

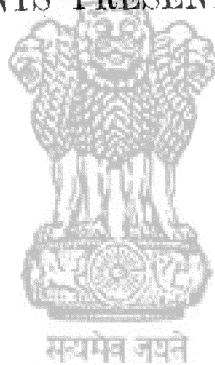
# INDIAN UNIVERSITIES COMMISSION.

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## UNIVERSITY OF BOMBAY.

### PART II.

WRITTEN STATEMENTS PRESENTED BY WITNESSES.



CALCUTTA :

OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.

1902.

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13	29	The Honourable Mr. E. Giles, Director of Public Instruction, Bombay.

\* Examined at Poona.

सत्यमेव जयते

University of Bombay. The most important object we should have in view is to give preponderance in its deliberations to the views of men who are engaged in the work of education.

6. To attain this object I would propose that a new Senate of a hundred members should be created, sixty of them being educationists and forty outsiders. The first should be chosen by Government from the Professorial staff of the Colleges, from the High Schools, and the Directorial and Supervising establishments in the following proportion :—

*Arts.*

- 6 from the Elphinstone College, Bombay.
- 20 from the Wilson, St. Xavier, Deccan and Fergusson Colleges at the rate of 5 from each.
- 12 from the Baroda, Ahmedabad, Bhavnagar, Junágadh, Kolhápúr and Sind Colleges at the rate of two from each.

*Law.*

- 2 from the Law College, Bombay.

*Medicine.*

- 6 from the Grant Medical College, Bombay.

*Engineering.*

- 5 from the Science College, Poona.

*High Schools.*

- 4 Head Masters of the Elphinstone, Poona and Ahmedabad High Schools, and of the Fort High School, Bombay.
- 1 The Director of Public Instruction.
- 4 Educational Inspectors.

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Out of the forty outsiders ten should be elected by Government, ten by the existing Senate out of its members, and twenty by Graduates of the University who are of ten years' standing from among Graduates with the same qualifications as themselves. Any vacancy in this new Senate should be filled up by the body which elected the person who has vacated his place, and, in the case of the Educational members, from the institution or establishment from which he was elected.

7. It will thus be seen that I do not propose the abolition of the present Senate, but the limitation of its functions to the election of ten of their number to be members of the new Senate, which, to distinguish it from the existing Senate, should be called the Working Senate. Or the existing Senate might be called "A body of Associates," and the name "Senate" restricted to the new body. A Fellowship of the University is highly appreciated and sought after by persons of position in society; and this feeling should be made use of by keeping the existing Senate and by Government adding to it from time to time.

8. The new Senate should be divided into Faculties as at present.

9. Whenever a question relating to studies and discipline comes up before the Senate, the Educational members usually residing in places other than Bombay and Poona should be entitled to give their vote in writing and be not required to be present in Bombay at the meeting. All other questions should be decided by the meeting in Bombay. A Fellow resident in Bombay who does not attend two successive meetings of the Senate should cease to be a Fellow.

10. The Syndicate should consist of the following members :—

*Ex-Officio.*

- 1 The Vice-Chancellor.
- 1 Principal, Elphinstone College.
- 1 Do. Law College.
- 1 Do. Grant Medical College.
- 1 Do. College of Science, Poona.

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*To be elected by the Faculty of Arts every two years.*

- 2 out of the Principals of the Wilson, St. Xavier, Deccan and Fergusson Colleges.
- 2 out of the Professors in the Elphinstone and the other four Colleges who are members of the Faculty.
- 1 from among the other members of the Faculty.

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*To be elected by the Faculty of Law every two years.*

- 1 a Professor of the Law College belonging to the Faculty.
- 1 from among the other members of the Law Faculty.

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*To be elected by the Faculty of Medicine every two years.*

- 1 a Professor of the Grant College belonging to the Medical Faculty.
- 1 from among the other members of the Faculty.

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2

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*To be elected by the Faculty of Engineering.*

- 1 a Professor of the College of Science, Poona, who is a member of the Faculty.
- 1 from among the other members of the Faculty.

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2

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Total ... 16

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11. The University should insist that the European Professors in the affiliated Colleges should be selected in the manner mentioned in paragraph 2 (b) and the Native Professors should be men who have obtained the highest degree in the branch they have to teach and at the same time have distinguished themselves by delivering public lectures, writing original works, or editing texts in

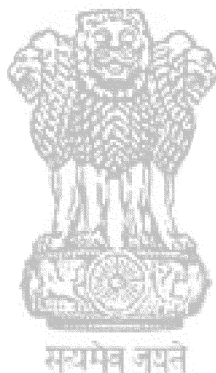
their particular subject. The mofussil Colleges, *i.e.*, Colleges at places other than Poona and Bombay, should be required to have two European members on their teaching staff. English Literature, History, and Philosophy should be taught by European Professors.

In the present state of things I would restrict the control of the University on the teaching establishments to this: I would not have it make appointments to Lectureships or Professorships.

12. No one should be appointed an Examiner in any subject unless he has achieved distinction on account of his knowledge of that subject or is a Professor in that subject answering to the description in the last paragraph. If such Examiners are not to be had in Bombay, members of the Colleges at Calcutta, Madras, Allahabad or the Panjab should be chosen; and when none is available there, Examiners for the highest of our Examinations, such as that for the M.A. Degree, should be chosen from among the members of the Universities of Oxford and Cambridge. The number of candidates for these Examinations is small, and no great inconvenience will be experienced if we get out question papers printed in England under the supervision of the Examiners and send the answers of the candidates to them.

13. Special Boards of Studies, consisting of the Professors in each subject and other men known to be experts, should be appointed by the Syndicate, who should report to the Syndicate on any point relating to studies referred to them.

R. G. BHANDARKAR.



**Memorandum submitted to the Indian Universities' Commission  
by Mr. R. P. Paranjpe, Acting Principal of the Fergusson  
College, Poona.**

*Teaching Universities.*—It will be the greatest boon to the country if the present Universities could be transformed into teaching Universities, and attain the same standard of efficiency that obtains in the Universities of Cambridge and Oxford or any of the German Universities. There are however many difficulties in the way of realising such a scheme :—

First and foremost there is the financial consideration. The endowments of the English Universities are magnificent (Oxford and Cambridge derive their income by taxing the Colleges). The Universities in Germany are mainly financed by the German Government. Unless some means can be found to obtain an adequate source of income, the idea of teaching Universities seems destined to remain an idea. Eminent men can be attracted to India only by the payment of liberal salaries, and it is a question even then if good men can be induced to come out. Supposing we appoint fifteen Professors in the Bombay University—a number which is totally inadequate if we are to include all branches of knowledge—their salaries would amount to more than three lakhs of rupees. Buildings, libraries, laboratories and various other necessary accompaniments of a University will also cost a great deal.

If all the system of higher education were to be re-cast, then by requiring the Colleges to be located in one centre we might be able to create a teaching University which might co-operate with the Colleges, but at present as the colleges are distributed all over the Presidency, they would be rendered useless if the University undertakes to teach students up to the same standard.

A teaching University is barely possible if it has only postgraduate teaching in view, and even then, for some time at any rate, it will suffer from want of students. There are at present not many openings for students to induce them to undergo a course of postgraduate studies. This difficulty is to a certain extent experienced even in Cambridge and other places. Not many students even in Cambridge study for the second parts of the mathematical and other triposes when the first parts are sufficient to secure a degree. I have seen two of the most eminent mathematicians of France lecture to audiences of two or four students.

Supposing we want to have a body of very distinguished Professors simply to advance knowledge and to offer an ideal to our students, we may have to consider whether the best Europeans will come out to India where they will not be in congenial surroundings. For some time at any rate professorships in Europe will be regarded as more important than those in India and there is the risk of some Professors being tempted back to Europe.

The remedy, I think, lies in the creation of a body of learned Indians themselves. The example of Japan will help us in this matter. At present the Japanese Government has about a hundred of its best students sent at Government expense to acquire learning in Europe. About fifty of these students are in Germany. Some are in England, some in America, and if I am not mis-informed, one or two in India (to learn Sanskrit). The Japanese Government imported distinguished European Professors for a term of years only and when their own men were ready and capable to occupy these professorships, Europeans were no longer imported. If a similar course were followed in India, we should soon get a body of learned Indians who would then themselves raise the tone of learning in this country. After some twenty or thirty years the expense of sending students can be diminished by diminishing their number, as foreign education will not be so necessary then to prepare capable men.

*Recognized teachers.*—The proposal presents many practical difficulties. The University will have to judge of a man only from the report about him forwarded by the governing body of the College. It will in general have no

direct means of judging about him. The College authorities are in a better position to appoint their Professors. All that a University need do is to veto any obviously bad selection which the Bombay University can do even at present. In general the sanctioning of teachers will be merely a formal matter. It is obviously the interest of the Colleges to appoint the best men available.

The Fergusson College, for instance, generally appoints persons who have been tried in the New English School and confirms them after giving them a trial in higher teaching.

If these recognized teachers are intended to prepare candidates privately without their having to join a College, I am entirely against this proposal. The Colleges even though not so efficient as those of Cambridge are certainly better than none at all.

*Spheres of influence.*—Colleges at a distance should not be affiliated. If the standards of the various Universities are made uniform, the Colleges would not desire affiliation with distant Universities. In some Universities degrees are given with comparatively greater facility.

*Constitution of the Senate.*—The Senate should consist of some 150 Fellows, 20 in Law and Engineering each, 40 in Medicine and 60 in Arts. These last should in general represent all the subjects of study in Arts. The principals of all the affiliated Colleges and the Director of Public Instruction should be *ex-officio* members. The membership of the Senate should be made terminable after five years and the Fellows should be made eligible for re-appointment. The membership should also lapse in case of non-attendance at half the number of meetings in a year. Thirty Fellows will thus retire in order of seniority. Half of these places are to be filled up on the recommendation of graduates who are of five years' standing in the respective faculties and who have obtained at least a second class degree. The other half of the Fellows should be nominated by Government from among persons of this or other Universities who have great academical distinctions or have done eminent service to the cause of education in this country.

From the experience of the past few years during which two Fellows have been nominated annually on the recommendation of the graduates of the University, it is seen that the persons elected by the graduates are generally fit and proper persons to take part in the Government of the University. The nomination by the Government is often looked upon as a kind of distinction without any responsibility attached to it.

As to how these changes may be introduced in the beginning, we may propose that of the present Fellows those who have permanently left India should no longer continue to be Fellows. Of the others a sufficient number of the most senior be requested to retire to bring the body to the above normal form; or these changes may be introduced gradually as circumstances may suggest.

*The Syndicate.*—The Syndicate should be a Managing Committee of the Senate. The present Syndicate is not at all an unwieldy body. Some of its duties should, however, be relegated to Boards of studies as suggested below. Two-thirds of the members of the Syndicate should be actually engaged in teaching. With this proviso the Syndicate can be elected by the Senate.

*Boards of studies.*—These should be advisory boards nominated by the Syndicate. There should be a board for each subject of study. These boards of studies may contain persons who are not Fellows of the Senate. But the greater number of members must be actually engaged in teaching. The Boards are to recommend text-books and examiners for the approval of the Syndicate. The membership of a board may be made terminable after five years. A question dealing with any subject should be referred to the corresponding board for consideration and opinion before it is taken up by the Syndicate or the Senate. Examiners should send a report to these boards as to how the general body of the candidates have acquitted themselves in their subjects.

*Graduates.*—It is not worth while to confer an honorary degree as suggested. In Cambridge, for instance, an M. A. degree gives some important privileges and that is why it is usually conferred there.

There should be a register of graduates containing, if possible, information about their careers in after-life, as is to a certain extent done in the list of graduates printed in the Madras calendar.

*Students of the University.*—It is true that there is a very great percentage of failures in the University examinations. This is due to the fact that a great many are just near the margin and a few marks on one side or the other makes all the difference. The Colleges generally hold a preliminary test about two months before the University examinations and if a student just fails in any subject they hope that he will make it up in these two months. Owing to the number of examinations, a student has to sacrifice a year perhaps if he is deprived of even his slight chance of success by not being allowed to appear for the examination, and consequently the Colleges are generally inclined to consider the question of the necessary certificates leniently. An improvement is possible without an appearance of undue harshness if the number of examinations were diminished and there be a greater amount of specialization in the studies. These are discussed more fully under "Curriculum."

*Discipline.*—Students are not compelled to reside in the residential quarters provided by the Colleges. There is a fair amount of supervision over those who do reside in the quarters. There is, however, no way of exercising proper control over day students when out of College. In the Fergusson College, for instance, the Principal and one other Professor reside in the College grounds and frequently visit the students' quarters. Students have to pay a certain subscription for the College Gymkhana. They are not, however, compelled to play, and the only exercise some of them take is a walk for an hour or so.

The students of the College have a debating club, and there is also held an Annual Gathering of the past and present students of the College. In general the students are coming more and more to feel that they join the College for something else besides the learning of so many portions of so many subjects which are required for their examinations. Any great improvement is of course a matter of time.

In the Fergusson College, since the beginning of this year, a plan is being tried with the object of bringing the professors and the students in closer contact and of exercising a stricter supervision over the latter. The students are divided into batches of about twenty-five and are assigned to the several professors. The professors are to see that they work neither too little nor too much, that they take proper physical exercise, that they read something else besides their usual text-books, and in general to take care that they spend their time to some purpose. It is too early at present to say anything about the results of such an experiment, but at any rate it won't do any harm.

The two Arts Colleges in Poona are about four miles from each other and much common action between the students of the two Colleges is not possible. There are, however, cricket and tennis matches between these Colleges once or twice a term.

*Curriculum.*—The subject, however, which is the most important and without which reforms or changes in any other matter are destined to failure, is that of the improvement of the curriculum. At present the various defects may be classified under (a) Neglect of the Vernaculars and consequent lack of general knowledge, (b) too many examinations, (c) want of specialization.

(a) The neglect of the Vernaculars is patent to everybody and needs little discussion. This subject perhaps refers more directly to the schools which supply students for the Colleges, but no apology is required for discussing it here. There has been a growing tendency of late years to make a boy begin English earlier and earlier. This leaves him no opportunity to perfect his knowledge of his mother tongue without which nobody can expect to acquire a thorough mastery over a foreign language and he begins to learn the very elements of such subjects as History, Euclid, Science, through the medium of English. The result of this is that the classes in these subjects transform into classes in English in the better class of schools and degenerate into cramming lessons in the worse class. A boy stumbles at many propositions of Euclid, for instance, not so



much on account of their intrinsic difficulty (though even here I should advocate the abolition of Euclid and follow the continental system of teaching Geometry without the fetters of Euclid), but because he cannot follow the successive steps as he has to consider the meaning of the various sentences in which these steps are expressed. When a student has got a fund of ideas, expressing them in one language or another would not be very difficult. In the schools then care should be taken to teach all subjects through the medium of the Vernaculars until the student is perfectly familiar with English.

The teaching of English is again extremely faulty. All the time of the students in the schools is taken up in cramming up rules about the technicalities of grammar and analysis, and it is not too much to say that many students who appear for the Matriculation Examination have not read half a dozen books of English literature and cannot write correctly one sentence out of ten. A glance at the English paper in the Matriculation will show that a student who has his cribs about grammar and idioms at his finger's ends, may answer miserably the questions in paraphrasing or translation or essay-writing and yet get through. It is a common complaint that students who join Colleges are absurdly weak in English and find it difficult to understand the lectures.

(b) Before a student can get his degree at present he has to pass four examinations, and it is this frequency of examinations which tell greatly on his health and stands in the way of his acquiring sound knowledge. A student, who reads Roman History in one year along with many other subjects which have no bearing on it, cannot be expected to have a deep knowledge of that subject and to take any genuine interest in it. Preparing a subject for an examination is far different from knowing it. If the burden of these examinations be removed to a certain extent there will not exist some of that superficiality that now exists.

(c) This superficiality is closely connected with the absence of specialization. At present before the University grants the degree of B.A. it examines candidates in the following subjects. English (4 times), second language (a classical language generally or a modern European language four times), Indian History, English History, Algebra, Euclid (twice each), Geography (including Physical Geography), Roman or Greek History, Logic, Physics, Trigonometry, Political Economy and some voluntary subject once each. By examining in so many subjects the University looks as if determined to allow him no opportunity to read anything for himself. The voluntary subject which is to give him the hall mark of a specialist would to an outsider look like the greatest fraud practised upon the credulous public. Taking a graduate with mathematics as his voluntary subject—a subject by the way which has the reputation among students of being the hardest of the voluntary subjects—I can safely say about him that he has not the knowledge of mathematics which a good student in an English public school has when he joins Cambridge with the intention of taking mathematical Honours there. And no wonder, for he has to learn too many other subjects to be able to devote much attention to his voluntary subjects. The remedy for all this appears to be specialization and specialization alone.

*In this connection I should propose the following reforms.*—The Matriculation Examination should be made much stiffer, especially in English. The studies done up to the present Intermediate Examination should with a few changes be the syllabus of the new Entrance Examination. Text-books in English (at least, ten in number), some in prose and some in poetry, should be appointed, and students should be examined in the general contents of these books and in composition and not in the trivialities and technicalities of grammar, Vernacular, Arithmetic, Algebra, Euclid, History and Geography should be compulsory and there should be several groups of optional subjects which would fit a candidate for the study of any of the three faculties—Arts, Medicine and Engineering.

No student should be allowed to appear for the examination before he has completed 18 years to prevent the present hothouse system of coaching up boys and sending them up immature for the University Examinations.

*The groups should be somewhat as follows :—*Advanced portions of Euclid and Algebra, Elementary Trigonometry and Mensuration, Physics and Mechanics, and Astronomy (for students going in for engineering).

Elementary Physics, Chemistry, Botany, Physiology.

Two languages (one of which may be a Vernacular language of India other than the candidate's mother-language), Ancient History, Logic.

Elementary Physics, Astronomy (any two of these sciences), Elementary Trigonometry and advanced portions of Euclid and Algebra.

Students may begin to work at the particular subject they want to study after such a searching test. They should have only one examination in this subject after three years. This examination should entitle a man to a B.A. degree, which should be called an Honours degree. The standard of these examinations should be pretty hard and should be just about the standard of the various Cambridge triposes. There need not then be any further examination for the M.A. degree, but for those who would like to study further there should be a further examination to test their knowledge (as is the case at Cambridge).

Along with this there should be a pass-course, but the pass-course should consist of two examinations after a matriculation of the kind specified above. The syllabus for the first of these two examinations should contain English Vernacular, a little mathematics and History of England and India, and for the second examination there should be optional only one subject of about the same standard as the voluntary subject in the present examination for the degree of B.A. or the subjects for the special examinations for the ordinary degree in Cambridge.

These graduates should not be allowed to proceed to M.A. and should not have the privilege of a vote in the election of Fellows, &c.

The classification given in the note of the President of the Commission may be advantageously extended to include modern European languages and to separate the northern and southern Vernaculars of India.

*Examinations.*—The way in which the examiners are appointed is of course only known to the Syndicate. But so far as is known there is no general meeting of the body of the examiners. This is a reform which is very desirable. It often happens that a student who has obtained the bare minimum in every subject passes, while another who has done well in all subjects but wants about four or five marks in one subject fails, because the examiners do not meet together and consult the various cases. A regular system of grace marks should be formulated. Half the examiners of one year should remain examiners in the next year so as to preserve continuity in the standards required for passing any examination. A part of the examiners should be men from other Universities. To maintain uniformity of standard there should be periodical Conferences between the Boards of studies of the various Universities.

The practice of giving high sounding degrees on the results of easy examinations in some of the Universities should be stopped. There should be two or three honorary degrees, *e.g.*, D.Sc., LL.D., for high excellence in research only.

A few of the points, such as the question of Registrar and staff, supervision at examinations, &c., lie within the province of the Syndicate, and I am not in a position to pronounce either way on the present system.

#### FERGUSON COLLEGE, POONA.

*Buildings, &c.*—College building, 5 large class rooms, 4 small rooms for voluntary subjects, Laboratory, College Library, office room, students' Library.

*Sir Bhagwatsingji Students' Quarters.*—Two-storied 28 rooms on the ground floor and 30 on the first floor. Accommodation for 114 students. A new block of 12 rooms to accommodate 18 students.

*Mess-rooms.*—Quarters for the Principal and the Resident Professor, quarters for the hospital assistant, servants' quarters, bath-rooms, &c. A botanical garden in the town for the common use of the New English School and the Ferguson College and another in course of preparation near the College.

For constitution refer to Appendix B of the Reports of the Deccan Education Society for the year 1898-99 and 1899-1900, copies of which are sent herewith.

#### FINANCE.

##### *Items of Income—*

Fees from students—about Rs. 14,000.

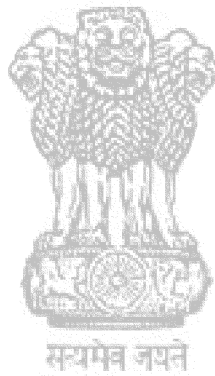
Grant from Government—Rs. 3,000.

Expenditure Rs. 16,000. This covers, besides salaries, scholarships paid to promising students. Compared with the expenditure of other Colleges this is too low. But it admits of an easy explanation. All the professors are life-members of the Deccan Education Society and as such are paid Rs. 880 only *per annum*.

Endowments of the value of about Rs. 17,700 for the purposes of prizes and scholarships.

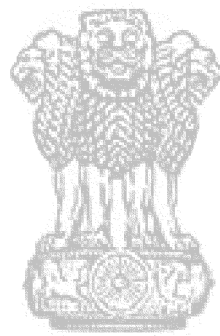
*Provision for Physical Education.*—Two tennis courts : two cricket fields : one foot-ball field ; one native gymnasium.

R. P. PARANJPYE.



## Teaching Staff of the Fergusson College, Poona, 1902.

No.	Name.	University Standing.	Subjects.	Remarks.
1	Mahadev Shivram Gole, Esq. ... ..	B.A. 1881, M.A. 1885, in Physics and Chemistry.	Professor of Physics and Chemistry and Principal.	Dakshina Fellow, Deccan College, 1881-82; Eighteen years' standing; Principal; Author of several Marathi works on Education, Social Reform and Physics.
2	Raghunath Purshottam Paranjpye, Esq....	B.Sc.*; (Bombay) 1894, B.A. (Cantab.) 1899. * In Pure and Applied Mathematics and Botany.	Professor of Mathematics; Acting Principal and Resident Professor.	Sir James Fergusson Scholar 1894; Dakshina Fellow, Fergusson College, 1895-96; 1st Class B.Sc., Government of India Scholar 1896-1901; Foundation Scholar, St. John's College, Cambridge, 1897-1901; Bracketed Senior Wrangler 1899; 1st Class, 1st Division Mathematical Tripos, 2nd part, 1900; Fellow of St. John's College. Joined College 1902.
3	Vaijanath Kashinath Rajawade, Esq. ...	B.A. 1884, M.A. 1887 in Languages (Degree, 1899).	Professor of English and Sanskrit. Resident Professor.	1st Class in B. A.; 2nd Class in M.A.; Virjiwandas Madhavdas Sanskrit Prizeman 1882; Dakshina Fellow, Deccan College, 1884-86; Professor of English and Sanskrit at D. J. Sindh College, Karachi, 1887-95; Six years' standing; Edited Kathopanishada for the Anandashrama Series.
4	The Hon'ble Mr. Gopal Krishna Gokhale .	B.A. 1885 ... ..	Professor of English, History and Political Economy.	Seventeen years' standing.
5	Govind Chimnaji Bhate, Esq. ... ..	B.A. 1893, M.A. 1895 (in History & Philosophy).	Professor of Logic and Moral Philosophy.	Ellis Prizeman in English 1893; Dakshina Fellow, Deccan College, 1893-94; Kashinath Trimbak Telang Gold Medallist 1895; 2nd Class M.A. Seven years' standing.
6	Narayan Sakharam Panse, Esq. ... ..	B.A. 1891 ... ..	Professor of Sanskrit...	Jagannath Shankarshet Sanskrit Scholar; Edited Prasanna Raghava Eight years' standing.
7	Mohomadkhan Munshi, Esq. ... ..	Nil ... ..	Professor of Persian.	
8	Dhondo Keshav Karve, Esq. ... ..	B.A. 1885 ... ..	Professor of Mathematics.	Ten years' standing.
9	Chintaman Gangadhar Bhanu, Esq. ...	B.A. 1885 ... ..	Professor of History ...	Dakshina Fellow, Deccan College, 1885-86. Translator of two of Spencer's works, and Editor of the Bhagavatgita. Fifteen years' standing.
10	Vasudeo Balwant Patwardhan, Esq. ...	B.A. 1893 (Calcutta) ...	Lecturer in English ...	Four years' standing.
11	Shivaram Vinayak Shewade, Esq. ...	B.Sc. 1899 (in Botany and Geology, Degree in 1902).	Lecturer in Biological Science.	Col. Patrick French Scholar 1897. Fellow, College of Science, Poona, 1900. Has also taken a first class in two examinations in Engineering.
12	Vasudev Shastri Abhyankar, Esq. ...	Nil ... ..	Shastri ... ..	Has studied Sanskrit Grammar, Rhetoric, Logic and Philosophy and translated into Marathi Shankaracharya's Sharira Bhashya, a work on Vedantism.
<i>Dakshina Fellows.</i>				
13	Keshav Ramchandra Kanitkar, Esq. ...	B.Sc. 1899 (in Botany, Chemistry and Pure Mathematics). B.A. 1901.	Lecturer in Physics ...	Superintendent of Resident students.
14	Vishwanath Balwant Naik, Esq. ...	B.A. 1902 ... ..	Lecturer in English Composition.	
15	Atmaram Yeshwant Mhaiskar, Esq. ...	B.A. 1902 ... ..	Do.	



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## NOTE FOR THE UNIVERSITIES COMMISSION

I will not repeat what I said in my Convocation Address, which has possibly been read by members of the Commission.

2. I wish it to be clearly understood that in what I have said or may say on the important questions before the Commission, my remarks must be taken as solely applying to the Bombay Presidency, with which I have been well acquainted for thirty-six and-a-half years. I have no personal knowledge in regard to the other presidencies. From what I have heard I take it that there may be circumstances connected with the other presidencies which in regard to those presidencies, might induce me to modify my views.

3. I confess that I have not yet been able to formulate a satisfactory plan by which the Bombay University can be made "a teaching body." Admitting that we could make a beginning by finding funds for providing one or more Professors or Lecturers in the most advanced subjects, (say for those students only who are preparing for their M. A. degree.) there is still the geographical difficulty, and the only way I see of meeting that difficulty is by insisting that more students should be members of one of the Colleges at the Presidency Town.

4. A perusal of many papers such as those mentioned in a foot-note\* has at present left the impression on my mind that we should do well to hasten slowly, and make but few modifications in and additions to our Constitution. I would retain the Senate and Syndicate as our governing bodies, remembering that we are probably not ripe for elaborate schemes. Court of Governors, Academic Council and such like are not suitable to Indian Universities. But I am in favour of providing in our Constitution for the presence of representatives of corporate bodies or benefactors, who have contributed largely to our funds.

