F. W. Walker
S1. S2 P25
S3. A1 A2 P.26
P.T.D P28.

HARRIS INSTITUTE,

PRESTON.

PROSPECTUS of CLASSES

Session 1925-26.

Classes Re-open September 21st.
Junior Day Schools September 15th.

Price - - Twopence.
Per Post 3d.

SPECIAL NOTICE.—Evening Students will be enrolled at the Technical School, from 7 to 9 p.m., on Wednesday and Thursday Evenings, September 16th and 17th. **Students who do not enrol on these dates will be charged an extra fee of 2/6. This will be strictly enforced.**

Mather Bros., Printers, 31, Lune Street, Preston

1925-26.

HARRIS INSTITUTE, PRESTON.

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T. R. JOLLY, F.C.I.S.

HON. TREASURER :
Mr. E. J. Andrew.

VICE-PRINCIPAL :
Mr. E. C. MOYLE.

DAY CLASSES.

DAY CLASSES.

——:0:——

CLASSES AFFILIATED TO MANCHESTER AND LIVERPOOL UNIVERSITIES.

These provide complete Courses of Instruction for the joint Matriculation of the Northern Universities; the Intermediate B.Sc. and Intermediate, B.Sc. (Tech.), Manchester; the Intermediate B.Sc., Liverpool; the Intermediate Examinations of the University of London; and the various Preliminary Professional Examinations, including Medical, Dental, Pharmaceutical and Dispensers.

SUBJECTS :—Chemistry, Botany, English, History, French, Latin, Mathematics, Mechanics and Physics.

Fee for the complete Matriculation Course £15 15s. 0d. (September, 1925, to July, 1926). Separate Classes by arrangement. The Session commences on Monday, September 21st, 1925.

PHARMACEUTICAL SOCIETY'S EXAMINATION, PART 1.

The Institute is recognised by the Pharmaceutical Society for instruction in the subjects of Part 1 Examination, viz. : Chemistry, Physics and Botany. Part time courses in these subjects have been arranged enabling students to attend either in the day-time or evening.

SPECIAL NOTE.—The Pharmaceutical Society of Great Britain require that candidates must register with them as Pharmaceutical Students prior to the commencement of any portion of their curriculum of studies. All Students must produce evidence of such registration.

Fee per Session for Day Course (September, 1925, to July, 1926), £9 10s. 0d.

Fee per Session for Evening Course (September, 1925, to April, 1926), £2 5s. 0d.

Students are strongly recommended to attend the Day Course if possible.

SCHOOL OF AGRICULTURE.

The Agricultural School is carried on by the Council of the Harris Institute, by arrangement with the Lancashire County Council, as part of the County Scheme of Instruction in Agriculture. The Session extends from October to March.

Full particulars are given in the Scheme of Agricultural Education, which can be obtained free on application.

SCHOOL OF ART.

The objects of the school are :—

(1) To give instruction in Art to those engaged in trades and professions in which the power of drawing and a knowledge of design are essential or helpful.

(2). To train those wishing to qualify to become teachers of Art in Secondary Schools, or in Schools of Art.

(3). To provide facilities to those desiring to study Art as a branch of general education, or as a preparation for the training as painter or sculptor.

For particulars, see detailed Prospectus.

DAY COMMERCIAL SCHOOL.

The Course extends over a period of two years, and prepares boys and girls for Clerical posts. The following subjects are taken :—Arithmetic, Algebra, Accounts, Bookkeeping, Commerce, Commercial Correspondence, Drawing, Drill, English, French, Games, Geography, History, and Office Routine, Mathematics, Shorthand and Typewriting.

The Classes commence on Tuesday, September 15th, 1925. Fee : £3 3s. 0d. for Session (September to July), or One Guinea per Term.

DAY JUNIOR TECHNICAL SCHOOL.

The aim of the School is to provide a suitable education for boys, who, having completed the ordinary course of work in the Elementary Day School, desire to enter Engineering, Building and other trades.

The curriculum is planned with the object of giving a general education in all subjects which are necessary to boys about to enter industrial occupations. The School also provides for the continuance of the general education given in the Public Elementary Schools.

The course of instruction extends over a period of two years and the subjects taught include the following :—Mathematics, Practical Drawing and Geometry, Art, Science (including Applied Mechanics, Electricity, Magnetism, Heat), Metalwork, Woodwork, Geography, History, English, Drill, and Organised Games.

The classes commence on Tuesday, September 15th, 1925.

Fee : £3 3s. 0d. for Session (September to July), or One Guinea per Term.

Conditions of Entry, Etc.

(1) Day Junior Technical School.

(2) Day Commercial School.

Candidates desirous of entering the Day Junior Technical School or the Commercial School take an Entrance Examination in May of each year, and, if successful, are admitted in the following September. Entry forms can be obtained from the Principal, Harris Institute, Avenham. Candidates must not be less than 13 years of age on the 1st of October. The Council of the Harris Institute offer a limited number of scholarships to candidates, who for two years prior to the date of the Examination have been in regular attendance at a Public Elementary School within 7 miles of the Preston Town Hall.

A limited number of Scholarships and Maintenance Allowances are also offered by the Lancashire County Council to candidates residing in the County area.

Leaving Certificates, First or Second Class, are given to all who satisfactorily conclude their period of training, and a certain number of free scholarships to Evening Classes are granted to those whose attainments and conduct in the Day School have merited it.

The Cost for books is approximately £2 0s. 0d. per annum.

The School Uniform is as follows :—**Girls.**—Navy Tunic and Girdle, Navy Knickers, White Blouse, with polo collar and long sleeves in winter, Magyar with short sleeves in summer. Blue and green tie, green cap in winter, Curacoas Hats with School Band in summer. Black cashmere stockings, black footwear, navy coat, if possible, if not, a dark one. School blazers can be obtained if desired.

Boys.—School cap and tie. Other wearing apparel in school colours can be obtained if desired.

The above can be purchased from the School Outfitters on the presentation of the regulation form which may be obtained at the School.

Every endeavour is made at the end of the course to assist worthy students to obtain suitable posts. Many employers apply to the School for employees and apprentices.

PART TIME DAY AND EVENING ENGINEERING COURSE.

Conditions of Entrance.—Before admission a Student must—

(a) have passed the Preliminary Technical Course ;

or (b) have attended the two years' course at a Junior Technical School ;

or (c) have attended a Secondary School to the age of 16 years ;

or (d) produce evidence of attainments equivalent to that of the Junior Technical Course ;

or (e) pass the Entrance Examination.

The Course of Instruction extends over a period of one day per week during the Session of about 40 weeks.

FEE £2 2s. 0d. PER SESSION.

Classes Commence September 21st, 1925.

See Page 28 for detailed Time Table.

TIME TABLES OF DAY CLASSES.

MATRICULATION COURSE.

Subject.	Monday.	Tuesday.	Wednesday	Thursday.	Friday.
English & History	9.30-10.30 (T)	2-3 (T)		2-3 (T)	3-4 (T)
French....			11.30-1 (T)		10.45 12.15 (I) 2-3 (T)
Latin		3-4 (T)		3-4 (T) (or times to be arranged)	
Mathematics	10.30-12.30	11.30-12.30 (T)	9.30-11.30 (T)		
Physics ...		9.30-11.15 (T)		9.15-11. (Prac. T.)	
Chemistry			2.30-4 (Prac. I.)	11.15-12.15 (I)	9.45-10.45 (I)

Botany....At times to be arranged. Students for the Matriculation course must be at least 18 years of age.

(T.)—Technical School. (I.)—Harris Institute.

PHARMACEUTICAL—PART 1.

Subject.	Monday.	Tuesday.	Wednesday	Thursday.	Friday.
Chemistry	2-3 (Organic Theory (I.)		9.30-10.30 10.30-12.30 Prac. Inorganic (2nd Year) 2.30-4 (Prac. I.)	11.15-12.15 (Theory (I.)	9.45-10.45 (Theory (I.) Org. Prac. 10-45 -12.30
Physics ...	3.15-5-0 (T.)	9.30-11.15 (T.)		9.15-11.0 (T.)	
Botany ...		11.30-12.30 2-4 (Prac. (I.)			

The Organic Chemistry can only be taken by students who have done a fair amount of Inorganic Chemistry.

I.—Harris Institute. T.—Technical School.

DISPENSERS' EXAMINATION.

Subject.	Monday.	Tuesday.	Wednesday	Thursday.	Friday.
Chemistry	2-3 Organic (Theory) (I.)		9.30-10.30 10.30-12.30 2.30-4 (Prac.) (I.)	11.15-12.15 (Theory) (I.)	9.45-10.45 (Theory) (I.)

The Organic Chemistry can only be taken by Students who have done a fair amount of Inorganic Chemistry.

