admission, provided that, if ~~four Europeans and Eurasians and three Muhammadans~~ be not within the first ~~fifteen~~, the number ~~under each may~~ be made ~~good~~, in order of merit, from the other qualified candidates. The names of successful candidates shall be published in the *Fort St. George Gazette*.

38. The candidates shall join the college on the 20th January (unless that day falls on a Saturday or Sunday when they shall join on the following Monday), and shall each on that day deposit with the principal—

(*a*) the sum of Rs. 100, which shall be drawn against for books and instruments;
(*b*) a health certificate from a gazetted Government medical officer to the effect that the candidate is fit for the out-door work of the Public Works department, and that he has had small-pox or has been vaccinated;
(*c*) his university certificate;
(*d*) testimonials of good character covering the last two years;
(*e*) his horoscope or other evidence of age;
(*f*) a leaving certificate from his last school.

(2) *Engineer Subordinate Class.*

39. Candidates must have passed the upper secondary examination, or the matriculation examination of the Madras university, or an examination accepted by Government as equivalent thereto and must be between the ages of 16 and 21 years on the 31st December preceding the year of admission.

40. Admissions shall be regulated by a competitive examination, to be held annually on the last Monday in April and the following day at the college of engineering and at Berhampur, Vizagapatam, Rajahmundry, Masulipatam, Bellary, Kurnool, Nellore, Kumbakónam, Madura, Calicut, Mangalore and Trivandrum.

41. The scheme of examination shall be as follows:—

	Marks.
Arithmetic (the whole)	125
Algebra (including quadratic equations)	75
Geometry (the first four Books of Euclid)	100
English composition	80
Hand-writing (to be judged from the paper on English composition)	60
Elementary drawing	60
Total ..	500

The qualifying minimum shall be 200 marks.

42. The fee for admission to this examination shall be Rs. 15. Applications will be received by the principal up to the third Monday in March.

43. The first thirty qualified candidates on the list shall be selected for admission, provided that, if five non-commissioned officers or soldiers of British regiments, six other Europeans and Eurasians and five Muhammadans be not within the first thirty the number under each may be made good, in order of merit, from the other qualified candidates. The names of selected candidates shall be published in the *Fort St. George Gazette*.

44. The civilian candidates shall join the college on the first Monday in July, and shall each on that date deposit with the principal—

(*a*) the sum of Rs. 75, which shall be drawn against for books and instruments;
(*b*) a health certificate from a gazetted Government medical officer, to the effect that the candidate is fit for the out-door work of the Public Works department, and that he has had small-pox or has been vaccinated;
(*c*) his university or upper secondary examination certificate;
(*d*) testimonials of good character covering the last two years;
(*e*) his horoscope or other evidence of age;
(*f*) a leaving certificate from his last school.

(3) *Sub-overseer and Surveyor Class.*

45. Candidates must have passed the lower secondary or the late middle school examination, and must be between the ages of

16 and 22 years on the 31st December preceding the year of admission.

46. Admissions shall be regulated by a competitive examination to be held annually on the third Monday in November at the college of engineering and at Berhampur, Vizagapatam, Rajahmundry, Masulipatam, Bellary, Kurnool, Nellore, Kumbakónam, Madura, Calicut, Mangalore and Trivandrum. The scheme of examination shall be as follows:—

	Marks.
Arithmetic (to the end of fractions)	100
English composition	100
Hand-writing (to be judged from the paper on English composition)	100
Drawing (copying a lithographed drawing) ..	100
Total ..	400

The qualifying minimum shall be 200 marks.

47. The fee for admission to this examination shall be Rs. 10. Applications will be received by the principal up to the first Monday in October.

48. The first thirty-five qualified candidates on the list shall be selected for admission, provided that if four Europeans or Eurasians and three Muhammadans be not within the first thirty-five, the number under each may be made good, in order of merit, from the other qualified candidates. The names of successful candidates shall be published in the *Fort St. George Gazette*.