5. I am strongly in favour of limiting the number of Fellows, and providing that Fellowships should be vacated by non-attendance at meetings, in which case tenure need not be originally for a term of years only. Elected Fellows should be in a fixed proportion to the total number, and election should be by the Faculties, Electors and Candidates being graduates of a certain standing (say twenty years) in that Faculty. Care will be necessary in fixing the number of Fellows for each Faculty—say Arts (including Science) 50, Law 30, Medicine 30, and Engineering 20.

6. The Syndicate should in my opinion be composed of not less than twenty members, so that committees can be formed for the disposal of the various matters, and rules being made for bringing questions, where necessary, before the full body for decision. The majority of the Syndics should be representatives of the Constituent Colleges. Where necessary—*e. g.* the College at Karachi, a representative, not a member of the College staff, might be permitted. In Bombay the tendency is (and I think right-

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\* Copies of the Statutes made for the University of London by the Commissioners appointed under the University of London Act, 1898, and of some of the Regulations made by the same Commissioners. Also a Memorandum prepared (not published) by Sir Courtenay Ilbert on "University Constitutions;" Also the volume of the Board of Education containing the reports received from the twelve University Colleges which participated during the year ended 31st March 1901 in the annual grant, now amounting to £25,000, made by Parliament for "University Colleges in Great Britain," and the three Colleges in Wales which receive from the Treasury a grant of £4,000 each.

ly) to discourage affiliated Institutions which do not teach up to the highest standard degree in a Faculty. But these (called Second Grade Colleges in some parts of India) together perhaps with the Head Masters of High Schools, might have the privilege of electing one or more representatives on the Syndicate.

7. In Bombay we have no Boards of Studies, a defect which certainly should be cured. And I should like to see permanent Boards for choosing Text Books, selecting Examiners, supervising Examinations, and all such like matters. Members of these Boards need not necessarily be Syndics, and they should advise, and report to the Syndicate.

8. Every Fellow should be assigned to one Faculty only. I prefer this to making the Faculties consist of the Professors and Teachers and Examiners in subjects of the Faculties, together with some additional members (of London University Scheme).

9. It is obviously desirable that a register of graduates should be kept with provisions for keeping it up to date.

10. *Students of the University*, I apprehend that our present Act of Incorporation will be repealed, and that a new Act will be passed, in which the difficulty at present felt with regard to Section XII will be removed. I refer to *In re Larasha Ratanji*, I. L. R. 23, Bombay, 465. In that case a candidate for the Previous Examination (one of our Examinations which a candidate for the B. A. degree must pass before he presents himself for the final degree Examination) claimed to present himself without obtaining a certificate from an Institution authorized by Government under Section XII. I am of opinion that all institutions, whether teaching up to the degree standard or not, should be authorized by Government. And the certificate which every candidate should produce before presenting himself for the Examination should not be merely a certificate of attendance, but also of fitness to appear for the Examination.

11. I see some difficulties in the way of the University supervising the Colleges in respect of the physical and moral welfare of the students. And I may add that in Bombay Presidency there is (I believe) no reason to suppose that Colleges do not do their duty in this respect. The Despatch of 1854 says that "the affiliated institutions will be periodically visited by Government inspectors;" but I doubt whether this rule has been followed in Western India. I am strongly in favour of continued efforts being made to make all the Colleges residential Colleges. The Despatch of 1854 speaks of substituting some mode of Entrance Examination which may secure a certain amount of knowledge in the Candidates for degrees without making their attendance at the University necessary, previous to the final Examination. If this is a suggestion to dispense with attendance at a College, I am respectfully but entirely opposed to it. It is the discipline and moral training at a College (especially if residence within the College precincts is feasible) on which reliance should be placed for the education of the character of our University Students. For those who are too old to be in *statu pupillari*, but who are anxious to increase their knowledge of certain Sciences, it may be possible for the University to provide something on the lines of extension courses (see Sir Courtenay Ilbert's Memorandum, page 24.)

12. *University Teaching*. I would like to say a few words on two of the subjects, English and Vernacular languages of India. I think it is possible that students at first find some difficulties in following their Lectures, the knowledge of English in some candidates for Matriculation

being said to be slipshod. (This possibly is due to the fact that in Bombay it is thought well to begin the acquisition of English *early*. See para 10 of Government of India Resolution No. 495-506, dated 28th October, 1899, on Mr. Cotton's quinquennial report.) But they probably soon overcome that difficulty. As to the Vernaculars, however, I am sure that the majority of candidates for Matriculation do not thoroughly know their own vernacular languages. The Despatch of 1854 apparently contemplated among affiliated institutions the inclusion of Anglo-Vernacular Colleges, in which the scheme of Education should provide for a careful cultivation of the vernacular languages. As far as I know, there have not been any such anglo-vernacular Colleges on this side of India. And the opinion seems universal that there is no place in the University Course for the vernacular languages. As it is, the student is burdened with a multiplicity of subjects. If that be so, then it is all the more necessary that the student, *before* he starts on his University Course, should be thoroughly conversant with his own vernacular. With this object I would make English and the candidate's vernacular compulsory subjects in the School Final and the Matriculation Examinations. In the case of those candidates, whose vernacular is not Marathi or Guzerathi, or Canarese, or Sindhi, or Hindustani (*e.g.* the few European or Portuguese or Goanese,) one or more extra papers in English might be substituted.

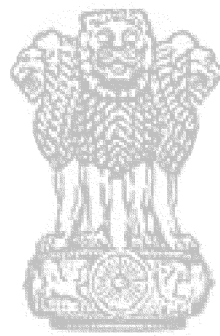
13. There is one point connected with this question of the vernaculars in regard to which I respectfully dissent from the Despatch of 1854, and that is that a knowledge of Sanskrit is of great importance for the critical cultivation and improvement of the Marathi and Guzerathi languages, and that it is more especially necessary to those who are engaged in the work of composition in those languages, or that its grammar can be applied to the improvement of the spoken languages (Marathi and Guzerathi). We do *not* want Sanskritized vernaculars. But if we want (as I submit we ought) to retain the pure vernaculars as spoken and understood by the people, then we should insist on all students showing a thorough knowledge in those vernaculars.

14. As our Registrar can give full details of all the subjects connected with "Examinations" I will not dwell further on these points.

15. There is one point, as to which I am not sure whether it falls within the scope of the Commission. It relates to Government scholarships offered to graduates to enable them to proceed to England for further study. In my opinion the Rules for election should permit the electors to look at the subjects and class in which the several candidates obtained their degrees; and also to consider the pecuniary condition of any candidates. Other things being equal the poor man should be chosen, and the emoluments of the scholarship should be sufficient to maintain him in England. Lastly, prospects should be held out to him of employment on his return to India. I am struck with the fact how few candidates we have in Western India for scholarships or Fellowships in England.

26TH FEBRUARY 1902.





सत्यमेव जयते

## THE BATTLE OF THE VERNACULARS.

Now that the din of the battle has passed away, it will be well to set forth as clearly as possible some aspects of the matter which in various quarters have been lost sight of or misunderstood. The first point—and one of paramount importance—is the question, what is the main reason for desiring a more thorough or extended study of the vernaculars in this Presidency? The answer is well expressed in the following extract from the late Mr. Justice Ranade's Note on the growth of Mahratti Literature:—"As a rule, our boys cease to study the vernaculars as soon as they enter English (? High) Schools about the twelfth year of their age, if not earlier. They thus practically lose touch with their people, and by the time they obtain their degrees too many among them find that 'they are unable either to talk or to write or read their current vernacular language.'" This want of familiarity breeds contempt for their mother-tongue, and people find it difficult to sympathise with a system which produces the unnatural results of *so-called educated men being unable to speak or to write their own mother-tongue fluently and correctly.*

It will be noticed that the above proposition is general in its terms, and not confined to any particular place or district. It was stated recently in the Senate that "they were the people in Bombay, who spoke half English and half Mahratti or Guzerati language. It was not so much the fault of the (Educational) Department as that of the circumstances under which they were placed in a cosmopolitan city like Bombay." This is a mistaken view. The illustrations of jargon which were quoted in the Senate came from the mofussil; and in the various complaints which have from time to time been formulated as to the deterioration of the principal vernacular languages of the Presidency, no attempt has ever been made to limit the evil to the Presidency Town. The subject is not local. In December 1888, the Kanarese Association, in addressing the University, stated that "graduates have a very poor command over their mother-tongue and a defective grasp of vernacular idiom." This is the complaint in regard to the interpreters of the High Court, many of whom have been brought up and educated outside Bombay. They are fairly acquainted with the English language, but they are sadly ignorant of the idiom of the vernacular languages into which they are supposed to translate the questions of judge and counsel. So, too, on the appellate side of the High Court an interpreter often finds it difficult to read aloud at sight with any degree of fluency a vernacular document written in the current handwriting. And yet he may be—and often is—a B.A. of our University. This is the evil which was apparently in Mr. Justice Ranade's mind when he wrote the words quoted above. Of course there is another aspect of the matter which deserves consideration, and that is the subject touched upon by Mr. Sathe, the Registrar of Native Publications, in his oft-quoted Report for 1892. Put in a few words it is this: "The intellects that are working to develop the literature of the country do not very often belong to the highly educated class, and the leading intellects do not devote much of their time and energy to the enrichment of their vernacular literature . . . . Moreover, having received their education in the English language, the study of which takes up much of their school and college course, very few of them (graduates) can write in their vernaculars even on the liberal arts." Which of these much-to-be-desired ends should be our first and main object? That our graduates may be able to write in their vernaculars both on the liberal arts and also on the useful, mechanical and industrial arts, and the fine arts, or that the ordinary educated Hindu gentleman may be able to talk and read and write his current vernacular language fluently and correctly? Surely the goal towards which we should at first strain all our efforts is the latter one. When that is attained, when an educated Hindu gentleman can talk his own vernacular purely, and not with a jargon, when he can read and write it correctly, and when he can translate from English idiomatically, then the other object will be attainable, and we may expect a supply of pure vernacular literature.

Let us see then how far the resolution, which was recently passed in the Senate, may be expected to assist in attaining the result which should be our first aim and object. The Bombay University recognises two main divisions of

languages—A (Classical) and B (Vernacular). The classical languages are (1) Sanskrit, (2) Greek, (3) Latin, (4) Hebrew, (5) Arabic, (6) French, (7) Persian and (8) Avesta and Pahlavi. The Vernaculars are (1) Mahratti, (2) Guzerati, (3) Kanarese, (4) Hindustani, (5) Sindhi, and (6) Portuguese. At present candidates at the Matriculation examination are examined in English and one of the classical (excluding Avesta and Pahlavi or vernacular) languages. In English there is one paper containing (1) one or more passages for paraphrase, with, as an alternative, one or more passages for translation into English in one of the vernaculars; (2) questions in grammar; and (3) an exercise or exercises in composition. In the second language, which may be either classical or vernacular, there is one paper containing prose passages for translation from and into English, and questions in grammar.

From that stage onwards a candidate for the University degree has no opportunity of showing his proficiency in his own vernacular. In the previous examination candidates are examined in (1) English, (2) Classical Language, (3) Mathematics, (4) History. In the two papers on English and in the one paper in the classical language the examination is entirely conducted in English. The same remarks hold good for the intermediate examination, the subjects for which are (1) English, (2) Classical Language, (3) Mathematics and Physics, and (4) Deductive Logic. Then we come to the examination for the Degree of Bachelor of Arts. Subjects (1) and (2) are English with composition and classical language. There is no use of any vernacular. Lastly, we have the Degree of Master of Arts, which a candidate may obtain on the expiration of five years from the date of Matriculation, should he pass the examination in any one of six branches, the first of which is languages. In languages English is compulsory, and there must be one or more of the classical or vernacular languages. At present Portuguese, Hindustani and Sindhi are not included in the vernaculars in which a candidate may be examined for his M.A. degree. They are probably not considered to be "advanced" vernaculars to which the recent Committee of the Syndicate deemed their attention should be confined. This is certainly true of the Portuguese language, the use of which as a vernacular among University candidates is restricted. The case of Hindustani and Sindhi is different, and different considerations have to be borne in mind as regards these two languages when one is compared with the other. The use of Hindustani is more or less general; Sindhi is confined to the Province of Sind. To avoid confusion it will be better at present to leave these languages out of consideration in the argument, but it will be understood that in so doing no discourtesy is intended. Confining ourselves then to the three main languages of the Presidency proper—Guzerati belonging to the Northern Division as it is known in official circles, Mahratti to the Central, and Kanarese to the Southern Division—the question for consideration is whether the regulations above referred to will tend to make the ordinary educated Hindu gentleman able to read and write his own vernacular correctly and fluently. As shown before in the Matriculation examination, assuming that he then exercised his option of taking his vernacular as his second language instead of a classical language, he will have had one paper containing prose passages for translation from and into English and questions in grammar. Then for four years he will be busily engaged with subjects in which his vernacular can have no place. Is it to be expected that in his fifth year of University study he will return to his vernacular and prepare himself for questions on the several books to be taken up by him, including points of scholarship, comparative philology, criticism, and the history of literature? Those will be the subjects of his 3rd and 4th papers. (See page 67 of the current University Calendar.) Where are the professors who are to guide him in this course of study? It has been said that this objection need not be considered, because the recognition of the vernaculars in the M.A. degree will alone create a demand, which will surely in due time be easily supplied by special endowments and other agencies. The accuracy of this proposition may be doubted, but let it pass; it is, to quote an expression used by the Dean of the Faculty of Arts "in the lap of the future." But how about the students? Will an impression be made on the ordinary educated Hindu gentleman. No doubt, if a certain number of scholars come forward and make critical and scholarly examination of their languages, and write good books in their languages, no one can deny that this will be to the advantage of their communities. But it is submitted that this is not the main object in view. Will these scholarly critics

improve the ordinary Hindu gentleman? A glance at the University lists will show that the proportion of B.A. graduates who proceed to the M.A. degree is exceedingly small. Then of these all do not go out in "languages." Within the last ten years fifty-six successful candidates did so. Of these besides English twenty took Persian, fifteen Sanskrit and eleven Latin. Of those forty-six how many would have taken their vernacular in lieu of, or in addition to, their second language? But quite apart from the fact that the "real scholars" will be very few who will devote themselves to the higher study of their own vernaculars, and will be of incalculable service in developing in after-life still further the resources of their mother-tongue, the question which is one of urgency is not whether these real scholars will bring honour to the University, but whether they will in ordinary daily life have an appreciable effect on the present pernicious practice, as shown in the fact that the ordinary educated Hindu gentleman very often cannot read and write his own vernacular fluently and correctly. They may be learned in comparative philosophy, criticisms and the history of literature; but in their ordinary life will they stem the tide which is having such a deteriorating influence on the vernaculars of this Presidency? It is unnecessary to elaborate other points which must occur to any one who ponders over this subject. Thus, with reference to the fact that our University students are now asked to drop the study of their vernaculars for four years, and then to resume them in an advanced stage, it is not inapt to quote the following extract from a representation made to the University some years ago:—"It would indeed be without precedent in the past history of education to lay down a curriculum in which a language is omitted for years to be taken up again when higher examinations are held."

Be that as it may, the Senate has deliberately resolved that the three principal vernaculars of the Presidency shall be optional subjects in the examination for the M.A. degree. It is not likely, nor is it to be wished, that Government will veto such a clearly expressed opinion. The question, which is now of pressing importance, is, having erected the pinnacle, which in a marvellous manner hangs suspended in mid air, how can we best build up to it and so make the edifice complete? The subject is one which requires most careful handling, and if we are to profit by past experience we must be careful to avoid certain pit-falls. Thus there is the difficulty in regard to those students who have no vernacular among the Indian vernaculars. This is true of the European or Eurasian students, and possibly it may be held to apply to Pársis, among whom the habit of speaking Guzerati in their homes is said to be becoming less. Then we must reckon, with the clearly expressed opinion of the Senate, that candidates, between their Matriculation and B.A. degree, shall not have appreciable burdens laid upon them in addition to the course of studies which they have already to undertake. These and similar considerations point to the fact that reform is only practicable in an earlier stage of a student's career; in short, that we should work in the directions indicated by the late Divan Bahadur Manibhai Jasbbhai in his "Memorandum on our Vernaculars" published in 1899. His object was improvement in the course of studies leading up to the Matriculation Examination. But, in brief, the argument is that the study of English is begun too soon before the student has thoroughly learnt his own vernacular. As the Reverend Mackichan said: "It is the early use of English as a medium of school study that is driving out or corrupting the vernaculars." And as he said in another place, "the truth is that the evil which has led to the neglect of the vernaculars by University men begins at a much earlier stage in the career of the students, and the cure must be sought in a revision of our methods of High School education and not a modification of the University curriculum." Surely the time has now come when this matter should be taken up in earnest. In no quarter is there any proposal to "kill the vernaculars with kindness." But those who do love this country, its peoples, and their languages, are anxious that some steps should be taken as soon as possible to ensure that the ordinary student when closing his school career, either by entering the University through the portal of Matriculation, or by passing the University School Final Examination, shall be compelled to show that he has a thorough knowledge of his own vernacular, not a critical, philological, or literary knowledge, but a sound acquaintance with the grammar and idioms of the language, and an ability to read and write it fluently. At present both in the School Final and the Matriculation one of the Indian vernaculars is only an optional subject. It is suggested that for all Hindus it should be compulsory, and that there

should be some change in the present system which fails to ensure a scholarly knowledge on the part of the student of his vernacular before leaving the High School. Whether the change should be on the lines suggested by the late Divan Bahadur Manibhai Jashbhai is a matter for careful inquiry. Also there is the question how far the University should be ordered to take action, and how much should depend upon the efforts of individuals or associations of persons outside the University. In regard to the University it would apparently suffice to revert to the policy which was so highly commended by the Chancellor in the first Convocation address delivered nearly forty years ago on the 28th April 1862. His Excellency Sir Bartle Frere said :

"I find that in 1859 the first Matriculation Examination was held, when 132 candidates presented themselves. Of these, only twenty-two passed. The cause of so small a proportion succeeding will be fresh in the recollection of all who took an interest in the University at that period. It was found that a great number of the candidates, who would have been well qualified for admission if judged simply by the progress they had made in those branches of learning which were to be the subjects of their University studies, were yet deficient in a complete and scholarlike knowledge of their own mother-tongue. I for one while regretting the disappointment entailed on many an anxious and zealous student, cannot regret the decision at which the Examiners of that period arrived, that a knowledge of the student's own vernacular language should be required as indispensable in anyone who applies for admission to this University."

In the following year the Vice-Chancellor, Sir A. Grant, carried in the Senate the resolution that in all language examinations after Matriculation the University should recognise, besides English, none but classic languages. It is unnecessary to dwell on the reasons which were urged in support of that resolution ; some of them have no force in the present day. But the point which must not be lost sight of is that it was not intended to abolish the vernaculars from the Matriculation. On the contrary, as the author of the scheme explained, "what is proposed is that the Universities should continue to examine candidates for Matriculation in the vernaculars as at present. This is desirable, because by so doing the University will test the efficiency of school teaching throughout the country. She will ascertain that each candidate is able to translate into his own tongue the ideas which he has acquired in rough English." And in the debate Dr. Wilson dwelt on the necessity of making it "imperative on all Indian students to pass an examination in their vernacular when they offer themselves for Matriculation, as strongly urged by Lord Elphinstone, the first Chancellor of this University." And Mr. West, while illustrating the same points, mentioned that he had himself met with students in the mofussil who while attaining proficiency in English had quite lost the use of their own language, except for such homely purposes as buying their dinners or scolding their wives : they were unable to write or even to read the most ordinary letter in the common written character.

These being the facts, it can be easily understood why Mr. (now Sir James) Peile, when Director of Public Instruction, urged on the University that every candidate for Matriculation, whether he takes up a classic beside or not, should be required to satisfy the examiners in the paper set and oral examinations held in his vernacular. As Mr. Peile said "a great deal of labour in this Department will not be as effective as the adoption of this simple regulation by the University." But the Syndicate did not feel themselves able to accede to the proposal. They said : "The vernaculars have, after much deliberation and discussion, been excluded from the higher examinations of the University ; they are not studied in any of the recognized Colleges, and the Syndicate are of opinion that by placing them on the same footing as the classical languages in the regulations for the Matriculation Examination, the University does all it can be expected to do for their encouragement." This, then, is how the matter stands. The "advanced" vernaculars are now not excluded from the highest examination of the University. The question is not whether the University has done all it can be expected to do for their "encouragement," but whether it should take its part in ensuring that the ordinary educated Hindu gentleman should be able to speak and read and write his own mother-tongue fluently and correctly.

## The Honourable Mr. Justice E. T. CANDY.

*Note by Mr. Justice Candy, Vice-Chancellor of the University of Bombay, on Section XII of the Act of Incorporation.*

As these papers have again come through my hands, I will, at the risk of prolixity, set out the salient points, some of which are in danger of being overlooked.

1. Section VIII of the three Acts, Act II of 1857 for Calcutta, Act XXII of 1857 for Bombay, Act XXVII of 1857 for Madras, incorporating the three Universities respectively, provides that the Senate shall have full power from time to time to make and alter any by-laws and regulations (so as the same be not repugnant to law, or to the general objects and provisions of this Act) touching the examination for the degrees and the granting of the same, and touching the qualifications of the candidates for degrees, and the previous course of instruction to be followed by them, and the preliminary examinations to be submitted to by them.

2. Section XII of the same Acts provides that, except by special order of the Senate, no person shall be admitted as a candidate for the degree in the various Faculties unless he shall present to the Senate a Certificate from one of the Institutions authorized in that behalf by the Governor in Council to the effect that he has completed the course of instruction prescribed by the Senate in the by-laws to be made by them under the power in that behalf given by this Act.

3. The close connection between Sections VIII and XII of the Acts is very marked. Section VIII gives power to the Senate to make by-laws touching the previous course of instruction to be followed by candidates for degrees, and the preliminary examinations to be submitted to by such candidates for degrees; while Section XII refers pointedly to the power so given to make such by-laws, and provides that every candidate for a degree must first present a Certificate from an *authorized* Institution that he has completed the course of instruction laid down in such by-laws.

4. These sections were in 1898 judicially interpreted by the Bombay High Court (I. L. R. 23 Bom. 465). It was held that the expression "Candidates for degrees" means in Section VIII candidates at any examination, preliminary or final, leading up to a degree, but that in Section XII it means simply candidates for the *final* examination for a degree. The Chief Justice, the late Sir L. Kershaw, said (page 471):—"I do not agree with the arguments with regard to the whole of the examinations having to be passed before the student becomes a candidate for the degree of B.A. I agree with the interpretation of my learned brother."

Parsons J., said (page 472):—"In Section VIII of the Act the expression 'Candidates for degrees' apparently means all persons who make use of the University with the object of obtaining a degree." But the same meaning was not attached by him to the expression in Section XII. To the argument that the words in Section XII meant that no person should be admitted to any examination which was prescribed for a degree, unless he produced the necessary certificate from an "authorized" Institution Parsons J. said (page 473):—"To suit this argument we should have to read the section as providing that no person shall be admitted as a candidate for any examination, preliminary or final, prescribed for the degree, without a certificate that he has completed the course of instruction prescribed down to the stage at which he has arrived, or for the examination at which he is about to present himself. This would, I think, be doing great violence to the words of the section as they stand." It was, therefore, held that the certificate mentioned in Section XII ("and one only is mentioned") was a certificate to be given solely at the final examination for the degree; and "it follows that a certificate is not required by that section or by

any other provision of law for the previous examination, which is a preliminary one made by by-laws under Section VIII of the Act."

5. The above is the only interpretation hitherto given by any of our High Courts regarding any sections of the Acts of Incorporation. Though not binding on the other High Courts, it would possibly be followed by them. Mr. Justice Michell, officiating Judge of the Madras High Court, says that he would have given the same decision.

Let us, then, see how it affects the existing by-laws and regulations of the three Universities.

6. In Bombay for 40 years Section XII of the Act has been utterly ignored. There is no allusion to it in any of the by-laws and regulations till last year, 1898, when the attention of Government was called to the point. This is fully explained in the letter from the Government of Bombay to the Government of India, No. 129, 28th January 1899, so I need not repeat. In Bombay we simply have Institutions "recognized" by the Senate. Of the "preliminary examinations" prescribed by the Senate in the "previous course of instruction" to be followed by "a candidate for a degree in Arts," the "Previous Examination" is one. By Regulation 11 (page 44 of the Bombay University Calendar for 1898-99) no undergraduate will be admitted to this examination, unless he shall have kept two terms at a College or Institution *recognized* in Arts, and unless he produce satisfactory testimonials under Form G. This Form is to be found at page 507 of the same Calendar, and is to be signed by the Head of the College or Institution at which the student may have attended. It certifies that the candidate has kept the two terms required by the Regulation. Thus all that is necessary is that the Institution, the Head of which grants the above certificate, is "recognized in Arts." The Regulations of the Bombay University for such "recognition" are to be found at page 247 of the same Calendar. The "recognition" is simply by the Senate. There is no mention of sanction or authorization by Government. And though, as shown by 1 (b) of the Regulations, the primary intention was that no Institution should be "recognized" unless it had the means of educating up to the standard of the highest degree in the Faculty in which recognition is desired, yet it was subsequently found necessary to add a Regulation (No. 3) permitting the Senate to recognize an Institution for the purpose of a particular examination or examinations only. Thus, to take a concrete instance, in the list of recognized Institutions to be found at pages 247-8 of the same Calendar, No. VI is the Rájárám College, Kolhápúr, which is "recognized in Arts" for the purpose of the Previous and Intermediate Examinations. This College has also been "authorized" by Government under Section XII of the Act; but under the High Court decision such authorization is a dead letter and meaningless. Being an Institution, unable to give a certificate that a candidate has *completed* the course of instruction prescribed up to the *final* examination for the degree, it requires no authorization by Government, and can send candidates up for the Previous and Intermediate Examinations simply on the strength of the fact that it has been "recognized" by the Senate. That was exactly the case of the "Collegiate Institution," which came before the Bombay High Court, and resulted in the decision above quoted. The Rájárám College, Kolhápúr, is, it is believed, absolutely free from Government control. The Mahárája may at any time dispense with the services of its present Principal, and appoint some one, whose aim may be to inculcate in its students hostility to the British Government. According to the present Regulations (page 247) the Senate even cannot withdraw its "recognition" unless the Rájárám College changes its course of instruction or ceases to educate up to the University standard. If the present state of things is allowed to continue, the situation may at any time become intolerable.

