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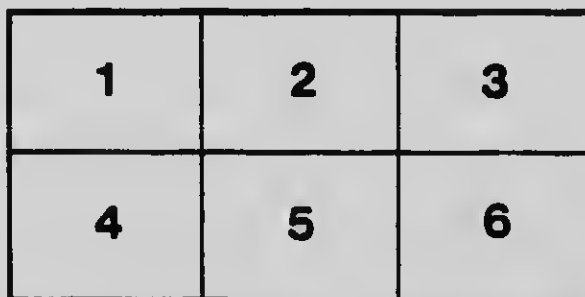
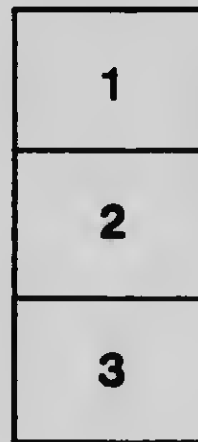
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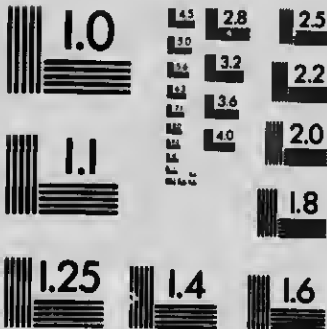
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CANADA MEDICAL COUNCIL

Report

COMMITTEE ON STANDARDS OF

EDUCATION

AND

EXAMINATION

MATRICULATION

1916



CANADA MEDICAL COUNCIL

Report of Committee on Standards of Education and Examination.

To the President and Members, Canada Medical Council:

Your Committee on Standards of Education and Examination desires to report that its attention during the past year has been devoted to the subject of matriculation. Following the discussion on preliminary education at the last annual meeting it seemed desirable that all available information regarding matriculation should be collected and placed at the disposal of the Council. A programme was agreed upon, the various parts assigned to members of the Committee, and a meeting has been held for the preparation of this report.

1. Matriculation in Canada.

Copies of regulations relating to matriculation have been secured from all the Universities and Medical Councils. Also copies of all matriculation papers set in Canada during the past year have been collected. A comparative study of these has elicited the following facts.

The minimum standard of matriculation is essentially the same for all the Universities of Canada.

All the Provincial Medical Councils fix a standard of matriculation, except British Columbia and Saskatchewan. These accept the degrees of approved medical schools without enquiring independently as to preliminary education.

The subjects required for matriculation are different only in unimportant details. The total content is much the same. All English-speaking Universities and Boards require English, History, Mathematics and Latin. The variations are in regard to Modern Languages and Science. The Nova Scotia Board and Dalhousie University require one Modern Language and no Science. Ontario permits an option of any two of Greek, French, German and Experimental Science (Chemistry and Physics). Some place Science on the compulsory list and permit an option between French and German. The Science

subjects are in various combinations among Chemistry, Physics, Biology, Physiology, Botany, Domestic Science, Agriculture and Zoology.

The French-speaking Universities and the Medical Council of Quebec require French, English, Mathematics, History, Latin, Philosophy, Chemistry, Physics, Botany and Zoology without options.

A study of these leads to the conclusion that from the point of view of the medical matriculant the content of the work required is adequate and satisfactory and that absolute uniformity is not necessary or desirable.

In regard to the minimum percentages required to pass there are also variations, but the differences are not great; 40% on each subject and 60% of a total average is a frequent standard. An estimate of the value of a minimum percentage must take into account the relative difficulty of the questions set.

Copies of all the papers set throughout Canada during the past year are in possession of the Committee and some comparisons have been made. The result is a conclusion that it is not possible to determine the relative difficulty of the different sets of these examinations, when all are so much alike, except as a matter of opinion rather than of fact.

In the opinion of the Committee the regulations, curricula and examinations for matriculation required by the Universities and Provincial Medical Councils are generally satisfactory and should be interchangeable.