49. The candidates shall join the college on the fourth Monday in January, and shall each on that day deposit with the principal—

(*a*) the sum of Rs. 75, which shall be drawn against for books and instruments;
(*b*) a health certificate from a Government medical officer to the effect that the candidate is fit for the out-door work of the Public Works department, and that he has had small-pox or has been vaccinated;
(*c*) his lower secondary or middle school examination certificate;
(*d*) testimonials of good character covering the last two years;
(*e*) his horoscope or other evidence of age;
(*f*) a leaving certificate from his last school.

(4) *Draftsman Class.*

50. The rules of admission to the draftsman class shall be the same as those for the sub-overseer and surveyor class, except that the health certificate need testify only to the candidate's fitness for the public service, and that the deposit shall be one of Rs. 60.

MILITARY STUDENTS.

51. Non-commissioned officers and soldiers of His Majesty's British service, desirous of qualifying for employment in the Public Works department, will, to the number of five annually, be admitted to the college by a competitive examination. Candidates must be soldiers of thoroughly good character well recommended by their commanding officers and under 25 years of age. They must have had not less than two years' service prior to the date of admission to the college. Applications will be received by the principal up to the second Monday in March. Each candidate's application shall be forwarded by his commanding officer to the principal and shall be accompanied by the following documents relating to the candidate:—

(*a*) extract from regimental defaulter's and court-martial books for the whole period of service;
(*b*) extract from the company defaulter's book for the preceding two years;
(*c*) certificate that the candidate has never been dismissed from staff employment;
(*d*) statement whether the candidate is married or unmarried;
(*e*) certificate of perfect eye-sight, sound health and unimpaired constitution, signed by a medical officer in the folllowing form:—

I certify that I have carefully examined *and that to the best of my belief his eye-sight is perfect, and he has no disease, constitutional affection or bodily infirmity, unfitting him, or likely to unfit him, for active out-door employment as an upper subordinate in the Public Works department.*

Name.

Designation.

52. If these certificates are satisfactory, the principal shall forward to the commanding officer papers of questions for the following examination to be held on the last Monday in April:—

	Marks.
English composition	80
Hand-writing	60
Arithmetic (the whole)	125
Algebra (including quadratic equations)	75
Geometry (the first four Books of Euclid) ..	100
Elementary drawing	60
Total ..	500

The qualifying minimum shall be 200 marks.

53. The five qualified candidates who stand highest on the list shall be selected and shall join the college in the following July.

On joining the college they shall bring with them—

(*a*) a descriptive roll;
(*b*) the record of service;
(*c*) a last-pay certificate;
(*d*) last clothing and bedding certificates;
(*e*) a certified list of clothing and necessaries in their possession when quitting their regiments;
(*f*) a certificate of the carriage, if any, furnished to them at the Government expense, &c., on leaving their regiments to proceed to Madras.

When not furnished with carriage to enable them to join, a certificate shall be given to this effect and they shall then receive travelling allowance at the rate of one anna per mile. A double allowance shall be granted to married men accompanied by their wives.

54. While studying at the college they shall be considered as doing duty, and shall remain on the strength of their respective regiments, without prejudice to their promotion and other advantages until appointed to the Public Works department. Military students shall be provided with barracks and married quarters at the college, they shall wear the undress or fatigue uniform of their rank and regiment, and they shall be under the command of the principal, or, in his absence, of the superintendent of military students. They shall receive, whilst at the college, the same pay as with their regiments, including good-conduct pay when entitled to it, together with rations or compensation in lieu, and a college allowance of Rs. 11 per mensem to cover extra messing and other expenses. They shall be exempted from the payment of college fees, and shall be supplied *gratis* with drawing instruments and the text-books in use. They shall not compete for civil scholarships, but shall be eligible for medals and prizes. The principal may remand any student to his regiment for insufficient progress or unsatisfactory conduct.

