

Home (1917) Department.
Education

Ordinary SERIES.

G.O. No. 1012

DATED 4. 8. 17

INDEXED

[Despatch Abstract.]

Secondary school leaving certificate *Scheme*.

Recording notes relating to the question of grouping
Physics and Chemistry as one subject in the list of optional
subjects in the -----.

Home (Ed.) Dept.

Subject. Study of Physics & Chemistry in the Secondary School leaving certificate

Ed. A

2421

Recd. 7.7.17

Extract from the notes to G. N. 804, Home (Ed.) dated the 15th June 1917:-

"This (the grouping of Physics & Chemistry as one subject in group C in the Secondary School leaving certificate scheme) is a very important matter & I shall note on it after the draft issues."

(D) R. R. R. 14.6.17.

page 37 of the calendar of the C.E.S. for 1916-17.

* This is a recent addition.

In the S. S. & C. scheme the following subjects are included in the optional group C:-

- (1) Languages other than English
- (2) History of England & India*
- (3) Algebra & Geometry.
- (4) Practical mathematics
- (5) Trigonometry
- (6) Botany
- (7) Physics
- (8) Chemistry
- & a few other subjects.

Students generally take up the Study of any two of the above subjects

Subjects. In choosing the subjects they have regard to the optional groups which they may take up for the Intermediate examination of the University. Optional groups (i) & (ii) for that examination comprise the following subjects:-

- Group (i) { (a) Mathematics
(b) Physics
(c) Chemistry.
- Group (ii) { (a) Natural Science
(b) Physics
(c) Chemistry.

Candidates who propose to take up group (i) in the Intermediate course ^{with advantage} should study in secondary schools the correlated subjects 'Algebra + Geometry', 'Physics', & 'Chemistry'. But as they study only two of the optional subjects in secondary schools, one of the science subject, 'Physics' or 'Chemistry' is left out. In obtaining a knowledge of the subject thus left out, the students depend upon the study of elementary science which is included in the 'B' group & as such, is taught to all pupils in the

Regulation 178
University Regulations
p. 135 of the University Calendar
1917

p. 37 of the App. Calendar
for 1916-17

the three higher forms of secondary schools. ~~It has~~ It has been ^(pointed out) ~~proposed~~ that this is not a satisfactory arrangement & that it could be improved by grouping 'Physics' & 'Chemistry' into one subject & revising the syllabuses so as to correlate them to the courses in those subjects in the Intermediate examination. The D.P.I may, it is submitted, be requested to offer his remarks on the suggestion & on the question whether any alteration should be made in the secondary school-leaving certificate scheme so far as the above subjects are concerned.

SK
11.7.17.
WJW

Q
12.7.17
L

The University I believe has made some rules as to the subjects in Group B which a student should study for the School Final for admission to a particular group of the University. Please refer me to them & return with a copy of the University Calendar.

My
13/7/17

Regulation 175 of the
- page 133 of the
- Reg. 207. Calendar
- 1917.
In the matriculation
course of the University,
elementary science,
comprising Physics &
Chemistry, forms one subject.

Please see para 5 of the letter from the Registrar of the University to the Principals of Colleges, (dated the 10th March 1915) on page 3 of notes to go. No. 590 Edl., dated the 5th June 1915, which ~~states~~^{specifies} the subject that should be taken up by candidates in the school final course for admission to particular groups in the Intermediate course. The rules framed by the University for the admission of holders of secondary school leaving certificates for the Intermediate courses in 1917-18 do not ~~contain any~~^{contain any} ~~reference~~^{reference} - please see pages 248 to 250 of Part I. B. of the Fort St. George Gazette, dated the 20th March 1917.

SK
18.7.17.

W
1917

A
20.7.17

(Gazette vol.
put up.)

University Regn

178.

The Intermediate Examination has three optional groups.

I (a) Mathematics (b) Physics (c) Chemistry

II (a) Natural Science (b) Physics (c) Chemistry

III (not relevant for this note).

