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*Presented by*  
Hon. Mr. Lallubhai  
Samaldas, Bombay.

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Sir Alfred Hopkins's Report to the  
University of Bombay.

1914.

# SIR ALFRED HOPKINSON'S REPORT TO THE UNIVERSITY OF BOMBAY,

1914

To

THE CHANCELLOR AND SENATE OF THE  
UNIVERSITY OF BOMBAY.

In presenting the opinion which I have now the honour to submit, I desire to state that I have throughout recognised that there are certain points upon which the University had already definitely decided, with the concurrence of the Government, as to its policy, and that funds are already provided to carry out the proposals, which were approved in 1912. I may state them shortly as follows :—

1. That provision should be made by, and under the authority of the University, for Post-Graduate teaching and research, in particular by the appointment—

- (a) of certain permanent Professors who would give their whole time to advanced work in the University ;
- (b) of Readers who would come from a distance, and who would be appointed from time to time to give special courses of lectures extending, as a rule, over a single term ;
- (c) of Lecturers, resident in India, who would be appointed usually from the staffs of the colleges, to give special University courses.

2. That the Library of the University should be re-organised and brought up to date both by the purchase of books and by improved equipment, and that a Librarian who would devote his whole time to the work of the Library should be appointed.

I have already submitted to the University special memoranda referring to these matters, which are numbered I, II and III, in the Appendix. I did this at the earliest possible moment, as the policy had been settled, and it is desirable to carry it out without delay.

As regards Lecturers, appointments for the year have already been made. The most serious difficulty will occur in regard to the vitally important matter of the appointment of the permanent Professors. The whole future development of advanced work in the University depends on securing

able men for these Professorships, and it is most desirable to start, if possible, this advanced work with at least three Professors. It has already been decided to appoint a Professor of Economics to the Chair, for which the stipend is provided. The task of selection is a very difficult one, and most careful enquiry to find a suitable man should be made both in India and in England, and also in America and on the Continent of Europe. It is, of course, essential that the Professor should have a good knowledge of English to enable him to lecture satisfactorily in that language, but it is also essential that he should be a man capable of pursuing original research in the subject of his Chair, and inspiring interest in it. No effort should be spared to secure for the University Professorships men of the right type from the outset.

Subject to the recognition throughout of the policy already settled by the University, I have ventured to express an opinion on a number of subjects, some of which have been suggested to me by members of the Senate and of the affiliated colleges and by other persons engaged in educational work in India. Others have occurred to me independently. I have visited all the affiliated colleges both in Bombay and the other parts of the Presidency, with the exception of Kolhapur. I have also had the advantage of conferring with the Principals of the Colleges, including the Principal of Kolhapur, of discussing various questions with other members of the teaching staffs and of hearing the views of a large number of those who are interested in higher education both in Bombay and in other places. I found it useful also to visit some of the colleges affiliated to the Universities of the Punjab and of the United Provinces, and some of the secondary schools and training colleges in the Presidency.

I desire to place on record how much I am indebted to those who have most freely given me all information in their power, and expressed opinions which have frequently been of the greatest value. In particular I wish to acknowledge the advantage I have derived from the complete and accurate information which has always been placed at my disposal by the Registrar, and to the very business-like way in which he has dealt with the questions that have been raised. From the time of my first landing in India down to my latest meeting with the Syndicate I have received the fullest assistance, and have met with a confidence which has not only made my task a pleasant one, but also been invaluable in dealing with the questions which arise, many of them of considerable difficulty.

It appears convenient to treat these questions under the various heads given below :—

### BUILDINGS.

On this subject I have little to add to the memorandum (Appendix IV) brought before the Senate while I was in Bombay, except to state that since it was presented I have had the satisfaction of hearing of the steps already taken with a view to the erection of such a building as indicated, and of seeing the plans which have been prepared by Mr. Wittet for the proposed building on the site adjoining the Library. The plans appear to me to show

a way of meeting the immediate needs of the University as regards accommodation in a manner which is generally satisfactory. I doubt however whether all the large lecture rooms of the size proposed are now required. It is important not to cover more of the open space on the East side of the present University buildings than is absolutely necessary, and I think there would be an advantage, if possible, in making the entrance from the street on the North side of the new building instead of in the University gardens on the South side. The architectural effect of the new buildings in relation to the Library will have to be very carefully considered to insure that the appearance of the handsome Library building is not spoiled, and the internal arrangements should be so constructed as to make it easy in case of need hereafter to devote some of the rooms to different purposes, such for example as a University Institute where graduates and students might meet. Good rooms, which members of the teaching staffs of the colleges can use when in Bombay, will I understand be at once provided on the ground floor.

#### LIBRARY.

Since writing my original memorandum on this subject (see Appendix III), I have made some inquiries as to the possibility of finding a suitable person with experience of Library organization to go to Bombay temporarily as there suggested, and assist in putting the Library in order, but have not been able to hear of anyone able and willing to undertake this work. However, from what I have since heard of Mr. Kuntay, the librarian recently appointed, and of the experience which he has gained in Europe, there is reason to believe that he will himself be able with suitable assistants to cope with this difficult and important task under the direction of the Library Committee. It is to be hoped that arrangements may be made for enabling him—with such assistance as can be provided in Bombay—to enter upon his duties by the close of this year, though it will not be possible to complete the arrangement of the library in a satisfactory way until the new buildings are ready and the University offices can be removed to the rooms there provided.

#### STAFF.

My opinion with regard to the administrative staff and the proposed teaching staff of the University is embodied in the memorandum (see Appendices V and I and II) already submitted. There is, however, a point connected with the staffing of the Colleges which I think is well worthy of the attention of the University and the Government. I refer to the importance of making provision to enable some of those who have been appointed as members of the teaching staff of a College to visit Europe, and pursue further study there under the most distinguished teachers. In some cases, Indian graduates, who hold positions in one of the Colleges, have thus been sent to Europe for further study, with great benefit. It is best to send to European Universities those who have already proved their capacity for more advanced work by what they have done in an Indian University. Scholarships or Fellowships to enable such a policy to be carried out would be very valuable. Care should however be taken that any such assistance

should be used for the purpose of improving the teaching staffs of the Colleges, and such scholarships should be limited to those who have definitely engaged to take up higher educational work. It would be most unfortunate if scholarships intended for the purpose above indicated were used simply as a means for enabling Indian graduates to enter the legal or other professions, some of which are already overcrowded.

I cannot leave the subject of the staffing of the Colleges without expressing my opinion that, if the University Colleges are to develop on sound lines and hold a high position, it is generally necessary that teachers from a distance should be associated with those who have received the main part of their training in India. The effect of bringing together, in the work of teaching and research, men of very different antecedents has proved useful to the Universities of the West. In India the case is still stronger, and I feel, no doubt, that a satisfactory future for higher education in India can only be secured by associating in the work of the Universities and their Colleges, both British and Indian teachers of the right type. It may be that in some exceptional cases this is impracticable, but, as a rule, I have no doubt that such a policy would lead to the best results.

I have mentioned in another part of my report, the question of certain Colleges being encouraged to devote their attention—as regards advanced work at least—to certain special subjects with which they are best able to deal, and discouraged from taking up others. This is a necessary policy, though it may occasionally cause inconvenience to individual students, who may have special aptitude for some subject which the College they have entered does not teach, or at all events, does not pursue to an advanced stage. In a case like that of Bombay, where there are three Arts Colleges, and where there will shortly be at least three Colleges teaching Science, some arrangement might be made for sorting out the subjects and enabling the students of one College to obtain instruction at another in a subject which he may desire to take up, but for which his own College does not make sufficient provision. Arrangements of this kind would have to be made between the Colleges themselves, but the University might exercise a useful influence in encouraging such a policy. It is doubtful, for example, whether it is necessary for more than one College in Bombay to provide instruction—at least advanced instruction—in Latin; but if that subject is thoroughly taught in one College there seems no reason why arrangements should not be made for enabling students of other Colleges, who desire it, to attend the courses of study in the one which is able to take up the subject most effectively.

#### DELEGATION OF POWERS.

I have already recommended the appointment of a Special Standing Committee to deal with the University Library, and of a Joint Board for Matriculation and School-leaving Examinations (see Appendix X). The same Board might also, with advantage, deal with the recognition of schools. It will be a matter for the consideration of the Senate whether this policy of

delegation cannot be extended by appointing Standing Committees having power to act within certain prescribed limits. If necessary, to satisfy the provisions of the constitution of the University, the subsequent confirmation of such acts by the Syndicate could be obtained.

### APPOINTMENT OF EXAMINERS.

It is desirable that there should be a report from the Faculty or Board of Studies as to the appointment of examiners in each subject, though it may be that the Syndicate will think it right, at all events in the larger subjects, to have more than one name for each vacancy submitted to them when appointing examiners, and I think there would be an advantage in not publishing the names of the examiners—at all events the internal examiners—appointed any length of time before the date fixed for the examination. It has been remarked that there is a tendency among candidates to cram up the publications or even other students' notes of the lectures of a particular examiner whose name is known long before the examination is held.

With regard to the appointment of examiners, I would also recommend that a regulation or bye-law should be enacted embodying the principle which has been adopted in the Charters granted to all the Universities which have recently been created in England. Their Charters provide, in effect, that "at least one external and independent examiner shall be appointed for each subject, or group of subjects, forming part of the course of studies required for University degrees." It is no doubt very important that those who are engaged in the actual teaching of a University or its Colleges should be associated in the work of examining. The scope and character of an examination for degrees should have regard to the teaching actually given, but in order to maintain a proper and constant standard, and to give confidence outside the University, it is important also to have the independent external examiner. I believe this to be especially important in India where great changes are taking place in the Universities, and where it is very difficult to judge of the real character of the degrees given. It is highly desirable also that, as far as possible, the standard of attainment implied in the degrees given by the various Indian Universities should be as nearly as possible equivalent. The questions set and percentage of marks required do not give an adequate guarantee as to what the standard really is, but if competent and experienced examiners from one University are appointed from time to time to examine in others, it would be easy to ascertain in what cases the standard is deficient. A guarantee thus given would really be of use to the graduates themselves in obtaining appointments, and also in determining what recognition by other bodies should be given to degrees of the various Indian Universities. The Universities will, of course, remain quite independent, but some intercommunication between them would be of real value. As a rule the external examiner would probably be chosen from some other Indian University, but occasionally it would be well to make use of the services of some experienced teacher from a British University. It is to be hoped that from time to time such teachers will be visiting India.