7. Let us now turn to the Calcutta Regulations, and see how far they are affected by this decision of the Bombay High Court. There the "First Examination in Arts" answers to our "Previous". By Regulation No. 2, page 23 of the Calendar for 1899, any undergraduate may be admitted to this examination provided he has prosecuted a regular course of study in an "affiliated" Institution for not less than two academical years after passing the Entrance Examination (answering to our Matriculation). By Regulation 3 every candidate shall



send his application with a certificate in the form entered in Appendix A, which is to be found at page 82 of the same Calendar. It is to be signed by the Principal or Head Master of the "affiliated" Institution in which the candidate has studied, and certifies that the candidate has completed in one or more of the "affiliated" Institutions the course of instruction provided by the University for the F.A. Examination. Turning now to page 78 of the same Calendar, we find the Rules for "affiliation." In Calcutta, Colleges are "affiliated," while schools sending up candidates for the Entrance (Matriculation) Examination are "recognized." But—and this is the important point—both to "affiliation" and to "Recognition" the foot-note is appended "See Section XII." Thus the Calcutta Regulations imply in the clearest possible terms that a "Candidate for a degree" in Section XII of the Act includes candidates both for the Entrance (Matriculation) and also for the Preliminary Examination (such as the Previous or First Examination in Arts), prescribed by the Senate under Section VIII as among the Preliminary Examinations to be submitted to by candidates for degrees. Such candidates must under the Calcutta Regulations produce certificates from Institutions *authorized* under Section XII of the Act. But according to the High Court decision such an idea is contrary to the provisions of the Act, which requires only *one* certificate from an "authorized" Institution, and that is when a candidate appears for his *final* examination for his degree. To require under Section XII of the Act a candidate for the Previous or First Examination in Arts at Calcutta to produce a certificate from an *authorized* Institution, is to do what the Bombay High Court declares is contrary to the provisions of Section XII which requires no such certificate from such candidates. The only other points to be noticed in regard to the Calcutta Rules of "affiliation" ("See Section XII") are that the Rules contemplate an Institution being affiliated *in a department* of Arts and the other Faculties, and not necessarily up to the standard of the degree in each Faculty, and that (unlike Bombay) the power of affiliation rests under the sanction of the Governor General in Council with the Syndicate, and the power of withdrawal, for any reason, rests with the Senate on the recommendation of the Syndicate and with the sanction of the Governor General in Council. As to the first point, attention may be called to the lists at page 240 *et seq.* of the Calendar. Thus, for instance, in Arts there are 45 Institutions affiliated up to the B.A. standard and 30 affiliated "up to the First Arts standard." According to the High Court decision, these latter 30 Institutions require under the Act no authorization by Government according to Section XII. The Regulations do not expressly provide for certificates in the case of candidates for Preliminary Examinations being given by the Heads of Institutions *authorized* under Section XII. Even if they did, the question would arise whether such Regulations would not be *ultra vires* as going beyond the Act which, it has been held, requires no certificate from an *authorized* Institution in the case of candidates for Preliminary Examinations. Further, there is this difficulty: according to the High Court decision, the only Institution, which can be "authorized" under Section XII, is an Institution which can give a certificate that a candidate has completed the course of instruction up to the *final examination* for a degree. Then, the 30 Institutions at pages 240-1 of the Calcutta Calendar, which can only give certificates up to the First Arts standard, cannot be "authorized" under Section XII. Therefore if "affiliated" on pages 78, 78 and 82 of the Calcutta Calendar means "authorized," the Calcutta Regulations are useless so far as institutions teaching up to less than the degree standard are concerned. Now that the decision of the Bombay High Court has by the medium of the Indian Law Reports reached Calcutta, it may be taken as extremely probable that some member of the Senate of the Calcutta University will give voice to the obvious difficulties which arise in attempting to reconcile the Regulations with the Act as judicially interpreted.

8. Let us now turn to the Madras Regulations. At page 46 of the Madras University Calendar for 1898-99 we find the Regulations regarding the First Examination in Arts (answering to our Previous Examination in Bombay). By Regulation 141 (page 47) each candidate must forward "a certificate in the form hereinafter prescribed from the head of some College authorized in that behalf by the Government of Fort St. George in Council to the effect that he has attended an authorized College or Colleges for a period of, at least, four terms



after passing the Matriculation or other accepted Examination, *and has completed the course of instruction prescribed by this University.*"

A comparison of these words with the language of Sections VIII and XII of the Act makes it clear that the framers of this Regulation thought that Section XII *did* apply to candidates for Preliminary Examinations (such as the First Examination in Arts) as well as for final examinations for degrees. This is made still more clear on looking at "the form hereinafter prescribed." It is to be found at page 133 of the same Calendar under the heading (page 132)—"Certificates required under Section XII of the Act of Incorporation." But according to the Bombay High Court decision, no certificates are required under Section XII of the Act of Incorporation, except in the case of candidates for the *final* examination for the degree. Therefore, the Madras By-laws and Regulations are in this respect not in accordance with the Act of Incorporation. Further, on turning to the "Rules of affiliation" of the Madras University (same Calendar, page 131), we find that "in the Faculty of Arts Institutions shall be affiliated as second-grade or as first-grade Colleges, the former being entitled to enter students for the first Examination in Arts only, the latter for both the First Examination in Arts and the Bachelor of Arts degree Examination." There are (pages 141, 142) no less than 38 of these second-grade Colleges, while there are 15 first-grade, and according to the High Court decision these 38 second-grade Colleges cannot be "authorized" under Section XII of the Act, for they cannot give a certificate that a candidate has *completed the course of instruction* up to the final examination for the degree. The Madras University By-law is, therefore, to say the least, incorrect, when it says that a candidate for the First Examination in Arts coming from a second-grade College must produce a certificate required under Section XII of the Act of Incorporation to the effect that he has kept so many terms and has completed the course of instruction prescribed by the University.

9. What then is the appropriate remedy for this state of things? It is submitted that the only remedy, which will effectually remove all difficulties, is an amendment of Section XII of the three Acts of Incorporation. The opportunity can be taken of making the language of the section clearer in other respects: thus, *e.g.*, it may be shown that the certificate required from a candidate is to be produced before he presents himself for examination. Thus the amended section may run:—

"Except by special order of the Senate no person shall be admitted as a candidate for the Final Examination for a degree, or for any of the Preliminary Examinations to be submitted to by candidates for degrees, unless he shall present . . . a certificate from one of the Institutions authorized in that behalf by . . . to the effect that he has completed the course of instruction prescribed, &c."

If Section XII is amended as above shown, then no question can in future arise regarding the By-laws and Regulations of the Calcutta or Madras Universities. At present, as I have indicated, according to the Bombay High Court decision grave difficulties may at any time arise in regard to those By-laws and Resolutions.

10. Amendment of Section XII was the course proposed by the Government of Bombay to the Government of India in their letter No. 129 of 28th January 1899. But the Government of India have replied (No. 294 of 29th June 1899) that a certain suggestion of the Syndicate's Committee of the Madras University affords a solution of the difficulty by which recourse to legislation may be avoided. The suggestion is that the Senate of the Bombay University should under Section VIII of the Act make a by-law providing that persons presenting themselves for examination in any of the preliminary examinations must present a certificate from one of the institutions specified in Section XII—that is to say, an institution authorized by the Governor in Council to give the certificate as to the completion of the whole course of instruction required for admission to the Final Examination—to the effect that they have gone through a certain course of instruction.

11. There are the following objections to this proposed solution of the difficulty :—

(a) It purports to meet the difficulty *only in Bombay*. It leaves the difficulties in Calcutta and Madras untouched.

(b) It is doubtful whether a majority could be obtained in the Bombay Senate to pass such a by-law. There is a powerful party in the Senate of the Bombay University whose object is to free educational institutions from Government control. The members of this party would be sure to oppose such a by-law in the Senate, and a disagreeable debate would ensue.

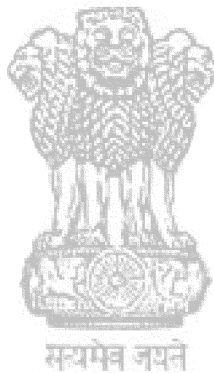
(c) If such a by-law were passed by the Senate and sanctioned by Government, the same party would take the earliest opportunity of testing its legality in a Court of Law. That is just what they did in the case of Mr. Karkaria's "Collegiate Institution," which resulted in the decision of the Bombay High Court. There was no sympathy with Mr. Karkaria; the motive was simply to show that all institutions teaching up to less than the degree standard are free from Government control. We should have, then, fresh proceedings in the High Court; and with the greatest respect for the Acting Advocate General I feel sure that the point is at least arguable. Section VIII of the Act says that the by-laws and regulations must be not repugnant to law, or to the general objects and provisions of this Act. Section XII as judicially interpreted says that a certificate from an "authorised" institution can be demanded from a candidate *once only*, and that at the time of his final examination for his degree. A by-law that candidates for degrees must prepare themselves throughout at certain institutions *recognised by the Senate* would, as the Acting Advocate General shows, be not repugnant to the general provisions of the Act. But he does not apparently appreciate the distinction between "recognised by the Senate" and "authorized by Government under Section XII of the Act." It is compelling a candidate for a degree to produce at every examination a certificate which, according to the High Court decision, the Act provides shall be demanded from him *once only*, which is not consonant with the spirit of the Act. The Acting Advocate General says that the mere fact that an extra burden in the matter of education is imposed by a by-law over and above the Statutory burden is *not in itself* a sufficient reason for holding such by-law to be bad as contrary to the Act (See *Bury vs. Cherryholm*, L. R., 1 Ex., Div. 457). An examination of the case quoted by Mr. Scott shows that it is clearly distinguishable from the present case. It was not in that case the question whether a certain by-law was repugnant to the provisions of the Act under which the by-law was made. On the contrary, the question was simply whether the by-law was inconsistent with one of its own clauses. Thus, the Workshop Regulation Act, 1867, provides that a child may not be set to work unless he attends school ten hours *at least* during each week. Then in 1870, the Education Act was passed, by which by-laws when sanctioned were to have the same effect as if they were enacted in the Statute. One of the by-laws in question expressly provided that nothing should be of any effect, in so far as it may be contrary to anything contained in any Act for regulating the education of children employed in labour. Thus the question was whether the by-law, providing that all children of a certain age must attend school for the full time that the school is open, was contrary to the Workshop Regulation Act of 1867. It was held that it was not. If the provision of the Workshop Regulation Act had been to the effect that "every child who is employed in a Workshop shall attend school for ten hours in every week, *and no more*," then no doubt the by-law would be contrary to the provisions of the Workshop Regulation Act, 1867; but this is not so; for the provision of the Workshop Regulation Act is simply that the child must attend school ten hours *at least* in every week. If the Education Act, 1870, had provided that every child need attend school for *nine* hours only in every week, then no doubt the by-law would have been bad. So here, the Act provides that a particular kind of certificate can only be demanded from a candidate for a degree at one particular stage in his "course of instruction."

The proposed by-law alters that, and says that this particular kind of certificate must be produced by the candidate at each and every stage of his course of instruction. I think I have said enough to show that the question whether the proposed by-law would be good or bad is certainly arguable. Is it wise to invite further litigation?

(d) Lastly, the result of such a by-law, if passed and sanctioned, will be to shut up all Colleges not teaching up to the degree standard. As the certificate required from candidates at preliminary examinations would have to be given by "authorized" institutions only, and as the only institutions which can be "authorized" are institutions which teach up to the degree standard, the result is that "second grade" institutions in Bombay must close their doors. For, as it is obvious that the Head of an Institution granting the certificate can only do so for the students who have studied in that institution, the result will be that we can only have Degree Colleges in Bombay Presidency.

E. T. CANDY.

30th August 1899.



## Sir BHALCHANDRA KRISHNA, Kt., L.M.

*Written Statement of Evidence given before the Indian Universities'  
Commission on the 28th February 1902.*

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*I.—Teaching University.*—The Bombay University, like its sisters of Calcutta, Madras, Allahabad and Punjab, is a mere examining body. I should much like it, if it could be made a teaching University, since by doing so its efficiency would be considerably enhanced. As in European Universities, the actual personal instruction in Colleges should be entrusted to tutors. A select number of Professors of special eminence, while serving in the Colleges, should be recognised as being attached to the University. Candidates for degrees should be required to hear a course of lectures from such recognised Professors. The system of instruction, in which a hundred or more students gather in one class room and listen to a Professor's lecture, is highly defective, whether for discipline or for knowledge. Instruction to be effective must be personal and direct. The teacher and the pupil must come into close contact. Such a thing is not feasible in the unwieldy classes that are now generally observable in Colleges. To meet this difficulty the students should be distributed in batches and each batch given into the charge of a tutor or a fellow. Besides the tutors there may be a class of lecturers or demonstrators, who may carry on the work of the tutors on a higher plan, conveying instruction to larger groups and by more comprehensive methods such as demonstration and experiment. The Professors should be a yet higher class of teachers, who should be men of superior standing in their respective subjects. There may be inter-collegiate lectures as well as University lectures, the Professors in the different Colleges forming, so to say, one corporation of learned men and jointly working in the cause of education and learning. Besides this I would also advocate the foundation of chairs at the University for the purpose of delivering lectures on special subjects similar to the chair of Agricultural Chemistry which was founded in connection with this University for the whole of India in 1888. Eminent and highly qualified experts may also be invited from England, as was suggested by Lord Reay in his speech as Chancellor of this University in 1888-89, to give a course of lectures at our Universities. Such a provision for post-graduate instruction will stimulate higher education in India in the real sense. Referring to outside teachers Lord Reay said : " Occasional teaching of this kind would in any faculty not only benefit the students, but graduates and others would secure thereby a fresh impetus to their whole intellectual life. If we could have induced Lord Herschell and Mr. Bryce to give us, while they were here, some of the treasures of their store of knowledge, we should certainly have been the better for it, even though no examination tested the results. I shall not fail to communicate with my University friends on the subject. It is

a great mistake to confine higher teaching to those who occupy chairs. The University should seize every opportunity of opening its doors to those whose learning can be made available, even though it is only for a short period. As long as excellence is reached, it matters very little what the nature of the connection is of the lecturer with the University."

*II.—The constitution of the Senate.*—The Act of Incorporation of this University fixed the number of Fellows at 28, excluding the Chancellor. The number rose to its highest point at 333 in 1897-98. The present number is 293. I am of opinion that the number of Fellows may well be limited to 150. One way of limiting the number of Fellows is to make the Fellowship tenable for a fixed term, making the holders eligible for re-election. The qualifications for a Fellowship should be: (a) high academic attainments, (b) conspicuous distinction in the higher walks of life, and (c) special benefactions. Under (a) I would include (1) educationists and scholars, (2) Professors in the different Colleges, and (3) distinguished graduates of Indian or other Universities. Class (b) would provide for successful merchants, soldiers and others who, though not belonging to any University, will be valuable advisers as practical business men. Class (c) would furnish scope for the recognition of wealth and benevolence. The disqualifications for keeping office after nomination or election should be (a) non-attendance at 50 per cent. of the meetings of the Senate in any given period, (b) insolvency, and (c) grave misconduct. As regards the appointments of Fellows, I would suggest that (a) 50 per cent. should be nominated by Government, (b) 30 per cent. should be elected by the Senate in the different Faculties (Arts 10, Law 5, Medicine 7, and including Agriculture Engineering 8), and (c) 20 per cent. should be elected by graduates.

*III.—The Syndicate.*—This body has no statutory existence by the Act of Incorporation of this University, but has been called into being under the bye-laws. I think it should have a statutory sanction and the law should define its powers in the same manner as those of Managing Committees of other corporate bodies. The original number of Syndics was 11 including the Vice-Chancellor, but by a resolution of the Senate in 1897 which was sanctioned by Government, the Deans of the Faculties were added to that body raising the total number to 15. The method of election of the Deans and the Syndics has, I believe, worked well and requires no alteration except in one respect, viz., that the actual teaching elements of the Colleges should, if possible, receive yet greater representation.

The office of the Vice-Chancellor should, I think, be elective. In 1887 the proposal was made in a draft Act framed by Mr. Justice West, but the scheme of the Act fell through apparently for want of approval of the Government. Now that the whole constitution of the University is under revision, the question of making the Vice-Chancellor's office elective may well be considered. Such offices in European Universities are invariably elective. In India, at that time when Universities were first established there was a total absence of eligible men. Even the principle of election was then unknown. After a life of nearly fifty years of the University and the expansion of the principle of election in other directions, it is high time the University adopts the principle in filling its highest executive office.

*IV.—The appointment of Examiners.*—In past time Examiners were appointed by selection made by the Syndicate out of regard to recognized ability. The system now in vogue is to invite applications and to make a selection from among the applicants. This system facilitates choice and possibly enlarges the scope of selections, but it works injuriously in two ways. It deprives the University of the services of those who are really capable but who out of self-respect will not come forward as applicants. Secondly, it has opened the door to all and sundry to put in their petitions and ply the University authorities with importunities. The result has often been to put in young graduates with no special qualifications and for whom even the candidates could have little respect. This system has caused a variation in the standard of examinations and a general demoralization among examiners as well as examinees. An examinership must not be treated as a mere matter of patronage or easy gain. It must rather be looked upon as a serious undertaking and as a reward of

conspicuous merit, of proved standing and capacity, and special application. Examiners should be selected from among the class of persons who should serve as ideals to students and fill them with awe and respect. A young graduate of two or three years' standing can hardly fill the position with credit to himself or honour to the University.

*V.—The course of Studies.*—On this point I shall confine my observations to the Medical Faculty and the course of studies at the Grant Medical College. The existing degrees in connection with the Medical Faculty are the L.M. & S. and the M.D. The L.M. & S. is commonly looked upon as a license, though the University calls it a degree. I think as a degree it is a misnomer. It should be abolished and the M.B. degree substituted in its place. I may mention that several attempts were made in times past to substitute the M.B. for the L.M. & S., but I regret to say they have failed to bear any fruit. I hope the Commission will see its way to effect the reform which has long been sought after by the Native medical profession.

There has been considerable difference of opinion as regards the standard of preliminary education necessary to qualify for the M.B. degree and the entrance examination for admission to the Medical College. The standard required by the general Medical Council is in some respects lower than the Bombay University Matriculation, and the general Medical Council recognises the Bombay Matriculation as sufficient qualification for registration as a medical student. The London University also requires its own Matriculation, and the London Matriculation differs from its Bombay analogue in requiring Latin as a compulsory subject and Greek, German, French or some elementary science, such as mechanics or chemistry, as an optional subject. I would recommend that the additional subjects required at the London Matriculation may be insisted on as a test of admission into the Grant Medical College. This will obviate the necessity of insisting upon a higher test than the Matriculation. Even for the London M.D. no higher test than the Matriculation is requisite. The course of studies should likewise be framed on the model of the London course. The curriculum of that University includes (1) the Preliminary Scientific, (2) the Intermediate Examination, and (3) the M.B. Examination. If the Bombay University adopts the London examination it may as well adopt the nomenclature of the different degrees. In London B.S. and M.S. are awarded to signify proficiency in surgery, and M.B. and M.D. mark proficiency in medicine.

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*VI.—The Personnel of the College.*—When the Government Medical College was established the Professorial staff was selected from the Indian Medical Service, because there were very few trained men outside the service available at that time. It was thus necessary in the interests of medical education to restrict the field of selection to men from the Indian Medical Service. The Professorships were made consolvent appointments and their pay was drawn from the Medical Service as well as the Educational Department. This system led to the dual control of the Surgeon-General to the Government of Bombay on the one hand and the Director of Public Instruction on the other. The former officer has had invested in him the principal control as regards selection, transfer, dismissal, and so forth. The latter officer, although the head of the Educational Department, has practically very little voice in the selection of Professors. As the officer himself remarked the other day, he is a mere post-bearer. The important claims of the medical education of this Presidency were thus subordinated to the convenience and exigencies of the Indian Medical Service. Professors were shifted from one chair to another at the sweet will of the Surgeon-General to the great detriment of the College.

In 1868 the Government of India proposed to attach certain chairs in the Grant Medical College to appointments held by certain officers in the Presidency, and to attach duties to certain full Professorships in addition to the legitimate work of these posts. The proposal was considered by the Faculty of Medicine and it was reported to the Syndicate that the proposed order of Government to attach certain chairs in the Grant Medical College to appointments held by officers in the Indian Medical Service without reference to their scientific attainments, and to add duties of an incongruous nature to certain other Pro-

fessorships, destroys the system of selection to the College chairs, encourages a perfunctory discharge of Professorial duties, interferes with the authority of the Principal of the College over its internal discipline and his privilege of recommendation to the chairs, subverts the control of the Director of Public Instruction over one of the most important educational institutions in his Department, and weakens the academical tie between the University and the College. The Medical Faculty therefore resolved that all Professors should be chosen for their scientific claims, that they should be selected from the Medical Service, from Europe or from any other source, and that Professors should continue to be under the immediate control of the Principal, who is subordinate to the Director of Public Instruction. Dr. (now Sir William Guyer) Hunter, in the course of an able minute, remarked: "In consequence of the chairs being attached to the Presidency appointments, the system of selection which formerly existed is virtually abolished and scientific attainments are made of secondary importance to Military claims. The Professorial duties would, therefore, come to be performed in a perfunctory manner as experience has already shown in the case of *ex-officio* Professors. Under these circumstances the efficiency of the Grant Medical College as an educational institution could not fail to be seriously impaired." He accordingly recommended that all Professors of the Grant Medical College should be chosen for their scientific attainments, and that they should be selected from either the Indian or the British Medical Service or from the open profession of medicine. Dr. (now Sir George) Birdwood was even more outspoken, as will appear from the following extract from his minute: "I would submit to Government that, with a due regard to the progress of University studies in the Grant Medical College, the Principal and Professors of the College should be appointed to the College and be attached to the Sir J. J. Hospital on account of their academic qualifications alone or fitness to hold the College chairs, being selected from whatever quarters, including the services as well as the open profession of medicine. The most eligible candidates offered themselves, and here parenthetically I would observe, the Syndicate cannot allow this paramount question to be hampered by any impertinent and irrelevant questions of the interests of the Military Service of Government in the Grant Medical College, by which its consideration by some of its members is seemingly conditioned and determined. All such questions must be faithfully put aside, and the efficiency of the College as an affiliated institution of the University solely and wholly considered." Dr. Birdwood further added that it was as difficult to make Professors of certain arbitrarily named Military officers as it was easy to order them to be made. The University cordially endorsed this view and submitted to Government that, in the interests of learning and science, the Principal and Professors of the Grant Medical College and the attached J. J. Hospital should be appointed solely on the ground of their scientific attainments and teaching powers, the choice not being limited to the Bombay Military Service, but the best candidates being accepted from whatever quarter they may offer themselves. Sir Alexander Grant, then Director of Public Instruction, also observed that "Professorships in the College should be regarded as purely scientific appointments, to be filled up irrespectively of the claims of the Military Service."

Dr. Henry Cook, one of the best Principals the College has had the honour of being presided over, remarked: "I would strongly advocate that the process might be immediately begun by the appointment of members of the general profession as a supplementary staff to the existing hospitals; while I hope the time is not far distant when other hospitals may spring up in this city and elsewhere, which may be entirely under the management of medical men, independent of the Medical Service." According to Dr. Cook "the profession has reached a stage when it might lay claim to a share of those public duties which, though they should be here, as elsewhere, unpaid, bring with them their own reward."

Another distinguished Principal, Dr. Carter, observed: "It has become urgently desirable to appoint a few talented Native tutors and demonstrators whose whole time would be devoted to the learners' benefit." He further suggested whether it would not be expedient to nominate an Assistant or Deputy

Professor in the more highly technical subjects, who on emergency or as a successor could take the place of the full Professor. He remarked: "The suggestion seems not amiss that College Professors be always taken, as they are in the chief European Colleges, from amongst the best qualified men available wherever to be found, and eventually it may happen that a moiety at least of our teachers will be thus derived from the *alumni* of the Grant College, their *alma mater*.

It will be seen from the opinions of these distinguished men that the evil of limiting the selection of Professors from the Indian Medical Service had grown to a great magnitude. It practically prevented the selection of the best men and precluded local talent from coming into prominence. The evil of shuffling the Professors from chair to chair had grown intense. Any Professor was considered qualified to occupy any chair, and instances have occurred in which one Professor was called on to teach such diverse subjects as Anatomy, Botany, Materia Medica, Hygiene and Surgery in succession. I leave it to the Commission to judge of the efficiency of such teaching. In 1885 this state of things reached an acute stage, when the Native medical profession took up the question of medical reform and brought the evils and defects of the system to the notice of Lord Reay, then Governor of Bombay. His Government issued a Resolution on the question of medical reform. The principle of those reforms was (1) to strengthen the scientific character of the Grant Medical College, (2) to create the Faculty membership of which would constitute the highest reward for the professional ability, (3) to ensure the continuity of teaching as well as to open up possibilities of research, and (4) to make the fullest use of the splendid opportunities which this city offers to the medical students by throwing the Hospital open to the best men of local profession, so that their professional knowledge may benefit the students and they themselves may remain in touch with the advance in the medical science. Under this Resolution two Professorships, of Pathology and Physiology, were made whole-time and the Professors were required to devote themselves to the cultivation of those subjects and were not to be transferred to any other chair. The spirit of this Resolution, however, was departed from as soon as Lord Reay left these shores and I regret to say there has once more been a relapse of the old abuses.

During the Government of his successor the Professor of Pathology was appointed to the chair of Chemistry and Medical Jurisprudence and was likewise entrusted with the duties of Chemical Analyser to Government, and this was done in the face of the fact that there was a highly qualified medical man holding the degrees of B.A., B.Sc., and M.D. of this University as Assistant Chemical Analyser to take up the post and competent in every respect to occupy the chairs of Chemistry and Medical Jurisprudence. Like instances are occurring to the present day. It was in pursuance of Lord Reay's policy that Dr. Meyer's appointment to the chair of Physiology was made, and it may be noted with pleasure that he inaugurated quite a new era in the method of Physiological teaching. It is such Professorships that are wanted, and unless we get for each of the principal subjects men who have made a life-study of their respective subjects medical education will not advance in this Presidency. With all deference to the Professors at the Grant College, I have respectfully to say that the teaching there requires to be made yet more effective and practical. It is the absence of such inspiring teaching that is the cause of lack of talent for original research that is observable among us.

I believe the time has come now to change this pernicious system. I would suggest that the Professors should be selected from the best men available on the ground of efficiency and merit. The Professors and Tutors should be required to have special qualifications for teaching the subjects, as signified by their possession of the highest degrees and diplomas or by actual work and authorship. The Professors should, as far as practicable, be full-time men. They should be assisted by Graduates holding special Degrees in those subjects. All the special branches of medical study which are here at present only in an embryo stage should be developed and encouraged, namely, (1) Bacteriology, (2) Sanitary Science, (3) Dental Surgery, (4) Diseases of nose, ear and throat, (5) Teaching of Infectious Diseases, (6) Medical Electricity, and the like. With



a view to secure the best attention of the Professors to the cultivation of their respective subjects, some restrictions may be imposed as to the extent of consulting practice to be open to them.