PART 1, L.D.S. DENTAL (LONDON & MANCHESTER).

Subject.	Monday.	Tuesday.	Wednesday	Thursday.	Friday.
Chemistry	Organic 2-3 (I)		9.30-10.30 Theory 10.30-12-30 Pract. 2.30-4 (I.)	11.15-12.15 (Theory) (I.)	9.45-10.45 (Theory) (I.) 10.45 -12.30 Pract. Org
Physics ...	3.15-5.0 (T.)	9.30-11.15 (T.)	Inorganic	9.15-11.0 (T.)	

INTERMEDIATE B.Sc.

At times to be arranged, if possible.

Physics—Friday morning (all morning).
Mathematics—Monday morning.
Chemistry—At times to be arranged.

CLASS FEES.—For Above Course.

For Session (September 1925 to July 1926).

£3 10s. 0d. per Subject, or £15 15s. 0d. Full Course of 5 Subjects.

SCHOOL OF ART.

SCHOOL OF ART.

The School is open for three terms of about 13 weeks each, viz. :— 21st September, 1925, to 23rd December, 1925.
11thJanuary, 1926, to 1st April, 1926.
12th April, 1926, to 2nd July, 1926.

FEES FOR SESSION (payable in advance.)

	£	s.	d.
Full-time Day Students	3	3	0
Evening Classes	1	0	0
Painting and Decorating Class	1	0	0
Students attending one day per week for Single Subjects	2	2	0

Classes commence on Monday, September 21st, 1925.

DAY AND EVENING CLASSES.—TIME TABLE.

	MORNING. 10-0—12-30.	AFTERNOON. 2-30—4-30.	EVENING. 7-0—9-0.
Monday.	Drawing Ornament Styles of Design Lettering Nature Drawing Painting in Monochrome	Still Life Painting Figure Drawing Object Drawing Design Perspective Lettering	Drawing & Painting Still Life Nature Study Antique Drawing Elem. & Advanced Drawing Drawing (1st & 2nd yr. Junr. Course)
Tuesday.	Nature Study Drawing Ornament History of Art Architecture	Still Life Drawing (Elem. & Advanced) Drawing and Painting from Life	Textile Art (4th yr) Drawing 1st & 2nd yr. Junr. Coure) Design Illustrations Drawing from Life
Wednesday.	Anatomy Geometry Still Life Memory Drawing Drapery Study Nature Study Principles of Art	Embroidery. Still Life Design Drawing from the Antique	Painting and Decorating Anatomy Modelling and Wood Carving Elem.&Adv.Drawing Textile Design 2nd & 3rd yr
Thursday.	Drawing & Painting Still Life Drawing and Painting Life	General Drawing & Practice	Antique Drawing Elem. Teachers' Class English & Arithmetic, 1st & 2nd year.
Friday.	Figure Composition Object & Memory Drawing Etching	Illustration Elem. Figure Drawing Drawing—Objects and Interiors Memory Drawing	Advanced Drawing Textile Design (1st year) Embroidery Design Architecture Perspective

During the Summer term an out-door Sketching Class will be held on Tuesday morning.

N.B. Evening lecture classes will terminate at Easter.

OBJECTS OF THE SCHOOL.

The objects of the school are :—

(1). To give instruction in Art to those engaged in trades and professions in which the power of drawing and a knowledge of design are essential or helpful.

(2). To train those wishing to qualify to become teachers of Art in Secondary Schools, or in Schools of Art.

(3). To provide facilities to those desiring to study Art as a branch of general education, or as an accomplishment.

(4). To train those who are desirous of taking up Art as a career, and who intend to specialise as painters, sculptors, illustrators, designers, etc.

(5). To meet the requirements of those engaged in various industrial occupations.

(6). Junior Courses. To prepare young students between the ages of 14 and 16, in order that they may specialise later on in any of the above courses.

EXAMINATIONS IN ART.

Internal.

Grouped Examinations will be held at the end of each term, comprising the subjects of the various Courses.

The Board of Education will hold Examinations in the following subjects of Art :—

(a) Drawing.

(b) Painting.

(c) Modelling.

(d) Pictorial Design for Reproduction in black and white or colour.

(e) Industrial Design for (i.) Handicrafts and (ii.) Manufactures.

1. The Examination in Drawing will be of a standard suitable for candidates who, after a good general education, including some preliminary instruction in Drawing, up to the age of 16 or later, have devoted themselves to serious and continuous study of Drawing for, as a rule, not less than two years.

2. The Examinations in Painting, Modelling, and Pictorial Design will be of such a standard as could be attained, according to the capacity of the candidate, by two or more years of serious and continuous specialised study after passing the Examination in Drawing.

3. Examination in Industrial Design will be of such a standard as could be attained through regular attendance at evening or other part-time classes in the intervals of employment for a period of four years after the age of 16.

4. Candidates will not be admitted to the Examinations in Painting, Modelling, or Pictorial Design unless they have previously passed the Examination in Drawing.

City and Guilds of London.

Students are prepared for these Examinations in the following Subjects :—Painting and Decorating, Embroidery, Principles of Art as applied to Cotton Weaving.

National Society of Art Masters.

A series of Examinations in Drawing arranged for Teachers in Elementary Schools.

SCHOLARSHIPS.

Harris Art Scholarship.

One scholarship of the value of £7 10s. 0d. per annum, tenable for three years, will be awarded annually.

The Scholarships will be open to all Students of the School of Art, who have attended for not less than one year immediately preceding the award, and will be tenable at the Harris Institute.

The Scholarships will be awarded on the results of the annual examinations, in conjunction with the Student's work of the session.

Should one or more of these Scholarships fall vacant before the full period of three years, two or three (as the case may be), will be given instead of one, in the year when they lapse.

Free Studentships.

Three Free Studentships to the Day Classes are offered to Students of the School (Day or Evening), who are studying with a view to becoming designers, craft workers, or teachers.

Method of award, the same as for the above.

Free Studentships to the Evening Classes are offered to students taking definite courses, and will be awarded on the result of marks given for homework, attendance, and internal examinations.

Special Scholarships are awarded to students who have left or are about to leave elementary schools, who intend to follow occupations requiring an Art Training.

SKETCH CLUB AND STUDENTS' UNION.

The Sketch Club is organised by the Staff and Students for the purpose of encouraging individual effort. Monthly competitions are arranged during the Session, and a series of subjects are set for the long vacation.

All Students are eligible. Further information and particulars may be obtained from members of the Staff.

EVENING CLASSES.

EVENING CLASSES.

General Regulations.

Students who are desirous of joining the Classes must satisfy the Principal of the Institute that they are able to benefit by the Course to which they seek admission, otherwise they must sit for an **Entrance Examination, to be held at the Technical School on Friday Evening, September 18th,** and if they fail to reach the prescribed standard it will be advisable for them to attend the Preliminary Courses, Technical or Commercial, conducted under the Preston Education Committee.

Students will be enrolled at the Technical School on Wednesday and Thursday evenings, September 16th and 17th, from 7 to 9 p.m.

FEES FOR SESSION.

All fees are payable in advance and not returnable.

	£	s.	d.
* Single Subjects	0	15	0
Any Complete Course : Building, Commercial, Electrical Engineering, Mechanical Engineering, or Technical, ...	1	0	0
School of Art, Evening Classes	1	0	0

* Theoretical and Practical Chemistry will be charged as separate subjects.

N.B.—Students who do not enrol on the dates given will be charged an additional fee of 2/6. This rule will be strictly enforced.

The Council reserve the right to discontinue any Class in the event of a small number joining.

Students who desire to take the Examinations of the Union of Lancashire and Cheshire Institutes or the City and Guilds of London Institute, may be called upon to pay the whole or a portion of the Examination Fees.

SCIENCE AND MISCELLANEOUS.

EVENING CLASSES.

TIME TABLES.

PURE MATHEMATICS.

Stage I.....Monday, 7 to 9.

INORGANIC CHEMISTRY.

Stage I. ..... Friday, 7 to 8 (Lecture.)
Stage I. ..... Friday, 8 to 9-30 (Pract.)
Stage II. ..... Wednesday, 7 to 8 (Lect.)
Stage II. ..... Thursday, 7 to 9-30 (Pract.)
Physical Chemistry ..... Wedneday 8-0 to 9-30.

ORGANIC CHEMISTRY.

Stage I..... Tuesday, 7-0 to 8-0 (Lecture)
Stage I..... Tuesday, 8-0 to 9-30 (Pract.)
,, II..... Tuesday, 8-0 to 9-30 (Pract.)

A Special Course will be arranged (if a sufficient number join) suitable for those desiring to qualify for the Pharmaceutical Examination, or the Society of Apothecaries Examination for Dispensers.