## REGULATIONS AS TO EXAMINATIONS AND COURSES FOR DEGREES.

As regards the regulations for Degrees—

### Faculty of Arts.

The subjects of examination and courses of study have been so fully discussed, and important alterations have so recently been made, that I think it would be undesirable to re-open the question of the regulations of this Faculty at present. The number of subjects taken at the Final Examination is no doubt very limited, and it will be important to ensure that the recent changes do not involve a lowering of the character of the degree, and that a high standard should be required in the two subjects now taken at the final. It may probably be the case that, hereafter, changes and, possibly, additions may be required, but I think it would be injurious to the interests of the University—especially in view of the numerous questions which are pressing for settlement—to raise this question now. It may be desirable also at some future date to consider again whether it is advisable to give Honours in Natural Science in the B.A. degree, having regard to the fact that the time devoted to the study of Science subjects for Honours at B.A. must necessarily be less than that required even for the ordinary degree in Science. I see, however, some clear advantages in retaining these subjects as optional even in an Arts degree. Although the Arts Graduates who take them cannot be regarded as having a thorough practical as well as theoretical training in Science, the knowledge obtained may be very useful to those who take up other professions—for example, to lawyers, to those engaged in various branches of public work, and to masters who will have the general organisation of the instruction in schools.

I may mention that I had at first considerable doubt as to the inclusion of the practical course in Elementary Science as compulsory in the first year but inquiries which I have made in the Colleges lead me to believe that the inclusion of this course has been on the whole a wise step and the Colleges appear to be very loyally providing the additional accommodation, apparatus and instruction required owing to this recent change, so far as their resources will permit.

A suggestion has been made that the subject of Education should be included in the courses for the Degree in Arts. My own opinion is against such inclusion, but that there would be an advantage in the University giving some definite recognition of the importance of sound practical training for teachers in secondary as well as primary schools, and that this training would best be given to those who have already obtained the Arts degree, and who would devote at least a year of further study to the subject of Education, including of course practice in schools and, in some cases at least, drawing, music or handicraft. A special Diploma in Education could be given to those who pass satisfactorily through such a course, on the lines which have been adopted in some of the English Universities.

### Science and Engineering.

The same considerations apply, to a large extent, to the Degree in Science. I concur, however, in the view which has been expressed to me by some of those who have good opportunities of judging, that further provision should be made for testing the knowledge of English possessed by the candidates for Degrees in Science. It is important that all such candidates should be able to speak and write accurately in English. It is not necessary that they should go through a complete literary course with set books in verse as well as in prose, but it is, I think, essential that they should be tested in Composition, and that they should read some suitable prose authors to secure an adequate vocabulary, and to improve their style.

There are some small changes as to the regulations for degrees in Science which I would suggest for consideration (see Appendix VI). They are matters involving expert knowledge on which I speak with hesitation but from suggestions made to me by some of the teachers of Science I think they are deserving of favourable consideration, and the adoption of these changes would not seriously disturb the arrangements that have been made, or cause confusion.

The question should be considered as to whether a separate Faculty of Science ought not now to be constituted in view of the great development which is taking place in Science teaching in the Presidency, and of the erection of the New Science Institute in Bombay.

### Law.

As regards the Law degrees and courses, I have already laid a memorandum before the Senate which is embodied in Appendix VII. The question is urgent.

### Commerce.

Two minor alterations in the degree regulations are suggested in the document (Appendix VIII) that has already been submitted to the Syndicate.

### Architecture.

I have perused the regulations which have been framed for the proposed Degree in Architecture. They appear to have been carefully drawn up with the advice of those who have practical acquaintance with the subject, and I have no changes to propose, but I have informally raised two small points for the consideration of those who are framing the scheme, with which I need not trouble the Senate in this report. The essential point is to ensure that adequate teaching shall be provided in the very wide range of subjects required for the Degree.

### Medicine.

As regards degrees in Medicine, I recommend :—

1. That medical students should be allowed to take their preliminary scientific subjects—Chemistry, Physics, and Biology—at any of the Colleges of the University which have adequate



equipment and provide suitable teaching in these subjects. For example, there seems every probability that they could be thoroughly taught both at the New College of Science in Bombay and at Ahmedabad in view of the recent developments which have taken place there. There are, no doubt, also other colleges in which proper provision in this respect is or could shortly be made. It will afterwards be a matter of consideration with the authorities of the Grant Medical School whether these subjects should still be taught in that school. In view of the growth of the Medical School, and of the great development which is taking place in the provision made for the subjects of subsequent study, such as Anatomy, Physiology and Pathology, and the pressure on the space available, it may be desirable to discontinue the teaching of these preliminary subjects in the Grant College itself. There is evidently considerable pressure on the space there available, and I believe that it would give useful encouragement to the Science teaching in some of the Mofussil colleges if the above suggestion were adopted. There would also be more opportunity for these colleges to exercise an influence on the students if intending medical students remained under their influence for two years instead of for a single year only, and in some cases it is a hardship to students to take them to a distance from their homes at an earlier period than is absolutely necessary. It would be necessary, of course, to recognise the Science study thus taken at one of the other colleges as counting towards the five years required for a Medical qualification. If this is done it may possibly be required as a condition that some preliminary instruction in Anatomy should be given in the First Year. This might probably be arranged with some member or members of the staffs of one of the local hospitals.

It seems to me impossible that all the subjects required for a qualification in Medicine which are now crowded into the last two years of the course can be properly dealt with in the time assigned to them. It seems clear that these subjects which include Medicine, Surgery, Midwifery and Gynæcology, Pathology, Medical Jurisprudence, Hygiene and Ophthalmology, cannot possibly be studied properly in the period of two years, which is all that is now allotted to them. I suggest that a student who has been certified by his Professor to have attended to his class work satisfactorily in Anatomy and Physiology, should be allowed to take the First Medical examination at the end of his Third Term after beginning his studies in these subjects. If this were done it would enable an additional half-year to be devoted to the subsequent subjects and to Clinical study in the hospital. A change of

somewhat similar character has recently been made with advantage in some of the English Universities. In this connection I think it is right to mention that the accommodation provided in the Grant Medical College for the study of Anatomy and Physiology, which form the groundwork of the early medical curriculum, appears to be excellent, and I believe few universities or medical schools are able to show better-planned rooms for this purpose. It is satisfactory also to note that the Chair of Anatomy is now an independent appointment, that the Professor devotes his whole time to the subject, and also that there is a full-time Professor in Physiology. The existence of a great hospital in close connection with the medical school affords excellent opportunity for the thorough study of Pathology, and it is to be hoped the opportunity thus given will be fully utilised by the authorities of the medical school, and that such additional accommodation as may be required both for teaching and for research in Pathology will be provided.

I have already presented to the University a memorandum (see Appendix IX), on the very important subject of the development of Post-Graduate study and research in connection with the Institute at Parel. I believe this subject to be of real urgency and of the utmost importance. The establishment of a hospital closely connected with the Institute will be required. In connection with this matter the University will no doubt consider the question of the regulations for the Degree of Bachelor of Hygiene or substitute a Diploma in Public Health on the lines which have been adopted in some other Universities, as such a Diploma has already a recognised value for those who are seeking appointments as Officers of Public Health. Intercommunication between the Parel Institute and the Grant Medical College and the J. J. Hospital there, as to the researches undertaken and to the clinical investigations going on in connection with both institutions and in the hospitals would naturally take place and possibly some connection, of an informal character at least, established as regards this subject.

#### AGRICULTURE.

It appears to me desirable to consult with the authorities of the College at Poona as to the possibility of reducing the number of University examinations in this subject. The constant pressure of impending examinations may interfere with steady practical work, and in view of this the second examination in Agriculture might perhaps be omitted. The first examination would deal with the general scientific subjects, and the two other years of the course would be devoted to Agriculture and the special Agricultural subjects which will be included in the final examination. Possibly arrangements might be made for recognition of the Science courses in other colleges where Chemistry and Botany are taught, as providing what is required for the first year. In Ahmedabad, for example, there are excellent laboratories for Chemistry and Botany, and a special Professor of Botany has been appointed, and in the D. J. Sind College a professorship of Biology has been established.

A similar question will arise with regard to the new Science Institute at Bombay, when opened.

At the same time the question of allowing some options in the subjects to be taken at the final examination could be considered, having regard to the character of the practical work in Agriculture which different candidates would be likely to take up after obtaining a degree.

I also desire to point out the advisability of encouraging Post-Graduate study in the Agricultural College. The foundation of scholarships or fellowships to encourage Post-Graduate study and research in this subject is most desirable. I believe that any benefactions which might be given for the establishment of such scholarships would be likely to lead to results of real value. The development of the Agricultural College as a centre for agricultural research and information, as well as for training students, should be fostered in every possible way.

### MATRICULATION AND ENTRANCE EXAMINATIONS.

I have already presented a memorandum to the University on this subject, which will be found in Appendix X. The matter is an urgent one. I would strongly advise that the University should make a definite advance in the matter, with a view to securing as early as possible the appointment of such a Joint Board as I have suggested in this memorandum. I think it would be desirable that such a Board should consider the question of holding School-leaving Examinations in certain schools, where whole forms would be sent in for examination, and where the examination would be conducted in consultation with the teachers on the lines which have been adopted by the Joint Board of the Northern Universities in England.