2. Enforcement of Matriculation Standards by Universities and by Medical Councils.

The following statements have been submitted to the Committee by the Universities.

University of Toronto.—No students admitted to the study of Medicine without complete matriculation.

Manitoba University.—Students must have full matriculation before registration.

McGill University.—During the past three years no student admitted without complete matriculation.

Queen's University.—Under special conditions a student with incomplete matriculation may be permitted to attend for

the first year. Subsequent to this enquiry regulations amended. No admissions hereafter without complete matriculation. Session 1913-14, 17 students with incomplete matriculation. Session 1914-15, 25 students with incomplete matriculation.

Dalhousie University.—All the students of this year had completed matriculation; but failure, in one subject only, allows the student to be conditioned for one year only.

Western University.—During the Session 1915-16 all students registered satisfied the entrance requirements.

Laval (Quebec).—Session 1915-16, 89 students admitted; 73 had B.A., 6 had the brevet, 10 irregulars admitted on payment of \$15 extra, who were examined by a Board appointed by the Faculty.

Laval (Montreal).—Out of 40 admitted in Session 1915-16 all but 11 had the brevet. These 11 had some certificates but were again examined by the Faculty.

No enquiry has been made as to the rigidity with which the regulations are enforced by the Medical Councils. From perusal of the annual reports it is evident that relaxation in some instances does take place for records appear of appeals for registration as matriculants being granted. The basis of the appeal and the reason for granting it are not stated.

3. *Matriculation in the United States.*

The information before the Committee has been secured from publications of the Council on Medical Education of the American Medical Association, from the annual announcements of a number of medical schools and from the Ninth Annual Report of the President of the Carnegie Foundation for the Advancement of Teaching. A study of these sources of information brings out the following facts:

1. The Council on Medical Education of the American Medical Association has classified the medical schools in the United States, using ten criteria as a basis of comparison.

2. The second of these criteria is "enforcement of a satisfactory preliminary education requirement."

3. As the various state boards of licensure accept the classification of the Council and debar graduates of low grade schools from the qualifying examinations of the state boards,

the Council, through its Secretary who is also Inspector, has the power of forcing upon the schools any minimum standard it pleases to set up.

4. An acceptable medical school must strictly enforce "a requirement for admission of a four-year high school education, and in addition at least one year of college work, including eight semester hours each of Physics, Chemistry and Biology of college grade and a reading knowledge of German or French."

This is the minimum standard of matriculation for an acceptable medical school at the present time.

5. The four-year high school curriculum does not differ materially from that of Canadian high schools. English, Latin, Mathematics and History are required subjects and options are permitted among German, French, Greek and Science. The latter includes Botany, Biology, Chemistry, Physics, Physiography, Physiology, Agriculture, Drawing, Manual Training, Domestic Science and Music. The final examinations of each individual high school are accepted.

6. The curriculum of the preliminary college year includes Physics, Chemistry, Biology, French or German.

7. The Council expects "a strict enforcement of the standards and requirements, the college itself to be held responsible for any instances in which they are not enforced. Since the product of the medical school depends largely on the quality of the students admitted, in rating medical colleges, special emphasis is laid by the Council on the strictness and honesty by which the standards of admission and advanced standing are administered. By the admission of unfit students the school is handicapped from the very beginning and, in the opinion of the Council, deserves a low rating regardless of its equipment."

8. In view of this statement by the Council on Medical Education an enquiry has been made to discover whether the standards are enforced by schools rated in the first class (A Plus). No personal inspection could be made but from the annual announcements of schools, and from President

Pritchett's Ninth Annual Report, there is abundant evidence that the standards are, in too many instances, only "paper standards." The following quotations are from President Pritchett's Report, pages 53-55. "The medical school will talk with a solemn face about its 'standards' and admit any student who has the price." "The Foundation . . . has not hesitated to call attention to the wide discrepancy which exists, even in some old and famous colleges, between the standards of admission laid down in the catalogue and those enforced in practice." "It does not make for a higher conception of truth to print one set of entrance requirements in the catalogue and practice another."