PHARMACY COURSE.

1ST YEAR.

Monday	Botany	7-0 to 9-0
Tuesday	Physics	7-0 to 9-15
Friday	Chemistry	7-0 to 9-30

2ND YEAR.

Monday	Botany	7-0 to 9-0
Tuesday	Organic Chemistry	7-0 to 9-30
Wednesday	Inorganic Chemistry (Lecture)	7-0 to 8-0
Thursday	Inorganic Chemistry (Practical)	7-0 to 9-30

3RD YEAR.

Tuesday	*Organic Chemistry	7-0 to 9-30
Wednesday	*Inorganic Chemistry (Lecture)	7-0 to 8-0
Thursday	*Inorganic Chemistry (Practical)	7-0 to 9-30

* Optional, if the required number of hours has been put in.

National Certificate in Chemistry.

General Students are advised to work for the National Certificate in Chemistry.—a 3 Years' Course.

1st Year.

Monday	Mathematics	7-0	to	9-0
Tuesday	Physics	7-0	to	9-15
Friday	Inorganic Chemistry	7-0	to	9-30

2nd Year.

Wednesday	Physical Chemistry	8-0	to	9-30
Tuesday	Organic Chemistry	7-0	to	9-30
Wednesday	Inorganic Chemistry	7-0	to	8-0

3rd Year.

Tuesday	Organic Chemistry	7-0	to	9-30
Wednesday	Inorganic Chemistry (Lect.)	7-0	to	8-0
Thursday	Inorganic Chemistry (Pract.)	7-0	to	9-30
Wednesday	Dyeing of Cotton and Associated Textile Fibres (City & Guilds)	8-0	to	9-30

BOTANY.

Monday ..... 7 to 9

GEOLOGY.

Wednesday ..... 7 to 8

ENGLISH LANGUAGE AND LITERATURE.

Friday ..... 7-15 to 8-15

FRENCH.

Tuesday	Elementary Grade	8-15	to	9-15
Tuesday	Intermediate Grade	7-15	to	8-15
Thursday	Advanced Grade	8-15	to	9-15

SPANISH.

Tuesday ..... 7-15 to 8-1

LATIN.

Thursday ..... 7 15 to 8 15

PHYSICS.

Tuesday ..... 7-0 to 9-15

TYPOGRAPHY (Theory).

A Class will be re-opened in the above subject in the forthcoming Session should a sufficient number of students be enrolled and a qualified Instructor obtained.

Mechanical and Electrical Engineering Department

MECHANICAL ENGINEERING.

Award of Senior and Advanced Certificates.

The Institution of Mechanical Engineers, in conjunction with the Board of Education, has approved of the grouped courses of instruction for the award of certificates at the end of—

(1) a Three Years' Course (Senior).

(2) a further Two Years' Course (Advanced).

Conditions of Admission to the Courses.

SENIOR COURSE.

Students must (a) have passed the Preliminary Technical Course,

or (b) have attended a Secondary or Day Junior Technical School to the age of 15 years ;

or (c) produce evidence of attainments equivalent to the above ;

or (d) pass an entrance examination.

Students who have obtained a First Class leaving Certificate in the Day Junior Technical School, may be admitted to the Second Year of the Senior Course.

ADVANCED COURSE.

Students must have passed the Senior Course or produce evidence of equivalent attainments.

Conditions of Award of Certificate.

In order to obtain a certificate a candidate must make not less than 70 per cent. of the possible attendances in each year of the course, and must obtain :—

(1) Not less than 40 per cent. of the possible marks in EACH subject in the examination held at the end of each year.

(2) Not less than 40 per cent. of the possible marks obtainable in EACH year for homework, class work, laboratory work, etc., taken separately, in EACH subject for which such marks are to be awarded.

(3) Not less than 50 per cent. of the grand total of marks obtainable in EACH year. Of this total the possible marks in the examinations constitute 70 per cent. and the remaining 30 per cent. will be the possible marks for home work, class work, laboratory work, etc., in each year.

A " Distinction " may be awarded to any candidate qualified to receive a certificate who gains not less than 85 per cent. of the possible marks in the Final Examination in any subject, and his certificate may be specially endorsed with the name or names of the subjects in which he has thus distinguished himself.

Fee to be paid by each Student entering the Final Examination, Five Shillings.

TIME TABLE.

SENIOR COURSE.

FIRST YEAR (S. 1).

SECTION A.—

Mathematics	Thursday	7-15 to 9-15
Engineering Drawing	Friday	7-15 to 9-15
Engineering Science	Monday	7-15 to 9-15

SECTION B.—

Mathematics	Tuesday	7-15 to 9-15
Engineering Drawing	Thursday	7-15 to 9-15
Engineering Science	Friday	7-15 to 9-15

SECOND YEAR (S. 2).

Mathematics	Wednesday	7-15 to 9-15
Engineering Drawing	Tuesday	7-15 to 9-15
Engineering Science	Friday	7-15 to 9-15

THIRD YEAR (S. 3).

FINAL FOR SENIOR NATIONAL CERTIFICATE.

Mathematics	Monday	7-15	to	9-15
Mechanics	Wednesday	7-10	to	9-35
Heat Engines	Tuesday	7-10	to	9-35

ADVANCED COURSE.

FIRST YEAR (A. 1).

Mathematics	Wednesday	7-15	to	9-15
Heat Engines	Monday	7-15	to	9-15
Machine Design	Friday	7-15	to	9-15

SECOND YEAR (A. 2).

FINAL FOR ADVANCED NATIONAL CERTIFICATE.

Electrical Engineering	Thursday	7-15	to	9-15
Theory of Machines	Wednesday	7-15	to	9-15
Heat Engines	Monday	7-15	to	9-15

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ELECTRICAL ENGINEERING

The conditions of admission to the Courses are as set out under Mechanical Engineering. Students are expected to sit at the Examinations held by the Union of Lancashire and Cheshire Institutes in the Subjects of the Course and to pay their own examination fees

TIME TABLE.

SENIOR COURSE.

FIRST YEAR (S. 1).

Mathematics	Monday	7-15	to	9-15
Engineering Drawing	Thursday	7-15	to	9-15
Electrical Science	Friday	7-15	to	9-15

SECOND YEAR (S. 2).

Mathematics	Tuesday	7-15	to	9-15
Mechanics	Thursday	7-15	to	9-15
Electrical Science	Wednesday	7-15	to	9-15

Third Year (S. 3).

Final for Senior National Certificate.

Mathematics	Monday	7-15	to	9-15
Technical Electricity	Thursday	7-15	to	9-15
Electrical Laboratory	Tuesday	7-15	to	9-15

ADVANCED COURSE.

First Year (A. 1).

Mathematics	Friday	7-15	to	9-15
Electro-Technics	Thursday	7-15	to	9-15
Electrical Laboratory	Monday	7-15	to	9-15

Second Year (A. 2).

The following Sections may be taken in different years. For the present Session, provision will be made for Section B. only :—

Section A. :—

Transmission and Distribution of Electrical Energy.
Heat Engines.

Section B. :—

Design of Electrical Machinery.
Electrical Engineering Drawing.
Electrical Engineering Laboratory.

Section C. :—

Electrical Instruments and Apparatus.
Applied Mechanics.

Section B.

Design of Electrical Machinery	Thursday	7-15	to	9-15
Electrical Engineering Drawing	Tuesday	7-15	to	9-15
Electrical Laboratory	Wednesday	7-15	to	9-15

PART TIME DAY AND EVENING ENGINEERING COURSES.

The conditions as set out above also apply to these courses.

MECHANICAL AND ELECTRICAL.

TIME TABLE.

MECHANICAL.

First Year (S. 1).

Mathematics	Thursday	2-0 to 3-0
	Friday	2-0 to 3-0
Engineering Drawing	Friday	3-0 to 5-0
Engineering Science	Thursday	3-0 to 5-0

Second Year (S. 2).

Mathematics	Tuesday	2-0 to 3-0
	Friday	2-0 to 3-0
Engineering Drawing	Friday	3-0 to 5-0
Engineering Science	Tuesday	3-0 to 5-0

Third Year (S. 3).

Final for Senior National Certificate.

Mathematics	Monday	7-15 to 9-15
Mechanics	Wednesday	2-0 to 4-30
Heat Engines	Thursday	2-0 to 4-30

An Advanced Course will be arranged if a sufficient number apply.

ELECTRICAL.

First Year (S. 1).

Mathematics	Thursday	2-0 to 3-0
	Friday	2-0 to 3-0
Engineering Drawing	Friday	3-0 to 5-0
Electrical Science	Thursday	3-0 to 5-0

Second Year (S. 2).