I append a note (see Appendix XI) which may be useful for reference on the working of the system by this Joint Board. If the requisite subjects are taken up to a proper standard the examination thus conducted is accepted by these English Universities as equivalent to the Matriculation, and a similar plan might be adopted in Bombay. The procedure is warmly approved by the masters and mistresses of many of the leading schools, and found to work quite satisfactorily. Such a Board might also, in consultation with the head-mistresses of some of the leading schools, grant a special certificate in Domestic subjects suitable for girls.

Another still more important question which could be considered by the proposed Board is the importance of providing some definite recognition, under the authority of the Government and of the University for those who will leave the secondary schools at an age rather younger than that at which they would pass a Matriculation examination of proper standard and go to a college of the University. It is clearly wrong, in India as it is in England, to assume that the normal and general course at present for the average pupil is to proceed up the so-called ladder from the primary to the secondary school, and thence to the University. There is, I believe, a demand for boys who have received a sound training in a secondary school up to about the Sixth Standard, to go to places of business as clerks or assistants, or to continue their education at some Technical or

Commercial School without attempting to graduate. I believe it is well worth the consideration of a Joint Board, if constituted, whether a school certificate should not be instituted of some what lower standard—and perhaps more practical character—than that which ought to be required for the Matriculation or Senior School-leaving Examination. The certificate might state on the authority of the Master of the school, that the boy had received regular instruction there for a definite period of years and that his character had been good. It might also indicate whether he had taken any active part in the games and life of the school, and it would also state the subjects in which he had satisfied the Examiners. The arrangements as to the certificates—whether a Senior one recognised for entry on a degree course, or such a Junior one as I am now suggesting—would be carried out in connection with the inspection of the schools. Such a certificate as last mentioned would often, I believe, be very useful to boys seeking employment, and would be helpful to those who have appointments to make. It would to some extent also satisfy the natural desire of parents—which is, I am informed, very strong in India—that on leaving school a boy who has passed through this course satisfactorily should have some definite document stating the fact and having the authority of the University. It is unfortunate that at present the choice lies between the Matriculation certificate or nothing, so far as University recognition, to which great value is attached, is concerned. There are many boys who would do creditable work and obtain a satisfactory livelihood if encouraged to take up practical industrial or commercial work after a proper period of instruction in a secondary school, but who could not with any advantage to themselves or others go through a full course for a degree, and then after the lapse of several years perhaps fail in the endeavour to obtain work either in an overcrowded profession or otherwise.

In order to maintain the character of true University teaching and the credit of the degrees given I believe it to be necessary to raise the standard of the Matriculation Examination. This should be done very carefully and gradually. Any sudden change would create hardship, but there is no doubt that great injury may be done to the colleges, and the quality of their work deteriorated by the admission of large numbers of insufficiently prepared students. In after life the students themselves who just manage to secure a bare Pass in a Matriculation Examination of low standard and then spend years in endeavouring to obtain a degree, will probably suffer most.

#### **RELATION OF THE UNIVERSITY AND THE AFFILIATED COLLEGE.**

On this subject I desire to repeat and enlarge what I have already said in my Address to the Senate that I believe that any proposal for the establishment of separate teaching universities in two or three centres in the Presidency outside of Bombay is premature, and that it is not either possible or desirable at present to attempt any such radical change. I believe the true policy is that on which the University has already embarked—of making a real University centre in Bombay with a proper University Library, suitable rooms for conducting University business and as a place of meeting for its members, and of providing on the lines already approved for Post-

Graduate teaching and research by the appointment of University professors, readers and lecturers for advanced work. This will to some extent set an example and standard of what the true University ideal should be, and if at some future time new Universities are created, they will be of much higher character than would be the case if any attempt were made to create them now. At the same time every encouragement should be given to the existing colleges to continue their work, and to develop on the lines and in the subjects in which each is best adapted. The work of these colleges is often carried on under great difficulties, and there will always be serious inconvenience from the fact that the University centre is so far away. Everything possible should be done to minimise these difficulties and inconveniences. I have made one or two suggestions on the point, which, although I must confess them to be inadequate, may still be of some use in bringing the colleges into closer touch with the work of the University as a central body. These are as follows :—

- (a) Provision of a proper meeting place for members of the Senate of these colleges when in Bombay, as above suggested.
- (b) That the Principal, at least, of each of the affiliated colleges should always be a member of the Senate, so that even if he is not able to attend regularly he would know officially what is going on, and be able to make communications, either directly in writing or through friends, with regard to subjects coming on for discussion.
- (c) Arrangements might be made for an annual meeting of the Principals, and possibly other representatives of all the colleges, at some time when other University business is likely to bring them to Bombay. Such meetings would give an opportunity for interchange of views and promoting better acquaintance, though they would be of an informal character.
- (d) There may be certain matters on which members of the Senate might be allowed to vote by letter or proxy. This matter has already, I believe, been under the consideration of the University, and is well worthy of serious attention.
- (e) It will be desirable to take the opinion of the colleges, where possible, with regard to contemplated changes in the Degree courses.
- (f) In view of the expense and inconvenience caused to candidates by having to come from great distances to Bombay, I think the University should consider the question of holding Degree examinations, as well as the Matriculation, at certain centres as well as in Bombay. I am aware of the fact that there may be difficulties with regard to the printing of the papers, but similar difficulties have been met in other Universities. There is no doubt also some advantage in ensuring that candidates who may have passed all their lives in one locality, should have the opportunity of seeing the Capital of the Presidency.

before they graduate. Probably, for the present therefore, it would be sufficient if arrangements could be made for holding the intermediate examinations at local centres, such as Poona, Karachi and Ahmedabad. There is no doubt that in some cases the expense of coming to Bombay and living there during the examination is a very serious burden on students, and at times they must be prevented from doing themselves justice in an examination held in a place which is unfamiliar and so far distant from their homes.

- (g) It would be a valuable stimulus to the work of the colleges if the Readers who may be appointed as proposed, could occasionally visit them and meet the members of the staff who are engaged in teaching their subjects, and also occasionally give a few lectures there.

I do not think it is desirable to attempt, by definite general regulations, issued by the University, to limit the work—either as regards teaching or research—that these colleges may desire to undertake, though I think the University may take a useful part, in discouraging individual colleges from attempting to undertake advanced work which they are not adequately equipped and staffed to cope with, in permitting arrangements between the colleges both in Bombay and at a distance by which one could devote itself specially to certain studies, leaving advanced study in those subjects to be dealt with by others, and in some cases in refusing recognition to certain colleges as regards special subjects in Honours or Post-Graduate courses in certain subjects. Care however must be taken not to prevent legitimate developments or to check legitimate aspirations.

It will, of course, still be incumbent upon the University to continue a system of inspection of the affiliated colleges in order to be satisfied that they are properly staffed and equipped for teaching the subjects for which they are to be recognised, and also to give advice as regards their needs and the additions which may from time to time be required both as regards building and equipment, and staff. Such inspection would not only be a necessary precaution for the University but might also be a valuable encouragement to the colleges, and helpful in stimulating their efforts and in obtaining the assistance which they need to carry out what is required.

I assume that the Syndicate will continue to appoint an Inspection Committee to visit the colleges at intervals, say, of three years, but I would strongly urge that there should be associated with any such Committee not only members of the Syndicate but also, from time to time, others who have had experience in University and College work—sometimes from other parts of India, and sometimes advantage might be taken of the services of persons of special knowledge who may from time to time visit India, and who may be able to give useful advice and make valuable suggestions with regard to the work of the colleges which they visit. I believe from what I have seen that the colleges would heartily welcome such advice, and would generally be ready

to make an effort to adopt such changes as would enable it to be carried into effect.

I have made some notes on a separate document (see Appendix XII) with regard to certain points affecting individual colleges at a distance from Bombay, which have arisen when I was visiting them.

The question of migration from one college to another without good reason, and in the middle of the Academic year, ought to be considered. I suggest that students should not be allowed to migrate during the Academic year except under conditions similar to those which have recently been adopted by the University to prevent migration during a single term (see Calendar 1914, page 824, Regulation 7).

I may mention incidentally that complaints have been made in some of the colleges as to the difficulty of getting suitable texts of the work set for the examinations. This applies especially in the case of Persian. It is desirable to make enquiry from some of those who have a thorough knowledge of the subject as to whether this difficulty can be met. I have been informed, for example, that the "Odes of Nishat," set for the First Year Course in Arts this year, cannot be obtained in Bombay at present. I speak with hesitation on a subject of which I have no direct knowledge. There are, however, scholars in Bombay who are quite capable of advising the University in the matter.

As above stated I think it is not desirable by any general regulations to prevent the colleges, where properly staffed and equipped for the purpose, from preparing for the M.A. or M.Sc. degrees. Each case should be considered on the merits. There are colleges able to undertake advanced work in certain subjects, and they should not be prevented from doing so. At the same time I think it right to point out that a useful form of endowment for those who wish to assist Indian students would be to provide scholarships which would enable a few of their best students from various parts of the presidency, after taking their B.A. degrees, to take a more advanced course in the University at Bombay after the proposed teaching arrangements have been carried out there.

I do not think it desirable that appointments in the colleges should be made subject to the approval of the University, but new appointments should be reported to it and if a college is found to be making unsuitable appointments and the instruction given in any subject is found unsatisfactory, the recognition of the teaching in that subject by such a college should be withdrawn. The question has been raised whether the University as a teaching body should confine itself to Post-Graduate courses or the courses for the Masters' Degree, and to really advanced work. I think that it is the right policy that the University as a teaching body should at present thus confine itself to Post-Graduate and advanced teaching and research. As at present advised I think it will not be necessary or desirable to attempt to include Natural Science in the subjects thus provided for by the University. The new College of Science will shortly begin its work and the first essential is to

secure that there shall be men of first-rate ability at the head of each of the three great branches of Science taught in the Institute, and that they should have a suitable staff of assistants increasing as the number students increases.