9. Many of the first class schools openly admit students with incomplete matriculation, e.g. Western Reserve University. See Announcement 1915-16, page 54: "Conditional Entrance. Candidates who lack a part of the full requirements for admission to this school may be received conditionally for the first year's work."

10. President Pritchett's Report, page 62. "The Council has imposed as a condition of the recognition of medical schools as acceptable an entrance requirement of one year of college work, this year to include the study of three sciences and a modern language. Not only has the Council adopted this requirement as a teaching measure, but it has enforced it throughout the United States, without regard to the ability of the school and college system to meet it. Finally, it has consented to recognize pre-medical schools set up in the medical school itself to teach the three sciences and a modern language—it can all be done easily in one large room: chemistry in one corner, physics in another, biology in a third, and German in the fourth."

11. Same Report, pages 63, 64. "No requirement for admission to a given medical school can be made without reference to the educational possibilities of the region thereabout. The conception from which we start is that the medical school is a professional school, that the youth enters it with a mind already trained to think, and with certain fundamental scientific knowledge. Only under this conception will our schools ever become intelligently related to one

another, and only under this conception can the medical school realize its mission as a professional training school resting upon the general educational system. In the southern states the medical schools had not got on a four-year high school basis when they were faced with this new requirement. The four-year high school is just getting established in most southern states. Even in cities like Nashville and New Orleans the public high school has not yet graduated its first four-year class. To enforce honestly a four-year high school requirement would call for great firmness and self-denial on the part of the medical schools; but to require on top of this a year of college including the sciences and a modern language is to inaugurate anew a régime of compromises and make-shifts, and to substitute an imitation of education for the genuine thing. Finally, this action will be a source of discouragement to the development of good high schools.

"Augusta (Class A), Atlanta (Class A), Nashville (Class A), Mobile (Class A), Memphis (Class B), and Louisville (Class A) went on this basis in September. The Augusta school, realizing that it would be closed by a compliance with the conditions, got a dispensation from the Council and was able to admit eleven to its entering class, none of whom met the conditions. Atlanta, with a similar dispensation, admitted thirty-one, none of whom met the requirements; Memphis, eleven, four of whom met the requirements; Vanderbilt, thirty-one, of whom not more than six could be considered as meeting the conditions; Louisville, eleven, of whom two met the conditions; and Mobile, nine, of whom eight met the requirements.

"On the other hand, Tulane (Class A Plus) and Texas (Class A Plus), which have now been for four years on this basis, were able to show, in a way, a successful enforcement of the requirement. Of the sixty-four freshmen at Tulane, two thirds offered the required pre-medical subjects, mostly covered in a single year; nearly all were high school graduates, but there was usually no record of the years they had spent in high school. Often, however, the pre-medical work had been done in inferior institutions, or was a patchwork made up from summer sessions, dental, pharmacy, or veteri-

nary courses, or from agricultural, commercial, industrial, or technical institutions. Even at the University of Texas school, where more than half of the fifty-five freshmen had two or more years of work in good colleges, less than half offered all the pre-medical subjects and less than half had spent four years in high school.

"Compliance with the requirement has been reached generally through conditions entirely artificial."

12. The classification of the schools, as made by the Council, is dealt with in the same report, pages 67, 68, as follows: "The classification . . . divides the schools into four classes. . . . One acquainted with these schools has only to examine these classes in order to perceive that the classification is meaningless. For example, the first class includes not only the strong medical schools with large endowment, complete clinical facilities, and research departments, like those of Harvard, Johns Hopkins, Columbia, Cornell, Washington University, and others, but it takes in also institutions like Vanderbilt, Tulane, Texas, whose standards and facilities are of an entirely different order. To place these latter schools in the same class with the strongest in the country, is good-natured prophecy, not educational justice."