55. The course of study and examinations shall be those of the engineer subordinate class. Those men who pass the final examination shall, in order of merit and to the extent of the requirements of the Public Works department of Madras and Burma, be appointed apprentice overseers for one year. Two appointments as apprentice overseer in the Madras Public Works department will be given every year. In addition an appointment as apprentice overseer in the Burma Public Works department may be expected from time to time. Students who qualify, but do not pass sufficiently high for immediate appointment, shall ~~revert to their regiments~~ pending selection in any subsequent year in which less than the guaranteed number pass the examination.

proceed to take instructions

56. During their practical year, the military apprentices shall ~~receive~~ their position as students, and shall continue to be borne on college and regimental lists. Their military pay and clothing shall be drawn from the Military Department by the Executive Engineers of the divisions to which they are attached. They shall be provided with free quarters or compensation in lieu and receive a staff allowance sufficient to bring their total consolidated pay up to Rs. 80 *per mensem*. *They shall, when posted to hill stations, also draw a local allowance of Rs.* 10 *per mensem as in the case of civil students.* Married men shall receive in addition the usual regimental allowances for wife and children. The apprentice overseers, if favourably reported on, shall, at the termination of the practical year, be transferred, in the rank of Sergeant, to the Unattached list and posted to the Public Works Department as first-grade overseers. Any apprentice who is unfavourably reported on shall revert to his regiment. An outfit allowance of Rs. 150 will be granted to military apprentices on their appointment to the department."

"56. During their year of practical study the military apprentices shall retain their position as students, and shall continue to be borne on college and regimental lists. Their military pay and clothing shall be drawn from the Military Department by the Executive Engineers of the divisions to which they are attached. They shall be provided with free quarters or compensation in lieu and receive a staff allowance sufficient to bring their total consolidated pay up to Rs. 80 *per mensem. They shall, when posted to hill stations, also draw a local allowance of Rs.* 10 *per mensem as in the case of civil students.* Married men shall receive in addition the usual regimental allowances for wife and children. The apprentice overseers, if favourably reported on, shall, at the termination of the practical year, be transferred, in the rank of Sergeant, to the Unattached list and posted to the Public Works Department as first-grade overseers. Any apprentice who is unfavourably reported on shall revert to his regiment. An outfit allowance of Rs. 150 will be granted to military apprentices on their appointment to the department."

57. Military apprentices shall receive travelling allowance at the rate of two annas per mile, or in case of portions of the journey performed by railway, at one anna and a half per mile, for the journey from Madras to the site of the work to which they are posted, and for all journeys performed on transfer during their apprenticeship.

Fees.

58. *Tuition fees.*—The following shall be the fees payable in advance by students while at college. Fees shall, under no circumstances, be returned after a student has been admitted to the institution:—

Class.	Monthly rate.	Per term, if paid in advance.	For the full theoretical course, if paid in advance.
	Rs.	Rs.	Rs.
Engineer class	12	68	360
Engineer Subordinate class	6	34	150
Sub-overseer and Surveyor class ...	5	28	100
Draftsman class	4	22	80

59. *Special fees.*—A contribution of Rs. 2 per term shall be made by each student to the recreation club. The riding course fee for students of the engineer and engineer subordinate classes shall be Rs. 15. The premium payable by mechanical engineer students at Perambúr is laid down in rule 14.

60. *Examination fees.*—Students shall pay fees at the following rates for admission to the final examinations:—

	Rs.
Engineer class	20
Engineer subordinate class	15
Sub-overseer and surveyor class	10
Draftsman class	10

Scholarships, Stipends and Prizes.

(1) *Engineer Class.*

61. Three scholarships of the monthly value of Rs. 15 each will be annually awarded: two of them will be awarded to the two candidates standing highest at the entrance examination, who are admitted to the class, and the third to a Muhammadan, or a native christian, or a European or Eurasian, in the order mentioned, who is admitted to the class and who does not secure a merit scholarship. These scholarships shall be renewed on the results of e

62. A gold medal will be an

63. During the year of practical training, subsistence allowances of Rs. 50 per mensem for Europeans and Eurasians, and Rs. 25 per mensem for natives shall be granted. Such allowances shall, however, be contingent on the good conduct and satisfactory progress of the student; and on proof of misconduct or idleness, the allowances may be reduced or withdrawn by the executive engineer. Travelling allowances to students joining or on the works shall be drawn at the rates sanctioned for officers of the third class under the Civil Service Regulations

(2) *Engineer Subordinate Class.*

64. Three scholarships of the monthly value of Rs. 10 each will be annually awarded to the civilian students: two of them will be awarded to the two candidates standing highest at the entrance examination, who are admitted to the class, and the third to a Muhammadan, or a native christian, or a European or Eurasian, in the order mentioned, who is admitted to the class and who does not secure the merit scholarship. The scholarships shall be renewed on the results of each term examination.