### PRESSURE ON THE COLLEGES.

It cannot but be felt that one of the most serious question affecting the University and all its colleges at the present time is how to deal with the largely increasing number of students who are seeking admission to them. Even before the recent enormous increase in the numbers of those who have passed the Matriculation, and who desire to be admitted to a college of the University, the question of overcrowding in the colleges had been a serious one. The Report of the Inspection Committee deals with specific instances. Some, if not all, of the colleges have made great efforts to provide the accommodation and staff required. When the changes thus contemplated have been carried out the colleges might perhaps have been able to deal fairly with the numbers entering when the Report was drawn up, but the additions then contemplated, some of which will take a considerable time to carry out, would, even if fully carried into effect, be quite insufficient to provide for the increased recent demand. Take one case only as an example :—In the Bahauddin College the number of students was 160 in the last Term of 1913, and at the beginning of 1914 it suddenly rose to 240. The hostels and lecture-rooms are overcrowded. Three, and even four student's have sometimes been crowded into a single small room, and it is quite impossible for members of the staff to obtain anything like the personal knowledge of their students which is necessary if their influence on the students' life in college is to be what it ought. In spite of this overcrowding, many students who desire to enter are necessarily refused admission. It is also certain that not only at the beginning of their career, but still more afterwards, matriculated students who desire to go to a college will meet with disappointment, both by failing to obtain a degree, and still more by failing to obtain employment after taking a degree. There is nothing harder for the individual or more injurious to the State than to provide for very large numbers an imperfect training which does not fit them for any useful career afterwards, and it is impossible for the colleges with the resources and accommodation now available to give training of the quality required to largely increased numbers.

On this subject as on others the practical remedies which I suggest as immediately possible must be regarded rather as mitigating evils, and as a move in the right direction than as completely meeting the difficulties or as counsels of perfection. They are :—

- (1) Urging, and, as far as possible, helping the colleges to carry out extensions, both those already contemplated, and others which in view of the increased numbers, may be needed. . . .
- (2) A new college may be founded, for example, in the South of the Presidency. It is to be hoped also that the college at Kolhapur may be put in a position by proper increase in the staff and equipment to be able to give instruction at all stages up to the



degree. If the various States of Kathiawar would tribute to the necessary cost either by aiding the development of the existing colleges or by founding jointly a new college at Rajkote, the needs of that district might be met.

- (3) The fact must be recognised that it would be far better if some of those who now spend years in endeavouring to obtain a degree were encouraged to go at once on leaving school into industrial or commercial pursuits, in many cases also taking advantage of the special instruction which can be given in technical or commercial schools even after they have taken up some employment. The natural and proper demand of pupils and parents for some definite documentary evidence of proper training in a secondary school would be satisfied by the institution of a school certificate under the authority of such a Joint Board as above suggested.
- (4) Some gradual raising of the Matriculation Examination standard is desirable in the interests of the students themselves, while at the same time it would raise the character and repute of the University. The standard should be such as to give some prospect that those who have passed will not be so liable to disappointment subsequently in their University career or in after life.
- (5) The University should press forward its recent policy of recognising and encouraging study in a wide range of subjects. It has yet to be seen to what extent the developments that are taking place as regards Science, including Engineering and Agriculture and Commerce, will provide a training for young men which will be recognised as fitting them for useful service to the community.
- (6) It seems often difficult and invidious for colleges to refuse to admit students, and no doubt considerable pressure is often brought to bear upon them to admit a larger number of students than they can properly deal with. I think, therefore, it may be desirable for the University, after careful consultation with the colleges, to fix the maximum number of students who may be admitted with the existing staff and the existing accommodation in each place.

It is impossible under the conditions of life which exist not only in India, but in other countries, to ignore these practical considerations. At the same time it must be fully recognised that the ideal of the University is not merely to prepare for special careers but to foster and encourage a real intellectual life, to advance and to disseminate learning, and the more widely it can do this the better. In this work, however, it is essential to secure that the training offered shall really be a higher training, that the standard of the teaching given should be such as a University ought to give, and that the

students entering should be fit to follow instruction of true University character. With this in view all possible encouragement should be given in the colleges to ensure that they flourish and advance not only in numbers but in the quality of the instruction and training which they give.

### EDUCATION OF WOMEN.

There is already an appreciable number of Lady students receiving instruction in the colleges of the University, and there is every reason to suppose that the number of such students is likely to grow. There is no doubt also that a special demand exists in India for Lady Doctors who have received a University education. Graduates of the University are doing useful work in Medicine, and some have already obtained distinction in the Medical profession. It cannot be said, however, that in the University or its colleges adequate provision is yet made for the training of Lady students. I believe it to be essential for the welfare of such students that they should have the advantage of the advice and direction, and the instruction which could be given by highly educated ladies who would devote themselves to the work. Unless such provision is made it is impossible to look with confidence for completely satisfactory results from the spread of Female education in its higher branches. The advice both in personal matters and with regard to their studies which highly educated and refined ladies could give, would be invaluable to the students.

There appear to be three possible ways of dealing with this question in Bombay :—

1. The establishment of a Women's College with independent buildings and a complete staff separate from those of the other colleges of the University, and that such college should be a Government college working very much on the model of the Elphinstone College. This course would have many advantages, but it is possible that the expense would be prohibitive, and that there might be unnecessary duplication of teaching, especially at the higher stages.
2. A Women's College might be founded by voluntary effort, such as has been so successful in the case of Wilson College and St. Xavier's College. It is, of course, impossible for me to venture an opinion as to whether such a proposal can be carried into effect at present.
3. A less ambitious scheme, but one which would, I believe, be of great value, would be to associate with one of the existing colleges such as the Elphinstone College, a special department for Lady students. The instruction in some subjects, at all events up to the Intermediate stage, could be given separately in this department, and some ladies should be appointed as members of the staff who would not only take part themselves in teaching, but also would be able to advise students on personal matters and to exercise a beneficial influence over them. It would be, of course, impossible to

provide advanced Medical or Scientific instruction in such a department, but there is no reason why Lady Medical students or students of Science should not have the advantage of personal association with the ladies of the staff in such a department. By arrangement, the students of the department could attend lectures of an advanced character, or in special subjects, in the Elphinstone or other college in the city, and in some cases the ladies of the staff might be able to give lectures in special subjects to mixed classes, at all events where the numbers attending were not very large.

### GENERAL.

Throughout this report it has been my wish that the recommendations made should be such as are desirable in view of existing conditions and possible to carry into effect in the immediate future. I have not attempted to propound an ideal scheme for a Bombay University but only to make practical suggestions and indicate certain lines of development which would, I believe, assist the growth and progress of the University and its colleges as existing institutions. There are other questions which will before long demand consideration. Amongst these I may mention the following :—

- (1) Whether it may not be possible hereafter for Secondary Schools to take such work and give such instruction as is now included in the first year of the University Course. There may be a few schools at present capable of doing this, but, so far as I can judge, the number of such schools is very limited. A change of this kind would therefore involve the whole question of Secondary Education in the Presidency and goes beyond the range of the matters with which I can properly deal in this report, though from the University point of view it would have the advantage of relieving the colleges to some extent from pressure where it is most felt, and of enabling the members of the teaching staffs in the various colleges to devote themselves to what is more properly University work and to give more personal attention to students.
- (2) Although I have deprecated the re-opening of the discussion of the regulations for the Degree in Arts at the present time, until other urgent matters referred to in this report have been dealt with, I think there are questions relating to the Degree Course which will have to be considered at no very distant date. The position of English, for example, in the University Course may have to be re-considered. It is without doubt essential that Graduates of Indian Universities should have such a knowledge of English as will enable them to understand and express themselves clearly, both verbally and in writing. Such a knowledge ought to be secured at as early a period as possible, in order that the instruction which is given in the English Language and the

books that are read may be properly understood, but I doubt the necessity or desirability of making an examination in English Literature a compulsory subject forming so large a part of the Final Examination as it does at present. I do not under-estimate the importance of students reading carefully a number of the best English books and of having guidance in their reading and the stimulating influence of good instruction in the subject, but I doubt the desirability of compelling all students at this stage of their Course to get up special books for examination purposes. I think it might be well to give a considerable choice of subjects at the Final Examination, if it is clearly laid down that style and power of expression in English will be considered, whatever subjects may be selected, and a fair standard of attainment in the language required. I may also mention that the plan adopted in some English Universities of allowing an Arts Degree to be taken by passing in a given number of subjects in the intermediate stage and a more limited number of subjects in the higher stages has many advantages. A candidate is not obliged to take all his subjects at either stage together, but is required to go through a proper course of study in each, and to pass the University examination in it.

- (3) The authorities of each college affiliated to the University should carefully consider the question of the adequacy of the staff to deal with the number of students who are admitted, and with the subjects which are to be taught in each. There should be some more definite standard of what is required to secure real efficiency in this respect. The question of specialization by colleges on certain lines and of enabling students of one college to take advantage, when it is desired, of instruction in certain subjects given in another will have to be considered.

I believe that it would be useful to call a conference of the Principals, and perhaps other representatives of the colleges, to discuss and report on these matters.

There may probably be other questions in addition to those above mentioned, upon which the University may desire to have my opinion or points which should be worked out in greater detail. If any such questions are raised I shall be happy to deal with them in additional notes and in a supplemental report if desired. Concurring, as I do, in the general lines of policy upon which the University has determined with regard to its future development, and feeling a warm interest in its welfare, I shall always be glad to give such assistance or advice as I can in carrying that policy into effect.

ALFRED HOPKINSON.

LONDON, 1st May 1914.