"But this is not all. Class 'A Plus' has been stretched to include schools of the type of the College of Medicine at Omaha and the Starling-Ohio School at Columbus, since known as the School of Medicine of the Ohio State University. To group these schools in the same class as Harvard, Johns Hopkins, and Washington University is to wipe out real distinctions."

President Pritchett finds the explanation of these conditions in the fact that "all the members of the Council are connected with one medical school or another. Men would be more than human if under such conditions they could entirely separate their duties as judges from their loyalty as members of the various faculties."

No comment is offered by your Committee on the situation presented by these quotations.

4. *Matriculation requirements in Great Britain.*

The regulations of the British Universities and Licensing Boards have been collected and classified in the accompanying table. The point of most importance in this is the information that Leeds and Liverpool Universities no longer make Latin compulsory and that Birmingham is about to do so. Apart from this recent relaxation in the universities mentioned there is no evidence of any easy route to enter upon the study of medicine in Great Britain.

The obvious conclusions are:

1. The Medical Boards of British Columbia and Saskatchewan should establish a standard of matriculation and examine the credentials of all candidates who apply for examination or for certificates to appear before the Canada Medical Council.
2. Reciprocity should be established, so far as matriculation is concerned, between the various Canadian Universities engaged in teaching medicine and the Provincial Medical Boards.
3. Reciprocity in matriculation certificates between Canada and Great Britain may properly be established.
4. Undergraduates of medical colleges in the United States should not be admitted to advanced standing in Canadian Universities without a review of their matriculation certificates.
5. Graduates of medical colleges in the United States should not be admitted to the qualifying examinations of any Provincial Medical Board or of the Canada Medical Council without careful inspection of matriculation certificates.

UNIVERSITY OR LICENSING BOARD.	SUBJECTS COMPULSORY.	SUBJECTS REQUIRED For which a choice may be made.	REMARKS
Cambridge	The previous examination; both parts. Part I, 4 papers, 2 Greek and 2 in Latin. Part II, Geometry, Arithmetic and Algebra. English essay and Paley or Logic or Heat and Chem.		
Wales	Must have Degree in Arts or Science of British or Colonial or Foreign University.		
London	English 2 papers. Elem. Math. 2 papers, 3 hours each. Latin or Greek or Mechanics or Physics or Chem. or Botany, 3 hours each, and two of the following neither of which has been taken, if neither Latin nor Greek has been taken, one must be a language other than English. (p. 4, list.)		
Birmingham	English, Mathematics, Latin.	Either Chem. or Experim. Mechanics; and one other language.	Probably Latin soon optional.
Durham	English, Mathematics, Latin, English History and Geography.	And one from Greek, French, German.	
Glasgow		And one of Greek, French, German, Italian or other languages.	All passed at not more than two periods.
St. Andrews		And one other language.	
Edinburgh		Greek, French, German or other language. Mechanics or Physics, Geography, Chemistry, either Natural History or Botany.	Leeds and Liverpool have given up Latin as compulsory.
Aberdeen		One of Greek, French, German, Italian, any other modern or Oriental language.	L.R.C.P. and M.R.C.S. (Diplomas).
Bristol	English, Mathematics, Latin.	Greek, or a modern language.	
Manchester	English, Mathematics, Latin, English History.	Two compulsory (one a language) from German, Greek, French, Modern History, Physics, Chemistry, Botany.	
Liverpool		Any one of Greek, French, German, Italian, Irish, Dutch and Spanish.	
Leeds	English, Mathematics, Latin.		
Sheffield	English, Mathematics, Latin.		
L.R.C.P. Edin.	English, Mathematics, Latin.		
L.R.C.S. Edin.	English, Mathematics, Latin.		
L.R.F.P. & S.G.	English, Mathematics, Latin.		
R.C.P. London	English, Mathematics, Latin.		
R.C.S. England	English, Mathematics, Latin.		
Queens, Belfast	English, Mathematics, Latin.		
R.C.P. Ireland	English, Mathematics, Latin.		
R.C.S. Ireland	English, Mathematics, Latin.		