Mathematics	Monday	4-0 to 5-0
	Friday	2-0 to 3-0
Mechanics	Friday	3-0 to 5-0
Electrical Science	Monday	2-0 to 4-0

THIRD YEAR (S. 3).

FINAL FOR SENIOR COURSE CERTIFICATE.

Mathematics	Monday	7-15 to 9-15
Electrical Laboratory	Tuesday	2-0 to 4-30
Electro-Technics	Thursday	2-0 to 4-30

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EVENING CLASSES.

ENGINEERING TRADES WORKSHOP COURSE.

A Minor Course of instruction will be arranged for Moulders, if there are a sufficient number of applicants.

The Classes will be held on two evenings per week.

SUBJECTS : Trade calculations and drawings.
Trade processes and materials.

BUILDING TRADES DEPARTMENT.

BUILDING TRADES DEPARTMENT.

Conditions of Admission to the Courses.

Senior Course.

Students must (a) have passed the Preliminary Technical course ;
or (b) have attended a Secondary or Junior Technical School to the age of 15 years ;
or (c) produce evidence of attainments equivalent to the above ;
or (d) pass an entrance examination.

Students who have obtained a First-Class leaving Certificate in the Day Junior Technical School may be admitted to the Second Year of the Senior Course.

Students taking the Third Year of the Senior Course will take the Third Year Building Trades Course Examinations of the Union of Lancashire and Cheshire Institutes, the fee for this examination to be paid by the student. . First and Second Year students will be examined, and successful students will proceed to the next year of the Course, on the results of school examinations held at the close of the evening session.

Advanced Course.

Students must have passed the Third Year Building Trades Course of the Union of Lancashire and Cheshire Institutes, or produce evidence of equivalent attainments.

For each year of the Advanced Course, students will take the examination of the corresponding year of the Advanced Building Trades Course of The Lancashire and Cheshire Institutes, the fee for this examination to be paid by the student.

Senior Course.

First Year (S. 1).

Section A.—

Mathematics and Science	Tuesday	7-15	to	9-15
Building Construction	Wednesday	7-15	to	9-15
Geometry	Friday	7-15	to	9-15

Section B.—

Building Construction	Monday	7-15	to	9-15
Geometry	Tuesday	7-15	to	9-15
Mathematics and Science	Friday	7-15	to	9-15

Third Year (S. 3).

For Students desirous of qualifying for attendance at Advanced Course Examinations :—

Building Construction	Thursday	7-15 to 9-15
and at least one from—		
Structural Engineering (Ely)	Tuesday	7-15 to 9-15
Geometry	Monday	7-15 to 9-15
Mathematics	Wednesday	7-15 to 9-15
and, if necessary, one other subject from—		
Builders Quantities	Tuesday	7-15 to 9-15
Carpentry and Joinery	Friday	7-15 to 9-15

Students who do not wish to proceed to an Advanced Course may choose any three subjects from the above, or may choose any two from the above and—

*Carpentry & Joinery (Practical)	Monday	7-15 to 9-15

The following subjects may be omitted in the Third Year (S. 3), and taken in the Fourth Year (A. 1).

Builders' Quantities
or
Mathematics

Those students who take Builders' Quantities (S. 3) in the Fourth Year, (A. 1) must take Builders' Quantities, (A. 1) in the Fifth Year.

Those students who take Mathematics (S. 3) in the Fourth Year (A. 1), must take Structural Engineering as one subject of the Course.

ADVANCED COURSE.

Fourth Year (A. 1).

Building Construction	Thursday	7-15 to 9-15
Practice Class	Wednesday	7-15 to 9-15
or		
*Carpentry & Joinery (Practical)	Monday	7-15 to 9-15
and ONE other subject selected from the following :—		
Builders Quantities	Monday	7-15 to 9-15
Carpentry and Joinery	Friday	7-15 to 9-15
*Structural Engineering	Monday	7-15 to 9-15
Architecture	Friday	7-15 to 9-15

* Classes will be held if sufficient Students enrol.

Fifth Year (A. 2).

As for Fourth Year (A. 1).

PLUMBING COURSE.

Senior Course.

First Year (S. 1).

Mathematics and Science	Tuesday	7-15 to 9-15
Building Construction	Wednesday	7-15 to 9-15
Geometry	Thursday	7-15 to 9-15

Second Year (S. 2).

Plumbing (Practical)	Monday	7-0 to 9-0
Plumbing (Theory)	Wednesday	7-0 to 8-30
Plumbing Science	Wednesday	8-30 to 9-30

Third Year (S. 3).

Plumbing (Practical)	Monday	7-0 to 9-0
Plumbing (Theory)	Wednesday	7-0 to 8-30
Plumbing Science	Wednesday	8-30 to 9-30

TEXTILE DEPARTMENT.

TEXTILE DEPARTMENTS.

COTTON SPINNING AND WEAVING.

Students are expected to sit at the examinations conducted by the Union of Lancashire and Cheshire Institutes, in the subjects of the Senior Course, or those conducted by the City and Guilds of London, in the subjects of the Advanced Course and to pay their own examination fees.

TIME TABLE.

COTTON SPINNING.

" a " signifies alternate weeks.

Senior Course

First Year (S. 1.)

Cotton Spinning	Tuesday	7-15	to	9-15
Textile Mathematics	Monday	7-15	to	9-15
aTextile Drawing	Thursday	7-15	to	9-15
aPractical	Thursday	7-15	to	9-15

Second Year (S. 2).

Cotton Spinning	Monday	7-15	to	9-15
Textile Mathematics and Mechanics	Friday	7-15	to	9-15
aTextile Drawing	Thursday	8-15	to	9-15
aPractical	Thursday	7-15	to	9-15

Third Year (S. 3).

Cotton Spinning	Wednesday	7-15	to	9-15
aTextile Drawing	Friday	7-15	to	9-15
aPractical	Friday	7-15	to	9-15
Textile Mechanics	Tuesday	7-15	to	9-15

ADVANCED COURSE.

First Year (A. 1).

Cotton Spinning Hons. A.	Thursday	7-15	to	9-15
Textile Engineering	Tuesday	7-15	to	9-15
Practical	Monday	7-15	to	9-15

SECOND YEAR (A. 2).

Cotton Spinning Hons. B.	Tuesday	7-15	to	9-15
Practical	Friday	7-15	to	9-15
Economics of the Cotton Industry	Wednesday	7-15	to	9-15

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COTTON WEAVING.

"a" signifies alternate weeks.

SENIOR COURSE.

FIRST YEAR (S. 1).

Cotton Weaving	Thursday	7-15	to	9-15
aTextile Design and Colour	Friday.....	7-15	to	9-15
aPractical	Friday.....	7-15	to	9-15
Textile Mathematics	Wednesday.....	7-15	to	9-15

SECOND YEAR (S. 2).

Cotton Weaving	Monday.....	7-15	to	9-15
aPractical	Wednesday.....	7-15	to	9-15
aTextile Design and Colour	Wednesday.....	7-15	to	9-15
Textile Drawing and Mechanics	Thursday	7-15	to	9-15

THIRD YEAR (S. 3).

Cotton Weaving.....	Friday.....	7-15	to	9-15
aTextile Design and Colour	Wednesday.....	7-15	to	9-15
aPractical	Wednesday.....	7-15	to	9-15
Textile Mechanics	Tuesday	7-15	to	9-15
or				
Chemistry	Monday.....	7-0	to	9-30

ADVANCED COURSE.

First Year (A. 1).

Cotton Weaving, Hons. A.	Wednesday	7-15 to 9-15
Practical	Monday	7-15 to 9-15
Principles of Art applied to Design	Tuesday	7-15 to 9-15

Second Year (A. 2).

Cotton Weaving, Hons. B.	Friday	7-15 to 9-15
Practical	Monday	7-15 to 9-15
Textile Engineering or Economics of the Cotton Industry	Tuesday Wednesday	7-15 to 9-15 7-15 to 9-15

COMMERCIAL DEPARTMENT.

COMMERCIAL DEPARTMENT.

The aims of the Commercial Evening Classes are :—

(a) To equip students for commercial life in all its ranges.

(b) To prepare students for the group course examinations held by the Union of Lancashire and Cheshire Institutes on dates given below. These are of three grades or years.

(c) To give opportunity to those desirous of literary or linguistic culture.

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In order to enter any class, students must satisfy the Principal that their standard of attainments is such as to enable them to profit by the instruction. To qualify for entrance to the first year they must :—

(a) have passed the Preliminary Examination of the Union of Institutes ; or

(b) have attended a Secondary School, or a Junior Technical School, or Junior Commercial School ; or

(c) produce evidence of attainments equivalent to the above ; or

(d) pass an entrance examination.