## APPENDIX I.

## POST GRADUATE INSTRUCTION AND RESEARCH.

Of the specific proposals already adopted with regard to the development of the University, the most important no doubt are those relating to the provision of post graduate teaching. Having before me the scheme approved by the Syndicate on 22nd August 1913, after report from a special committee on the subject and as a considerable time will be required to carry the recommendations made into effect, it may be convenient that I should at once call attention to one of the points—I think perhaps the most important point—that arises. Three kinds of appointments are referred to in the scheme, which puts first in order of importance the permanent appointment of professors of high distinction, and the opinion is expressed "ultimately this class of appointment should constitute the real nucleus of the University's system of post graduate teaching." In that opinion I entirely concur. Already it has been decided to appoint a Professor of Economics and, if desired, I should make suggestions with regard to the definite steps to be taken with regard to this appointment and the conditions of it, it may be well for me before doing so to refer to the question of the general policy to be adopted in dealing with the most important question above indicated. It is to be hoped that, as soon as possible, other professorships may be instituted—say, three in the first instance, so that a substantial field of study and research may be covered from the outset. What is the character of this field to be? I am impressed with the desirability of devoting attention specially to those subjects which can be studied in India better than in other places, in which research can be carried on more effectively—here than elsewhere, and of better word what may be called "Orientalia." To Economics and Economic History studied with special reference to India, this principle applies. Other subjects suggest themselves as coming within it; for example, Indian History, Archaeology, including Archæology, the History of Indian thought (Literature and Philosophy) and Philology. What subjects exactly should be taken up and how they should be divided will depend partly on the special qualifications of the men who may be found available. It is essential that they should be men who have the capacity and the desire for adding to the knowledge of their subject and also of imparting it with stimulating interest in it. One inducement to men of the right type to take up a position as contemplated in Bombay would be the fact that each would have, in his own subject, the best opportunity for advancing the knowledge of it and keeping the interest of others in it. With a clear policy and ideal before it in this matter, the University will have the best guide as to the successive steps to be taken both now and in the future. The institution of three chairs would be a good beginning. When such chairs are in existence the question of instituting a Doctor's degree for the encouragement of research might well be considered. I wonder whether we may hope that citizens of Bombay may follow the course which has been taken by those of some other cities in endowing special chairs bearing the names of the donors or of someone whom they desire to commemorate.

BOMBAY, 20th November 1913.

APPENDIX II.  
LECTURERS AND READERS.

I understand that steps have already been taken to proceed to the appointment of three lecturers in each of five selected subjects and that they will take up their duties in the next summer term. It is therefore unnecessary for me to say anything at present with regard to that part of the scheme.

As regards the *Readers* I understand that the subjects and character of the courses and honorarium have been settled but no further steps taken. If anything is to be done for the coming summer term, inquiries with a view to making appointments should be made very soon but it may be open to question how far there would be any advantage in bringing out Readers specially next summer and whether it might not be well to settle this matter when the question of the professorships to be instituted has been dealt with, unless some specially favourable opportunity, for engaging the services of a Reader of high distinction in the immediate future, occurs.

In deciding exactly what subjects are to be undertaken by the Readers, the considerations I have urged with regard to the Professors do not apply. They will come temporarily and from Europe. I believe that in this case the subjects usually selected should be those to which European scholars have naturally devoted themselves at home and in which they have achieved distinction; for example English Literature, English and European History and perhaps some branches of Science would appear to be suitable subjects. Such courses would be very stimulating to M.A. and other advanced students and the visits of such men, if the choice of Readers is very carefully made, would be both pleasant and helpful to the members of the staffs of the Colleges who are permanently engaged in teaching these subjects. The occasional interchange between Universities of their best thinkers, thus bringing together men from a distance who have subjects of interest in common, may be most useful, and, if the right type of man is selected, inspiring.

BOMBAY, 27<sup>th</sup> November 1913.

### APPENDIX III.

#### LIBRARY.

The Syndicate has, I understand, already made arrangements for devoting a large sum to the Library first for the purchase of books and second for training a Librarian by sending him to acquire a knowledge of Library organization in selected European Libraries. Having regard however to the existing condition of the Library and to the large number of new books coming in, I think it is unlikely that he would be able to carry out the very heavy task of re-arranging the Library throughout and preparing a new catalogue as well as the ordinary work of supervision and dealing with new additions. It seems to me that it would be desirable (1) to have a plan drawn up for utilizing the whole building for Library purposes and equipping it in a manner suitable to the character of the building as well as practically convenient. (2) To endeavour to obtain the services temporarily of some experienced member of the staff of a well-established Library of a University type, in order to have a proper start made. He could deal with the arrangements of shelves, with the division of subjects, with the form of catalogue. While such a man possessing full experience of Library methods elsewhere is engaged in this work, the future Librarian now in training might perhaps work with him during part of his time so as to be in a position to take full charge of the Library afterwards. Without some such arrangement I doubt the possibility of any one being able to carry out the very heavy task of putting the Library into proper condition and also of working it for the benefit of the largely increased members who will, it is to be hoped, use it.

(3) The question of the relationship of the University Library to that of the Asiatic Society might be considered. There may be valuable and costly works of which it is not necessary to obtain copies for both institutions, and some plan for mutual interchange and co-operation in arranging to cover the whole field would be useful. For example, as regards the numerous learned periodicals which are now required for the use of scholars specializing in some line of research, it could be agreed which should be taken by the Society and which by the University. Of course such arrangements would not apply to the case of works and periodicals which are likely to be frequently used by many members of the University and which therefore must always be available in its own library.

If it was found for financial reasons that the expense incurred in carrying out suggestion No. 2, involved the postponement of the purchase of the full quantum of new books for a short time, I do not think there would be any serious inconvenience. The question of good arrangement however will not wait.

(4) In view of the great mass of business to be transacted by the Syndicate I would suggest the appointment of a Standing Committee to deal with Library matters, of course subject to the ultimate control of the Syndicate but with power to incur expenditure for various objects up to an amount to be authorized from year to year. The members of this Committee, in addition to members of the Syndicate, might include others specially interested in Library matters and able to devote personal attention to it. For example, the University Professor of Economics would naturally be a member of such a Committee. Such a Committee might also with advantage consider the relation of the University Library to the various College Libraries where books should be in daily use by the students. •

BOMBAY, 24th November 1913.

## APPENDIX IV.

### UNIVERSITY BUILDINGS.

I have now had the opportunity of visiting all the buildings of the University and its colleges in Bombay, of seeing something of the manner in which the examinations are conducted in the temporary structures which are erected from time to time and also of seeing the plans of the New Science Institute and going through the building in course of erection.

In view of what I have seen and heard already, I feel the importance of the question of the accommodation for the University—of providing a suitable home for it—being dealt with as urgent, in order to carry out its proposed development and for bringing into operation the suggestions which have already received the sanction of the Senate. This need not interfere with future extension.

I have also seen the valuable report (dated June 24th, 1913) of the Building Committee appointed by the Syndicate.

I venture accordingly at this early stage to bring before you the following suggestions for consideration and the opinion which, as at present advised, I have formed on this subject, which may be summarised as follows :—

I. That it is essential for the University to have a definite location—or home—where its business can be carried on, and such developments of advanced work as may be determined on, may be provided for.

II. That any scheme now executed should be capable of future extension, as necessity arises.

III. That having regard to existing buildings and conditions, it is not practicable to remove the University as a whole to a new locality and start as it were *de novo*.

IV. That it is not impossible to provide what is necessary in the central situation in which the University is now placed.

V. The essential requirements may be stated as follows :—

(a) A first-rate library, well-arranged and catalogued, where members of the University and the staffs of the recognized Colleges, when in Bombay, will find the works of reference they require to consult and where they may read and pursue various branches of advanced study and research. In fact, a true University Library.

(b) Accommodation for conducting the examinations of the large number of candidates who are presenting themselves.

(c) Meeting rooms for the authorities of the University, the Senate, the Syndicate and the various Committees and Boards which are engaged in its business.

(d) Suitable offices for the Registrar and clerical staff.

(e) Lecture rooms, special class rooms or seminar rooms, and private rooms for the professors and members of the proposed teaching staff, who may be appointed to take up the advanced work contemplated by the University.

(f) Some rooms where the teaching staffs of the University and its colleges, and also, so far as practicable, students of the University may meet.



- (g) A large lecture hall where, from time to time, distinguished men of letters or science, whether members of the University or coming from a distance, may deliver addresses or lectures either to members of the University or to others who take an interest in science and learning and so stimulate interest and exercise an influence in promoting intellectual life.