2. Under the school final system, every candidate has to undergo a public examination in 3 subjects (known as Group A subjects); to study at school some subjects in Group B; & to study & sit for a public examination in one or more optional subjects listed in Group C. The more important subjects of Group C are set out in page 1 supra.

3. The University has practically ruled that students wishing to join the Intermediate class

(a) in Group I, should have studied at school two of the following subjects of Group C: (i) Algebra & Geometry (ii) Physics (iii) Chemistry.

(b) in Group II, should have studied at school two of the following subjects of Group C: (i) Botany or Algebra & Geometry (ii) Physics (iii) Chemistry.

4. It is understood that the standard in Group C is much higher than the standard in Groups A or B.

5. It has been represented that the

about rules tell against the rapid development of education in the Intermediate classes.

6. Suppose a student A takes up Algebra & Geometry & Physics & joins Group I at a college; & another B takes up Algebra & Chemistry & joins Group I at the same time, the knowledge in Physics of student A will be much more than that of student B while the reverse will be the case in Chemistry. But as both A & B are taught in the same class, the professor in physics will have to carry his instruction to B's level of knowledge; which means A will have unnecessarily to waste time in learning again what he has learnt at school.

7. An obvious remedy is to combine Physics & Chemistry as one subject for Group 6. It was so in the olden days.

Of course, it will follow that the knowledge imparted in the combined subject will be less, so far as each branch is concerned, than what is now attempted to be imparted at present. But the subsequent acquisition of knowledge in the Intermediate will be faster. And what is more important,

in the case of the very many who end their studies with the school final, they will have attained a fair knowledge of both sciences - so useful in after life - much higher than is possible than the smattering obtainable under Group B.

6. Similar remarks to Group II of the Intermediate.

7. I shall be glad if the Director can consider the situation & send in proposals, if any, to better the same; if necessary after consulting any persons he chooses.

D.P.Huo.)

23/7/17

10.137 & 30.7.12

In a first place schools are now equipped for one out of Physics & Chemistry as a rule and furthermore we are not able to face the expense of having them equipped with the other.

The whole question of the course has been exhaustively discussed and the matter among others, and the present arrangements confirmed.

The change would certainly mean a greater

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23.7.17

Recd 25/7

SK

burden upon students as it is morally certain that university courses would bring up the standard in both subject to what it is now in one.

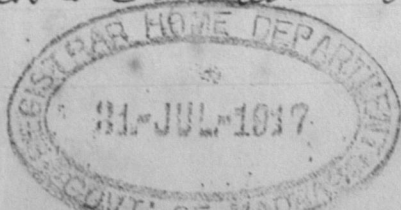
The schools are already far too much subordinated to the university, which expects for them what they pay for. The school would be to make the school course an aim in itself rather than to make it subservient to supposed university requirements.

The University is going to have a B.Sc. degree with three science subjects. Certainly schools cannot provide a parallel in all.

People who want university courses ought to expect to begin something new. If they are going on to secure the most that a college has any right to expect is a good general education with some experience of laboratory work.

If any change is necessary it probably is the exclusion altogether of chemistry as a C School subject.

It is further to be remembered that students are not ignorant of chemistry because they have not taken it under C. The new course under elementary science in B provides a fair basis.



for 28. vii 17.

Have see para 211 of
O.S. letter, p. 2 of 8. 804
15.6.17.

Home (Edn) Dept.

Submitted.

pages 7-8 impr.

2. In the circumstances explained by the D.P.D. no further action need perhaps be taken on this case.

SK
2.8.17.

For orders.

CA
2/8/17

Several headmasters have strong opinions on this subject but, as is usual with controversial questions, the Director adduces several arguments against the proposal. I am not convinced that they outweigh the arguments for. But it is clear the present time is not opportune for ordering this change. So let the notes be revised for future reference

mm
3/8/17

His order No 1012 of 4.8.17

Recorded.

CA
3/8/17

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191

READ AGAIN G.O. No.
191

DATED

CURRENT No.

ENCLOSURE TO C. No.

ORDER OF GOVERNMENT

LETTER OF GOVERNMENT

STATEMENT WITH DITTO

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