No student under 15 years of age is admitted.

All students are expected to take the examination at the end of the course in those subjects for which they enrolled at the opening of the session. Students who have completed a course of two years at the Day Commercial School may be permitted to enter the second year classes. The fee for any course is £1 0s. 0d. for the four (or in the 3rd Year three) subjects ; if Typewriting is included, the fee is £1 5s. 0d. The fee for each single subject, if a course is not taken, is 15s. Students who, after entering for a course, fail to make the required number of attendances, are charged 15s. per subject. A student taking a course may, so far as his attainments and the time table permit, sit in a class and enter for an examination of a higher year than the remaining subjects of his course. Transfers from one class to another are not permitted after the first two weeks of the session. The detailed syllabuses of examinations in the subjects will be posted up in the Technical School, on the enrolment nights, September 16th and September 17th, 1925, or may be found complete in the Prospectus of the Lancashire and Cheshire Institutes, price sixpence at any bookseller's.

GROUPED COURSES.

Commercial Courses are of four kinds, namely :—

(a) General Courses.
(b) Courses for Book-keepers.
(c) Courses for Correspondents.
(d) Courses for Shorthand Clerks.

All Courses are now open to both males and females. In the First and Second Years each Course, with the exception of those for Correspondents, consists of **four** subjects. Third Year Courses and Courses for Correspondents consist of three subjects.

In each Course (except the special ones specified later, which do not qualify for a Grouped Course Certificate), one or more subjects are obligatory ; others are generally optional.

From the latter subjects students may select the required number to make up their Course.

Before selecting a Course students should **consult both the time-table printed** (on pages 45 to 48), **and the tutors** who will be present to enrol on September 16th and September 17th, 1925.

For detailed syllabuses see Notices in the Technical School.

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SUBJECTS OF THE GROUPED COURSES.

First Year.

General Course :—Four Subjects.

Obligatory : Commerce.

Optional : Any three of the following :—

Commercial Arithmetic.
English and Commercial Correspondence.
Geography.
Book-keeping.
Shorthand.
French or Spanish.
Typewriting.
Cotton Spinning.
Cotton Weaving.

Course for Book-keepers. (Four Subjects, all obligatory) :—

Book-keeping.
Commercial Arithmetic.
Commerce.
English and Commercial Correspondence.

Course for Correspondents. (Three Subjects) :—

OBLIGATORY : English and Commercial Correspondence.
French or Spanish.

OPTIONAL : **One** of the following :—

Commerce.
Arithmetic.
Shorthand.

Course for Shorthand Clerks. (Four Subjects) :—

OBLIGATORY : Shorthand.
English and Commercial Correspondence.
Arithmetic.

OPTIONAL : **One** of the following :—

Commerce.
Book-keeping.
Typewriting.

SECOND YEAR.

General Course. (Four Subjects) :—

OBLIGATORY : Commerce.

OPTIONAL : **Three** of the following Subjects (in not more than one of which the first year syllabus may be taken, provided the subject has not been previously offered) :—

Commercial Arithmetic.
English and Commercial Correspondence.
Geography.
Book-keeping.
Shorthand (minimum of 60 words per minute).
French.
Spanish.
Typewriting.
Cotton Spinning.
Cotton Weaving.

Course for Book-keepers. (Four Subjects) :—

OBLIGATORY : Book-keeping.
Commercial Arithmetic.
Commerce.
English and Commercial Correspondence.

Course for Correspondents. (Three Subjects) :—

OBLIGATORY : English and Commercial Correspondence
A Foreign Language (French or Spanish).

OPTIONAL : Any one of the following :—

Commerce.
Commercial Arithmetic.
Geography (First Year Syllabus).
Shorthand.
A second modern Foreign Language (First Year Syllabus).

Course for Shorthand Clerks. (Four Subjects) :—

OBLIGATORY : Shorthand.
English and Commercial Correspondence.

OPTIONAL : Any two of the following subjects :—

Commerce (2nd Year Syllabus).
Book-keeping (1st or 2nd Year Syllabus).
Commercial Arithmetic.
Typewriting.

THIRD YEAR.

General Course. (Three Subjects) :—

OBLIGATORY : Commerce.

OPTIONAL : Any two of the following :—

Book-keeping and Accountancy.
Arithmetic.
English Literature.
Shorthand (minimum of 80 words per minute).
A Modern Language.

Course for Book-keepers. (Three Subjects) :—

OBLIGATORY : Book-keeping and Accountancy.
Commercial Arithmetic.
Commerce.

Course for Correspondents. (Three Subjects) :—

OBLIGATORY : A Modern Foreign Language (French or Spanish).
Commerce (2nd or 3rd Year).

OPTIONAL : Any **one** of the following :—

A second Modern Language (1st or 2nd Year *Syllabus).
Geography (2nd Year Syllabus).
Arithmetic (2nd or 3rd Year Syllabus).
Shorthand.

Course for Shorthand Clerks. (Four Subjects) :—

OBLIGATORY : Shorthand.
Commerce (2nd or 3rd Year Syllabus)*.

OPTIONAL : Any two of the following :—

English and Commercial Correspondence (if sufficient enrol).
Book-keeping (2nd Year Syllabus), or *
Book-keeping and Accountancy.
Arithmetic.
Typewriting.

* In the Third Year Course, if any subject chosen has been taken in a previous year, the next higher stage must be taken.

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Time-Table of Evening Commercial Classes.

Subject.	Year.	Place.	Day.	Hour.
Arithmetic	1st	Harris Institute or * Christ Church Schools* Bow Lane.	Monday	7-15 to 8-15, or 8-15 to 9-15
,,	2nd	Harris Institute	Friday	7-0 to 8-0.
,,	3rd	Harris Institute	Friday	8-0 to 9-0.

* All females taking Arithmetic attend the Arithmetic Classes at the Harris Institute. All males taking Arithmetic (except such as also take Geography) attend the Arithmetic Classes at the Christ Church Schools, Bow Lane.

Males taking both Arithmetic and Geography attend both Classes at the Harris Institute.

Book-keeping	1st (Beginners)	Technical School	Wednesday.	7-15 to 8-15, or 8-15 to 9-15.
,,	1st ,,	Christ Church	Wednesday.	7-15 to 8-15, or 8-15 to 9-15.
,,	1st (Slightly more advanced)	Technical School	Thursday	7-15 to 8-15, or 8-15 to 9-15.
,,	2nd	Harris Institute	Wednesday.	7-15 to 9-15.
,,	3rd	Technical School	Wednesday.	7-15 to 9-15.
Commerce	1st	Technical School	Tuesday	7-15 to 8-15, or
,,	1st	Technical School	Friday	8-15 to 9-15.
,,	2nd	Technical School	Tuesday	8-15 to 9-15, or
,,	2nd	Technical School	Friday	7-15 to 8-15.
,,	3rd	Harris Institute	Monday	7-0 to 8-30.

Time-Table of Evening Commercial Classes—*continued.*

Cotton Weaving	1st	...	Technical School	Thursday	7-15 to 9-15.
,,	2nd	...	Technical School	Monday	7-15 to 9-15.
Cotton Spinning	1st	...	Technical School	Tuesday	7-15 to 9-15.
,,	2nd	...	Technical School	Monday	7-15 to 9-15.
English and Com. Correspondence...	1st	...	Technical School	Tuesday	8-15 to 9-15, or
,,	1st	...	Technical School	Friday	7-15 to 8-15.
,,	2nd	...	Technical School	Tuesday	7-15 to 8-15, or
,,	2nd	...	Technical School	Friday	8-15 to 9-15.
,,	Literature		Harris Institute	Friday	7-0 to 8-0.
French	1st.	...	Technical School	Tuesday	8-15 to 9-15.
,,	2nd	...	Technical School	Tuesday	7-15 to 8-15.
,,	3rd	...	Harris Institute	Thursday	8-15 to 9-15.
Geography	1st	...	Harris Institute	Monday	7-15 to 8-15.
,,	2nd	...	Harris Institute	Monday	8-15 to 9-15.
Latin	1st	...	Harris Institute	Thursday	7-15 to 8-15.

Time-Table of Evening Commercial Classes—*continued.*

§Shorthand	... 1st	...	... In same building as the Arithmetic Classes	Monday	... 7-15 to 8-15.
§ ,,	... ... 1st	...	... In same building as the Arithmetic Classes	Monday	... 8-15 to 9-15.
,,	... ... 2nd (A.)		... Technical School	... Thursday	... 7-15 to 9-15.
,,	... ... 2nd	...	... Harris Institute	... Thursday	... 7-15 to 9-15.
,,	... ... 2nd (B.)		... Technical School	... Thursday	... 7-15 to 9-15.
,,	... 3rd	...	... Harris Institute	... Thursday	... 7-15 to 9-15.