VI. Dealing separately with these heads :—

- (a) The University already possesses a beautiful Library building in a situation which is readily accessible. This building should as early as possible be devoted *solely* to library purposes, and the offices of the Registrar and clerical staff and the meeting place of the Syndicate removed to a new building. Until this is done, the proper arrangement and organization of the Library is not possible. Probably one of the wings on the ground-floor could be set apart as a special reading room for those who wish to undertake from time to time some serious study in the library ; another portion, which need not be large, should be set aside as a Librarian's room and for cataloguing.
- (b) I understand that on the east side of the new Science Institute, accommodation can be provided for examining about 800 students at once; others could be provided for in the University Hall, and possibly arrangements might be made for others in some structure of a temporary character on the north side of the site reserved for ultimate extensions of the Institute or in some of the rooms which may be erected as hereinafter suggested. The special accommodation required for the small number of lady candidates might perhaps be provided as at present in one of the Colleges—a plan which is not entirely without its advantages. The erection of a temporary structure from time to time each year on vacant land at a distance from the University offices is open to obvious objection ; and if a heavy storm occurred while examinations were in progress the continuance of them might after a few minutes become impossible for a time at least. I ought to say that, so far as I can judge, the actual conduct of the examinations is carried on in a most efficient and businesslike way, having regard to the very great difficulties which those who have charge of them have to contend with. At a later date, the question of the possibility of holding University examinations simultaneously at some other centres, *e. g.*, Poona, Karachi, and Ahmedabad, may perhaps be considered. I cannot help feeling that it must be a hardship in many cases for candidates to travel long distances immediately before examination and to live in a strange place. A student may be unable to do himself justice under such circumstances, and in some cases the question of expense may also bear hardly upon candidates.
- (g) The carefully-planned Hall erected out of the benefaction of Sir Cowasjee Jehangirji Readymoney would, I believe, provide for this requirement. The present University Hall, though a handsome and dignified building, well suited in some ways for ceremonials is, I understand, owing to its acoustic properties, unsuited for the purpose of addresses or public lectures.
- (c), (d), (e) and (f). These four requirements remain to be provided for, and until (c) and (d) at least are dealt with, it will be impossible to put the Library on a proper footing or carry out the necessary rearrangements there. I recognize that it is important not to sacrifice the amenities of the present attractive surroundings of the University Hall and Library, and I do not regret that it was found necessary to abandon a suggestion for erecting a very large building on this site and, having regard to the facts above referred to, it does not appear

necessary to do so. I believe that a building to meet requirements (c) and (d) and also (e), at all events, in part, might be erected on the east side of the present open space, preferably towards the southern end. Such a building might be of the character proposed in the report of the Committee of June 24th, 1913, though, in view of recent experience in England, there are some modifications which would be worth consideration. I believe that such a building might be so arranged as not to diminish appreciably the advantage derived from an open space adjoining the University building, and even to add to the fine appearance of this part of the city. These requirements (c) and (d) and part at least of (e) are really urgent. Until they are dealt with the schemes already sanctioned cannot become effective. At the same time however—whether carried into execution at once or not—further extension which, will be required under head (e) and the matters included in (f) should be taken into consideration. If (c), (d) and the part of (e) immediately required are provided for at the southern end of the east side, a very similar building *mutatis mutandis* could be afterwards placed at the northern end. Before however any plans are adopted, the question of avoiding noise from the street will have to be very carefully considered in consultation with the architect.

The opinion that it would be preferable to build now at the southern end of the open space is based on the assumption that no additional land in the neighbourhood can be used for the University. If it is possible that, at some future time the space between University Road and the Science Institute or any substantial part of it may become available for University purposes, I should decidedly recommend that the new buildings *immediately* required should be placed at the north-eastern corner and so admit of the laying out and use of any additional space acquired and of the southern side of the University property, being dealt with in a complete scheme. If a continuous space along the whole frontage from the University Library to the Science Institute could be devoted to it wholly, the site of the University and the two colleges adjoining would not, I believe, be surpassed anywhere.

If such a scheme as suggested were carried out the essential present requirements of the University would be met, the Hall and Library would be preserved for the purposes for which they were intended, and having regard to conditions already existing, I believe that a good solution of the present pressing question as regards this aspect of University development would have been arrived at. I may add that the proximity of the magnificent Museum now in course of erection will be a most valuable asset to the University. For the study of important subjects, such as Archæology, Anthropology and Fine Art, it is of the utmost importance to have a good Museum close at hand; the same considerations will apply, as soon as the additional wings of the new Museum are erected, to Natural History and to Geology (including especially Petrology and Mineralogy), and its practical applications. The presence of men of high scientific attainments and learning in these subjects would also be a valuable help in enabling the Museum to be of practical use for educational purposes.

I have of course not gone into minute detail with regard to the various matters abovementioned; but if you think it desirable I should be happy to meet or communicate with the Building Committee and the architect, and for the reasons abovementioned I have thought it desirable to bring this matter forward separately and as early as possible, although other important matters must, of course, be left for much fuller information and consideration.

November 1913.

## APPENDIX V.

### STAFF.

I have carefully considered the question which has been raised whether it is desirable to appoint a salaried Principal or administrative Head of the University devoting his whole time to its work. There would be some obvious advantages in such appointment, but having regard to all the circumstances of the case, including the question of the heavy expense involved I have come to the conclusion that, for the present at least, it is not desirable to institute such an office.

It must be remembered that the main part of the instruction given to students of the University in Bombay itself as well as in the mofussil, will be given in the colleges, and that the administration of these colleges will remain independent, although subject to the conditions laid down by the University with regard to their affiliation. It is quite possible however that, when the proposed permanent University professors have been appointed, special duties might be assigned to one of them with regard to the organization and arrangements for the post graduate work. Whether this can be done would depend partly on the personal characteristics of those who are selected to fill the new chairs, and this question ought not to interfere with the selection of the best man available in his own special subject. Some honorarium would naturally be assigned for any such additional duties, but I do not anticipate that they would be heavy.

It is certain that the work and responsibility of the office of Registrar does require the whole time of an experienced and capable officer, and he will of course require adequate assistance to meet the growing demands of an advancing University. It is understood that a Librarian is to be appointed giving his whole time to the work of the Library.

The question of assigning certain general supervisory duties in connection with the Library or other departments of University work to some selected members of the staff of one of the colleges with a small honorarium, is worth consideration. If such a Board as I have suggested in my memorandum on Matriculation is formed, it may become necessary to appoint a paid secretary to that Board. I propose to submit a special recommendation on the question of inspection at a later date. Some further expense may be involved as it may be found desirable to provide special assistance from time to time to aid any Inspection Committee in its work. This however would not involve the appointment of any additional permanent member of the staff.

*February 4th, 1914.*

## APPENDIX VI.

### SCIENCE.

I think it would be desirable with a view to simplification, and to promote economy in teaching, to revise the syllabuses for all the degrees in which Science subjects are included. In particular it is worth consideration whether the examination for the B.A. Pass in Science should not be made the same as that for the B.Sc. subsidiary subject. I would suggest that reference should be made to the Board of Studies to report on this whole question after consulting the principal science teachers in all the colleges. The members of the Board appear to be elected every five years. It seems to me that there would be an advantage in revising the rules so as to provide for the retirement of one or two members and the appointment of successors every year or every second year. It might be right, however, to provide for the possibility of re-election of retiring members in special cases.

In view of the developments which are taking place in the Engineering College, Poona, I understand that suggestions may be made to the University with regard to the regulations for degrees in Engineering. I do not feel able at present to express an opinion in detail with regard to such suggestions ; but I may state that I have been impressed with the importance of maintaining suitable courses of instruction and providing University recognition for a number of students who will not take a degree, but who are, I believe, doing good practical work in college, and who will have still better opportunities for this when the new laboratories are fully at work.

In view of the great extension of Science teaching in connection with the University, it becomes a matter of vital importance that teachers of the subject should be very carefully selected, and should have received a training under the best teachers. I would again emphasize the importance of assisting those who are to undertake such work to spend some time in one of the European Universities in which this subject is best taught, and in which a stimulus is given to original work and thought.

It is highly desirable that, before the College of Science at Bombay is completed and the equipment provided, the professors who will be at the head of each of the three great departments—Physics, Chemistry and Biology—should be appointed, so that detailed arrangements may be made with the advantage of their advice.

## APPENDIX VII.

### LAW.

In order to place the instruction in this subject on a satisfactory footing it appears to me that several changes are urgently needed :—

I. I am satisfied that the students require more assistance and direction in their studies. I agree fully with the Committee of Inspection and with the Principal as to this. Lectures alone are not a sufficient training. I recommend the appointment of two well-trained lawyers who would devote their whole time to the work of the Law School. The office of the Chief Librarian might be combined with the other duties of one of the persons so appointed. Having had long experience of Law Teaching, I attach great importance to the opinion expressed by the Principal in his remarks on the Committee's report that generally the Teachers of Law should be in actual touch with practice. This however does not apply to such subjects as Roman Law, and I think that it would be advantageous and that waste of power would be avoided if one of the persons to be appointed as I have suggested, also gave the lectures on Roman Law—possibly the other might take Jurisprudence or Equity. The exact subjects would depend on the special qualification of the persons appointed for the tutorial work. This work might include holding small classes in which questions are put and answered verbally—setting of hypothetical cases which could be dealt with by the students either verbally or in writing—advice as to books to be read and the mode of referring to cases and the looking up of enactments and authorities bearing on any question. A certificate of having satisfactorily attended classes of the Tutors and performed the exercises set should be required from candidates for the degree, in addition to the usual certificates of attendance at formal lectures. Many of the students, I understand, who take the degree and who are admitted to practice, have never had any training for their profession beyond what can be obtained from attending formal lectures and reading text-books alone. I do not believe that this can be regarded as sufficient and the best substitute for reading in a barrister's chambers or being articled is such tutorial work as I have suggested.

The students would probably also derive advantage from attending the Courts under some direction and making notes of reports of cases there. These notes should be shown to the teachers from time to time and commented upon, and the class of cases to be attended could be selected by them.

II. I do not consider it desirable for students of Law to attend a very large number of lectures, but I do think that having regard to the wide range of subjects taken the number now given in the Law School should be increased, and that some of the lectures should be given at an earlier hour when students and teachers are fresh for work. It is, I believe, necessary also to divide the very large classes. Very few lecturers could regularly keep alive the attention of a class of 300, especially when many come late in the day after other work.

III. In my opinion the regulations as to the subjects for the examinations require some modification. I doubt the possibility of the average student taking up such subjects as negotiable instruments, insurance, patents and other parts of mercantile law in his first year. On the other hand I think there would be a great advantage in introducing a course on the outlines of Constitutional Law. I think some change should be introduced as regards the prescribing of text-books for study. There is a fear that a definite prescription of a list of text-books may lead to cramming; for example, in getting up by rote the decisions in a list of named leading cases. I would also point out that the ground to be covered is so wide in some branches as to render it desirable to make a slight addition to the number of papers set.