*VII.—The method of Teaching.*—The number of class lectures may be diminished and that of clinical lectures increased, in order that there may be more practical instruction available to students. They may be entrusted with a greater share of Hospital work than at present. They should be also given more practical work in connection with Laboratory study, both Physiological and Pathological, as well as external midwifery practice. As to the Professorial and teaching staff, I have already suggested that the work should be distributed in the first instance among tutors with a select batch of students allotted to each. The tutorial work may be taken up at higher stages and improved upon by Lecturers and Professors.

*VIII.—College Buildings.*—I learn that Government are already alive to the increased want of College accommodation and have sanctioned an outlay which will in some measure meet the want. But another equally crying want is the provision for residential quarters, which has not yet sufficiently engaged the attention of the authorities. For medical students residential quarters are an absolute necessity. They are valuable not only for the disciplinary and moral benefits which usually accrue from residence at the College, but are indispensable under the special conditions of study and attendance at the Medical College. Their absence so long has been a source of manifold evil. To provide for the want of it an effort has been made since last year and a Committee has been organised to take steps to accomplish the object. It is to be hoped that Government will come to the rescue of this long neglected undertaking and will help the movement with bountiful hands.

*IX.—The physical effects of the system of Examinations.*—Another point which calls for consideration is the general character of the University system of teaching and its effects on the physical condition of the students. There have been many premature break-down of health which have frequently resulted in early death. This subject aroused considerable public attention in 1894, and the late Mr. Justice Ranade brought the discussion to an issue by collecting opinions and statistics and reading a paper at a public meeting of the Graduates' Association. There has not been any decided agreement as to the causes and the effects, but the fact of early mortality among graduates has been a cause of not a little uneasiness in the public mind. In my view, among other causes, the multiplicity of examinations in all the Faculties put a continual strain upon the students, under which those not blessed with robust constitution break down. The statistics and other information compiled by the late Mr. Justice Ranade and embodied in his lecture are very valuable, and I respectfully invite the attention of the Commission to his paper. I have myself been struck with the want of vitality and staying power among our University men, both during the course as well as in after life. The causes of such feebleness of constitution deserve to be looked into and remedied, if as is contended they lie in the University system. Cramming, continuous hard work, multiplicity of subjects and of examinations, the conditions of living and struggle in life, are some of the causes which have conduced to that result. They are not all incident to University life, but such of them as may be remediable ought to be dealt with by the Commission.

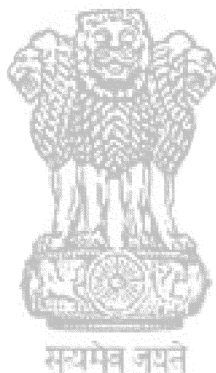
The statistics given by the late Mr. Justice Ranade show that the percentage of deaths is higher in proportion as the number of examinations is larger. Thus the percentage for M.A., LL.B.'s is 33, while that for M.A.'s is 16. The single degrees of L.C.E., L.M. & S. and B.A. show an average of 4 to 7 per cent. To mitigate the evils of the system the late Mr. Justice Ranade proposed two remedies: (1) a division of degree examinations into two classes—honours and passes; (2) examinations by compartments. The distinction between honours and passes has the sanction of the rule in vogue in European Universities. The pass examination should be a simpler test, adapted to the average requirements of the public service as well as the community in general. The honours examination should be a stiffer test, reserved to mark genuine scholarship. The

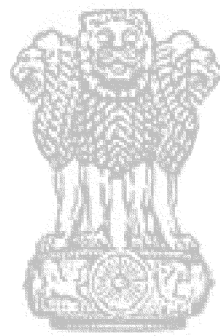
proposal of what has been described as "examinations by compartments" was discussed at several meetings of the Bombay Senate and was formally adopted by that body with an overwhelming majority, but it eventually fell through for want of Government sanction. Examinations by compartments is not a correct description of the proposal. What is intended is that students who pass in some subjects at an examination and fail in others should be exempted from appearing in the first set at a fresh examination. Such a distribution of work may lighten the strain in some cases. Any safeguards of proficiency in the way of high percentage marks in the passed subjects may be insisted on, but the principle as such deserves careful consideration.

*X.—The Registrar.*—I would make the Registrar a full-time officer in view of the Teaching University.

*XI.—The Board of Studies.*—I would have these from the best men, and in each Faculty.

BHALCHANDRA KRISHNA.





सत्यमेव जयते

ELPHINSTONE COLLEGE, BOMBAY.

March 5, 1902.

TO THE SECRETARY, INDIAN UNIVERSITIES' COMMISSION.

SIR,

As desired by the Commission I have endeavoured to form a comparative estimate of the subject of Mental and Moral Science as treated at Bombay, Calcutta and Madras. It is, however, very difficult to form a definite idea of the amount of work and standard expected from students in a speculative subject without actually teaching and examining it; and the difficulty is increased by the great differences in the ways in which the various curricula are formulated. Here we prescribed text-books, whilst at Calcutta and Madras the course is largely or almost wholly laid down in the form of a syllabus of subjects. In dealing with a syllabus teachers learn by experience (of examinations) what should or should not be expected in a way impossible to an outsider. However, I have looked through the courses prescribed and some specimens of papers, and have arrived at the general conclusion that on the whole, in spite of great superficial differences, probably in practice the results obtained are not very dissimilar in the three cases.

Taking the *Calcutta B.A. Honour course*, four papers are set; and so also in Bombay. The Calcutta course includes Psychology and History of Philosophy, which here belong to the M.A. course: but a certain amount of both enter indirectly into our B.A. course; and looking to the amount of reading and average difficulty involved I think our B.A. course is probably about on a par with that of Calcutta.

In the *Calcutta M.A. course* six papers are set, and so also here: and the two courses seem to me very fairly parallel.

In the *Madras B.A. course* six papers are set as against four here, but the first of these (on Deductive Logic) belongs to our Intermediate course. Two more deal with Psychology and the History of Philosophy as at Calcutta; but probably on the whole the amount of work involved is much the same as with us.

Lastly, the *Madras M.A. course* involves ten papers and a dissertation as against five papers and an essay here. But three of these papers seem to be on single books, and perhaps involve no more work than one of our papers: three more are on Psychology, which is dealt with here in one paper; two more are on Ethics, also dealt with in one paper here. These eight papers therefore do not, I think, really cover more ground than three of ours. Then there are two papers on Logic, which is not included in our M.A. course: if these are considered equivalent to our fourth paper, Bombay is left with one paper to the good. As to the dissertation, I do not think an essay written at leisure on a subject chosen by the writer can be considered in itself so difficult as one written in the examination hall on a set subject: but of course I know nothing of the standard exacted in these dissertations. On the whole, therefore, though the number of papers is so much greater, I do not think the amount of work involved is greater than with us here, possibly even not so much.

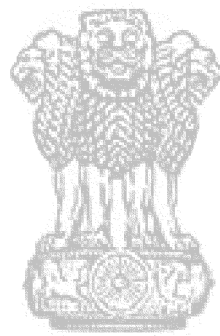
I should like to add that when I stated in my evidence that I thought that making Logic and Moral Philosophy compulsory would prove fatal to many candidates, I was speaking of our present voluntary course, to which I understood the question to refer, and which is too long and too difficult for a general subject.

I have the honour to be,

Sir,

Your most obedient servant,

W. H. SHARP.



सत्यमेव जयते

*Statement presented by Mr. H. M. MASINA, F.R.C.S., of the evidence given by him before the Universities' Commission on Monday, the 3rd and Friday the 7th March 1902.*

*Teaching University.*—It is exceedingly desirable that the University of Bombay should be a teaching body and not simply an examining body as at present. To bring about this change would involve a very serious and most difficult question of finances, which can however be simplified or minimized by taking on the existing colleges and institutions in the Presidency as recognized by the University whether absolutely conducted by Government or aided by Government or managed by private enterprise as the basis or component parts of the suggested teaching University without making any internal changes in them. This suggestion has been made on the same lines as what was proposed by the association for promoting the establishment of a teaching University of London under the presidency of Lord Reay in 1884. If the University was thus converted into a teaching and an examining body it would decidedly have better influence over University education in general throughout the Presidency than what it has now in its capacity as an examining body only. That the existing professors, lecturers and teachers of the various recognized colleges and institutions should be recognized as University professors, lecturers and teachers. And as necessity arises of creating new professorships, lectureships or teacherships, it should be done by this reformed or remodelled University. The above suggestion will also help materially in forming a list of recognized professors, lecturers and teachers, and candidates for degrees should be required to receive instructions from these recognized teachers.

If it is impossible to remodel the University in making it a teaching body in the wholesale way as suggested above, at all events, a beginning could be made in two directions :—

- (1) In establishing lectureships or teacherships for the subjects connected with the Matriculation or School Final Examination, as for instance the teaching of languages like Latin, Greek or German. At present the number of candidates who take up these languages is very limited and on that account there are some public schools which cannot afford to employ the services of a teacher especially for the purpose of teaching very few students. Such institutions can send their students to these University classes and give a certain pecuniary contribution to them.
- (2) As already suggested by some of the gentlemen who have given evidence previous to me, professorships could be created for teaching the subjects of higher or highest examinations, as for instance classes for M.A. students who take up Science or Physics. The colleges whose students attend such classes might similarly contribute towards the expenses of such professorships. The M.A. students, as I gather from the previous evidences, practically teach themselves, and I feel confident that they will readily take advantage of the classes as suggested above.
- (3) The University might create Research professorships and so far as the Medical Faculty goes there is room for the creation of a chair in Pharmacology and Therapeutics, which I am sure will be greatly supported by those who advocate the use of Indian drugs for medicinal purposes.

*Sphere of Influence.*—The sphere of influence of the Bombay University should only extend over the Bombay Presidency, and not beyond it, because in the latter case, it becomes a very heavy order for the University which it cannot efficiently carry out. As regards affiliation\* of institution, there is no necessity of putting down any local limit, and there should be no objection to affiliating\* institutions beyond the Bombay Presidency, so long as these institutions fulfil the necessary requirements for affiliation, that is they are up to the mark when admitted and that they have kept up to the mark after affiliation.

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\*The term affiliation is here used to imply recognition for examination purposes only.

This extensive sphere of affiliation\* if carried out in the proper way tends to increase the prestige of the University, and helps the financial condition by increasing its income if candidates from these distant affiliated Universities go up for our University examinations.

*Constitution of the Senate.*—There is no doubt that the present Senate of the University has become too large or unwieldy and there is great deal of truth that Fellowships have been given merely by way of compliments and that only a small number of Fellows attend the meetings of the Senate. The present unwieldy condition of the Senate cannot be easily remedied either by a clean sweep or gradual transition. At the same time I am of opinion that it is not possible or feasible to limit its number. Neither is it necessary to do so, because it is not the quantity or the number of the Fellows which must be attended to, but it is the quality or qualifications of the Fellow to be selected which must be scrupulously tested or seen to. One way of reducing the number of Fellows will be to disqualify a Fellow for gross misbehaviour, for insolvency, or if he is absent at 30 per cent. of the number of meetings of the Senate held in a year. But this last rule cannot be made universal, because it is not always possible for the Fellows of the University who reside very far away from Bombay, as for instance Kathiawar or Sind, to attend the meetings of the Senate regularly. Similarly Fellows proceeding on a long leave out of Bombay cannot possibly be made to vacate their Fellowships. Under such circumstances the absenting Fellows must satisfy the Senate regarding the cause or causes of their absence from the meetings, or must have previous permission or sanction of the Senate to absent themselves from the meetings of the Senate. Another way of limiting the number of Fellows will be to hold elections biennially or at the latest triennially and not annually. But the number of Fellows to be elected should be as small as possible, say from six to twelve. Out of these twelve, six should be elected by Government, four by the Senate and two by the graduates of ten years' standing. In this election all the different Faculties must be duly represented. Limiting the number or suspending the election for several years, say over three years, has some disadvantage; for instance, men of approved merits and abilities cannot be elected as Fellows with benefit to the University at a time when their services will be most usefully required by the Senate in their deliberations.

Gentlemen qualified to be Fellows of the University must be :—

- (1) Professors, lecturers or teachers in a recognized college or institution.
- (2) Heads of leading high schools.
- (3) Distinguished graduates of the Bombay or any other University.
- (4) Special benefactors of the University, *e.g.*, one who contributes towards the establishment of a professorship or gives a large donation for establishing a University laboratory or a similar department. This will further help in alleviating or minimizing the financial difficulty of making the University a teaching body.

*The Syndicate.*—The existing arrangement is good enough, but it would be decidedly to the interest of the University to make the following additions :—

A. In case the head or principal of the following recognized colleges should at any time be not a member of the Syndicate, he must be appointed *ex-officio* Syndic :—

1. Elphinstone College, Bombay.
2. Deccan College, Poona.
3. Wilson College, Bombay.
4. St. Xavier's College, Bombay.
5. Fergusson College, Poona.
6. Dayaram Jethmal Sind College.
7. Grant Medical College.
8. College of Science, Poona.

B. The Director of Public Instruction, if he is not on the Syndicate,

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\* See marginal note, page 1.

C. The Principal, Elphinstone High School.

D. A representative of the public high schools.

In electing Syndics for the various Faculties, one of the two Syndics must be from the staff of the recognized colleges mentioned above.

*Vice-Chancellor.*—If we can succeed in fully remodelling the Senate of the University to our entire satisfaction, I would say that the time was there, when the Vice-Chancellor should be elected by the Senate and not by the Chancellor.

*Faculties and Boards of Studies.*—There is no necessity of the suggestion that the Faculties should be strengthened by abrogating the rule that every Fellow must be assigned to a Faculty.

It would be decidedly an advantage to appoint *Boards of Studies* for each Faculty. The duties of these Boards should be mainly advisory and the Syndicate must consult them on text-books and other matters within their respective department.

*University Teaching.*—It has been stated that many students begin their University course without sufficient knowledge of English to profit by lectures they attend. There is great deal of truth in this statement and I am fully convinced that this is the result of the present faulty arrangement of the curriculum and conduct of the Matriculation examination.

In former years, that is up to 1888, there was always a *viva voce* or oral examination in English, and though the test was applied in a very haphazard way candidates came better prepared in English, because the subject was taught in those days from a double point of view:—

(1st) to pass the written examination test;

(2nd) to pass the oral examination test,

and hence English was decidedly more thoroughly taught than it is done now. Then again up to a certain period Paraphrase was made compulsory and candidates came similarly better prepared for it. It will be seen that this is quite clear from the fact that very few candidates now-a-days try the passage for Paraphrase and the large majority go in for the easier portion of the paper, *viz.*, translation of a passage from the vernacular language into English. From the above, it will therefore be seen that the real cause of the poor knowledge of English of the present students joining colleges is the absence of this wholesome test. The test is really a good one, but because it cannot be applied properly, there is no reason why it should have been condemned as a bad test and abolished. It is much more sensible that the same test should be revived and conducted in a better way, by giving more time to the examiners or by appointing a larger number of examiners in English. If this is not possible, the standard of the Matriculation English should be distinctly raised and brought up to the London Matriculation standard, and now that the Matriculation is held to be the Entrance Examination into colleges for higher studies, it is high time that our present Matriculation curriculum be thoroughly overhauled or re-formed and brought up to the requirements of the London Matriculation or similar examinations of other well-known Universities as suggested above. If these changes are brought about, there will never be any cause of the said complaint of the deficient knowledge of English of students joining colleges. In support of the oral examination test being a good test I beg to bring to the notice of the Commission what holds good in admitting matriculated students into the Grant Medical College. I have intentionally mentioned above that there is good deal of truth and not every truth in the above complaint because I have found while teaching the students of Grant Medical College of all years that this difficulty of profiting by the lectures they attend gradually disappears in the majority of students as they advance in their studies; and the fault does not lie altogether at the door of the students. In some cases the professors, lecturers or teachers are at fault too, either from natural defects in delivery or from want of sufficient tact in putting facts before the students. And the truth in the latter statement or explanation will be admitted by those who have long experience in teaching, from the fact that every good student is not necessarily an equally good or successful teacher.



Further proof that this defective knowledge of English is due to the absence of the oral test is quite clear from the fact that the complaint has arisen ever since the abolition of the test.

The students who usually find difficulty in following the lectures in the beginning of their career are generally from the Mofussil where they are very little or not at all used to European pronunciations and delivery. This statement of mine, no doubt, supports the view held by some that English should be taught in the high schools and especially in the Matriculation class by Englishmen, but it cannot be admitted as an absolute truth, for we have heads of schools whose knowledge of English, whose delivery and pronunciation of the language are in no way inferior to those of Englishmen, and so I am of opinion that it is rather a sweeping assertion adduced by some whose knowledge of the internal management and teaching of the existing public schools must be very limited indeed.

*Latin.*—I am of opinion that it is not absolutely necessary from my own experience and from the limited number of those who have graduated in Medicine and taken Latin as their second language to make Latin compulsory. But as it holds good in all European Universities, and as it has served useful purposes in some ways, and as we want to remodel our University, I would not oppose to have Latin made compulsory for our Matriculation. If Latin is to be made compulsory, at least five years' previous notice must be given so as to enable the heads of schools to make the necessary arrangements for its teaching.

The only portion of knowledge of Latin which stood me in good stead was the knowledge of Roots and *Ætymology* of English words derived from Latin.

Here I might mention that whereas in former years one of the questions at the written examination in Matriculation was generally set to test the knowledge of roots and derivations of English words, such is not the case at present.

Were it not for the fact, as will be seen later, that I want our medical curriculum to be re-modelled according to the London University requirements, I would not support the making of Latin a compulsory second language, but would prefer to see German to occupy its place and Latin to be included along with French in the group of voluntary languages; and I was thoroughly convinced of the greater utility of a knowledge of German and French for medical studies than that of Latin during my last visit to Europe.

*Examinations.*—I shall confine my observation or evidence to the working of the only Medical College in the Presidency, *viz.*, the Grant Medical College and the examinations in Medicine.

There are at present two degrees in Medicine, the degree of "L.M. and S." and the "M.D." degree. From the very beginning I must lay before the Commission my most emphatic protest that the designation L.M. and S. for our first medical degree is altogether a misnomer. It is also a most illogical and confusing nomenclature. It is also not dignifying to the prestige of a University to give a degree which is not only looked upon as a license but also called so. I don't know of any University outside India which confers a degree in Medicine and calls it a License; the only exception that I find is the University of Dublin which, in addition to granting degrees, confers *diplomas* in Medicine, Surgery and Midwifery, and to this latter they don't give the confusing and illogical name of the degree of "L.M. and S."

It is only acknowledged as a degree within the four walls of this University, and even here all the members of the Senate do not look upon it as a degree but hold it to be a license, and though they have not had the courage to say so at public meetings, they have invariably looked upon it as such. Even Government, Municipality and other public bodies also think very low of it on account of its present designation. Another proof, and a most conclusive one, is that the Royal College of Physicians of London and the Royal College of Surgeons of England refuse to recognize it as a degree but look upon it only as a license, and hence candidates from this University when they want to go up for the examinations of these bodies do not get the same concession as is allowed to candidates who possess a University degree, though the test for such foreign degrees may be the same as that of L. M. and S.

Further evidence that the L.M. and S. is looked down upon could be adduced by what holds good in the appointment of medical men in connection with Plague departments; here gentlemen holding British University degrees and diplomas are given preference to those of our University, and very recently Government have issued a resolution sanctioning the admission of 26 medical men who were imported here on temporary plague service from Great Britain into the Indian Medical Service without any competitive test examination, and no such encouragement or reward has ever been offered to our own medical graduates, who have done equally efficient work judging from the favourable reports made about them. All these 26 men, I am prepared to say, do not hold University degrees, but some of them are only Licentiates or members of British Medical Corporations. Even our present Vice-Chancellor in one case did not accept the medical certificate of his own graduate in connection with a High Court law suit, but had the opinion of Government Medical Officer (Surgeon to the Coroner) taken in the matter. Even people holding the triple diploma of the licensing bodies of Edinburgh and Glasgow are given preference to our own men, and this I say from my own personal experience of the matter and from a letter from the Secretary to the Director General of Indian Medical Service, No. 365, and dated 15th January 1901, wherein he has offered a salary of Rs500 to a gentleman holding the triple diploma of Edinburgh, who had not been successful in passing the L.M. and S. Examination here.

Other similar instances of such injustice could be produced if required.

From the above it will be seen that in the interest of our own men and for the dignity of the University it is necessary to abolish this misnomer and convert it into M.B. When this change is to be effected, I would suggest that our M.B. degree must be placed on the same level as the M.B. degree of the London University, and in doing so it is absolutely necessary to make alterations and additions in our present Matriculation examination which is the standard of preliminary examination in general education required to be passed previous to registration as a medical student and the present medical curriculum.

*The Standard of Preliminary Education.*—Various attempts have been made for altering or revising the standard of preliminary education for admission to the medical studies. The minutes of all these proceedings are lying in the University files, and I would not waste the time of the Commission by going over that ground again. I would only say that the discussions on these occasions were carried to either extreme; one party wanted an unusually and unnecessarily high standard, the other wanted to let things practically remain where they were. If they had practised a wise or discreet middle course, the attempts would not have been futile; however, I for one am not the least sorry for the results because it has left the doors open for us now to bring about the desired changes in a better way.

Our present standard of preliminary education is Matriculation examination, the defects of which so far as English goes have been pointed out already, but so far as the requirements of the General Medical Council of the United Kingdom go it is a sufficient test. Even the Edinburgh University and the Royal Colleges of Physicians and Surgeons of the United Kingdom recognize our Matriculation test.

I for my part would not rest with this test, but suggest that our preliminary education test should be on the same lines or standard as the London Matriculation, which is decidedly a superior test of general education.

The only differences between it and our University Matriculation are that Latin is compulsory in London Matriculation and an optional language or elementary Science is required and in the conduct of the examination. If the Senate can see their way to bringing about this change in our Matriculation examination, there is no necessity of demanding a higher standard of admission to medical studies than this revised Matriculation standard. I am sure this suggestion of changing our present Matriculation and bringing it up to the level or lines of the London Matriculation would be acceptable to the heads of other colleges because their complaint about the poor knowledge of English of the present matriculated students is founded on the same grounds. It has been suggested by some that the standard of preliminary education must be the

previous examination. But this means the addition of *at least one year* more to the already long medical curriculum, which is of five years.

Besides, I would prefer that, instead of spending one year for the previous examination with its present curriculum, the medical student should spend a year in post-graduate study.

*Medical Curriculum.*—Along with the changes suggested for the standard of general or preliminary education, it is necessary to alter the present medical curriculum and bring it up to the requirements of the M.B. standard of the London University and to institute similar examinations. At present we have four examinations for the degree of L. M. & S. The first examination is known as the examination in Elementary Mechanics of Solids and Fluids for which a candidate appears within his first academic year. The next examination is known as the "First Examination in Medicine," the subjects for which are Chemistry and Practical Chemistry, Botany and Materia Medica, and Pharmacy. The next examination is known as the "Second Examination in Medicine," and the subjects of examination are Anatomy (descriptive and practical), Physiology, and Histology. The Final or the last examination is known as the examination for the degree of L. M. & S. The subjects of this examination are :—

- (1) Principles and practice of Medicine including Pathology and Therapeutics.
- (2) Principles and practice of Surgery including Surgical Anatomy and Ophthalmic Surgery.
- (3) Midwifery, and Diseases of women and children.
- (4) Medical jurisprudence including practical Toxicology and Hygiene.

The present arrangements for the Second and the Final Examination for the degree of L. M. & S. are satisfactory, except that a candidate submitting himself for the Final Examination here is not required to produce a certificate of two months' attendance each on lunacy and infectious diseases and a certificate of having acquired proficiency in Vaccination. The arrangements for the examination in the Elementary Mechanics of Solids and Fluids and the First examination in Medicine require to be altogether changed. It is most surprising and even absurd to expect a candidate who has just commenced to attend lectures in Anatomy and Physiology, or at all events has a very poor knowledge of these subjects, to give the physiological action and therapeutical uses of various drugs, and it is just as much impossible for him to understand Organic Chemistry. Under the circumstances, I would suggest that the arrangements of these two examinations should be altered, and in their place an examination on the lines of the Preliminary Scientific Examination of the London University be instituted, and in that case the subjects of Materia Medica and Pharmaceutical and Organic Chemistry must be included in the group of subjects for the Second Examination in Medicine.

*M.D. Examination.*—At present the standard of preliminary education required for the M.D. degree is B.A. or B.Sc., and if the changes suggested for the Matriculation Examination are not carried out, it must remain the same; otherwise the revised matriculation standard will be good enough even for the M.D. It is quite desirable that, as we suggest to institute M.B. degree on the lines of the London University degrees, we might as well institute the degrees of B.S. and M.S. for those who want special qualifications in Surgery. One more degree that I would recommend is the degree in Sanitary Science. There could be no two words as to the importance of instituting a special degree in public health. It is rather surprising to see that, though the Grant Medical College has been founded over 50 years ago, this sad requirement of the Presidency has not been given the same attention it deserves.

If there is enough of material for teaching at the Grant Medical College up to the requirements of a Sanitary Science degree, I cannot understand why a special degree has not yet been instituted, and it is high time that the matter should be attended to without further delay by the authorities concerned.

*Examiners.*—The present system of appointment of examiners, so far as the medical faculty goes, has, on the whole, given satisfaction. The only point that I would suggest is that at least one of the two examiners in a subject must have

been an examiner in the same subject on a previous occasion. A renovation which I would like to suggest is that the Dean and the Syndics of the Medical Faculty be allowed to be visitors during the conduct of the examinations. This indirect system of supervision will be a better one than the appointment of Moderators. I for one am opposed to the appointment of Moderators, and I presume the system has come into existence since the appointment of young and inexperienced examiners. If a careful selection of examiners is made, there is not the least necessity of Moderators. I would go a step further and say that it is a slur on a good and experienced examiner to have a Moderator to criticize his work. The system of inviting applications for examinerships is a good one if it is utilized for the purpose of knowing different men who work in different subjects; but the examiners must not be selected wholly and solely from the applicants. If there are good men who have not applied, they must not be debarred from the appointments. I know of men who are experienced examiners, but have not applied to be examiners, but would have accepted the examinerships if offered to them. In order to induce good men to be examiners, better remuneration should be offered than at present. Whenever practicable, professors or teachers of the subject of examination must not examine in their own subjects or their own pupils or students, because by doing so an independent opinion cannot be formed of the teaching of that subject.

*Standard of Marks.*—The percentage of marks required to pass the First and Second examinations in medicine requires alteration. At present a candidate is required to get 33 per cent. of marks to pass in a subject and 45 per cent. of the total number of marks to pass the whole examination. This means a double standard, and leads to a certain amount of confusion. A candidate getting 33 per cent. in all the subjects is thought to possess a sufficient knowledge of the subjects, but when the question of total comes in, if he fails to get 45 per cent. of the total number of marks, the opinion of the examiners is changed, and his knowledge is therefore declared to be insufficient to pass the examination.