§ In this subject students who have previously done nothing may find it advisable during the first session to work for a local examination. They should consult their tutors on the matter. The second year classes consist of :—A. Advanced Theory and Speed to 60 words per minute ; B. Speed from 60 to 70 words. Students who can do 70 words per minute should join the 3rd year.

Spanish ...	... 1st	...	... Harris Institute	... Friday	... 7-15 to 8-15.
Typewriting	... 1st and 2nd Years		Technical School	... Tuesday & Friday	One hour between 6-15 to 9-15.

Students must consult the tutor on the enrolment night as to which hour is available.

SPECIAL COURSES.

(Not qualifying for a Group Course Certificate).

These courses are intended to assist students of an ADVANCED grade to a higher standard of attainments. The Course consists of any three of the following subjects :—

English Language & Literature	Frid. 7-0 to 8-0.	Harris Inst.
Advanced French	Thur. 8-15 to 9-15.	Harris Inst.
Latin (suitable for Prof. Prelim.)	Thur. 7-15 to 8-15.	Harris Inst.
Book-keeping	Wed. 7-15 to 9-15.	Technical Sch.
Shorthand (Higher Speeds)	Thur. 7-15 to 9-15.	Harris Inst.
Arithmetic	Frid. 8-15 to 9-15.	Harris Inst.
Spanish (if enough apply)	Frid. 7-15 to 8-15.	Harris Inst.

A Local Examination will be held (in those subjects not otherwise provided for) and certificates will be given.

Royal Society of Arts Examinations.

In most of the classes the work done is sufficient to cover the requirements of the examinations held in March and May, by the Royal Society of Arts, whose certificates are of considerable value, but students are recommended to seek early in the course the advice of their tutors in this respect. Candidates may enter for any number of these examinations, but are advised to make early application. Examinations are not held in May at the Institute unless there are sufficient applications. The syllabuses of these examinations will be posted in the Technical School.

DATES OF THE EXAMINATIONS HELD BY THE UNION OF INSTITUTES.

Geography .....Friday, April 9th, 1926.
Type-writing (First Year) .....Saturday, April 10th, 1926.
Arithmetic (All Years) .....Monday, April 12th, 1926.
Shorthand (All Years) .....Tuesday, April 13th, 1926.
English (All Years) .....Wednesday, April 14th, 1926.
French (All Years) .....Thursday, April 15th, 1926.
Commerce (All Years) .....Friday, April 16th, 1926.
Type-writing (Second Year) .....Saturday, April 17th, 1926.
Book-keeping (All Years).....Monday, April 19th, 1926.
Spanish (All Years).....Tuesday, April 20th, 1926.

HARRIS INSTITUTE, PRESTON.

CLASSES AFFILIATED TO MANCHESTER AND LIVERPOOL UNIVERSITIES.

These provide complete Courses of Instruction for the Joint Matriculation of the Northern Universities; the Intermediate B.Sc. and Intermediate, B.Sc. (Tech.), Manchester; the Intermediate B.Sc., Liverpool; the Intermediate Examinations of the University of London; and the various Preliminary Professional Examinations, including Medical, Dental, and Pharmaceutical.

DAY CLASSES.

ART.

AGRICULTURE.

DAY COMMERCIAL SCHOOL.

DAY JUNIOR TECHNICAL SCHOOL.

MATRICULATION AND INTERMEDIATE SCIENCE.

DENTAL & PHARMACEUTICAL COURSES.

EVENING CLASSES.

ART.

SCIENCE AND MISCELLANEOUS.

ORGANISED COURSES.

BUILDING TRADES.

COMMERCIAL.

COTTON SPINNING. COTTON WEAVING.

MECHANICAL ENGINEERING. SCIENCE.

PHYSICS AND ELECTRICAL ENGINEERING.

All communications to be addressed to

T. R. JOLLY,

August, 1925. Principal and Secretary.

Scholarships and Prizes.

A limited number of Scholarships and Prizes will be awarded at the discretion of the Council.

Regulations applicable to all Students attending Classes at the Harris Institute.

The Lecturers are authorised to report periodically, through the Principal, on the attendance, homework, and conduct of each Student. The Council shall have power in dealing with the students who are unsatisfactory in these and other respects, to remove their names from the Register without return of fee.

A Certificate or Diploma will be issued to all Students who satisfactorily complete a Five Years' Course. The award of the diploma will depend on attendances, school and homework, and examination results. These diplomas may be endorsed by the Board of Education.

HARRIS INSTITUTE,

PRESTON.

PROSPECTUS OF CLASSES

Session 1926-27.

Classes Re-open September 20th.

Junior Day Schools September 14th.

SPECIAL NOTICE.—Evening Students will be enrolled at the Technical School, from 7 to 9 p.m. on Wednesday and Thursday Evenings, September 15th and 16th. **Students who do not enrol on these dates will be charged an extra fee of 2/6. This will be strictly enforced.**

HARRIS INSTITUTE,

PRESTON.

PROSPECTUS OF CLASSES

Session 1926-27.

Classes Re-open September 20th.

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PER POST 3d.

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Mather Bros., Printers, 31, Lune Street, Preston.

1926-27.

HARRIS INSTITUTE, PRESTON.

TRUSTEES :

Mr. E. J. Andrew.
Mr. W. F. Ascroft, J.P.
Mr. Ed. Dickson.
Mr. Hy. Astley-Bell, J.P.

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Mr. EDMUND DICKSON.

VICE-PRESIDENTS :

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Mr. R. P. Neilson, C.A., J.P.
Mr. T. B. Silcock, C.C., J.P.

University Representatives :

Professor A. H. Gibson (Manchester).
Dr. A. Holt, D.Sc., M.A. (Camb.) (Liverpool).

HON. TREASURER :

Mr. E. J. Andrew.

PRINCIPAL AND SECRETARY :

T. R. JOLLY, F.C.I.S.

VICE-PRINCIPAL :

Mr. E. C. MOYLE, A.R.C.Sc.

DAY CLASSES.

DAY CLASSES.

——:0:——

CLASSES AFFILIATED TO MANCHESTER AND LIVERPOOL UNIVERSITIES.

These provide complete Courses of Instruction for the joint Matriculation of the Northern Universities; the Intermediate B.Sc. and Intermediate, B.Sc. (Tech.), Manchester; the Intermediate B.Sc., Liverpool; the Intermediate Examinations of the University of London; and the various Preliminary Professional Examinations, including Medical, Dental, Pharmaceutical and Dispensers.

SUBJECTS :—Chemistry, Botany, English, History, French, Latin, Mathematics, Mechanics and Physics.

Fee for the complete Matriculation Course £15 15s. 0d. (September, 1926, to July, 1927). Separate Classes by arrangement. The Session commences on Monday, September 20th, 1926.

PHARMACEUTICAL SOCIETY'S EXAMINATION, PART 1.

The Institute is recognised by the Pharmaceutical Society for instruction in the subjects of Part 1 Examination, viz. : Chemistry, Physics and Botany. Part time courses in these subjects have been arranged enabling students to attend either in the day-time or evening.

SPECIAL NOTE.—The Pharmaceutical Society of Great Britain require that candidates must register with them as Pharmaceutical Students prior to the commencement of any portion of their curriculum of studies. All Students must produce evidence of such registration.

Fee per Session for Day Course (September, 1926, to July, 1927), £9 10s. 0d.

Fee per Session for Evening Course (September, 1926, to April, 1927), £2 5s. 0d.

Students are strongly recommended to attend the Day Course if possible.

SCHOOL OF AGRICULTURE.

The Agricultural School is carried on by the Council of the Harris Institute, by arrangement with the Lancashire County Council, as part of the County Scheme of Instruction in Agriculture. The Session extends from October to March.

Full particulars are given in the Scheme of Agricultural Education, which can be obtained free on application.

SCHOOL OF ART.

The objects of the school are :—

(1) To give instruction in Art to those engaged in trades and professions in which the power of drawing and a knowledge of design are essential or helpful.

(2). To train those wishing to qualify to become teachers of Art in Secondary Schools, or in Schools of Art.

(3). To provide facilities to those desiring to study Art as a branch of general education, or as a preparation for the training as painter or sculptor.

For particulars, see detailed Prospectus.

DAY COMMERCIAL SCHOOL.

The Course extends over a period of two years, and prepares boys and girls for Clerical posts. The following subjects are taken :—Arithmetic, Algebra, Accounts, Bookkeeping, Commerce, Commercial Correspondence, Drawing, Drill, English, French, Games, Geography, History, Office Routine, Mathematics, Shorthand and Typewriting.