IV. In view of the range of study required and of the fact that the right to practise really follows from obtaining the degree, a two years' course seems to me too short, especially as many of the students do not devote all their time to legal study or practice. Any great and sudden change might cause hardship; but I would suggest that some of the subjects now taken in the first year should be postponed to the second, *e.g.*, mercantile law: that the examination should take place in October before the opening of winter term in November, and that for the second examination, courses should be prescribed to cover three terms—say two summer and one winter—the students normally taking the first LL.B. in March.

V. *Accommodation.*—(a) As this is the only Law School in the Presidency and so far as I can judge rightly so—the need for hostel accommodation is specially urgent. (b) There should be some suitable rooms where the Tutors and, when possible, some of the other members of the staff could meet small classes of students or at times see them individually. (c) Arrangements must be made to provide for the increased number of lectures and division of classes. This question is, of course, intimately connected with that of the re-arrangements required in Elphinstone College.

VI. I believe that it is important to secure the co-operation of the Law teachers in the work of examining. The questions usually set in Law Examinations are—as I know by experience—far from being the best test of a student's real knowledge of the subject. One does not find it out until one has had actual experience both of teaching and examining. I quite agree as to the necessity of having external examiners as well. I should also suggest that a *viva voce* examination in Law might be added with advantage.

As regards cost, in view of the facts referred to in the report of the Inspection Committee, the appointment of two capable young men, at say Rs. 300 a month, to such positions as I have suggested should not be difficult. I agree with the Committee of Inspection in urging the pressing need for placing the studies in the Faculty of Law on a better footing. I do not say that the proposals above made cover everything that is desirable; but I believe that if adopted a substantial advance would be made. If desired I should be happy to go into further details on the matter, after consultation with those interested in the Law School.

BOMBAY, 20th November 1913.

## APPENDIX VIII.

### THE COLLEGE OF COMMERCE AND THE DEGREE OF B. COM.

The new College of Commerce appears to have made a very satisfactory start in the temporary premises that have been secured for carrying on its work. It seems likely that a very large number of students will desire to avail themselves of the advantages now offered by the College. It is also satisfactory to note that a number of the students will have passed the Intermediate Examination in Arts, either in Bombay or some other Indian University before entering on the course in Commerce.

There are two small changes in the Degree course which I would suggest for the consideration of the Senate. I believe that neither of them would seriously disturb the arrangements which have recently been made. *First* I think it would be desirable that the subject of Economic Geography should be taken in the first year at the Intermediate stage, instead of the difficult subject of Mercantile Law and Practice, and that the whole subject of Commercial Law should be dealt with continuously in the two final years. *Second* that the subject of "Organisation of Industry and Commerce" should be placed as a fourth voluntary subject instead of as a compulsory subject for the final. The course as laid down seems rather too heavy.

I think there would be an advantage in dealing with the first, at least, of these two questions at an early date. I understand that the Acting Principal of the College, Mr. Aiyar, who has devoted so much time and thought to the arrangements relating to instruction in Commercial subjects, concurs in the opinion that both these changes would be desirable.

The question of instituting the Degree of Master of Commerce should also be considered. Two branches which at present seem specially suited as alternatives for such as advanced degree are (1) Finance and Accounting in connection with Government and Municipal work; (2) the additional subjects, beyond what is prescribed for the Bachelor's Degree, required by those who intend to qualify as actuaries.

BOMBAY, 26th February 1914.

## APPENDIX IX.

### POST GRADUATE STUDY AND RESEARCH IN MEDICINE.

Applying the principle of encouraging those branches of study and research that can be carried on most effectively in India and for which Bombay could afford special advantages, I feel strongly that the policy of the University should be to do all it can to promote careful study and research in Tropical Medicine and in Hygiene. The amount of material unfortunately is enormous. Already great advances have been made in the knowledge of the causes, the cure and prevention of disease, especially of Tropical Diseases. The work done in this department has been one of the greatest triumphs of Science in recent years, and the opportunities in Bombay for still further promoting this invaluable work in extending knowledge and relieving suffering are exceptional. I know nothing more likely to add to the repute of Bombay as a centre of scientific work, nothing more likely to benefit the country than the establishment and development of a great Institute for research in Tropical Medicine in connection with the Laboratories at Parel and for giving Post Graduate training in preventive medicine. The number of students must necessarily be limited and only those who have already graduated in medicine or given evidence of attainments at least equal to those of Graduates, should be admitted, but the beneficial results from training really competent men and promoting research of a really fruitful kind would be unlimited. Such a school would no doubt draw capable investigators from other places as well as from the Presidency, even from Europe and the United States. There is ample room for such an Institute in Bombay as well in Calcutta. I would earnestly urge the encouragement of this subject, and trust that there may soon be established, in connection with the Laboratory at Parel, an Institute—well-equipped and well-manned—first for research and special study in Tropical Medicine and second for the training of Medical Graduates in the subject of Public Health and Preventive Medicine. University awards and distinctions might be given to encourage the work done in the Institute and in particular, a Diploma in Public Health for those who complete a satisfactory course in that subject. The question should be considered whether it is desirable to continue the special degree in Hygiene as the term Diploma in Public Health has now a recognized meaning and value, both in India and in Europe. The influence of the University in promoting research and study of the kind above indicated would, I believe, be very valuable and the benefit which may accrue incalculable.



## APPENDIX X.

### MATRICULATION.

The present position with regard to the Matriculation Examination requires specially careful attention. As regards the conduct of the actual examination—what I may call the Registrar's Department—I have no suggestion to make. The business arrangements seem quite satisfactory, in spite of the very large and increasing number of candidates. In view of the increase it might perhaps be well to hold the examination at one additional centre—possibly at Baroda.

The points I desire to lay stress upon are of a more fundamental character.

*First.*—I find that complaint is made that the standard of examination varies substantially from year to year and also that, owing partly, no doubt, to the number of examiners, it is not uniform even throughout a single examination, in those subjects at least in which the candidates are very numerous. The figures certainly appear to show that the standard varies from year to year; for example, this year the total percentage of failures was 42·47 as against 66·92 last year, although the number of candidates had largely increased, the failures in English 27 per cent. as against 32 last year, although the addition of an extra paper in the subject might be supposed to raise the standard, and in Mathematics failures were 3·46 per cent. as against 33·49 last year, a change so great as to preclude altogether the idea that it is due to exceptionally well prepared candidates having presented themselves.

As regards the complaint of want of uniformity at the same examination it is impossible to say how far it is well founded. Similar questions have occasionally arisen in other Universities, and I propose after my return to England to make more detailed inquiry and to send a note as to possible means that may be adopted for securing uniformity of standard in addition to those already adopted by the University.

The question as to the mode of appointment of examiners is referred to below.

Another objection which has been raised, and which I think there is much force in, is that the masters of the Secondary Schools have no opportunity of making their views known on any matter affecting an examination which influences their schools and the subjects they are teaching so vitally.

The University must depend for suitable students on the character of the work done in the Secondary Schools, and I think it is most important that the masters of these schools should have some opportunity of expressing their views in an effective way with regard to the regulations of the Matriculation Examination for which their pupils are to be prepared.

Another difficulty in Bombay Presidency arises from the fact that there are two competing examinations which may have to be taken at the time when a boy is leaving a Secondary School. First, the Matriculation admitting to the University but not to the Government service; and second, the School Final, recognized for Government service but not admitting to the University courses. The double examination may be a hardship to pupils and cause serious inconvenience in the conduct of the schools. Experience in England shows the advantage of examinations held in the schools as compared with rigid external tests but any change in this direction must be carefully guarded and the University is naturally the authority to determine the conditions on which students are to be admitted to its degree courses.

To meet these difficulties and to provide the most efficient working authority for the Matriculation and School Final Examinations, I suggest the formation of a

Board of (say) about twelve members consisting of (A) Representatives of the University, (B) Representatives of the Government, (C) Co-opted members—who should be chosen from leading school masters in the Presidency—one retiring say every second year. This board should have the whole conduct of Matriculation and School Final Examinations including the nomination of Examiners—subject, of course, as regards any change in the subjects and general character of the examination to the sanction of the University so far at least as regards recognition for University purposes and of the Government so far as regards admission to the services. The value of the association of masters of good Secondary Schools in dealing with matters affecting Matriculation or School leaving examination is most important and such association has been found very beneficial in dealing with this difficult question elsewhere.

It will be a matter for future consideration whether under the direction of such a board as above suggested a system of School Certificates should not be instituted under conditions providing that the senior school certificate should count as a Matriculation certificate when all the subjects required by the regulations of the Matriculation Examination are included.

As to the subjects of the Matriculation, they have been so recently revised that I am most unwilling to suggest any alteration. I feel bound however to state that I am strongly of opinion that the subject of Geography ought to be included among those required for this examination. The exact form in which this should be done can be considered later. It is true that by the new regulations a certificate is required from the Head Master of a school stating that the candidate possesses a satisfactory knowledge of the subject. Were such certificates of a really effective kind, the policy of substituting school records instead of an external examination in certain subjects has much to recommend it, but under existing conditions I am satisfied after making direct inquiry on the matter that the regulations with regard to such certificates will not be effective. It is putting an unfair strain on the school master to expect him to refuse a certificate on the ground only of insufficient knowledge of Geography, if the candidate appears adequately prepared to enter for the examination in other subjects. There is no sufficient guarantee that the school will be properly provided with teaching appliances in the subject or that any of the masters will have studied it at all themselves. Geography badly taught is undoubtedly a useless subject but, if well taught, there is no other subject which will do so much to give a pupil an accurate and orderly habit of thinking, to make him understand that knowledge is to be of things not of mere words and to give him clear ideas of what the world is like beyond the range of his own limited experience—using that experience to help to give him some understanding of what is beyond. The importance of the subject as regards school teaching is recognized in England by the fact that the Board of Education requires all certificated school teachers to have passed a definite examination in Geography. The reasons which make this necessary in England apply, I believe, with a still greater force to India. It is to be noted that unless Geography is taken up at this early stage it may be entirely neglected, as it is not expressly recognized in any of the courses laid down by the University, though I am glad to find that, in some at least of the Colleges, History lectures are regularly illustrated by proper maps in the lecture rooms. I have been interested to find that the view above expressed is shared both by experienced masters of schools and by members of the teaching staffs with whom I have conversed in some of the Colleges.\* The same considera-

\* *Note*:—I may mention that since presenting my memorandum on Matriculation I have received a report of the interesting Conferences held at Lahore under the Presidency of Professor Ramsay Muir. A Resolution was carried unanimously at the Conference—"That the University be urged to require that students should be compelled to obtain a certain percentage of marks in both parts of the History and Geography paper in the Matriculation." Professor Ramsay Muir at the Conference "deplored the way in which Geography seemed to be treated in the Matriculation," and said that "on the whole an adequate geographical training in school was even more essential as a preparation for Historical study in the University than the training in History itself." The Master of the Central Model School regretted the lack of interest in Geography, and the opinion was expressed that students should be encouraged to make their own maps and check them by atlases subsequently. It was also proposed that the attention of the Colleges be directed to the importance of adequate provision of wall maps, atlases, etc.

tions apply to some extent to the certificates as regards Science. This question however is less urgent, especially in view of the practical course in Elementary Science now taken by all students in their first year, and the very loyal and earnest way in which the Colleges appear to be endeavouring to provide what is required for the purpose. I therefore do not now recommend any alteration as regards Science. It is both less urgent and more difficult to deal with.