To avoid this confusion and anomaly, I would suggest that for the First Examination in Medicine a candidate must secure 35 per cent. of marks in each subject to pass the examination, and for the Second Examination in Medicine he must secure 40 per cent. of marks in each subject to pass the examination. This means that the standard of total of 45 per cent. must be abolished. Taking into consideration the great importance of practical work for the Final or Professional studies, the number of marks for the written and practical examinations ought to be the same.

*Allotment of Grace Marks.*—Some years ago, the University allowed grace marks to be given to deserving candidates at a meeting of the examiners before declaring the results. But this rule has recently been abolished possibly from its abuse, and on that account some deserving candidates have been plucked for the want of this system of giving grace marks. For instance, a candidate getting first class marks in medicine, surgery, and midwifery is plucked in the examination or fails to pass in the first class for not having secured the necessary amount of marks in Medical Jurisprudence—a subject of no great importance so far as his future career as a general practitioner goes. With this object, I think, it will be fair to deserving candidates if the system of grace marks was reintroduced and properly exercised.

*Affiliated Colleges—Teaching Staff.*—Sir Bhalechandra Krishna in his evidence has done ample justice as regards the selection of the staff of the Grant Medical College in the Presidency, and hence I shall not take up the time of the Commission by going over the whole of the same ground again. But in order to emphasize all that he has said, I must repeat that the method of selecting the staff requires to be thoroughly overhauled, and the pernicious system of selection wholly and solely from the Indian Medical Service must be materially corrected. While mentioning about the selection from the Indian Medical Service, it must be stated without the slightest hesitation that the Medical Profession of this Presidency is under lifelong gratitude for its existence and its present efficiency to the first Principal of the College, the late Dr. Charles Morehead, and his successors. It is to be most devoutly wished that the most liberal and praiseworthy principles and policy adopted by the first Principal of the College should be most religiously adhered to so as to fully realize the aims and

objects of the first pioneers of Medical Education in this Presidency, the foremost among whom was Sir Robert Grant, whose name the College bears. I must also here bring to the notice of the Commission the most laudable, judicious, far-sighted, philanthropic, and exemplary policy of Lord Reay in connection with Medical Education and reform during his tenure of office as Governor of Bombay. I am sorry to say that some of the reforms which he has installed have practically come in abeyance, and his efforts have not practically borne the same fruit which was anticipated.

It was during the Government of Lord Reay that the system of full-time professors was instituted, and he made a beginning by appointing two full-time professors, one for Physiology and the other for Pathology, and there is no doubt that good and satisfactory results have been achieved as regards the teaching of Physiology at the Grant Medical College, but it will be still more satisfactory if some original or research work in Physiology could be done if time and facilities permit it. But the full-time Professorship of Pathology practically does not fulfil the original object of Lord Reay just as much as the full-time Professorship of Physiology. For when I had the honour of meeting Lord Reay in London in 1898, he was quite disappointed to know this state of affairs. This result has nothing to do with the incumbent of the present chair of Pathology, but is the outcome of the pernicious system of changing professors at the will of the Surgeon-General and the exigencies of the Indian Medical Service. While on the subject of full-time professorship, I beg to suggest that, in addition to Physiology and Pathology, there must be a full-time professor for the very important subject of Pharmacology and Therapeutics. At present these subjects are supposed to be taught to the second year students of the College by the Professor of Materia Medica, who is also Resident Medical Officer of the St. George's Hospital, and within the last five years three different men have occupied the said chair in succession. Whatever cannot be taught by the Professor of Materia Medica is supplemented by the Professor of Medicine in his capacity and duties as First Physician of the Jamsetjee Jijibhoy Hospital and Professor of Medicine and Therapeutics. Thus there is no organized system of teaching Pharmacology and Therapeutics, subjects of vital importance in the practice of Medicine.

From this the Commission will be able to form its own opinion as to the efficiency of teaching of the said subjects.

This leads me at once to leave the subject of the teaching staff and come to the constitution of the governing body and rules of the institution. At present the College is under a sort of triple government: (1) the Director of Public Instruction; (2) the Surgeon-General with the Government of Bombay; (3) the Principal of the College. Sir Balchandra Krishna has already alluded to and deprecated this system, and I support his statement by what I have personally observed during my connection with the Grant Medical College and Jamsetjee Jijibhoy Hospital since 1882 both as a student and a teacher.

I am of opinion that the Principal of the Grant Medical College is the proper person to advise Government as regards the teaching and internal management of the institution, and the Director of Public Instruction, as the head of the Educational Department in the Presidency, must have the necessary control over the actions of the Principal, and not the Surgeon-General, who, on account of the requirements and exigencies of the Indian Medical Service, has to interfere with the arrangement of the staff of the College and Hospital. My experience, further, is that ever since 1882 those who have occupied the post of Surgeon-General with the Government of Bombay have never been Principals of the Grant Medical College, nor have they held appointments in the Grant Medical College other than Principalship for a sufficiently long time to qualify them to be the Medical Adviser to Government with reference to Medical Education at the Grant Medical College and the Jamsetjee Jijibhoy Hospital. Further, I have observed that, instead of these institutions benefiting at the advice of the Surgeon-General, they have, on the contrary, directly suffered. In support of this statement, I would allude to the frequent changes which take place in the College and the Hospital staff to the detriment of efficient teaching, the diminution in the number of unclaimed bodies for the purposes of *post-mortem* examinations and dissections by the abolition of the so-called "chronic

wards" of the Jamsetjee Jijibhoy Hospital, and during the last three years the adverse attitude toward the creation of new Professorships and Assistant Professorships at the Grant Medical College from its alumni as recommended by the last Principal, Colonel Hatch.

That the Director of Public Instruction, to quote almost his own words, said the other day that his duties were, so far as the Grant Medical College was concerned, more of the nature of a postal service between the Principal of the Grant Medical College, the Surgeon-General, and Government.

A portion of the teaching staff which requires to be enlarged and better paid is the tutorial staff of the College. Having been a tutor myself for some years and having seen the work done by other tutors, it must be said to the credit of the tutorial staff that their work is admirable, taking into consideration the poor remuneration they get. As a matter of encouragement, their proper designation should be "Demonstrators" or "Assistant Professors." Further, it is this portion of the teaching staff which ought to be trained up to take up the duties of the Professors under emergencies, and not younger members of the Indian Medical Service as suggested by the present Principal of the Grant Medical College in his evidence the other day.

*Teaching of different subjects.*—This is a subject which requires to be treated in minute details, but I think it will be waste of the valuable time of the Commission to do so, and hence I shall bring to the notice of the Commission some salient features only.

With the exception of importing the most elementary knowledge of Zoology, there is no more of Zoology taught in the College. I don't know what use was made of the two hundred rupees per month which was a scale of the pay of the incumbent of the post when it was in existence. The importance of Zoology in connection with Biology is self-evident. The Bombay University requires Comparative Anatomy for the M.D. Examination, but there is no provision whatsoever made for the candidate to learn this subject at the Grant Medical College; nor is there anything like a museum for the students to learn Zoology or Comparative Anatomy themselves.

The teaching of Physics requires to be attended to, as it is evident from the fact that practically all the students who go up for the examination of Elementary Mechanics of Solid, and Fluids have to take private tuition from teachers not connected with the College. From this it will be seen that the teaching in Physics and Biology is more theoretical than practical.

So far as teaching of *Pharmacy* goes, all that the students learn and the examiners exact from them is the making of a mixture or a pill or a powder. I have already alluded to the teaching of Pharmacology and Therapeutics.

At present there are no practical classes in *Physiology*, where the students themselves can do the practical work just on the same lines as it is done in Practical Chemistry.

*Medicine and Surgery.*—There must be distinct and regular lectures in Clinical Medicine and Surgery as laid down in the University curriculum, quite independently of the clinical work done in the mornings. The morning clinical work is done for the benefit of a limited number of the class, whereas clinical lectures are intended for the benefit of the whole class.

*Midwifery and Gynæcology.*—Since the resources of natural labour cases and even labour cases requiring operative interference have diminished within the past few years on account of special hospitals for women having come into existence under the management of lady doctors, and since the suggested reform in the medical curriculum will require a candidate to produce a certificate of having conducted twenty labour cases or at all events more than the present required number, I would suggest that the new midwifery institutions, if practicable, should be utilized for clinical instructions for female medical students. Besides this, provision must be made for the so-called *external midwifery practice*, which has worked most satisfactorily in British hospitals and more especially so at the Rotunda Hospital, Dublin. No doubt, the difficulties of carrying out this suggestion here are just as great as the facilities in carrying out the same in Great Britain, but the scheme fully deserves a patient trial.

*Hygiene and Sanitary Science.*—In addition to what is being taught now, the students should be taken on excursions and given a practical idea of the hygienic and sanitary arrangements and conditions of Bombay.

*Bacteriology.*—It is high time that some adequate provision and arrangement should be made for teaching Bacteriology, and, if facilities and finances would allow, special chairs be created for special subjects like Dentistry, Diseases of the Skin and *Medical Electricity*. There is no provision whatsoever for the clinical teaching of *Infectious Diseases*, Lunacy and Mental Diseases, and Vaccination. This has resulted in the removal of Infectious Diseases' Wards from the Jamsetjee Jijibhoy Hospital, though it is quite correct to have removed these wards from the immediate vicinity of the General Hospital; there is no reason why, with all necessary precautions, some clinical lectures should not be given at the existing hospital for infectious diseases.

Whatever teachings the students now receive of Infectious Diseases consist only of class room lectures.

*Pathological Laboratory.*—There is at present no regular arrangement for the students to do any practical work themselves in Pathology, *e.g.*, examination of blood or of morbid tissues.

*Museum.*—The Museum requires to be put on better footing for teaching purposes, because its present condition is far from satisfactory.

One department where the students can get opportunity for practical work is the *Casualty Department of the Jamsetjee Jijibhoy Hospital*.—The students must be put to do the same duties which are at present entrusted to or conducted by the Military Medical pupils, *e.g.*, attending to accident cases, poison cases and even their presence at the admission of in-patients.

*Post-Graduate Education.*—Another direction in which improvement could be effected in producing better medical men or practitioners and to offer facilities to graduates intending to go up for the M.D. degree is to introduce the system of post-graduate courses which will not entail much additional expense because of the special fees which may be charged from graduates taking advantage of such courses. The *Jamsetjee Jijibhoy Hospital* can also afford similar opportunities if the present subordinate staff be gradually substituted by taking on graduates of the University who have had brilliant hospital career as House Surgeons, House Physicians, and Resident Medical Officers. This will be not only to the interest of the graduate and the public, but will relieve the Military Department of the services of some of their subordinates; I allude here to the work done at present by the House Surgeon and Assistant Surgeons derived from the Subordinate Medical Department.

Another suggestion I would make here towards remedying a complaint which is sometimes made of classes getting at present large and unwieldy. It has been admitted that it is impossible for one professor to manage such large classes. The remedy that I suggest is the creation of additional or joint professorships which can be filled up by electing distinguished graduates of our University to such posts, and, if there is overcrowding in teaching at the Jamsetjee Jijibhoy Hospital, there is no reason why the resources of the Gokuldas Hospital should not be utilized.

*Residential quarters for students.*—This point has also been alluded to by Sir Bhalchandra in his evidence, and, since the matter is under the active consideration of College authorities and co-operation of some of the members of the local medical profession, I need not take up the time of the Commission by dilating upon the matter, except to mention that, if it is not possible to build quarters for all the students within the compound or grounds of the Hospital and College, at all events provision must be made for the residence of senior students.



Mr. J. N. UNWALLA, M.A., Principal,  
Samaldas College.

No. 18 of 1902.

Samaldas College,  
Bhavnagar, 24th February 1902.

To

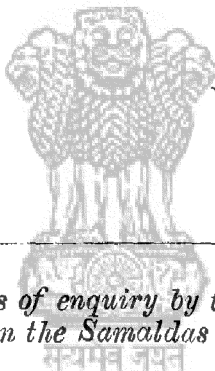
THE HON'BLE MR. JUSTICE N. G. CHANDAVARKAR,  
Local Commissioner, Bombay,  
Indian Universities' Commission.

SIR,

I have the honour to submit herewith suggestions on the points to be considered by the University Commission as laid down by the President.

One of my colleagues, Professor Sanjana, will represent our College before the Commission in Bombay, and will be able to give any further information connected with these suggestions, which have been adopted unanimously at meetings of the staff of this College.

I have the honour to be,  
Sir,  
Your most obedient Servant,  
J. N. UNWALLA,  
Principal, Samaldas College.



*Information bearing on points of enquiry by the Commission and suggestions thereon from the Samaldas College staff.*

[The numbers of the following paragraphs correspond to those of the printed Note of Points.]

3. It is expedient to enlarge the provisions of the Act of Incorporation of the Bombay University so as to make it clear that the University may be held competent to teach as well as to examine.

The possibility of providing for the appointment of University Professors and Lecturers depends mainly upon the funds at the disposal of the University.

It is possible to form a list of recognized teachers, though it is not clear what useful purpose such a list would serve at present.

It is thought that keeping terms at some recognized Institution is necessary for candidates for Degrees.

4. It is desirable that each University should have a sphere of influence of its own.

5. It is expedient to limit the number of Fellows by prescribing a maximum. It is desirable as well as expedient to prescribe qualifications of persons to be appointed Fellows.

It is desirable to provide that Fellowships shall be vacated by non-attendance at meetings for one whole year.

With the above provisions there is no necessity for making Fellowships terminable.

6. It is not necessary to place the Syndicate on a statutory basis.



It is thought desirable to revert to the old number (10) of Syndics, the Deans being of this number; provided that Boards of Studies be appointed as consultative bodies to help them.

It is evident that Government have been adequately represented on the Syndicate for many years past, but the mofussil Colleges have had hardly any representation—a state of things requiring to be altered.

7. It is necessary to have Boards of Studies in the several subjects of each Faculty; these should be elected by each Faculty from among its own members as well as from distinguished specialists who are not members of the Senate.

8. It is desirable that a Register of Graduates should be formed and kept up to date with a view to the election of Fellows.

It is desirable to follow the Cambridge and Oxford usage in conferring Honorary Degrees on distinguished Professors or officials of the University coming from outside.

9. As a rule, we have preliminary tests before sending up candidates to the University Examinations.

10. If the University is recognized as a teaching body, a commencement might be made by providing for teaching in the subjects of the M.A. Degree.

It is thought inexpedient to make any provision for a school of Theology at present.

11. It is thought advisable to keep the B.A. course of the same length as at present, but the number of Examinations for the Degree should be two instead of three; that the number of necessary subjects at the Degree Examination be reduced and the number and scope of voluntary papers be in proportion increased; and that voluntary subjects might be introduced even at the Intermediate Examination.

It is thought advisable that the power of moderating be given to members of the Boards of Studies. With a view to secure an independent test, an interchange of Examiners should be made, where possible, between different Universities, or qualified persons who are not connected with affiliated Colleges be appointed Examiners. But in case Professors of Colleges concerned are appointed as Examiners, measures should be taken to make the test as impartial as possible.

The subjects of the Intermediate and B.A. Examinations should be arranged in groups; a minimum number of marks should be required for passing in each group, and not in each paper of that group. Also if second class marks are secured in any group, the candidate should be exempted from re-appearing in it at his next trial.

12. It is not thought necessary to have a whole-time Registrar for the Bombay University at present.

13. It is desirable that the affiliation rules should afford a guarantee that Colleges have efficient staffs.

*Information wanted in paragraph 13.*

(c) There is a special commodious building constructed at the expense of the Darbar.

(d) At one time there was a Governing Board of high officials; but at present the Divan Sahib, representing the Darbar, is the Controlling Officer.

(e) The fee receipts for the year ending 31st March 1901 are Rs. 4,080, and the total expenditure amounts to Rs. 27,824. The fee per term is Rs. 24 with Re. 1-8-0 extra per student for Gymkhana.

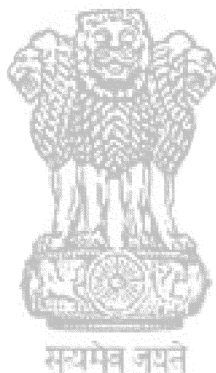
(f) *Endowments*: Fifteen Darbari scholarships of the aggregate value of Rs. 1,272 per annum. Two scholarships and one Gold Medal are awarded by private individuals of the total value of about Rs. 306.

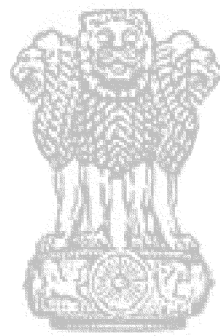
The physical culture of students is specially encouraged by an annual grant of Rs. 100 by the Darbar. Expenses in connection with the inter-collegiate matches for the Lord Northcote Challenge Shield amount to nearly Rs. 200 per annum.

Last year a special grant of Rs. 200 was also awarded by the Darbar for the preparation of two special tennis-courts in addition to a cricket pitch connected with the College Gymkhana.

14. It is thought advisable that schools teaching the Matriculation standard should be in some way under the control of the University. There should also be a Register of recognized private tutors permitted to send up students for Matriculation.

J. N. UNWALLA,  
Principal, Samaldas College.





सत्यमेव जयते

*Return of the Teaching Staff, Samaldas College, Bhavnagar, and the Law Class attached thereto.*

[Information required in paragraph 13 (a).]

Name.	Where educated.	Degree with year.	Special subjects.	Other qualifications.	Year of joining Educational Department.	Subjects taught.
Mr. J. N. Unwalla	Elphinstone College ...	M.A., 1868	English and Latin; Physics at B.A.	Fellow, Elphinstone College, 1866, and Fellow of the Bombay University.*	1867	English and Physics.
" B. A. Enti ...	Elphinstone College ...	B.A., 1877	Political Economy and Persian.	.....	1877	History and Logic.
" K. J. Sanjana	Deccan College ...	M.A., 1879	Mathematics ...	Chancellor's Medalist and Fellow, Deccan College, 1877. Fellow, Bombay University, and Examiner at the Bombay University.	1879	Mathematics.
" J. J. Kaniya...	Elphinstone College ...	B.A., 1887 (1st Class).	Sanskrit and Moral Philosophy.	Sanskrit Fellow, Elphinstone College, 1887-88. Duke of Edinburgh Fellow.	1890	Sanskrit.
" S. M. Isfahani	Madrasah-Sadr in Isfahan (Persia).	.....	Persian and Arabic	University Examiner since 1890	1886	Persian.
" B. B. Bhatt ...	St. Xavier's College ...	B.A., 1893; LL.B., 1898.	Sanskrit and Law	Public Prosecutor, Bhavnagar Law Courts.	1900	Law at the First LL.B.

\* Also Student of Comparative Philology and Languages, ancient and modern.

*Bhavnagar, 24th February 1902.*

**J. N. UNWALLA,**  
Principal, Samaldas College.

*Return of Students at the Samaldas College, Bhavnagar, established January 1885.*

[Information required in paragraph 13 (b).]

NUMBER OF STUDENTS ON THE 31st MARCH 1901.					NUMBER OF STUDENTS WHO WENT UP FOR THE VARIOUS UNIVERSITY EXAMINATIONS LAST HELD AND NUMBER PASSED IN EACH.							Annual average cost of a Student's education for the year ending 31st March 1901.	REMARKS.	
Brahmins.	Other Hindus.	Musalmans.	Parsis.	Total.	Previous.		Intermediate.		B.A.		First LL.B.			
					Number sent up.	Number passed.	Number sent up.	Number passed.	Number sent up.	Number passed.	Number sent up.			Number passed.
31	23	1	3	58	25	13 (2 in the 2nd class)	28	11 (2 in the 2nd class).	10	4 (One in the 2nd class.)	11	6 (One in the 1st class.)	Rs. a. p.  * 479 11 3	* Cost exceptionally high on account of famine and plague.

*Samaldas College, Bhavnagar, 24th February 1902.*

J. N. UNWALLA,  
Principal, Samaldas College.

*Memorandum submitted to the Universities Commission ~~given~~ by  
Mr. P. M. Mehta, M. A.*

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**I. Teaching University:—**

The Bombay University is in a sense a teaching University. The University prescribes the courses of instruction requires from students certain attendance at a College and the various colleges that instruct students in those courses have to be recognised by the University. It is not practicable to make the University any more a teaching body than it is. But you can have, if funds can be made available, University professors for a post-graduate course, the colleges teaching only up to the B. A. and the corresponding degrees in the other faculties.

**II. Senate:—**

The Senate as at present constituted has on the whole worked very satisfactorily and no change is called for. It is vaguely said that the Senate is unwieldy, that it is incompetent, that it is obstructive, that it wants to lower the standard for degrees, that the European element is not sufficient, that it does not act upon proper advice &c., but I have not yet seen any evidence adduced in support of these statements. The tables A to D hereto annexed show that, (1) there is a large majority of qualified University men in the Senate, (2) that the college professors and others actually engaged in the work of education are fairly represented, (3) that Government are fairly represented, and (4) that the European Community is strongly represented. Out of a total of 297 Fellows, 210 are holding University degrees, 46 though not holding degrees are recognised men of learning and only 38 are persons of no special educational qualifications, comprising among them persons who have founded various endowments in connection with the University and people of eminent position. There are 88 who are actually employed in or are connected with the work of education. Table B shows that the 210 University men are of really high academic attainments. There are 110 Europeans, 87 Hindus, 79 Parsis, and 21 Mahomedans and 117 Fellows are at present in Government service and 22 are retired Government servants. The Senate has always respected and acted on the opinion of professors except on two occasions when it may be said it went against such opinion:— (1) When the reforms suggested by the Examination Reform Committee, the principal among them being the enlargement of the Syndicate by making the Deans members thereof, came up for discussion. (2) When the late Mr. Justice Ranade proposed to divide every examination into groups and to allow the candidates to pass in all the groups at the same time or separately. On both these occasions I venture to think that the Senate was in the right and the professors who opposed the proposals were in the wrong. With regard to the first the change has been very beneficial and the professors have themselves come round to the same view. With regard to the

second it is not quite accurate to say that the Senate acted wholly against the advice of the professors. For most of the Indian professors were in favour of the change, and also two European professors, Revd. Scott the present principal of the Wilson College and the late Dr. Peterson of the Elphinstone College had signed the report of the Committee recommending the change. That proposal which was strongly advocated by the late Mr. Justice Ranade whose intimate knowledge of the wants and requirements and difficulties of Indian students was unsurpassed, passed the Senate almost unanimously, only five fellows I believe, voting against it, but Government declined to sanction it on the advice I suppose of some of their educational officers. What took place on that occasion illustrates the fact that European professors however sympathetic and actuated by the best of intentions, are not able fully to appreciate the requirements and difficulties of Indian students. There is no justification for supposing that the advice of European professors and members of the Senate who are absolutely disinterested in the matter of University education in as much as they do not educate their sons at the Indian Universities is disregarded through sheer obstinacy by the Indian Members of the Senate who are vitally concerned in the matter for it is mostly at the Indian Universities that they educate their sons and for whose real benefit such advice is given. Is it not more charitable and more in accordance with facts to say that the Indian Members of the Senate who have themselves been the products of the Indian Universities and have an intimate knowledge of the capabilities, requirements and difficulties of the Indian students are able sometimes to see objections to the acceptance of the advice of their European colleagues which they are unable fully to appreciate? On the merits of dividing examinations into groups I shall speak further later on.

The only change therefore that I would advocate would be to limit the number of Fellows to 200 exclusive of the *ex-officio* fellows, as was proposed in the draft Act of Sir Raymond West, the reduction to be made in the following manner; only two-thirds of the vacancies occurring in every year should be filled till the number is reduced to 200 and after the reduction is effected no more nominations should be made than there are vacancies. One-half of the nominations to be made as above should be made by Government and the other half by election by graduates of not less than five years' standing. An electoral-roll of graduates should be kept by the University and a fee should be charged to persons wishing to have their names put on the roll. The right of election given to the graduates since 1893 has to my mind been very wisely exercised. I would not make fellowships terminable but fellows not attending any meeting of the Senate for a period of two years should by the fact of such absence lose their fellowships. I would not increase the number of *ex-officio* fellows. At present there are ten *ex-officio* fellows but out of them only three take interest in University affairs and they are all on the Syndicate. The rest hardly attend any senate meeting and take no active interest in the University.

### III. Syndicate:—

I think the present number of the Bombay Syndicate (15 including the Vice-Chancellor) is a proper number and should be maintained. Government and the

Colleges are fairly represented in the Syndicate. Out of the 15 present members 8 are Government Officers and the Colleges are properly represented. See Table E. It has so far as I know never occurred, that any educational officer or professor who took an interest in the matter and desired to be in the Syndicate was kept out. I think on the whole the present system of electing the Syndicate has worked very satisfactorily and I would keep it as it is. At present provision is made in the Bye-laws about the constitution of the Syndicate and its powers and that system is elastic and I would not substitute for it a provision in the Act. For instance we in 1899 increased the strength of the Syndicate by adding the Deans thereto and gave the Syndicate power to appoint moderators and we were able to effect the reform by an alteration in the Bye-laws with the approval of Government, without resorting to the cumbrous procedure of moving the Indian legislature to amend the Act, which would have become necessary if the provisions about the Syndicate had been a part of the Act. There need be no apprehension about the Senate light-heartedly meddling with the constitution and powers of the Syndicate for Government have always the power of veto given to them. The present system has done very well and I would deprecate any change in it.

#### **IV. Faculties and Boards of Studies :—**

The Faculties as at present constituted have worked well and I would not disturb them. There are no board of studies and the Syndicate from time to time consult fellows competent to advise them on the matter. Boards of Studies elected by faculties might however be usefully constituted.