The Classes commence on Tuesday, September 14th, 1926. Fee : £3 3s. 0d. for Session (September to July), or One Guinea per Term.

DAY JUNIOR TECHNICAL SCHOOL.

The aim of the School is to provide a suitable education for boys, who, having completed the ordinary course of work in the Elementary Day School, desire to enter Engineering, Building and other trades.

The curriculum is planned with the object of giving a general education in all subjects which are necessary to boys about to enter industrial occupations. The School also provides for the continuance of the general education given in the Public Elementary Schools.

The course of instruction extends over a period of two years and the subjects taught include the following :—Mathematics, Practical Drawing and Geometry, Art, Science (including Applied Mechanics, Electricity, Magnetism, Heat), Metalwork, Woodwork, Geography, History, English, Drill, and Organised Games.

The classes commence on Tuesday, September 14th, 1926.

Fee : £3 3s. 0d. for Session (September to July), or One Guinea per Term.

Conditions of Entry, Etc.

(1) Day Junior Technical School.

(2) Day Commercial School.

Candidates desirous of entering the Day Junior Technical School or the Commercial School take an Entrance Examination in May of each year, and, if successful, are admitted in the following September. Entry forms can be obtained from the Principal, Harris Institute, Avenham. Candidates must not be less than 13 years of age on the 1st of October. The Council of the Harris Institute offer a limited number of scholarships to candidates, who for two years prior to the date of the Examination have been in regular attendance at a Public Elementary School within 7 miles of the Preston Town Hall.

A limited number of Scholarships and Maintenance Allowances are also offered by the Lancashire County Council to candidates residing in the County area.

Leaving Certificates, First or Second Class, are given to all who satisfactorily conclude their period of training, and a certain number of free scholarships to Evening Classes are granted to those whose attainments and conduct in the Day School have merited it.

The Cost for books is approximately £2 0s. 0d. per annum.

The School Uniform is as follows :—**Girls.**—Navy Tunic and Girdle, Navy Knickers, White Blouse, with polo collar and long sleeves in winter, Magyar with short sleeves in summer. Blue and green tie, green cap in winter, Curacoas Hats with School Band in summer. Black cashmere stockings, black footwear, navy coat, if possible, if not, a dark one. School blazers can be obtained if desired.

Boys.—School cap, tie, and school Blazers.

The above can be purchased from the School Outfitters on the presentation of the regulation form which may be obtained at the School.

Every endeavour is made at the end of the course to assist worthy students to obtain suitable posts. Many employers apply to the School for employees and apprentices.

PART TIME DAY AND EVENING ENGINEERING COURSE.

Conditions of Entrance.—Before admission a Student must—

(a) have passed the Preliminary Technical Course ;

or (b) have attended the two years' course at a Junior Technical School ;

or (c) have attended a Secondary School to the age of 16 years ;

or (d) produce evidence of attainments equivalent to that of the Junior Technical Course ;

or (e) pass the Entrance Examination.

The Course of Instruction extends over a period of one day per week during the Session of about 40 weeks.

FEE £2 2s. 0d. PER SESSION.

Classes Commence September 20th, 1926.

See Page 29 for detailed Time Table.

TIME TABLES OF DAY CLASSES.

MATRICULATION COURSE.

Subject.	Monday.	Tuesday.	Wednesday	Thursday.	Friday.
English & History	11.15–12.15 (T)	2-3 (T)		2-3 (T)	3-4 (T)
French....			3.4 (T)		11.15 12.15 (T) 2-3 (T)
Latin		11.15–12.15 (T)		3-4 (T) (or times to be arranged)	
Mathematics	9.15-11-15	11.30-12.30 (T)	9.30-11.30 (T)		
Physics ...		9.30-11.15 (T)		9.15-11. (Prac. T.)	
Chemistry			2.30-4 (Prac. I.)	11.15-12.15 (I)	9.45-10.45 (I)

Botany....At times to be arranged. Students for the Matriculation course must be at least 18 years of age.

(T.)—Technical School. (I.)—Harris Institute.

PHARMACEUTICAL—PART 1.

Subject.	Monday.	Tuesday.	Wednesday	Thursday.	Friday.
Chemistry	2-3 (Organic Theory (I.)		9.30-10.30 10.30-12.30 Prac. Inorganic (2nd Year) 2.30-4 (Prac. I.)	11.15-12.15 (Theory (I.)	9.45-10.45 (Theory (I.) Org. Prac. 10-45 -12.30
Physics ...	3.15-5-0 (T.)	9.30-11.15 (T.)		9.15-11.0 (T.)	
Botany ...		11.30-12.30 2-4 (Prac. (I.)			

The Organic Chemistry can only be taken by students who have done a fair amount of Inorganic Chemistry.

(I.)—Harris Institute. (T.)—Technical School.

DISPENSERS' EXAMINATION.

(Chemistry Only).

Subject.	Monday.	Tuesday.	Wednesday	Thursday.	Friday.
Chemistry	2-3 Organic (Theory) (I.)		9.30-10.30 10.30-12.30 (Theory) 2.30-4 (Prac.) (I.)	11.15-12.15 (Theory) (I.)	9.45-10.45 (Theory) (I.)

The Organic Chemistry can only be taken by Students who have done a fair amount of Inorganic Chemistry.

PART 1, L.D.S. DENTAL (LONDON, MANCHESTER, LIVERPOOL, and EDINBURGH.

Subject.	Monday.	Tuesday.	Wednesday	Thursday.	Friday.
Chemistry	Organic 2-3 (I)		9.30-10.30 Theory 10.30-12-30 Pract. 2.30-4 (I.)	11.15-12.15 (Theory) (I.)	9.45-10.45 (Theory) (I.) 10.45 -12.30 Pract. Org
Physics ...	3.15-5.0 (T.)	9.30-11.15 (T.)		9.15-11.0 (T.)	

INTERMEDIATE B.Sc.

At times to be arranged, if possible.

Physics—Friday morning (all morning).

Mathematics—Monday morning.

Chemistry—At times to be arranged

CLASS FEES.—For Above Course.

For Session (September 1926 to July 1927).

£3 10s. 0d. per Subject, or £15 15s. 0d. Full Course of 5 Subjects.

Pharmacy Course £9 10s. 0d., or £3 10s. 0d. per Subject.

Day Fees may be paid per Term.

SCHOOL OF ART.

SCHOOL OF ART.

The School is open for three terms of about 13 weeks each, viz. :— 20th September, 1926, to 23rd December, 1926.
10th January, 1927, to 14th April, 1927.
25th April, 1927, to 1st July, 1927.

FEES FOR SESSION (payable in advance.)

	£	s.	d.
Full-time Day Students	3	3	0
Evening Classes	1	0	0
Painting and Decorating Class	1	0	0
Students attending one day per week for Single Subjects	2	2	0

Classes commence on Monday, September 20th, 1926.

DAY AND EVENING CLASSES.—TIME TABLE.

	MORNING. 10-0—12-30.	AFTERNOON. 2-30—4-30.	EVENING. 7-0—9-0.
Monday.	Drawing Ornament Styles of Design Lettering Nature Drawing Painting in Monochrome Perspective	Still Life Painting Figure Drawing Object Drawing Design Lettering	Drawing & Painting Still Life Nature Study Antique Drawing Elem. & Advanced Drawing Elem. Teachers' class
Tuesday.	Nature Study Drawing Ornament History of Art	Still Life Drawing (Elem. & Advanced) Drawing and Painting from Life	Drawing & Painting Still Life Textile Art (4th yr). Drawing (1st & 2nd yr. Junr. Course) Design Drawing from Life
Wednesday.	Geometry Still Life Memory Drawing Drapery Study Principles of Art Design	Lino Cutting, Stencilling Leather Work Embroidery. Still Life Design Drawing from the Antique Nature Study	Lino Cutting Stencilling Leather Work Painting and Decorating Anatomy Modelling & Wood Carving (1st & 2nd yr. junior course) Textile Design 2nd & 3rd yr
Thursday.	Anatomy Drawing & Painting Still Life Drawing and Painting Life	General Drawing & Practice	Figure Drawing English & Arithmetic, 1st & 2nd yr. Illustration Drawing from life
Friday.	Architecture Figure Composition Object & Memory Drawing Etching Design	Raffia & Basketry Batik Embroidery Illustration Elem. Figure Drawing Drawing—Objects and Interiors Memory Drawing	Textile Design (1st year) Embroidery Basketry Raffia Batik Architecture Practice

During the Summer term an out-door Sketching Class will be held on Tuesday morning.

N.B. Evening lecture classes will terminate at Easter.

OBJECTS OF THE SCHOOL.

The objects of the school are :—

(1). To give instruction in Art to those engaged in trades and professions in which the power of drawing and a knowledge of design are essential or helpful.