65. A silver medal will be awarded to the student who passes first at the final examination.

66. The 'Walker' scholarship of the value of about Rs. 13 per mensem shall be tenable for two and-a-half years by a student of this class who is a native of the Malabar, South Canara, or Nilgiri district, and who possesses a fair knowledge of Malayalam or Canarese.

67. The 'Rogers' prize of the value of about Rs. 20 shall be given annually in books to the most distinguished student of the class after the final examination.

68. During the practical course subsistence allowances of Rs. 30 per mensem for Europeans and Eurasians, and Rs. 20 per mensem for natives will be granted. Such allowances shall, however, be contingent on the good conduct and satisfactory progress of the student; and on proof of misconduct or idleness, the allowances may be reduced or withdrawn by the executive engineer. Travelling allowances to students joining or on the works will be drawn at the rates sanctioned for officers of the third class under the Civil Service Regulations.

(3) *Sub-overseer and Surveyor Class.*

69. Three scholarships of the monthly value of Rs. 8 each will be annually awarded: two of these will be awarded to the candidate standing highest at the entrance examination, who is admitted to the class, and the third to a Muhammadan, or a native christian, or a European or Eurasian, in the order mentioned, who is admitted to the class and who does not get the merit scholarship. The scholarships shall be renewed during the second year on the results of the term examination at the end of the first year.

70. A bronze medal will be awarded to the student who passes first at the final examination.

(4) *Draftsman Class.*

71. Three scholarships of the monthly value of Rs. 7 each will be annually awarded on the same conditions as those given in the sub-overseer and surveyor class.

72. A bronze medal will be awarded to the student who passes first at the final examination.

(5) *Special Prizes.*

73. Prizes consisting of instruments or books will be given in all the above classes for special proficiency in particular subjects.

Rau' prizes of the value of Rs. 20 each
der certain prescribed conditions, for profi-
possible, one prize will be awarded

(6) *Stipends in Workshops.*

75. Four stipends of the monthly value of Rs. 6 for the first year, Rs. 7 for the second year, and Rs. 8 for the third year will be awarded annually to young men who have passed the elementary technical examination in carpentry or blacksmith's work, and who join the college workshop with a view to be trained as teachers in technical or industrial schools or in school workshops for manual training. The course shall extend over three years during which time the students shall be prepared for the highest technical examination in cabinet-making, or carpentry, or fitters' work. The students shall ordinarily work in the workshop for thirty-five hours per week and will be allowed one month's vacation in the hot weather and the ordinary authorized holidays. They shall be required, if need be, to serve as teachers for two years, and to submit half-yearly reports as to how they are employed for three years after leaving the workshops.

Scholarships and stipends may be reduced or forfeited for misconduct, idleness or want of progress.

TIME TABLE.

76. The hours of attendance at the college shall be from 10 A.M. to 1 P.M. and from 2 to 4–30 P.M. The field work and workshop hours shall, from time to time, be fixed by the principal.

77. The principal shall submit a time table annually for the approval of the Director. No material change shall be made in the time table or in the general arrangement of the college work without his sanction.

VACATIONS AND HOLIDAYS.

78. The college shall be closed for the midsummer vacation from the 1st May to the first Monday in July and for the Christmas vacation from 23rd December to 17th January.

79. The casual holidays allowed in chapter II of the educational rules shall apply to this college in so far as its special character may allow.

LEAVE AND DISMISSAL.

80. Students may obtain leave of absence by application to the Principal.

81. Scholarship-holders shall forfeit their scholarships during any period, however short, of absence without leave, and shall be further liable to have their scholarships withdrawn, if they absent themselves without leave for five consecutive working days.

82. In cases of severe illness certified to by a competent medical authority, sick leave with scholarship may be given by the principal for a fortnight. If such leave is granted for a period exceeding a fortnight, the excess period shall be leave without allowances.

83. Any student who has obtained admission into the college by means of a false certificate or by false representations of any kind, or who has been found guilty of grave misconduct, shall be summarily dismissed; the fact of such dismissal and the reasons for it being at once reported to the Director.