#### **V. Examinations :—**

I am afraid too much importance is given to examinations as a test of knowledge and culture. At best an examination is a very insufficient and sometimes deceptive test and it is difficult sometimes to prevent papers being set by which as Mr. Mathew Arnold says "the examiner is led to shew his want of sense and the examinee his store of cram." The Syndicate and the Senate have tried their best by elaborate rules and instructions, and great care in selecting examiners, to make the examinations as faultless as possible, but the mistake lies to my mind from looking at examinations from a wrong point of view. The real aim should be to secure the going through properly laid down courses of instruction for a number of years under the inspiration of the best instructors, and examinations should be subordinated to and used only as a means to secure such training. This can only be secured by insisting upon persons of the highest academic qualifications as professors, the University being given greater powers of supervision to see that the courses of instruction are properly gone through, and by reducing the present number of examinations and modifying the present system of determining the success or failure of candidates at examinations. The frequency of examinations interferes with freedom and variety of teaching, encourages cram, and puts unnecessary strain on students and gives them little time to digest what they learn and think. I think the University should hold only one good final or degree examination or at the most two examinations (one intermediate and one degree examination) in the various faculties leaving any Intermediate examinations that may be considered necessary to the various Colleges. The London University

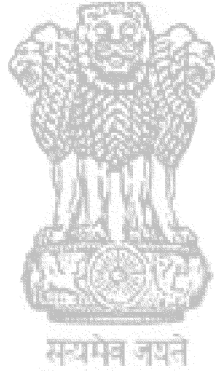


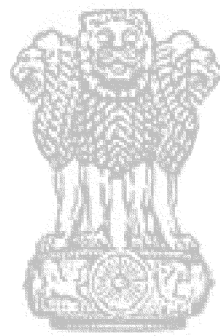
when it required attendance at a College for the Arts degree, had only one examination the Final B.A. It was only when such attendance was abolished that it became necessary to seek other guarantees for continuous study and two examinations instead of one were insisted upon. ~~Calcutta and Madras have only two examinations in Arts.~~ Then, the present system which requires a candidate to pass the whole of the examination at one time should be altered. Each examination should be divided into two or at the most three groups in some cases, and it should be at the option of the student to pass in all groups at the same time or at different times. Such a proposal was adopted by the Senate on the motion of the late Mr. Justice Ranade in 1898 but Government withheld their consent to the same. I think that proposal to be a very good one and one which considerably discourages cram. The present system under which a candidate failing in one subject but passing, sometimes creditably, in all the other subjects at the examination, is compelled to waste a year and again submit himself to examination in all the subjects is undesirable and unmeaning. At Cambridge the Previous, the General Examination and the Final B.A. are each divided in two parts and candidates for the pass degree are at liberty to pass the two parts at different times. In Madras the B.A. is similarly divided into three parts.

#### VI. Affiliation rules :—

The recognition or affiliation of Colleges should be left entirely to the University. No authorisation on the part of Government as contemplated in Section 12 of the Act should be required. In fact in Bombay that provision had remained a dead letter ever since the establishment of the University till the year 1896, and none of the institutions that sent up candidates for degrees were ever authorised by Government. It is not pretended that any thing went wrong owing to the want of authorisation. It is instructive to see how when in 1899 Government began exercising the power of authorisation, they used such power. The Government Law School at Bombay the only Institution recognised by the University for the purposes of the LL.B. degree was for many years in a very satisfactory condition. Government themselves had acknowledged this and had from time to time promised various reforms but nothing was done although latterly they were actually making a profit out of the institution. Under these circumstances, certain gentlemen organised a scheme with a competent staff of professors to start a private College of law teaching up to the LL.B. degree and the whole control of the proposed institution was placed in the hands of a strong governing board with Mr. Justice Tyabji as President. Mr. Justice Chandavarkar was along with others a member of the board. The Senate on the recommendation of the Senate decided to recognise the College and applied to Government to authorise the same under Section 12. When that application reached Government, they appointed a Committee to enquire into the condition of their Law School and suggest improvements therein. The Committee in their report made proposals involving considerable expenditure, and as Government were not prepared to spend any moneys out of their revenues on the school the only way of effecting the much needed reform was to increase the fees and secure all the students to the government school in order to enable Government to meet from the fees the increased expenditure. They accordingly after several months' cogitation replied to the application of the University refusing mainly on the above ground, the

authorisation applied for. Thus in spite of the policy laid down by the Government of India on the recommendation of the Education Commission of 1882 that private enterprise in higher education should be systematically encouraged and fostered, the Government of Bombay by the use of their power of authorisation under section 12 prevented the starting of this College in order to enable them to improve their own school without any expenditure, by securing the monopoly of giving legal instruction.



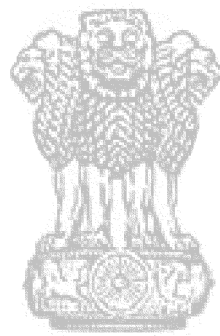


सत्यमेव जयते

**Table A.**

**List of Fellows as appearing in the Calendar for 1901-1902.**

I	2	3	4	5	6
Year of appointment.	Number of Fellows holding University degrees.	Number of Fellows not holding University degrees but learned in some branch of knowledge.	Fellows with no special educational qualifications, comprising donors and people of eminent position.	Total.	Number of Fellows actually engaged in or connected with the work of education.
1864 ... ..	...	2	...	2	...
1865 ... ..	1	...	2	3	...
1866 ... ..	3	2	2	7	...
1867 ... ..	3	1	...	4	...
1868 ... ..	2	...	1	3	1
1870 ... ..	4	...	...	4	...
1871 ... ..	2	1	...	3	1
1872 ... ..	1	1	2	4	...
1873 ... ..	2	...	1	3	...
1874 ... ..	1	...	1	2	...
1875 ... ..	2	...	2	4	...
1876 ... ..	2	...	...	2	...
1877 ... ..	5	1	1	7	4
1878 ... ..	2	...	...	2	1
1879 ... ..	3	1	1	5	3
1880 ... ..	2	...	1	3	2
1881 ... ..	7	...	...	7	3
1882 ... ..	...	1	2	3	1
1883 ... ..	5	1	1	7	1
1884 ... ..	4	...	...	4	2
1885 ... ..	6	...	1	7	3
1886 ... ..	8	1	2	11	2
1887 ... ..	10	1	...	11	1
1888 ... ..	7	3	...	10	3
1889 ... ..	10	2	1	13	...
1890 ... ..	13	2	...	15	7
1891 ... ..	14	2	...	16	5
1892 ... ..	9	2	...	11	2
1893 ... ..	17	1	1	19	8
1894 ... ..	8	2	2	12	2
1895 ... ..	9	5	...	14	3
1896 ... ..	13	5	1	19	11
1897 ... ..	10	2	5	17	8
1898 ... ..	7	3	1	11	5
1899 ... ..	5	...	4	9	...
1900 ... ..	8	2	1	11	3
1901 ... ..	5	2	2	9	5
<i>Ex-officio</i> , not gazetted ...	3	...	...	3	1
Total ...	210	46	38	297	88

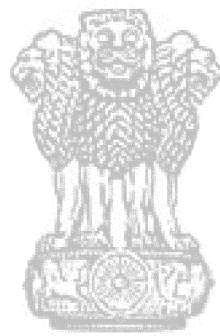


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**Table B.**

**Fellows of the Bombay University holding University degrees.**

Degree or Degrees.	
M.A. ... ..	36
M.A., Ph. D. ... ..	1
M.A., D.D., LL.D. ... ..	1
M.A., D.D. ... ..	1
M.A., B.Sc. ... ..	3
M.A., D.Sc. ... ..	1
M.A., B.Sc., L.M. ... ..	1
M.A., L.C.E. ... ..	1
M.A., LL.B. ... ..	9
Ph. D. ... ..	2
M.D. ... ..	11
M.D., M.A., B.Sc. ... ..	1
M.D., B.A., B.Sc. ... ..	1
M.D., B.Sc. ... ..	3
M.D., M.A. ... ..	1
B.A., LL.D. ... ..	1
B.A., LL.M. ... ..	1
B.A., LL.B. ... ..	29
LL.D. ... ..	1
B.A. ... ..	36
L. M. & S. ... ..	35
L.M., B.A. ... ..	1
M.B., B.A. ... ..	1
M.B. ... ..	3
M.C.E., B.A. ... ..	1
L.C.E. ... ..	5
L.C.E., B.A. ... ..	4
D.Sc., C.E. ... ..	1
Ph. D., D.D., D.C.L. ... ..	1
D.D., D.C.L. ... ..	1



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### Table C.

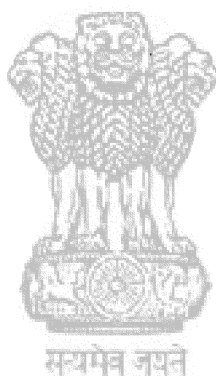
*Classification of the Bombay University fellows according to communities.*

Europeans.	Hindus.	Parsis.	Mahomedans.	Total.
110	87	79	21	297

117 Fellows at present in Government Service.

22 Fellows in Government Service when nominated but since retired.

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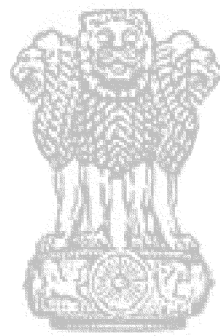


**Table D.**

***Representation of Colleges in the Senate and the Syndicate, 1901-1902.***

College.	Strength of the Staff.	Members of the Senate.	Members of the Syndicate.	Remarks.
Elphinstone... ..	7 Professors, 2 lecturers.	7	1	
Deccan College ...	5 Professors, 2 lecturers.	5	...	The Principal has on several occasions expressed his unwillingness to be elected a Syndic.
Grant Medical College.	10 Professors ...	9	1	Before Dr. Hatch went on leave he was also on the Syndicate, so there were two Syndics from this College.
Science College Poona.	6 Professors ...	3	...	For many years the Principal was on the Syndicate. The present Principal has declined to serve on the Syndicate.
Government Law School.	6 Professors ...	2	...	The Professors are generally Junior Barristers.
Wilson College ...	8 Professors ...	6	...	Dr. Machichan the Principal ceased to be a Syndic only on his going on leave and will be elected again on his return to his duties.
St. Xavier's College.	12	7	1	
Fergusson College...	9	1	...	
Baroda College ...	9	4	...	Two of the Professors were very recently appointed.
Gujrat College ...	6	1	...	
Samaldas College ...	5	2	...	With regard to some of the Mofussil Colleges there is the distance difficulty. Besides the professorial staff of some of them is not of the same quality as the First Class Colleges.
Sind College ...	7	1	...	
Rajaram College ...	5	None	...	Teaches only up to the Intermediate examination.

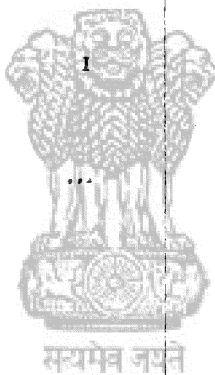
*N.B.*—The Director of Public Instruction is also a member of the Syndicate.

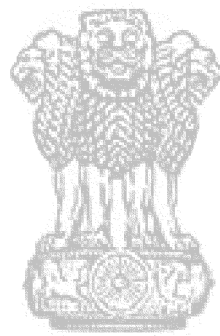


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**Table E.**  
***Syndicate 1901-1902.***

Faculty.	Total number of Syndics.	Syndics actually engaged in educational work.	Syndics not engaged in educational work.	Remarks.
Arts ... ..	5	3	2	Till recently Dr. Machichan represented science and so there were four Syndics engaged in educational work. Mr. Naegamvala who has taken Dr. Machichan's place was for many years a Professor at the Science College.
Law ... ..	3	...	3	In this faculty the Syndics are appropriately drawn from High Court Judges and Barristers of standing, specially as the Professors at the Government Law School are generally Junior Barristers.
Medicine ... ..	3	1	2	Till Dr. Hatch went on leave there were two Professors of the Medical College as Syndics.
Engineering ...	3	...	3	Formerly the Principal of the Science College Poona used to be on the Syndicate. The present Principal has shewed himself unwilling to join the Syndicate. One of the Syndics Mr. Moos was for many years a Professor at the Science College Poona and the other two Syndics are eminent Engineers.





सत्यमेव जयते

**Lieut.-Colonel DIMMOCK, I. M. S.**

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(3). I do not consider it practicable to change the constitution of the Indian Universities so as to make them altogether teaching as well as examining bodies. I confine my remarks to the Bombay University.

The history of the origin of the different Colleges seems to me a difficulty, I may say, an insuperable obstacle, to such a change. In Bombay we have four large Colleges, some of which are public memorials, aided and controlled by Government, others are the educational results of religious societies and under sectarian control. To give power to the University to appoint the Professors and Lecturers of these Colleges would be impolitic, to say the least, while to expect the University as a teaching body to be satisfied with a mere recognition of any Teachers and Fellows that the governing bodies of the Colleges might appoint, would be going no further than the present powers of the University allow. It might be possible to concede that the Lecturers and Professors of subjects at the different Colleges might be termed University Lecturers, but there could be only one University Lecturer, or at the most, two where the course was a divided one.

Such distinction would be an honour and would have to be conferred with great discretion. Suppose, for instance, there were an University Professor of Sanscrit, I do not think it would be possible for the Colleges, say, of Baroda, Gujarát, and others, to participate in the benefits of his lectures if they were to be given at the Bombay University.

The University at present does exercise considerable influence on the staff of Colleges, for unless the Syndicate approve of the constitution, aims, and staff of a College, they can at least refuse to recognise it.

Section XII of the Act of Incorporation provides for all this and should be strictly adhered to.

At the same time I consider that the University ought to be able to exercise a direct educational effect and to have University Lecturers in special subjects who might be localized and travelling, the latter to give lectures in the higher branches of the subjects at the affiliated Colleges of the Mofussil, and attendance on such lectures might be enforced as part of the curriculum.

In this way a certain amount of unity in teaching could be ensured. The affiliation should be encouraged.

(4). The sphere of influence of an University should be limited by geographical expediency as far as possible, though, I suppose, under the provisions of the Act legislative considerations must weigh most. I refer to the Colleges of Sind, in this instance, which would be more conveniently within the influence of the Punjab University as far as geographical situation is concerned. There is, however, a fairly consistent method in the constitution of all the Universities which makes this point of less moment, and the predilections of a province or state and its legislative direction should be paramount. The spheres of influence of the University bodies of India corporate might be forwarded by annual conferences of representatives from different Colleges of India. The Arts Colleges, the Science and Medical Colleges of the different Universities might in this way exchange views and discuss questions of procedure, methods of examination and other important matters, to the greatest benefit of themselves, and higher learning in general, throughout the country.

(5). The constitution of the Senate of the Bombay University requires modification. All the Fellows should be active representatives of their different Faculties, and their present number reduced. The Colleges in Bombay should have a considerable share in the constitution of the Senate, and a number, if not all of them, should be Fellows of the University. In fact it seems to me that the Capital cannot be otherwise than the real centre of the University.

It is probable that other Colleges will arise in time in Bombay itself. I do not think that the Arts Colleges should teach Science, and I think a Natural Science College, where the higher branches of Experimental Physics, Chemistry, Electricity and the cognate sciences may be taught, is eminently needed in Bombay.

The situation of the affiliated Colleges of the Mofussil is a difficulty, but I think it can be overcome by representation at the seat of the University.

They could elect their own representatives from amongst the graduates of a certain standing, eligible for election as Senators, and be members of one or more Faculties.

One of these might be nominated or elected for a term of years to serve on the Governing Committee.

A certain rotation should be followed in such a manner as to give each College, or group of Colleges, a voice in the government of the University in turn.

The Heads of all Mofussil Colleges should be ex-officio Fellows. A certain number of Fellows should be elected by the graduates in each Faculty: the proportion would have to be based on my preceding statements, and so apportioned as not to interfere with the principle of the government of the University being largely carried out by those actively engaged in the education of the candidates for degrees.

On the same basis a certain proportion of non-graduates should be appointed Fellows in consideration of their being benefactors of, or actively interested in, the cause of higher education.

For the proper government of the University I would change the constitution of the present Syndicate and make it a Governing Committee, presided over by the Vice-Chancellor, and composed, ex-officio, of the Heads of Colleges in Bombay, and one elected Fellow from each of the Faculties. The Director of Public Instruction should be also an ex-officio member of this committee. Members of the Syndicate should all be Deans of Faculties.

6. A series of permanent and occasional special Syndicates from amongst the Fellows of Faculties should be formed, as is done in the Cambridge University.

At present a number of questions have to be referred to sub-committees of the Syndicate which entails a great deal of delay in disposing of special questions, and there is much necessary reform and work which remains undone for want of a system capable of grappling with them.

These Syndicates would correspond to the Boards of Studies, etc., and they would be advisory to the Governing Committee.

The Senate would therefore be composed of—

The Lecturers and Teachers at the Colleges in Bombay.

The Heads of Mofussil Colleges.

Representatives of such Colleges.

Elected graduates of a certain standing in each Faculty.

Educational representatives nominated by the Chancellor or by Government.

The Syndicate or Governing Body could consist of—

The Vice-Chancellor.

The Director of Public Instruction.

Three Heads of Colleges.

Four elected Fellows.

One Mofussil College representative

They would be assisted by the Special Syndicates.

Each Special Syndicate or Board might be formed of four Fellows and they need not necessarily belong to one Faculty where the subject was of general University importance. The scheme would oblige the Fellows to take an active and useful part in the work of the University. The Professors would be appointed by the Syndicate or Governing Committee, and Deans of Faculties would have to preside over local University Boards. Some of them might be formed at the Mofussil centres for the disposal of local University business.

(8). A register of graduates should be kept. This is especially required for Medical Graduates.

A Medical registration, apart from the University, is however the greatest need, if it would be brought under regulations similar to those of the General Medical Council in England. Our graduates suffer great hardship in being obliged to compete amongst the native public on equal terms with Vaidis and Hakims, there being no legislation to prevent any one setting up as a Medical Practitioner. There is no doubt that this has a deteriorating effect upon our graduates in their practice, and many of them become empiricists. I think that perhaps in time, when the general public are more educated, steps may be taken to modify this very great evil of unqualified practice.

(9). I think it would be a good plan to enforce test examinations in the Colleges for those about to appear for the different University examinations, and the Colleges might be empowered to prevent candidates appearing if they did not pass the test satisfactorily. A certain amount of interest in the general status and welfare of the students might be taken by the University. For instance, wearing of academical dress, the institution of University clubs of all kinds, of debating, athletic, cricket, rowing and other social clubs, and of inter-College contests.

(10). In the matter of teaching, although the University is an examining one only, it can regulate the prescribed courses of study to a certain extent by the system of examination. So far as medical under-graduates are concerned, I am not satisfied that English is sufficiently well taught for the purposes of the study of medicine. It is particularly necessary that in exact subjects the student should be capable of understanding his teacher's language. This is often not the case with newly entered matriculated students, and we have held a preliminary test in English at the College for several years in order to safeguard this objection.

In the other Faculties the P. E. is required before registration as a student of a College: and the consequence is that the Grant College has had a considerable increase in the number of its students of late years whose education is of a lower standard than that of the other Faculties.

I consider it desirable to raise the standard of educational requirement to the P. E. for entrance into the Grant College.

The question of changing the medical degree from a License to a Bachelorate has always failed on this point. The Professors of the College have endeavoured to obtain a higher general education, and their schemes have always been thrown out by the influence of the Faculty in the Senate, the majority of which have wished to simply convert the present L.M. & S. into a degree.

I think if the P. E. were conceded the problem would be easily solved and the Bombay University could then convert the L.M. & S. into an M.B. degree.

I would not change the requirements of the M.D.

Retrospective effects could perhaps be overcome by some such arrangement as conferring the degree of M.B. on graduates of 20 years standing, by requiring an examination in the subjects of the final for those of 15 years standing, and an examination in Arts and the subjects of the Final for those of 10 years standing and over.

I am in favour of making Latin compulsory at the Matriculation Examination for the medical degree. I know that this is contrary to the recent action



of the Medical Faculty of the London University, who have recommended that Latin should no longer be compulsory. But this opinion is strongly condemned by the majority of the profession at home, so far as I can gather from the correspondence in the medical journals, and Latin is certainly the key to most medical terms.

(11). Variations in standard according to subject cannot be avoided, but some equalization of standard can be effected if all the examinations of a degree are well considered. For instance, for the medical degree. To pass the Matriculation a candidate has to obtain 33 per cent., to pass the 1st and 2nd Examinations in Medicine he has to obtain 45 per cent., and to pass the Final he must obtain 50 per cent., so that there is an ascending difficulty of passing, which throws out a good many students at each examination. This would be equalized by requiring the P. E. for entrance.

The standard for the medical diplomas is a high one, and the result is seen in the clever men who form the past and present graduates of the University, and the fact that a fair number of our students pass the higher examinations in England and a very considerable number after failure at the Bombay University obtain British diplomas.

(13). The Grant College is a Government one entirely, and the teaching staff is appointed by Government. There are eleven chairs—Medicine, Surgery, Midwifery, Physiology, Pathology, Chemistry, Ophthalmic Medicine and Surgery, Materia Medica, Botany, Anatomy. There have been very few changes in the last ten years.

The Professors of the technical subjects are practically full-time men. Certainly quite as much so as in English hospitals.

The Professors of the Professional subjects of Medicine, Surgery, Pathology, Midwifery and Ophthalmic Medicine and Surgery have charge of wards in the J. J. Hospital and the other allied hospitals.

They give clinical instruction in their respective wards in the subject which they teach, and the method of instruction is excellent and even superior to that which students obtain in the English schools, for personal attention is given in clinical methods to each student, such as English students could not hope to get.

I do not know of any medical school in England where such close personal attention is given by the Professors and Lecturers of the subjects taught.

The Professors are highly qualified men. The Physicians are graduates of Universities, and the Surgeons are Fellows of the Royal College of Science, England—identical qualifications that are required for the staff of a London or Provincial hospital of high standing. I think it would be a good plan to attach young members of the Indian Medical Service to the College and hospitals and train them in the different branches as a preparation for future needs of the school.

The Professors are assisted by 11 tutors, who are selected from the most distinguished junior graduates of the University and carry out practical instruction under the direction of the Professors. A certain number of them are also Honorary Surgeons and Physicians of the various hospitals where they continue the work of instruction.

There are additional Honorary Physicians and Surgeons of the hospital, who also assist in the clinical instruction, and a lectureship on diseases of the Ear, Throat and Nose has lately been established and to it one of our Parsi graduates, who holds the F.R.C.S., England, has been appointed. Two or three appointments of a similar kind in other subjects have been under contemplation of various Principals of the Colleges and have been made in instances, but have not been very successful. There are two or three subjects which might be tried in this way. The students are of all kinds of communities and from different parts of the Presidency of India. We have Europeans, Parsis, Mahomedans, Hindus, men and women students. They are as a rule very well behaved and

eager to learn, but the great difficulty is to get them to appreciate the practical part of the teaching. The Grant College and the Petit Laboratory are the two main buildings, and a new set of anatomical rooms is in course of building.

Schemes for further expansion of the school are being considered in other directions also.

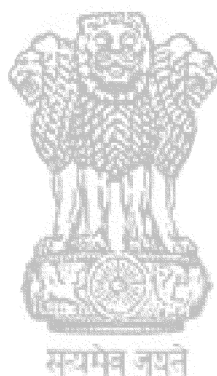
There is a very fair list of scholarships and prizes—memorial and Government endowments in most cases.

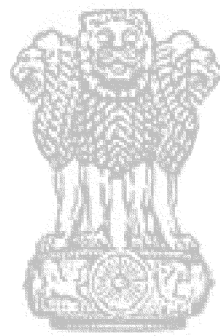
There are a Gymkhana club, a cricket pitch, a gymnastic ground and three tennis courts, clinical and debating clubs, and the different classes of students mix freely in sports.

I am endeavouring to carry out a scheme of residential quarters for students which my distinguished predecessor Colonel Hatch inaugurated. I think the Bombay Colleges should make a more extensive move in this direction.

It would certainly develope the University system very greatly.

H. P. DIMMOCK, Lieut.-Colonel.





सत्यमेव जयते

## Major C. H. A. Meyer, M.D., I. M. S.

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The evidence which I can offer relates chiefly to the Medical Curriculum of the University of Bombay.

### *The Preliminary Examination for the Medical Degree.*

*Matriculation* is the preliminary examination in general knowledge which the University requires the intending medical student to pass before entering the Medical College. For all other degrees in this University *at least* the Previous Examination is *now* required. The consequent result of this state of things is that students who cannot pass the Previous Examination are driven into the medical profession, the only one open to them. This accounts for the falling off in the average standard of our students at the Grant Medical College and their greatly increased numbers during the past few years. I am, I believe, correct in saying that in no other University in India is as low an examination as Matriculation accepted as the preliminary educational test for a Medical degree.

The Bombay Matriculation *on paper* appears excellent. As has frequently been said, its requirements are superior in many respects to those of the preliminary of the General Medical Council and not far inferior to those of the London University Matriculation. A thirteen years' experience of the teaching of the junior students at the Grant Medical College, however, has convinced me (and in this I am supported by those of my colleagues at the Grant Medical College, who also have to teach junior students) that Matriculation does not equip a student with a sufficient knowledge of English and with a sufficient education generally to enable him to take up the study of Science. The student does not properly understand his European Professors, and this is chiefly due to an inadequate knowledge of English; also however not uncommonly to the fact that he has learnt his English with a native accent from a native schoolmaster. In the course of time, *viz.* a year or more, he will certainly learn to understand the English of an Englishman, but this entails a great curtailment of the already too brief period (5 years) laid down for medical study. Few of our students indeed can finish their course in the 5 years. My contention above, therefore, is that Matriculation provides us with men who are not sufficiently educated and who are wanting in knowledge of English.

### *Remedies.*

The remedies I would suggest for this state of affairs are as follows:—

If Matriculation be retained as the preliminary, require the intending medical student (in fact I would include *all* Science students) to obtain a *much higher* percentage for pass in English at the Matriculation than at present; the result would be better, I think, than if P.E. English were taken as it now is with its low standard for pass.

### *Oriental Language, &c.*

A *Classical Oriental language* (or some other subject and among these I should put Greek) should be compulsory.

### *Latin.*

*Latin*, again, I think absolutely necessary for Science students and especially so for the medical student. It is the universal language for scientific nomenclature, and an ignorance of it will certainly add to the difficulties of a medical student in acquiring what he has to learn. Moreover, its study I contend is one of the best ways of learning English thoroughly.

If the above plan were followed out as regards Matriculation, the results would, I believe, be more satisfactory than if we adopted the P.E. of the University, *as it is*, as the preliminary for Medicine. A student who has only just passed the P.E. can be astonishingly ignorant of English and general knowledge. It would be still more satisfactory if the P.E. with the same modifications and additions, as I have suggested in the case of Matriculation, were taken as the preliminary. The Professor of the College of Science, Dr. Thomson, stated before you the other day that the raising of the standard of admission to his College from Matriculation to P.E. had been the greatest blessing they had ever had. Further as regards the Matriculation, I should reintroduce *a viva voce* examination in English.

#### *The age of Matriculation.*

A student should be at least 15 years old before being allowed to appear for Matriculation. Boys and girls of 14 years or less pass the examination now and enter as medical students. The nature of the studies they take up and the experiments they soon meet with in studying medicine are apt, I think, to be injurious and unsettling to the characters of those who are hardly more than children. Moreover, by entering at such an early age, a student may pass his final medical examination and be qualified to practice on the public at too young an age.

#### *The present state of the Medical Regulations of the University.*

Further, I wish to draw attention to the out-of-date character of the present medical regulations of the University. To be in keeping with the best Universities we should have the following scheme of studies and examinations:—

(1) A Preliminary Scientific course ...	...	{	Physics.
			Biology.
			Chemistry.
(2) An Intermediate course ...	...	{	Anatomy.
			Physiology, &c.
(3) A Final Professional course ...	...	{	Medicine.
			Surgery, &c.