I deprecate any sudden raising of the standards of examination but I do feel bound to point out that if the work done in the affiliated Colleges is to be of proper standard and the credit of the University maintained, there should be some raising of standard in the Matriculation examination, though this should be done very gradually ; and it is to be hoped that ultimately the standard may be approximately equal to that of such examinations as the London University Matriculation or others of like character and perhaps recognized as interchangeable with them. It is very difficult without having actually examined to judge of standards in any particular examination ; but it is obvious that an examination in Mathematics with only 3 per cent. of failures among candidates drawn from schools of all kinds and most various degrees of efficiency must be entirely inadequate as a guarantee of any knowledge of this subject, which is a compulsory one in all Matriculation Examinations. I may also mention as regards English, that there is no guarantee that a candidate can do simple composition satisfactorily. He may pass simply by getting up certain set books. It has been suggested to me that candidates should be required to pass in composition, taken separately ; and I think this suggestion is a good one. It is not necessary that candidates should write eloquent essays but merely be able to express facts in clear and fairly correct English. In comparing the standards of examinations in India with those in England, it must always be remembered that nearly all Indian students have to learn English as a difficult foreign language and that it involves a very considerable amount of study and intellectual training for the Indian students to gain sufficient knowledge of the language to write clearly, to read easily and to understand the thoughts expressed even in the simplest literature. Such a knowledge is absolutely essential to enable a student to profit by the instruction given in the Colleges, but in all criticisms of Indian Matriculation Examination the time and careful training required for its attainment must not be forgotten.

## APPENDIX XI.

### **Note as to the Senior School Certificate Examination of the Joint Board of the Universities of Manchester, Liverpool, Leeds and Sheffield.**

1. The Senior School Certificate Examination was instituted by the Joint Matriculation Board of the Northern Universities with the object of bringing an examination of Matriculation standard into as close a touch as possible with the schools themselves. It is essential that such an examination should admit successful candidates to Universities and exempt them from the preliminary examinations of various professional bodies, provided that the necessary regulations as to choice of subjects have been fulfilled. Many Secondary School pupils, however, do not intend to proceed to a University or to enter a profession, and the requirements of such candidates are not met in the best way by imposing regulations as to subjects such as are required by the Universities for the Matriculation Examination; the certificate regulations are framed, therefore, to meet the cases of these candidates. The subjects of examination are divided into three groups, (1) English, including History, (2) Languages, (3) Mathematics and Sciences, and candidates must pass in a certain number of subjects which include at least one subject from each group. This regulation ensures that all candidates are examined in the range of subjects required for a broad general education.

(2). Further, for the needs of schools such an examination should be taken as a Form Examination and not by a chosen few of the best scholars of the school. It was found, consequently, that the Matriculation standard itself was too high for general form purposes (pupils of average age 16—17), so that the Senior School Certificate Regulations will enable candidates to obtain a certificate on terms less onerous than those demanded for Matriculation and similar purposes. But this same Certificate is in itself a Matriculation Certificate, if the Matriculation requirements as to subjects, etc., are fulfilled. That is, there is no duplication of examinations, but the average school candidate and the more promising Matriculation candidate are catered for by the same examination.

3. In most cases the examination papers taken by a school are actually the Matriculation Examination papers, and in other cases—at present few in number—papers are set to a special approved syllabus submitted by a school are few. This is evidence that the standard syllabuses of the Board are in themselves well adapted for school requirements, and that the schools desire such external guidance in their work. The system also ensures that points of value which appear in such special syllabuses are assimilated before long into the standard (Matriculation) syllabus.

4. The whole working of the examination is designed to bring it into touch with school needs; and with the above general statement, the main points of the regulations can be summarized as below.

5. Schools sending in candidates for the Examination must be under Inspection by an External Body, and such Inspection must show that the school is efficiently conducted. Any recognised Authority may undertake the Inspection but the report of such Authority must be available for the information of the Joint Matriculation Board as the Examining Body.

6. Schools are at liberty to submit their own syllabuses for approval in any subject of the Examination, and they are encouraged to do this by fixing the fee for such papers extremely low, and in many cases the fee is remitted altogether.

7. Candidates may present themselves for examination in more than the minimum number of subjects required for a pass.

8. Schoolmasters and school-mistresses in active service form 20 per cent. of the full Board, and at least 33 per cent. of the Special Standing Committee dealing with School Examinations. It should be stated that these teachers do not have access to the Examination Papers before the commencement of the Examination.

9. Wherever possible, people with School experience are appointed Examiners, though it is by no means an easy matter, owing to various circumstances, to obtain efficient Examiners of this type. Almost invariably the Revisers to whom the question papers are finally submitted are school teachers engaged in active work. Such Revisers are chosen from schools *outside the area served by the Board*, and are drawn, therefore, mainly from the South of England.

10. Copies of the actual marks obtained by the candidates and a Report on the work of the candidates from each school as a whole in each of the different subjects of the Examination are sent without charge to the school authorities.

11. The heads of schools are invited to send in an estimate of the probable performance of their candidates in each subject of the examination, and in the case of "doubtful" candidates this estimate is considered by a small Committee and a decision is come to as to whether a candidate has done himself justice or not in the examination and failed or passed accordingly. This procedure affects about 5 per cent. of the school candidates. It has been found that an estimate arrived at by the Headmaster in consultation with his Staff is much more reliable than the bare statistical school record of a candidate for the two or three years preceding the examination.

12. The success of the Regulations depends largely on the way in which they are carried out, and there are a great many Regulations dealing with the setting of papers and marking of scripts, and what is most important, the making of an allowance by the full meeting of Examiners when weakness is shown by any candidate in one subject if work in the other subjects reaches a satisfactory standard.

27th April, 1914.

## APPENDIX XII.

### NOTES ON THE COLLEGES IN THE NORTH OF THE PRESIDENCY.

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#### D. J. Sind College.

This College is in urgent need of additional accommodation, both for teaching and for the residence of students. Proposals have been made for devoting the whole block of buildings—part of which is now used as a Museum—to the College. A scheme for dealing with the matter has been carefully thought out and, if adopted, the additional provision which could be made for Laboratories, Class Rooms, and Library, would enable the work of the College with its present number of students to be carried on in a satisfactory manner so far as accommodation is concerned. The expense involved would not appear excessive. Unless some arrangement of the kind is made it is impossible to deal properly with the number of students at present in the College and the subjects in which instruction is now given.

There is also urgent need for additional hostel accommodation. This could be provided on a plot of land at the corner of the ground known as the Artillery Lines or Maidan, and an open space adjoining should be reserved for playing fields. It is essential to the healthy working of the College that an arrangement of this kind should be made both for residence of students and for games and recreation.

The question of providing instruction in Agriculture in the Sind College should be taken into consideration now. It may not be desirable to institute a complete Degree Course and possibly a less extended Course, say of two years, might be arranged in connection with the College, which would be very useful. The courses already arranged in Engineering which do not lead to a Degree and such shortened courses as are given at the Agricultural College in Poona will form valuable precedents.

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#### Colleges in Kathiawar—Junagadh and Bhavnagar.

Both these Colleges appear to be overcrowded, and the accommodation in the hostels is inadequate although they have been recently extended.

With the resources at their disposal I do not think it possible for both Colleges to provide the instruction required in all the subjects recognized for the Arts Degree. For example it might be well to give up the teaching of French and of Philosophy in the Bahauddin College. I would suggest that the two Colleges should confer together and report as to the subjects which each can take up and teach effectively without casting an undue burden on the members of the staff. . . .

*Bhavnagar.*—The proposed new Laboratory ought to be proceeded with at once. Better arrangements and organisation are also required for the students' games and physical exercise.

### **Baroda.**

Here as in other places the classes are congested although many students applying for admission have been refused. There are 275 students in the first year class which has been divided into two sections. The arrangements made for games and physical exercises at Baroda are excellent, and the accommodation for teaching will be greatly improved by the removal of the High School to new premises and the erection of a new physical laboratory. In spite of the further accommodation thus provided it will still be impossible for the College to admit all candidates who apply, and selection will have to be made from among the applicants.

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### **Ahmedabad.**

The provision for Science teaching which has now been generously made, and the proposed extension of the College by the erection of a hall and library, mark a great advance in the development of this College, and I believe that the suggestions I have made with regard to recognition for certain purposes would still further assist its development, especially as regards the Science side. But here also I believe that selection will still have to be made from those who apply to enter.