84. Leave may be granted during the practical course for a period or aggregate of periods not exceeding one month per annum. Such leave shall not entail forfeiture of stipend, but any leave in excess of one month shall involve loss of stipend and the practical course shall be extended by a period equal to the excess over one month per annum of the leave taken.

EXAMINATIONS.

85. All term and final examinations shall be conducted by an independent Board of Examiners, consisting of a president and two members appointed by Government, on the recommendation of the Director of Public Instruction, for a term of three years. When necessary, the Board may, with the sanction of Government, employ assistant examiners. The decision of the Board of Exam

regard to the qualifications of any student appearing for examination shall be final. The names of all students declared by the Board to have passed a final examination shall be published in the *Fort St. George Gazette*. After completing the annual examinations, the Board shall submit a report to Government, through the Director of Public Instruction, summarising the results of the examinations. It may record in the report any observations of a general nature bearing on the working of the college, or make any suggestions it may consider expedient, provided such observations or suggestions arise naturally out of the examination work which the Board has to perform. The report shall be signed by the president and members of the Board.

86. The examinations for admission to the several classes shall be conducted by the college staff.

Diplomas and Certificates.

87. *Engineer and Engineer Subordinate classes.*—On the completion of the course in the college a provisional certificate signed by the principal and the president of the Board of Examiners, shall be issued, showing that the candidate has passed the final examination. On the satisfactory completion of the practical course, a diploma signed by the principal and the Director of Public Instruction shall be issued, setting forth the qualifications of the student for employment as a civil engineer, a mechanical engineer, or as an engineer subordinate.

88. *Sub-overseer and Surveyor class and Draftsman class.*—On the completion of the course, a certificate signed by the principal and the president of the Board of Examiners shall be issued, stating that the student has passed the final examination and is qualified for employment as a sub-overseer and surveyor or as a draftsman. A student who has passed the final examination of the engineer subordinate class, and who elects not to proceed to the practical course, shall be granted a certificate of qualification as a sub-overseer.

Employment of Passed Students.

89. *Engineers.*—One appointment annually as apprentice engineer shall be conferred on the student who passes highest at the final examination. The apprenticeship shall commence on the 1st January following the examination, and shall ordinarily extend over twelve months, when the apprentice, provided he has passed the B.E. degree examination of the Madras University and fulfilled the conditions of paragraph 11, chapter II, volume I, Public Works department code, shall be brought on the permanent establishment of the Public Works department, provincial service, as third-grade assistant engineer. Other engineer students, who have satisfactorily completed the practical course, shall be eligible for appointment to the temporary upper subordinate establishment of the Public Works department, whence transfers may be made to the permanent establishment to fill existing vacancies on the recommendation of superintending engineers. Fully qualified engineer students may also be appointed assistant engineers under local boards.

90. *Engineer Subordinates.*—One appointment annually as overseer, third-grade, in the permanent upper subordinate establishment of the Public Works department shall be conferred on the civilian engineer subordinate student who passes highest at the final examination, provided he has satisfactorily completed his practical course and provided a vacancy exists for such appointment. Other civilian engineer subordinate students, who have satisfactorily completed the practical course and for whom there are vacancies, shall be eligible for appointment to the temporary upper subordinate and lower subordinate establishments of the Public Works department, whence transfers may be made to the permanent upper subordinate establishment to fill existing vacancies on the recommendation of superintending engineers. No person will be eligible for appointment to the permanent upper subordinate establishment unless he be a fully qualified engineer or engineer subordinate. Appointments as delta superintendent, minor irrigation overseer and as overseer to district boards and municipalities are also open to qualified engineer subordinates. Qualified military students required for the Public Works department shall be

NOTIFICATION.

The following rules shall be inserted between rules 97 and 98 of the rules relating to the constitution and working of the College of Engineering, namely,—

97-A. Any duly qualified teacher employed in a departmental institution or in any school recognised by the Madras Educational department may, with the sanction of the Director of Public Instruction, receive a course of training in any subject taught in the college, free of charge.