#### *Physics.*

Criticising this University in relation to such a scheme we find that the only *Physics* required from the medical student is the passing of an examination in the Elementary Mechanics of fluids and solids. In order to comprehend modern Physiology (the subject I teach), a considerable knowledge of Physics (Electricity, Laws of Light, Sound, &c.,) is required, and this I have always had to teach them myself in my lectures.

#### *Biology.*

*Biology*, again, is not required of the medical student by the University, and a knowledge of it is of the greatest importance to the subsequent study of Anatomy and Physiology.

So greatly has the need for instruction in Physics and Biology been felt at the Grant Medical College, that in recent years tutorial classes in the two subjects have been instituted. As, however, there is no University Examination in them, it is difficult to get most of the students to take much trouble in learning what they know they will not be examined in.

#### *Teaching at the Grant Medical College.*

It will be seen, therefore, that our teaching at the Grant Medical College in Physics and Biology (and I could instance the case of other subjects similarly) is beyond and above what the University of Bombay requires.

#### *Botany.*

The University requires *too much Botany*, I think, of the medical student, and therefore a great deal of his time is wasted in its study.

As at present arranged, the University course allows too little time (really only a year) for the study of Anatomy and Physiology. What the student learns of these subjects prior to passing his 'First Examination in Medicine' is very little. He requires at least 18 months to 2 years for these studies.

#### *History.*

During my connection with the Grant Medical College, we (*i.e.* the Principal and Professors of the College) have made at least three attempts to introduce reforms on the lines I have indicated in the medical curriculum of the University and to substitute M.B., &c., degrees in the place of the existing L.M. & S. Our efforts, however, have always been frustrated by the opposition met with in the Senate and in the Faculty of Medicine.

#### *Text Books and Indian Students.*

I am of opinion that we used to be very cautious in setting special text books, or parts of them, in Indian Universities. The Indian student has often a wonderful faculty for committing his text book to memory *verbatim*. What we want a student to know is his *subject* and not his text book. What he particularly requires, I think, is the stirring up of his powers of observation, originality, imagination and reasoning. It is especially important, too, I think, that study should always include as much practical work as possible; this is particularly necessary in the case of Science. An Indian student is naturally inclined to avoid that personal practical work which is so highly important always to members of my profession.

I would, therefore, avoid setting special text books whenever possible. This can be done with perfect fairness in the case of the medical subjects of study.

There are a few other points to which I should like to draw attention.

#### *The Senate.*

The present constitution of the *Senate* I think certainly calls for reform. The composition of the body is such that not infrequently voting is partly influenced by other considerations than the merits of the question at issue. Again the personal influence of one man is often too strong in the body as it now is and is apt to cause the carrying of his opinions.

#### *Examinerships.*

There is often keen competition and canvassing for examinerships. I think this rather unseemly and any reform which would put an end to it would be welcome. Some alteration in the monetary rewards to Examiners might effect a salutary change in this respect.

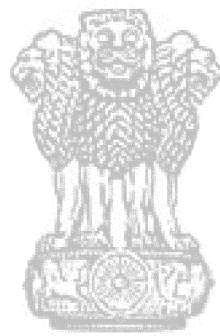
#### *Meetings of Examiners.*

Preliminary meetings of all the Examiners in one examination should be compulsory before final results are sent in to the Registrar. This would obviate often the hardship to a man failing to get a higher class by say one or two marks.

#### *Biennial Examinations.*

All medical examinations should be held twice a year, *viz.* at the end of the Winter and Summer Sessions. Certificates from the colleges are often granted too easily and it is not an uncommon thing for an Examiner to examine a student who obtains 10 per cent. or even less than this of full marks. Colleges could meet this by instituting test examinations prior to the University Examinations. Only on passing a satisfactory test would the student be granted his certificates.

C. H. L. MEYER, M.D., B.S., M.R.C.S.,  
Major, I. M. S.,  
Professor of Physiology, Histology and Hygiene,  
Grant Medical College, Bombay.



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**Memorandum of the Evidence given by Mr. R. M.  
SAYANI, M.A., LL.B., on the 6th March 1902.**

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(1) *Teaching Universities.*

To transform the University of Bombay into a Teaching University is a highly desirable object, but there are two difficulties in carrying out such object, namely, (1) it is impossible to procure the necessary funds, and (2) no feasible scheme can be devised to arrange the transformation successfully.

(1) Any such scheme must necessarily involve an enormous expenditure, both initial and annual, as a Teaching University implies that all the affiliated Colleges should be in the same city or town and that all the students should be in residence, and the initial outlay for acquiring the necessary lands and buildings and all other accessories will be very heavy. Again, the employment of the necessary staff of Professors and lecturers will require a heavy annual expenditure, and neither Government nor the public will contribute anything like the requisite initial outlay, nor undertake to pay or subscribe towards the annual expenditure.

(2) Some of the affiliated Colleges are "aided Colleges" and they may not be inclined to submit to their independence of action being interfered with. The students of the mofussil affiliated Colleges may not be able to leave their homes and reside at the seat of the proposed University. There will be difficulties in diverting funds entrusted to the University for establishing prizes and scholarships.

Although we cannot, therefore, have a Teaching University at present, we must console ourselves by the fact that our University has at present and does exercise considerable amount of control over the affiliated Colleges by prescribing the courses of studies and the standards of marks, and the affiliated Colleges constitute the teaching portion of our University, entrusted with their own management, but subject to the indirect control and the guiding influence of the University.

(2) *Sphere of Influence.*

The University of Bombay should have for its sphere of influence the whole of the Presidency including Sind, so long as Sind forms a portion of our Presidency.

(3) *Constitution—The Senate.*

The Senate of our University has become rather large, and the number of Fellows ought to be reduced to about two hundred; this can easily be done by Government not appointing additional Fellows for a few years. The appointment of new Fellows should not be limited to persons connected with the work of imparting higher education. Outside persons of culture and education and persons eminent in other walks of life should also be appointed as has hitherto been the practice, so that we may also have the advantage of outside culture, opinion and experience, and the deliberations of the Senate may be healthy and liberal.

(4) *The Syndicate.*

The Syndicate is the Executive Committee of the University elected under the By-laws. It is true there is no mention in the Act of Incorporation of any Executive Committee, but no case has been made out for legislative interference in the matter. The various Faculties have usually elected the most suitable Syndics and Deans, and have always been anxious to return to the Syndicate such of their members as have to do with imparting higher education in the affiliated Colleges, and there should be no *ex-officio* members of the Syndicate. It is a healthy thing and essential to enlightened progress that



members of the Syndicate should be elected. The number of the Syndics, at present fourteen, should be raised to twenty, so as to make the Syndicate large enough to form Committees for proper discussion of matters of administrative detail, the additional number being also obtained by election in the same manner as hitherto, and rules being made for bringing questions, where necessary, before the full body for decision.

(5) *Faculties and Boards of Studies.*

The Syndicate should have power to assign, or not to assign, a Fellow to a Faculty as it may deem proper. It should also have power to refer any matters, if it thinks desirable, to experts, although such experts may not be members of any Faculty or of the Senate. Boards of Studies may be nominated by the several Faculties from time to time under the supervision of the Syndicate, and members of such Boards need not be Fellows. There should be Boards of Studies, as this is very important from the point of view of the affiliated Colleges. These Boards will choose text books, select examiners, supervise examinations, and do other similar work. Members of these Boards should not be members of the Syndicate. They should only advise and report to the Syndicate.

(6) *Graduates.*

It is desirable that a Register of Graduates should be kept, with provisions for keeping it up to date.

The University may be empowered to confer the M.A. or other suitable degree on recognized teachers who come from other Universities. This should be done by the Senate on the recommendation of the Syndicate.

(7) *Students of the University.*

The University has no control over the granting of certificates by the affiliated Colleges to their students presenting themselves for examination, and cannot look after the moral and physical welfare of the students, nor can it take steps to foster a genuine University life in the great towns by establishing societies to bring men of different Colleges together. It is the duty of the Educational Department to look after the above matters with the assistance of the affiliated Colleges.

(8) *University Teaching.*

Many students begin their University course without sufficient knowledge of English to profit by the lectures they attend. Every boy should begin his education with learning his vernacular. English is a foreign language in India and can only be learnt through the vernacular. Those boys who know their respective vernaculars well, also learn English well. Every student must know his vernacular well. The vernacular should be made compulsory at the Matriculation and the test to pass in it must be made a strict one. The student, before he starts in his University course, should be thoroughly conversant with his own vernacular. Indeed, I would go so far as to recommend that unless a candidate for Matriculation obtains 40 per cent. in his papers in the vernacular and English languages, he ought not to be allowed to pass.

As to Greek and Latin, they are not necessary in India. Our classical language, so to speak, is the English language. It must be remembered we must learn our vernacular first, then English, and then one of our own classical languages such as Sanskrit and Arabic, and we cannot learn Greek and Latin in addition to the above things.

The suggestion that there should be a school of Theology ought not to be taken up. It may lead to undesirable results.

(9) *Examinations.*

The Matriculation Examination should be divided into two parts, the first part comprising the English and the vernacular only. The standard to pass the first part ought to be a strict one, say, 40 per cent. in each language. No grace marks should be allowed. No books are prescribed at present and no books should be prescribed in future. Until and unless a candidate has passed in the first part, he ought not to be allowed to appear for the other part.

# The Indian Universities Commission.

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EVIDENCE GIVEN IN BOMBAY ON 6TH MARCH, 1902, BY

K. SUBRAMANI AIYAR, B.A., L.T.,

*Principal, Byramjee Jeejeebhoy College of Commerce, Bombay.*

I am a Bachelor of Arts of 1878, and a Licentiate in Teaching of 1892 of the University of Madras. I have been a teacher for the past 24 years and have served in High Schools, an Arts College, a University Training College, and in Commercial Schools. I have been connected with the organization and working of commercial schools for the past 16 years, and am now the Principal of the Byramjee Jeejeebhoy College of Commerce, Bombay. I was appointed a Fellow of the University of Madras in 1899, and a Fellow of the University of Bombay in 1901. I have been a member of the Incorporated Society of Accountants and Auditors, London, for the past 12 years.

## UNIVERSITY COLLEGES AND PROFESSORS.

2. It is desirable to make the colleges an integral portion of our Universities, and to increase the stringency of the rules of affiliation. Colleges would become even more efficient than they are at present, if each college confined its attention to the teaching of a few selected subjects. To carry out this object, professors and lecturers must be individually recognised as such by the University. The University must demand from candidates certificates of having attended courses of lectures delivered by recognised professors. Candidates for a degree must be made to study each subject under a professor who has been recognised as competent to teach that subject. A certificate of having attended an affiliated college is not enough, as, in certain subjects, the professors of the college may not be up to the mark. The present regulations do not permit a student to study certain subjects in one college, and the other subjects in another college. It would then be unnecessary to have three or four professors for the same subject in the same town. It would then become practicable to secure the services of eminent professors and to get museums and laboratories fitted up on a large scale.

3. It must gradually become practicable for the University to appoint its own professors in certain subjects. When it is decided to make Bombay a Teaching University, and when it becomes known that funds are required for the appointment of University professors, this University may confidently hope to receive a number of donations for the purpose. The scholarship and prize funds connected with this University amount to more than ten lakhs of rupees. The founding of a scholarship or a prize has, till now, been the only way of making a donation to the University. In Madras, however, it would be much more difficult for the University to get funds for the appointment of University professors. The University of Birmingham provides that every donor of £1,000 or more to the University chest shall become a life member of the Court of Governors of the University. Some such regulation may with advantage be made when the Indian University Acts are amended; the amount of the donation may be fixed at Rs. 15,000 for Madras, and at Rs. 25,000 for Bombay. Gentlemen who have founded University prizes and scholarships

may when they have the power, be prevailed upon to allow the original donation to be utilized for general purposes or for the creation of a University Chair. A scholarship founded for the encouragement of a backward class or a neglected branch of study ceases to be useful, when the object for which it was founded has been achieved, and may be willingly diverted by the donor to other University purposes. This system of appointing University professors and recognising professors of private colleges prevails in the re-constituted University of London, in the recently formed University of Birmingham, as well as in American Universities.

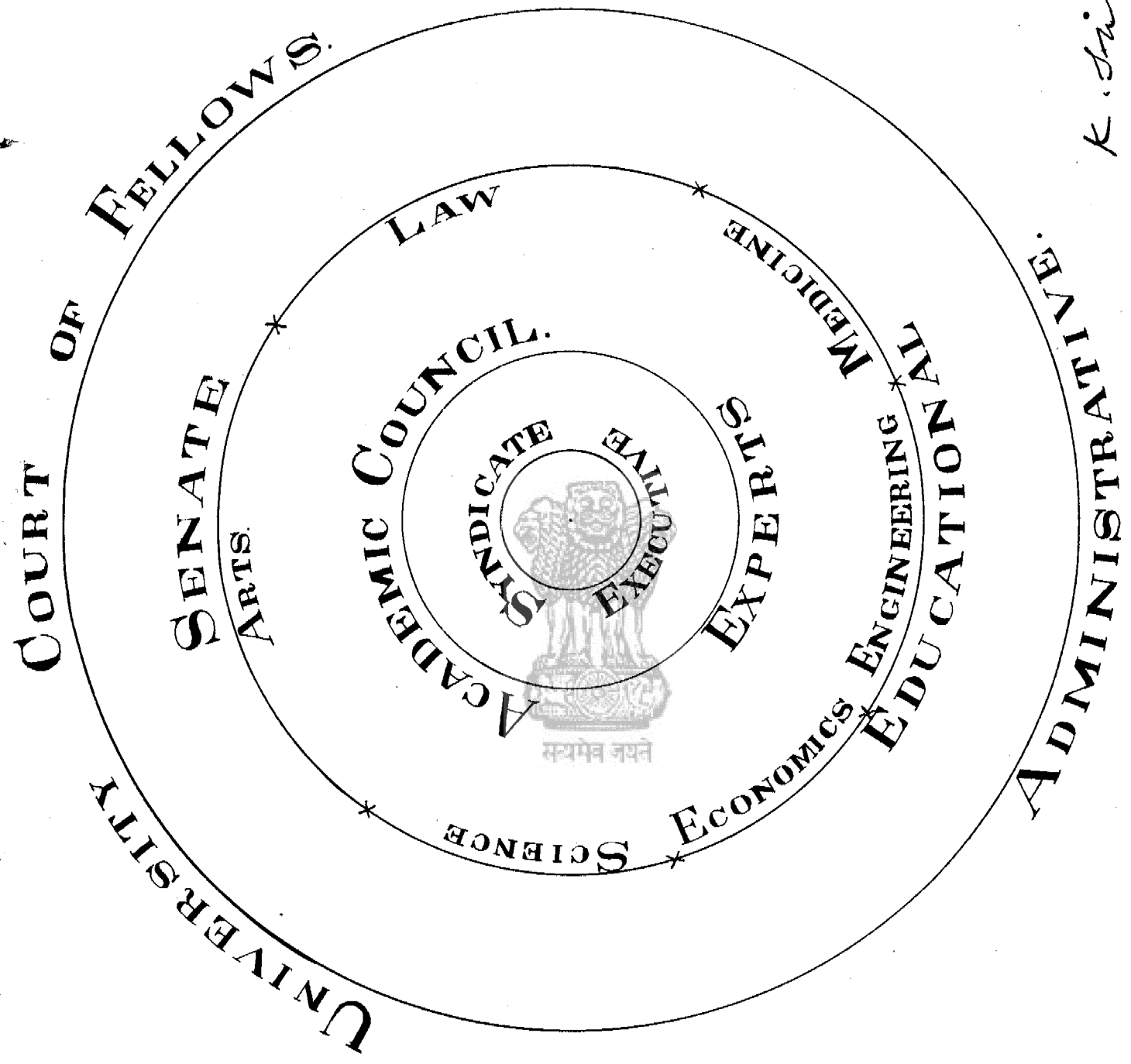
4. The regulations at present in force about the affiliation of colleges must be made more stringent when colleges are recognized as an integral portion of the University. Every college must have its own Boarding House for undergraduate students, with a resident Professor-Superintendent; and students not in the Boarding House must live either with their guardians or in Licensed Boarding Houses. This will entail heavy expenditure, especially in a city like Bombay. But, if the rule about Boarding Houses be not rigorously enforced at the beginning, it would cause no hardship, and colleges would gradually provide themselves with Boarding Houses. If ours is to be a Teaching University, residential colleges are indispensable. In Bombay, the College Department has in every case been entirely separated from the School Department, whereas in Madras the School and College Departments are nearly in every instance located in the same building and are under the supervision of one and the same Principal. The Bombay system clearly seems to be better than the Madras system in this respect.

### THE CONSTITUTION OF THE UNIVERSITY.

5. One weakness that I would venture to point out in the constitution of the University of Bombay is that the members of the syndicate are *over-worked*, and that the members of the senate are *under-worked*. Besides the Senate and the Syndicate, we have in Bombay only one other board, *viz.*, the Board of Accounts. The members of the Syndicate practically do the whole of the work connected with this University, there being no mechanism for utilizing the services of other members of the Senate. The most respected members of our Senate are our Syndics; it has, however, to be remembered that they are our busiest citizens. The constitution must be so altered as to secure a greater division of labour and to entrust different kinds of University work to different committees, composed of members specially selected for the purpose. In Bombay, when the Senate does not agree with a scheme brought up by the Syndicate, the whole question is generally sent back to the over-worked Syndicate for re-consideration and re-submission. When the Senate and the Syndicate disagree, the natural course would be to refer the question to a committee specially selected for the purpose; work would then be turned out much more quickly than at present. In Bombay, meetings of a Faculty are rarely held, except for electing Syndics and Deans. However competent a senator or a syndic may be, he cannot be equally fit for discussing and settling the details of every kind of educational curriculum. The constitution of Standing Committees of the Senate and the definite distribution of work among such committees are reforms which must prove highly beneficial. I beg leave to propose that the Fellows of our Universities constitute the University Court with limited powers, that Selected Fellows constitute the Senate, that the Experts of the Senate constitute the Academic Council, and that a few members of the Council constitute the Syndicate.

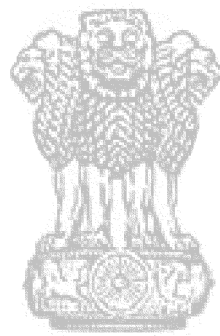
### THE UNIVERSITY COURT.

6. According to the Statutes of the re-constituted University of London, the existing Fellows retain their Fellowships for life, but cease, as such, to be members of the Senate; and the Senate, consisting of 54 members, is made the supreme governing



Bombay  
6 March 1902

K. Subramaniam



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body of the University. In Birmingham, the supreme governing body is the Court of Governors, whose powers are limited by Statutes to administrative questions. Here, in India, the Fellows may constitute the University Court and may continue to be the supreme governing body, their powers being made purely administrative. It may be provided that questions relating to courses of studies and examinations are not to be submitted to the University Court. If the discussion of purely educational questions is taken out of the hands of the governing body of Fellows that constitute the University Court, it seems unnecessary to make the Fellowships terminable. Capacity for educational work has not hitherto been, and cannot hereafter be, the sole qualification for a Fellowship, I mean, for a membership of the University Court. But if the University Court is to be the sanctioning authority even on purely educational questions, Fellowships must be terminable. In any case, non-attendance must entail forfeiture of membership. European Professors occasionally leave India on furlough for a year or two; the interests of the University will suffer if their names are removed from the list of Fellows on account of enforced absence for 12 or 18 months; I would submit that a Fellow failing to attend University meetings, say, for two consecutive years, might be made to forfeit his Fellowship.

7. A Fellowship conferred on distinguished students of colleges in Oxford and Cambridge differs widely from a Fellowship of an Indian University. The Cambridge Fellowship does not, I believe, give the Fellow a voice in the administration of the University of Cambridge. The Dakshina Fellowships of Bombay do not give such Fellows a voice in our University administration. The University Court must count among its members, *i.e.*, among the University Fellows, (1) gentlemen known for their scholarship and learning, (2) gentlemen of wide educational experience in India and elsewhere, and (3) gentlemen known for their administrative and business capacity. I do not therefore concur in the view that none but graduates should be made University Fellows. It must be open to Government to appoint such as may deserve a Fellowship, irrespective of their being graduates or not. It must not be made impossible for the Local Government to appoint a cultured Banker or Merchant to the Senate.

8. The Members of the University Court will then be of the following classes :—

(a) Life Fellows appointed from among donors of a specified sum of money to the University Funds.

(b) *Ex-officio* Fellows.

(c) Fellows appointed by Government on account of their scholarship, culture, educational experience, or business capacity.

(d) Fellows elected by graduates of 15 years' standing and approved by Government.

It may be laid down that none but graduates of 20 years' standing be elected as Fellows, and that in the case of holders of a Master's Degree, they be eligible for election as Fellows 10 years after the date of their taking the first degree.

#### THE SENATE.

9. The rule that every Fellow of the University must be made a member of some one Faculty should, in my humble opinion, be abrogated. It must be open to Government to appoint a gentleman a Fellow of the University without making him a member of any Faculty. When appointing a Fellow, Government must announce whether he is to be a member of any Faculty, and, if so, of which Faculty. Such Fellows of the University as are also members of a Faculty should constitute the Senate.

No Fellow should, as a rule, be assigned to more than one Faculty. A B.A., LL. B., must, as a rule, be made a member of the Faculty of Law and of that Faculty alone. He must be assigned to the Faculty of Arts also, only when it is considered that, on account of special scholarship, he will prove a valuable member of the Faculty of Arts. The Arts Faculty will then become a Faculty of Experts, as much as the Law and Medical Faculties. According to the 62nd Statute of the London University, no member of a Faculty is permitted to vote at an election in more than one Faculty. It is best to make a membership of the Senate terminable. This can be done by appointing gentlemen members of a Faculty, (that is, of the Senate) for a period of 5 years. First appointments to the Faculties and therefore to the Senate must remain in the hands of Government ; but the re-appointment of members of the Senate must be partly by election. If 30 members of a Faculty retire at the end of 5 years, it must be open to members of that Faculty or to the members of the Senate to re-elect about 15 of them, while the re-appointment of the remaining 15 members may be left to the discretion of Government. The members of the Faculty and of the Senate are the gentlemen most competent to judge whether, in the interests of the University, the retiring members must be re-elected. If the senate should fail to re-elect really valuable members, it would be open to Government to re-appoint such gentlemen.

### THE ACADEMIC COUNCIL.

10. The members of the various Faculties constituting the Senate may elect about 30 Senators to the Academic Council. The Academic Council may be made the real working council of the University, the initiative being taken in nearly every instance by this Council. The resolutions of the Council on educational questions must be confirmed by the Senate, while their resolutions on administrative questions must be confirmed by the Senate *and* by the University Court. The heads of the leading recognized colleges must be made *ex-officio* members of the Academic Council. The members of each Faculty of the Senate must elect a certain number of themselves as members of the Council. The members of the University Court may be permitted to elect two members of the Senate as members of the Academic Council.

### THE SYNDICATE.

11. The Syndicate must consist of not more than nine members and must be no more than an executive committee. A council of 30 is too large for making appointments and attending to current University work. While the resolutions of the Academic Council must be confirmed by the Senate, they must be *carried out* by the Syndicate. The Vice-Chancellor appointed by Government will preside over the deliberations of the Syndicate ; one Syndic may be elected by the University Court from among the life members of that Court, that is, from among the benefactors ; the remaining Syndics must be elected by the members of the Academic Council. Election to the Council must be on account of scholarship, while election to the Syndicate must be more on account of business capacity.

### THE FACULTIES.

12. The services of the members of a Faculty ought to be utilized more than at present, special committees of a Faculty being occasionally appointed for discussing and reporting on new schemes connected with courses of studies and examinations. I have not as yet heard of the Madras or the Bombay University referring questions connected with the Matriculation Examination to a Committee composed of such Heads of High Schools as happen to be Fellows of the University. They would seem to be the men most fitted to discuss such questions and submit a report. They might take a narrow view, but, then, theirs will only be a report, and the final decision will rest

with the Senate. We have at present only four Faculties, *viz.*, Arts, Law, Medicine, and Engineering. It is now time to consider whether the number of Faculties should not be increased, as has recently been done in London. In the re-constituted University of London, there are eight Faculties. In London, as well as in Birmingham, they have a Faculty of Science, distinct from the Faculty of Arts, recognized Professors of Science being members of this Faculty. In Bombay, as well as in Calcutta, we have Degrees in Science; we have, however, no separate Faculty of Science in the Indian Universities. Till recently, there was no separate Faculty of Engineering in London, while in the Universities of Birmingham and Pennsylvania, Engineering is included under Science. In India, however, Engineering has always constituted a separate Faculty. In Bombay this Faculty is known as the Faculty of Civil Engineering, while in the other Universities it is known as the Faculty of Engineering. It will be necessary to consider whether provision ought not to be made for Mechanical and for Electrical Engineering.

13. One of the two new Faculties instituted by the University of London Act of 1898, is the Faculty of Economics and Political Science including Commerce and Industry. The University of Birmingham has instituted a Faculty of Commerce on the same lines as the London Faculty of Economics. The Universities of California, Chicago, South Dakota, New York, and Toronto have instituted Faculties of Commerce and Economics; the University of Pennsylvania has a similar Faculty and awards the Degree of Bachelor of Science in (*a*) Economics or (*b*) Commerce and Industry or (*c*) Civil Engineering or (*d*) Electrical Engineering or (*e*) Biology. I venture to submit that the time has arrived for deciding whether our Universities should not begin to follow in the wake of these English and American Universities, and especially of the University of London which has been our model. Mr. Chamberlain, Chancellor of the University of Birmingham, recently defined a University to be a place where knowledge is (1) taught, (2) tested, (3) increased, and (4) applied. He was of opinion that no student, desirous of instruction, should be turned hungry away from the doors of a University. It seems to me that the Colonial Secretary's definition of the functions of a University is one that ought to be borne in mind by our University Authorities. In this connection, I beg leave to submit to the Commissioners a leaflet on University Degrees in Commerce recently published by Mr. Rustomjee Byramjee Jeejeebhoy, the grandson of the Founder of my Institution; it contains a concise summary of what has been done by English and American Universities, for the promotion of the study of Economic and Commercial Sciences.

#### UNIVERSITY TEACHING.

14. I beg to submit that College students must be made to rely more upon their own private reading than on the Professors' lectures and notes; they must make a greater use of the College Library than at present. Professors may, with advantage, reduce the number of lectures they deliver on a subject, and entirely give up dictating notes and abstracts of Standard Works. The Professors' lectures may indicate the sources of information and give references to Standard Works; and students may be made to read such works under the supervision of the College Tutors. It is the student and not the Professor that must write out abstracts of the portions to be read. If Professors and Examiners cease to be anxious about securing a high percentage of passes, the percentage of passes will soon begin to rise. It is this anxiety for a large percentage of passes that makes the Professor dictate carefully prepared notes, with the result that students rely less and less upon their own reading and that they memorize more than it is desirable. The student must be trained to think, and must be merely told how and where to search for facts; he must not expect his Professor to solve every little difficulty for him. We have too much of lecturing and too much of teaching, which proves prejudicial to the development of the natural powers of our College students.