97-B. A teacher who is in Provincial or Local or Municipal employment may, with the sanction of the Director or President or Chairman, as the case may be, be allowed during the course of training a portion not exceeding one-half of the pay of his substantive appointment. Certificated teachers in receipt of salary grants whom a manager may wish to attend a course will be eligible for the continuance of their grants during such course, provided that the Principal of the college certifies that their conduct has been good and their progress satisfactory.

97-C. Teachers employed in Government, Local or Municipal schools who are required to receive a course of training shall be entitled (subject in the case of the last two classes to the sanction of the Board or Municipal Council concerned) to draw travelling allowances from Provincial, Local or Municipal funds, respectively, for a single journey on joining and on leaving the college, at rates which shall follow the classes to which the teachers belong as defined in the Civil Service Regulations. Other students shall not be allowed travelling expenses from public funds.

N. P.

MAY.

appointed apprentice overseers at the commencement of their practical course—*vide* rule 55. In alternate years, one appointment to the engineer establishment, provincial service, will be offered to a senior selected upper subordinate of the Public Works department.

91. *Sub-overseers and Surveyors.*—Qualified sub-overseers and surveyors will be appointed to the Public Works department as sub-overseers as vacancies occur. They will be eligible also for employment as channel superintendent in the Public Works department and as deputy surveyor in the Survey department. When the services of temporary men are required for special surveys not undertaken by the Public Works subordinate staff, the Public Works officers in charge are instructed to select for such employment none but qualified surveyors of the college.

92. *Draftsmen.*—Qualified draftsmen will be appointed to the Public Works department as draftsmen and estimators as vacancies occur.

93. Students of the engineer and engineer subordinate classes who pass sufficiently high to merit guaranteed appointments shall, before appointment, produce certificates of physical fitness for the work of the Public Works department. The medical examination for such certificates shall be held at the end of the practical course. Other qualified students will, on appointment to the Public Works department, be required to produce certificates of physical fitness under the ordinary rules of the public service.

94. The guaranteed appointments referred to are reserved for statutory natives of India, provided that natives of pure Asiatic descent shall be admitted only if their parents or guardians are domiciled in the Madras presidency or the native states of Travancore, Cochin, Pudukkóttai, Sandúru, Banganapalle and Mysore.

95. It shall be the duty of the principal to render all reasonable assistance to passed students who may not be appointed to the Public Works department, in seeking employment under local boards and municipalities and other agencies. With this view lists of qualified men, with remarks as to their attainments, conduct, &c., shall be circulated annually to local boards and municipalities, with recommendations that they may be employed in suitable posts when opportunities offer, and the attention of such boards should be invited to G.O., No. 2773 L., dated 12th December 1893.

Casual Students.

96. Applicants who pass the entrance examination, and who produce certificates of good health and good character, make the usual deposit and pay the prescribed fees may be admitted as casual students to the engineer class, provided that accommodation is available for them. They may present themselves for the term and final examinations, and if they pass they will receive provisional certificates issued to successful students at the end of the college course; but they shall not be eligible for guaranteed appointments or for scholarships or prizes or for the free practical course.

97. Other casual students may also be admitted to the engineer class for one or more terms, on payment of the prescribed fees, for instruction in special subjects, provided that they possess sufficient general education to follow and profit by the instruction given and that accommodation is available for them. They shall not be eligible for any of the college examinations, but may receive a certificate of attendance.

Independent Candidates.

98. A student who has failed to obtain a certificate from the Board at the final examination, may appear before the Board for examination in any subsequent year, provided he is certified to have put in the necessary attendance at the college, and pays a fee as follows :—

	Rs.
Engineer candidates	30
Engineer subordinate candidates	24
Sub-overseer and surveyor candidates	18
Draftsman candidates	12

99. Candidates who qualify in this way shall receive the certificates referred to in rules 87 and 88, and their names shall be published in the *Fort St. George Gazette* in a separate list. Engineer and engineer subordinate independent candidates shall not be eligible for diplomas until they have satisfactorily completed the practical course.

Registers and Accounts.

100. The following registers shall be kept:—

(1) Register of admissions and withdrawals for each class.
(2) Monthly register of attendance, fees and fines for each class.
(3) Acquittance roll and pay abstract.
(4) Library catalogue and register and inventory of valuable stock.
(5) Register of scholarships.
(6) Register of expenditure on contingencies.

101. The register of valuable stock shall be scrutinized every year, the work being entrusted in rotation to one of the senior members of the staff, who shall certify to the correctness of the stock and the entries in the register.

Miscellaneous.

102. All civilian students shall provide themselves with the prescribed books and drawing instruments. They will be non-resident. Strict observance of the standing orders of the institution as regards attendance, discipline, &c., shall be required from all.

103. The practical course will extend over a complete year, and this period will be reckoned from the dates on which the students join their divisions. Students during their practical course shall not be under the supervision of the principal, but officers under whom such students are serving will be required in the Public Works department to furnish to the principal half-yearly reports of their progress in such form as may from time to time be prescribed by Government. All allowances during the practical course shall be debited to the Public Works department.

104. The provisions of the educational rules relating to accommodation and sanitation, discipline, dress, periodical examinations and punishments shall apply *mutatis mutandis* to the college, in so far as its special character permits of their application.

105. The principal shall invariably obtain the previous sanction of the Director for any deviation from the prescribed rules.

106. Extracts from this code of rules with such alterations as may have been sanctioned during the preceding twelve months shall be published every year by the principal in the first issue of the *Fort St. George Gazette* in January.

APPENDIX.

Forms of Application for Admission to the College—*vide* Rule 29.

N.B.—1. Every application must be accompanied by—

(*a*) Treasury receipt;
(*b*) Copy of conduct certificate covering at least the two years preceding the date of application;
(*c*) Copy of conduct certificate from the head of the college or school which the candidate is attending or attended last;
(*d*) Copy of horoscope or baptismal certificate or other evidence of age.

2. Unless the abovementioned documents are received, the application will not be accepted.

3. Printed forms will be supplied on application.

I.—Application for admission to the engineer class, College of Engineering, Madras.

Candidate's name *in full.*	Candidate's address.	Name and address of father or guardian.	Date of birth.	Race and religion.	Year of passing F.A. examination.	Register number and rank in F.A. examination.	Whether passed B.A. examination or appeared for it, or about to appear.	List of documents enclosed.	Place at which candidate desires to appear for entrance examination.

Place.
Date. *Signature of Candidate.*

II.—Application for admission to the engineer subordinate class, College of Engineering, Madras.

Candidate's name *in full.*	Candidate's address.	Name and address of father or guardian.	Date of birth.	Race and religion.	Examination passed, viz., First Arts, upper secondary or matriculation.	Year of passing examination and register number and rank.	List of documents enclosed.	Place at which candidate desires to appear for entrance examination.

Place.
Date. *Signature of Candidate.*

III.—Application for admission to the sub-overseer and surveyor class, College of Engineering, Madras.

Candidate's name *in full.*	Candidate's address.	Name and address of father or guardian.	Date of birth.	Race and religion.	Year of passing lower secondary or late middle school examination.	Register number and rank in examination.	Whether passed matriculation or higher examination; if so, date and register number.	List of documents enclosed.	Place at which candidate desires to appear for entrance examination.

Place.
Date. *Signature of Candidate.*

IV.—Application for admission to the draftsman class, College of Engineering, Madras.

Candidate's name *in full.*	Candidate's address.	Name and address of father or guardian.	Date of birth.	Race and religion.	Year of passing lower secondary or late middle school examination.	Register number and rank in examination.	Whether passed matriculation or higher examination; if so, date and register number.	List of documents enclosed.	Place at which candidate desires to appear for entrance examination.

Place.
Date. *Signature of Candidate.*

---

copy sent to Press.

ned for signature.

shed in print.

s S.O., No. , DATED
196 .

No. 12 : A

NUMBER OF COPIES REQUIRED. { Order complete. / Letter only. / Order complete with Letter.

Press

Please show proof to

12 P

Nov 1-28

RES TO C. NO.

E GOVERNMENT

E GOVERNMENT.

T WITH DITTO.

T SIDE, IF, BEING MEANT FOR DESPATCH
ORIGINAL.

= Print in full.
= Not to be printed.
= Print abstract only.
= Print heading only.