## THE TEACHING OF ECONOMICS, HISTORY, AND GEOGRAPHY.

15. As regards Political Economy, I venture to submit that the teaching of this subject is not carried here to a sufficiently high standard and that the knowledge of Economics acquired by a Bachelor of Arts is meagre and superficial. It has not been recognized that Banking and Currency form an integral portion of Economics. Graduates who have passed in Political Economy have often been found to have very hazy notions even about the A. B. C. of Foreign Exchanges and to know much less about Currency. I believe that the creation of a Faculty of Economics will greatly stimulate the study of Economics, Economic History, Banking, Currency and allied subjects. The reconstituted University of London has, on its list of recognized teachers, teachers of such subjects as Banking, Economic History, Economic Theory, Economic Geography, Public Finance, Railway Economics, and Statistics..

16. It has recently been pointed out that Economic study occupies a more prominent position in the University of Cambridge than in the University of Oxford, and that the University of Oxford must assign a more prominent position to this subject than is at present the case. It has been said that the position assigned to Economics at Oxford is not commensurate either with the place which Economics is now taking in the world outside or with its own intrinsic interest and value. The importance attached to Economic studies by the Indian Universities is much less than what it is at Oxford. It can therefore be neither unreasonable nor premature to request our University Authorities to provide greater facilities for Economic studies.

17. As regards Geography, it has so far not been recognized in India as a suitable University subject. Economic and Commercial Geography has been recognized as a University subject by the Universities of London and Birmingham and the Universities of the United States and Canada. In London there are Professors who have been recognized by the University as teachers of Geography in the Faculty of Arts as well as in the Faculty of Economics. In Oxford a school of geography has recently been started, admission to this school being confined to graduates; a Diploma in Geography is awarded to the students of this school at the end of the year. That English Graduates think it worth their while to go to a school of geography for a year and take a Diploma in geography at the end of their course will, it is hoped, draw the attention of our University Authorities to the fact that Geography deserves to be recognized as a University subject. Geography is at present one of the subjects prescribed for the Matriculation Examination; it happens, however, to be one of the worst taught subjects in the High Schools of Bombay and Madras. Geography is so taught that it only develops in our students a dislike for the subject. Though our examination papers are partly to blame for this state of things, it is the teachers of High Schools that must be said to be primarily responsible for this neglect of Geography. But if the teachers of to-day had been taught Geography as a University subject in their College course, they would have been able to handle the subject in the class-room with greater effect and to greater purpose.

## BOARDS OF STUDIES.

18. We, in Bombay, have no Boards of Studies though they have such Boards in Madras and Calcutta. It is certainly desirable to get such Boards formed in Bombay from among the members of each Faculty. These Boards must be sub-committees of experts in special subjects and must be advisory bodies. Their recommendations about courses of studies, text-books, and the selection of examiners must prove helpful to the Academic Council and the Syndicate. In London they have 32 Boards of Studies as against 10 in Calcutta and 14 in Madras. In London, they have a Board for History, a Board for Economics, and a third Board for Geography,

as against one Board in India for all three subjects. The London University has a Board of Studies for the theory, practice, and history of education, while we have none such in Bombay and Calcutta.

### BOARDS OF EXAMINERS.

19. In Bombay a separate examiner is appointed for each subject and for each examination. The practice is different in Madras. To me it seems preferable to appoint a Board of Examiners to examine in a group of allied subjects and to make the appointment for a term of years ; this will secure a greater uniformity of standard than at present. The Board must consist of Professors and a few External Examiners. College Professors must be allowed to be the most competent men available for examining in the subjects which they teach. Even when this is granted, it is sometimes said that the examinations ought to be conducted by External Examiners—a view to which I demur. When the University of London was formed in 1836, the business of teaching was confined to the Colleges, while the duty of examining and conferring degrees was entrusted to an entirely separate and independent body. This compromise has not been found to give satisfaction, and the recently framed Statutes therefore provide that in each subject of examination the Senate shall, if practicable, appoint at least one examiner who is not a teacher at the University. The Statutes of the Birmingham University provide that the Examiners of the University shall be selected from among the Professors and Lecturers, that in every subject at least one External Examiner shall be appointed, and that the examination shall be conducted jointly by the Professor-Examiners and the External Examiners. The London Regulations are also to the same effect. A Professor is recognized as such by the University, only when the University Authorities form a high opinion of his scholarship as well as of his character. The association of an External Examiner is solely for the purpose of preventing the tendency of the Professor-Examiner to move in a narrow groove. The higher University examinations are really for the purpose of testing the student's work at College and not for the purpose of testing the qualifications of the Professor.

### UNIVERSITY DEGREES.

20. In the older Universities of India, Degrees should be awarded not only in Arts, Law, Medicine, and Engineering, but also in (1) Science, (2) Agriculture, (3) Economics and Commerce, and (4) Teaching. In Madras they have a Degree in Teaching, but no Degree in Science, while the Universities of Bombay and Calcutta have instituted Degrees in Science, but none in Teaching. The University of London awards Diplomas in the theory, practice, and history of Education, while in Birmingham Education is one of the voluntary subjects for the B.Sc. Degree. In Bombay, Departmental Examinations have recently been instituted in the theory and practice of Teaching, and the honours' course of this examination corresponds to the L. T. Degree Course of Madras. The examination in Teaching would gain considerably in prestige, if instituted by the University. Though Departmental Examinations in Teaching have been held in Madras for nearly 30 years, it was still considered advisable to get that University to institute the L. T. Degree. After having been a teacher for about 9 years and after having all the while ridiculed the utility of a Teachers' Certificate Examination, I appeared for, and passed, the Madras Departmental Teachers' Certificate Examination, mainly with a view to secure a higher government grant for the school of which I was Head Master. Preparation for that examination changed my views, as I began to notice a perceptible improvement in my methods of teaching. Later on, I was made an Assistant in the Government Teachers' College, Madras ; there I caught the enthusiasm of the Principal of that College, Mr. Hall, and, without any kind of official pressure, prepared for, and passed, the L. T. Degree Examination after 14 years'

experience as a teacher. I feel that I have benefited by my L.T. studies and by my 5 years' stay in the Teachers' College. The quality of the teaching in High Schools must materially improve if the teachers are required to pass examinations in the Science and Art of Education.

21. In the words of Sir Phillip Magnus, " the function of a University is to liberalize all kinds of professional studies, Medicine, Law, Engineering, Commerce, and Education itself, and to suggest courses of study leading to a University Degree in the branches of knowledge cognate to different professional careers, and to encourage learning and original investigation in any of the subjects of study included in such courses." I do not concur with those who hold that, in matters connected with University Education, we ought to be conservative and not progressive. Our Universities are practically the only Corporations that have to legislate solely for the needs of Educated India, and it is our Universities that can afford to be most progressive. In political and social matters which concern the literate and the illiterate, the educated and the uneducated, progress must necessarily be slower, and our leaders may have to be more cautious. It is in the matter of University Reform that Indians can most afford to profit by the example of England and America, where University Reform is the order of the day.

22. I am not in favour of a Local University conferring an Honourary Master's Degree on graduates of other Universities that come out as Professors. On the first Degrec-day of the Birmingham University, Honourary Degrees were conferred on Professors of the University ; the University Authorities did not, however, offer their Degrees to eminent graduates of other Universities for fear of such Degrees not being accepted. Graduates of English Universities may not take it as a compliment if offered a Master's Degree by an Indian University. The abilities of such foreign graduates are best recognized and utilised by their being appointed Fellows of our Universities. Though our Universities have been empowered to confer the Honourary Degree of LL.D. on distinguished and eminent persons, our University Authorities have been exceedingly sparing in the granting of this Degree. The Madras University has not hitherto found more than one distinguished educationist deserving of this honour, and neither Madras nor Bombay has hitherto been able to find a single Indian graduate deserving this Honourary Degree. One would expect the Indian Universities to do themselves the honour of conferring the LL.D. Degree on educationists who have been considered worthy of the LL.D. Degree by British Universities. Unless there is a change of feeling and policy in this matter, little use will be made by our University Authorities of any power of conferring Honourary Degrees that they may be granted. A more liberal use of this power will stimulate the younger generation to greater literary activity. Our Universities ought not to imagine that they have a higher dignity to maintain than their British models. University honours ought to be distributed so as to stimulate scholarship and research. I, therefore, hold that our Universities do not require any additional powers in the matter of conferring Honourary Degrees and that they have only to use more liberally the power they already possess of conferring the LL.D. Degree.

23. There is not much to choose between the Bombay Matriculate and the Madras Matriculate ; still the Madras University does not recognize the Bombay Matriculate, and does not permit him to join a Madras College. Our Universities ought to unbend a little and to recognize one another more readily than at present. The Matriculates and the Graduates of an Indian University ought to be recognized by every other Indian University and to be permitted to continue their studies in the Colleges of any Indian University. In the case of the Previous, Intermediate, and First in Arts Examinations, the standards differ, and our Universities are justified in refusing to recognize some of these intermediate certificates.

24. Candidates for the Bombay Bachelor's Degree have to pass in all the prescribed subjects at one and the same examination, while the Madras candidates for the B.A. Degree are permitted to pass the examination in three different years. Formerly candidates for the Madras B.A. Examination had to pass in all the subjects at one and the same examination. I am of opinion that the present Bombay system, which is the same as the old Madras system, is preferable to the present Madras system. The standard of an examination is lowered when the candidate is permitted to pass it in compartments. Specialising in a particular subject ought to begin after the B.A., as it is only then that it can be carried to a sufficiently high standard.

#### THE MATRICULATION EXAMINATION.

25. There is a general complaint in Madras and Bombay that the knowledge of English possessed by the Matriculate is so poor that he is not able to follow the Professor's lectures at College. Various remedies have been suggested from time to time, and some of these have been tried and found wanting. During the 24 years that I have been a teacher, the matriculation curriculum has so often been altered in Madras, and the length of the school course has been increased. None of these remedies have, however, been able to produce a better matriculate than before. Formerly text books were prescribed in English for the Madras Matriculation Examination, and this led to the cramming of annotations, and then to the abolition of text books. The complaint now is that there is as much cramming as before, though of a different sort. The school course was lengthened by a year in Madras in the hope that the Matriculate's knowledge of English would be increased. These reforms have not proved efficacious, as Examiners continue to set questions on Grammar that can be answered from memory. I am of opinion that the English paper must consist *solely* of questions on Paraphrasing Poetry, Translation into English, Composition and Transformation of Sentences; the paper ought to contain no questions on Grammar or even on Idioms. Students may also be asked to write out the substance of one or more prose passages; the exercise in Composition ought to be made more a test of the candidate's power of writing good English than of his ability to think out the facts or the arguments required for the essay set. The Examiner ought to supply the candidates with the principal facts and arguments, and the candidates ought to be asked to expand the outlines given into an essay. The teacher ought to be left to his own resources as to the selection of the means by which he can best improve the style and composition of his students.

26. I am not in favour of a minimum age-limit being laid down by our Universities for admission to the Matriculation Examination. The school course has gradually been extended in Madras from 8 to 10 years; the present-day Matriculate is not, however, much better than the Matriculate of 20 years ago. The school course in Bombay is 11 years, *i.e.*, one year longer than in Madras; the Bombay Matriculate is, however, no better than his Madras brother. If a boy is sent to school in his seventh year, he cannot pass the Bombay Matriculation before his 18th year, and cannot take his Bachelor's Degree before he is 22 years old, unless the rules are evaded, and the boy frequently receives double promotions. Students that desire to compete for the Indian Civil Service or the Provincial Civil Service will be placed at a great disadvantage if a minimum age-limit is prescribed for passing the Matriculation Examination. The real remedy is to improve the quality of the teaching and to increase the stringency of the regulations for the recognition of schools; the length of the school course may then, with advantage and without prejudice to the true interests of education, be reduced to 8 years.

27. Under Statute 117 of the re-constituted University of London, the Senate of that University is permitted to make provision for holding separate Matriculation

Examinations for different classes of students, having regard to the courses of study which the students propose to follow. The regulations of the Senate of that University at present require matriculation candidates to be examined in 4 compulsory subjects and in one voluntary subject to be selected from a list of 10 voluntary subjects. I beg to submit that our matriculation curriculum may, with advantage, be modified on somewhat similar lines. Passing in a particular voluntary subject may be made a condition of admission into a particular professional college.

### THE RECOGNITION OF SCHOOLS.

28. The control exercised by the Bombay University over secondary schools is very slight. The University recognizes a High School without endeavouring to satisfy itself as to the efficiency of its staff and without insisting on the school being provided with the necessary apparatus, furniture, and library. Private candidates are allowed to appear for the matriculation without any restriction. If, of two brothers, one joins a recognized matriculation class and the other studies at home, and if the former is not permitted by the Head of his School to appear for the examination, his application is not accepted by the University, while the brother that stayed at home is at liberty to appear for the examination. This is an anomaly. There is only one object that the University can have in recognizing High Schools; and that is, that no candidate should be permitted to appear for the University Entrance Examination unless it is shown that he has been efficiently taught by qualified teachers that may be presumed to have endeavoured to form the character of their students. This object can be achieved only by recognizing really well-conducted schools and by permitting none but students of such schools to appear for the examination.

29. The written permission of the Head of a High School is required before a student appears for the matriculation; still a large percentage of those permitted to appear fail at the examination. About three months before the University Examination, Head Masters of High Schools hold a Preliminary Examination on the same lines as the Matriculation, and make their selection on the results of this Preliminary Examination. If Head Masters granted the necessary permission only to such as passed in every subject at this Preliminary Examination, the percentage of failures would be greatly reduced. As a rule, Head Masters are not so strict in making their selection, as it sometimes happens that students failing in the Head Master's Preliminary Examination pass the University Examination. It may be added that strictness in promotions will largely tend to reduce the percentage of failures.

30. The percentage of passes at the matriculation examination is 33 in Bombay as against 20 in Madras. 47 per cent. of the candidates sent up by Bombay High Schools pass, while, of the private candidates, only 12 per cent. pass. It strikes me that Head Masters of Bombay High Schools are, as a rule, a better class of men than Head Masters of Madras High Schools, where a good Head Master soon becomes a College Assistant. The tendency to convert a good High School into a weak College is more marked in Madras than in Bombay.

## Note for the Universities' Commission.

The colleges affiliated to the Bombay University are not numerous, and are separate and fairly complete institutions, not excrescences growing out of high schools. In only one instance, that of the Rajaram College, Kolhápúr, the full course for a degree is not taught. All the colleges have special buildings, and almost all have hostels attached to them, though the accommodation for resident students is not generally adequate. All the colleges but two (Fergusson and Bhávnagar) are under European Principals.

The colleges are grouped at Bombay where there are 5 (including the Law School), and at Poona where there are 3. The rest are all isolated and are situated at Karáchi, Ahmedabad, Baroda, Bhávnagar, Junágadh and Kolhápúr.

The colleges, which practically constitute the University, are thus very scattered, and, consequently, while it is desirable that the University should have the power of appointing Professors or Lecturers, it is obvious that outlying colleges cannot materially benefit by such appointments. It would be hardly possible for a special Professor to give a course of lectures in Bombay and then to repeat them at Poona and elsewhere. Consequently, under present circumstances, University Professors would probably have to confine their teaching to those who were going through a post graduate course of study. This might be of great advantage, for, in the majority of the colleges, the existing staff have little time to spare for those who are reading for a course higher than the degree. Graduates might be attracted to Bombay if special post graduate instruction was provided for them by the University. I think at all events that the power to create a teaching University should be taken. I do not think it probable that the power could be largely exercised until conditions have widely changed.

2. A system of combined lectures might be possible where colleges are grouped, but, there even, only in special subjects, and where the number of students from each college is limited. In ordinary subjects the classes in each college are so large that combination becomes impossible. No one can lecture to more than a certain number of men, perhaps 80 as a maximum, and do justice to all. But where students are few, as in the case of the Science degree, I think that colleges in one locality might mutually benefit by a combination of instruction.

3. I am of opinion that the present Senate in Bombay is far too large. The maximum number of Fellows should not exceed 120, and I would reduce that number to 100 rather than raise it to 150. If a new constitution is given to the University, existing Fellows who are still resident in the Presidency might be placed on a list of Honorary Fellows (without powers). The present number of elected Fellows is not large and those Fellows might be replaced on the new list, while Government might nominate from the old list such men as seemed by their attainments and their interest in education to be likely to take an earnest and intelligent part in the management of University affairs.

All Fellowships should in future be tenable for 5 years. Fellows vacating under this rule should be eligible for renomination. Similarly elected Fellows should be eligible for re-election. Any Fellow who failed to attend a meeting of the Senate for a period of 2 years should vacate his Fellowship unless his absence was due to special circumstances which he could not control.

The present system of election of Fellows by graduates of 10 years' standing might perhaps continue, but the number of elected Fellows should be strictly limited and should not be more than  $\frac{1}{4}$ th of the whole. Elections should take place from each Faculty in turns in the following proportions :—

Faculty of Arts, 2.

Other Faculties, 1.

If a Faculty of Science is created it might perhaps be merged with that of Engineering. The Faculties would thus be 4 in number as at present.

Fellows nominated or elected should be assigned to one Faculty only. At present many belong to the Faculties of Arts and Law and thus exercise a double influence. Men should be selected as Fellows on account of their distinction in a certain direction and should be allotted to the corresponding Faculty.

I am of opinion that if reform took place on these lines the Senate would be a body fit to deal sensibly and intelligently with educational questions. At present our Senate is overloaded with persons who have neither special knowledge of education nor special distinction as educated men. They attend meetings and vote, not always because they grasp the matter under discussion, but because they follow a leader to whom they have given their allegiance. The educational result is occasionally very disappointing to those who understand education and have the best interests of the University at heart.

4. The Syndicate of the Bombay University is a body which has no statutory existence. It exists under the By-laws as an Executive Council or Committee of the Senate, and is not even mentioned in the Act of Incorporation. I am of opinion that, if legislation is resorted to, the Syndicate should have its status defined and legalised.

It at present consists of 15 members. The Vice-Chancellor, the 4 Deans of the Faculties and 10 Syndics, of whom 4 are in Arts (one representing Science), 2 in Law, 2 in Medicine and 2 in Engineering. It meets once a month and transacts all the business of the University, subject to such control or revision by the Senate as is provided for in the By-laws. This control is practically unlimited.

The Syndicate is fairly constituted, and my experience of its working during the last 3 years is that it is a reasonably good working body, and that the members elected to serve on it are generally capable and ready to devote time and trouble to the interests of the University. But there are in my opinion some deficiencies in its constitution. Thus—

- (1) It is almost invariably composed of residents of Bombay, to the exclusion of capable men connected with colleges in the mofussil. A remedy for this might be found in the payment of travelling allowances to any member coming from a distance to attend the meetings.
- (2) The members are elected in Bombay by the Bombay resident Fellows only. This might be corrected, with a reduced Senate, by allowing voting papers to be sent in by all Fellows of the University.
- (3) The monthly meeting is a great tax upon the Syndicate and, as I have pointed out, non-residents of Bombay are practically excluded. This difficulty might be met by the delegation to a small executive body of powers to deal with current work. The meetings of the Syndicate might then be held once a quarter and on fixed dates, so that members living out of Bombay could arrange to attend. All important educational business involving a change of curriculum or University procedure should be reserved for such meetings.
- (4) The election of members of the Syndicate by the Faculties does not afford a guarantee that men who are engaged in the work of education are elected. It appears desirable that men holding a certain educational position should be *ex officio* members of the Syndicate, *e.g.*, Principals of Colleges, or at least a certain percentage of Principals who might succeed to the Syndicate by rotation.
- (5) If the Syndicate was reinforced by *ex officio* members the number elected by the Faculties might be reduced to—

In Arts, a Dean and two Syndics ;  
 Medicine, a Dean and one Syndic ;  
 Law, a Dean and one Syndic ;  
 Science and Engineering, a Dean and one Syndic.

This would give 9 elected members. If the Director of Public Instruction, the Educational Inspector, Central Division, and 6 Principals of Colleges were *ex officio* members, the total number of the Syndicate would be, with the Vice-Chancellor, 18 or 3 more than at present. This would not be too large a number with quarterly meetings. The inner Executive Board could consist of the Vice-Chancellor, 3 *ex officio* members and 3 members elected by the Faculties. The whole body of the Syndicate should have power to elect the Executive Board from their own body. The election to the Syndicate should be made by the Faculties as at present.

- (6) Each Syndicate should, I think, be constituted for 2 years instead of one as at present. Now, when a Syndicate has begun to get a grasp of University matters, and when the members have begun to work together, it is dissolved, and a possibly entirely new body may be brought into existence. This is not at all desirable and 2 years seems to be a more suitable life for such a body.
- (7) If the Syndicate meets 4 times a year, the Senate also should ordinarily meet 4 times. Dates for the meetings of both bodies should be fixed, so that non-resident members would know when they might be called on to attend meetings and arrange accordingly. Power should of course be taken to convene special meetings if urgently required.

5. With regard to the University Act I presume that if legislation is resorted to, care will be taken to provide for the due alteration of Section XII which is at present vitiated by a decision of the High Court.

6. As regards the affiliation of colleges to the University, I think that certain fixed rules should be drawn up, as in Calcutta, and that colleges should only be affiliated when they could show that they conformed to those rules to the satisfaction of the Syndicate and Senate and of the Local Government. In Bombay we had not long ago 3 mushroom institutions which in no way deserved the name of colleges and which would not have obtained affiliation had a strict test been applied to them. These 3 colleges have, I am glad to say, disappeared. The application of rules would not, I think, lead to the disaffiliation of any college in the Presidency, but the rules should exist, and their application to existing institutions should be at any time possible.

7. I am in favour of Boards of Studies. In Bombay the appointment of Moderators is provided for, and questions as to curricula are referred to the Faculties, but the Boards would render the opinion of experienced experts available, and would tend to maintain a level standard of work and of examination.

8. I do not think that our curricula generally are bad, but I consider that in many directions there is room for reform, and I believe that if the question of revising the curricula generally was taken up, after other constitutional reforms were completed, there would be a considerable amount of expert opinion available which would be gladly preferred for the benefit of the students and the University, but which is now withheld because proposals for change, however excellent, are liable to be swamped by the vote of an assembly which cannot always grasp their significance.

Our curricula are, however, not shallow or superficial generally and I consider that they afford, in almost all subjects, a fair test of what a man is worth, and have a distinctly high educational value. Given good examiners, and consequently sensible papers and sensible marking, and I think that the curricula are generally as advanced and as complete as is desirable under present conditions.

9. I should be in favour of an Honours Course for the degrees, separate from the pass course. I do not consider that our present 'Honours,' which are won by a higher percentage of marks, are satisfactory. The Honours man



should be put to a severer and greater test than the pass man. I may add here that possibly groups of colleges might combine their lectures for Honours men with advantage.

10. I am strongly of opinion that the present Matriculation Examination should be abolished and replaced by a general School Final Examination which might, under certain conditions, be accepted by the University as an entrance test. Such an examination should consist of certain obligatory subjects, common to all candidates, thus—

1. English ;
2. Vernacular ;
3. Arithmetic ;
4. History and Geography of England and India.

Other subjects should then be grouped together and one group of two subjects taken up by each candidate at his option. The boy who wished for a commercial career might take commerce and a kindred subject, while the boy who wished to join a college would naturally take languages. The scheme could easily be worked out : the relief to the schools and to the pupils would be great, and the University would not lose, as it could charge a fee for registration of name in the University books and would have no expenses or responsibility for the examination which should be conducted by the Educational Department.

11. Finally, I wish to place on record my opinion that, while there is great room for reform in connection with this University, the University has done and is doing good and valuable work and is producing men who are not only occasionally brilliant scholars, but who are, on the whole, fairly well educated, well mannered and well conducted. My experience after 29 years is that our graduates are generally men who are fit to be public servants, and to take their proper place in the various walks of life, that the tendency in the colleges and in the students is towards improvement and that the University of Bombay is not behind any other University in India either in the efficiency of its management, or in the sufficiency of its results.

सत्यमेव जयते

E. GILES,  
Director of Public Instruction.

*Bombay, 22nd February 1902.*

**Dr. R. G. BHANDARKAR, M.A., Ph.D., C.I.E.**

*Statement read to the Commission on the 27th February 1902.*

1. The education of our Graduates is in most cases unsatisfactory. The thinking and critical powers are not awakened, and the moral feelings are not cultured. This appears to be due to the following facts :—

(a) The students read their books and study their subjects with a view only to pass their Examinations. Their interest in them is not awakened and ideas and facts are not assimilated.

(b) The Teachers are in a good many cases not up to their requirements. They do not show much learning nor the spirit of a student, which alone are calculated to inspire reverence for them in the minds of their pupils.

(c) No care is taken to appoint good Examiners, or good Examiners are not available.

(d) There is no educational public opinion which Teachers, Examiners and the Executive body of the University might be expected to fear and respect in the discharge of their duties.

2. To counteract the operation of these causes, the importance of a mere Degree ought to be lessened, and endeavours should be made to create a large body of men devoted to learning, research and teaching, and resident within a limited area. To create such a body as this—

(a) As many Colleges as possible should be located in one place.

(b) The Professors should be selected from the best English and Continental Universities from among men who have lived for a good many years within the atmosphere of their Universities after graduation. Fresh Graduates should not be brought out. These will form the European portion of the learned body, which should have a Native portion also. This should be constituted by the creation of a large number of Fellowships to be conferred on Natives who have achieved distinction and who should be required to devote their lives to learning, making researches, and teaching. Examiners should be selected from this learned body, and Native Professors from the Fellows.

3. The Professors and Fellows of the several Colleges located in one place should constitute the University, lay down courses of instruction, hold Examinations and grant Degrees.

4. It will not be possible to have many such Universities in one Province. Each Province should have one ; and the Colleges at present scattered in different parts of the Province should remove to the place where the University is located, and incorporate themselves with it. They should, at the same time, increase the European portion of their establishment in the manner mentioned above, and have also a stronger Native establishment than they seem to have. If these things cannot be done, the students trained in those Colleges will not be eligible for Degrees. For the benefit of these Colleges, however,—and we have a number of them in British territory and Native States,—an inferior Degree should be instituted. The University should hold Examinations for it and give diplomas to the successful candidates. But these will not be called Graduates of the University.

5. I have thus sketched the ideal which, I think, we should aim at. It cannot be realized at once, nor is it advisable that it should be artificially brought into existence. We must gradually grow towards it, so that a body of wholesome traditions may gather round the institution. But a beginning should be made by introducing changes in the constitution and functions of the