(2). To train those wishing to qualify to become teachers of Art in Secondary Schools, or in Schools of Art.

(3). To provide facilities to those desiring to study Art as a branch of general education, or as an accomplishment.

(4). To train those who are desirous of taking up Art as a career, and who intend to specialise as painters, sculptors, illustrators, designers, etc.

(5). To meet the requirements of those engaged in various industrial occupations.

(6). Junior Courses. To prepare young students between the ages of 14 and 16, in order that they may specialise later on, in any of the above courses.

EXAMINATIONS IN ART.

Internal.

Grouped Examinations will be held at the end of each term, comprising the subjects of the various Courses.

The Board of Education will hold Examinations in the following subjects of Art :—

(a) Drawing.

(b) Painting.

(c) Modelling.

(d) Pictorial Design for Reproduction in black and white or colour.

(e) Industrial Design for (i.) Handicrafts and (ii.) Manufactures.

1. The Examination in Drawing will be of a standard suitable for candidates who, after a good general education, including some preliminary instruction in Drawing, up to the age of 16 or later, have devoted themselves to serious and continuous study of Drawing for, as a rule, not less than two years.

2. The Examinations in Painting, Modelling, and Pictorial Design will be of such a standard as could be attained, according to the capacity of the candidate, by two or more years of serious and continuous specialised study after passing the Examination in Drawing.

3. Examination in Industrial Design will be of such a standard as could be attained through regular attendance at evening or other part-time classes in the intervals of employment for a period of four years after the age of 16.

4. Candidates will not be admitted to the Examinations in Painting, Modelling, or Pictorial Design unless they have previously passed the Examination in Drawing.

City and Guilds of London.

Students are prepared for these Examinations in the following Subjects :—Painting and Decorating, Embroidery, Principles of Art as applied to Cotton Weaving.

National Society of Art Masters.

A series of Examinations in Drawing arranged for Teachers in Elementary Schools.

SCHOLARSHIPS.

Harris Art Scholarship.

One scholarship of the value of £7 10s. 0d. per annum, tenable for three years, will be awarded annually.

The Scholarships will be open to all Students of the School of Art, who have attended for not less than one year immediately preceding the award, and will be tenable at the Harris Institute.

The Scholarships will be awarded on the results of the annual examinations, in conjunction with the Student's work of the session.

Should one or more of these Scholarships fall vacant before the full period of three years, two or three (as the case may be), will be given instead of one, in the year when they lapse.

Free Studentships.

Three Free Studentships to the Day Classes are offered to Students of the School (Day or Evening), who are studying with a view to becoming designers, craft workers, or teachers.

Method of award, the same as for the above.

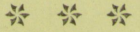
Free Studentships to the Evening Classes are offered to students taking definite courses, and will be awarded on the result of marks given for homework, attendance, and internal examinations.

Special Scholarships are awarded to students who have left or are about to leave elementary schools, who intend to follow occupations requiring an Art Training.

SKETCH CLUB AND STUDENTS' UNION.

The Sketch Club is organised by the Staff and Students for the purpose of encouraging individual effort. Monthly competitions are arranged during the Session, and a series of subjects are set for the long vacation.

All Students are eligible. Further information and particulars may be obtained from members of the Staff.



EVENING CLASSES.



EVENING CLASSES.

General Regulations.

Students who are desirous of joining the Classes must satisfy the Principal of the Institute that they are able to benefit by the Course to which they seek admission, otherwise they must sit for an **Entrance Examination, to be held at the Technical School on Friday Evening, September 17th,** and if they fail to reach the prescribed standard it will be advisable for them to attend the Preliminary Courses, Technical or Commercial, conducted under the Preston Education Committee.

Students will be enrolled at the Technical School on Wednesday and Thursday evenings, September 15th and 16th, from 7 to 9 p.m.

FEES FOR SESSION.

All fees are payable in advance and are not returnable.

	£	s.	d.
Single Subjects	0	15	0
Theoretical and Practical Chemistry will be charged as separate subjects.			
Any Complete Course : Building, *Commercial, Electrical Engineering, Mechanical Engineering, or Textile	1	0	0
School of Art, Evening Classes	1	0	0
Approved Pharmacy and Chemical Trades Course	2	5	0

*If Typewriting is included in a Commercial Course an additional fee of 5s. will be charged.

N.B.—Students who do not enrol on the dates given will be charged an additional fee of 2/6. This rule will be strictly enforced.

The Council reserve the right to discontinue any Class in the event of a small number joining.

Students who desire to take the Examinations of the Union of Lancashire and Cheshire Institutes or the City and Guilds of London Institute, may be called upon to pay the whole or a portion of the Examination Fees.

EVENING CLASSES.

SCIENCE AND MISCELLANEOUS.

EVENING CLASSES.

Time Tables.

PURE MATHEMATICS.

Stage I.....Monday, 7 to 9.

INORGANIC CHEMISTRY.

Stage I. ..... Friday, 7 to 8 (Lecture.)
Stage I. ..... Friday, 8 to 9-30 (Pract.)
Stage II. ..... Wednesday, 7 to 8 (Lect.)
Stage II. ..... Thursday, 7 to 9-30 (Pract.)
Physical Chemistry..... Wednesday 8-0 to 9-30.

ORGANIC CHEMISTRY.

Stage I..... Tuesday, 7-0 to 8-0 (Lecture)
Stage I..... Tuesday, 8-0 to 9-30 (Pract.)
Stage II. ..... Tuesday, 8-0 to 9-30 (Pract.)

PHARMACY COURSE.

1st Year.

Monday.....	Botany.....	7-0 to 9-0
Tuesday	Physics	7-0 to 9-15
Friday	Chemistry.....	7-0 to 9-30

2nd Year.

Monday	Botany	7-0 to 9-0
Tuesday	Organic Chemistry	7-0 to 9-30
Wednesday	Inorganic Chemistry (Lecture)....	7-0 to 8-0
Thursday	Inorganic Chemistry (Practical) ...	7-0 to 9-30

3rd Year.

Tuesday	*Organic Chemistry	7-0 to 9-30
Wednesday.....	*Inorganic Chemistry (Lecture)...	7-0 to 8-0
Thursday	*Inorganic Chemistry (Practical).	7-0 to 9-30

* Optional, if the required number of hours has been put in.

National Certificate in Chemistry.

General Students are advised to work for the National Certificate in Chemistry.—a 3 Years' Course.

1st Year.

Monday	Mathematics	7-0	to	9-0
Tuesday	Physics	7-0	to	9-15
Friday	Inorganic Chemistry	7-0	to	9-30

2nd Year.

Wednesday	Physical Chemistry	8-0	to	9-30
Tuesday	Organic Chemistry	7-0	to	9-30
Wednesday	Inorganic Chemistry	7-0	to	8-0

3rd Year.

Tuesday	Organic Chemistry	7-0	to	9-30
Wednesday	Inorganic Chemistry (Lect.)	7-0	to	8-0
Thursday	Inorganic Chemistry (Pract.)	7-0	to	9-30
Wednesday	Dyeing of Cotton and Associated Textile Fibres (City & Guilds)	8-0	to	9-30

BOTANY.

Monday ..... 7 to 9

GEOLOGY.

Wednesday ..... 7 to 8

ENGLISH LANGUAGE AND LITERATURE.

Friday ..... 7-0 to 8-0

FRENCH.

Tuesday	Elementary Grade	8-15	to	9-15
Tuesday	Intermediate Grade	7-15	to	8-15
Thursday	Advanced Grade	8-15	to	9-15

SPANISH.

Tuesday ..... 7-15 to 8-15

LATIN.

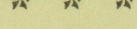
Thursday ..... 7-15 to 8-15

PHYSICS.

Tuesday ..... 7-0 to 9-15



Mechanical and Electrical Engineering Department.



MECHANICAL ENGINEERING.

Award of Lower and Higher Certificates.

The Institution of Mechanical Engineers, in conjunction with the Board of Education, has approved of the grouped courses of instruction for the award of certificates at the end of—

(1) a Three Years' Course (Senior).

(2) a further Two Years' Course (Advanced).

Conditions of Admission to the Courses.

SENIOR COURSE.

Students must (a) have passed the Preliminary Technical Course,

or (b) have attended a Secondary or Day Junior Technical School to the age of 15 years ;

or (c) produce evidence of attainments equivalent to the above ;

or (d) pass an entrance examination.

Students who have obtained a First Class leaving Certificate in the Day Junior Technical School, may be admitted to the Second Year of the Senior Course.

ADVANCED COURSE.

Students must have passed the Senior Course or produce evidence of equivalent attainments.

Conditions of Award of Certificate.

In order to obtain a certificate a candidate must make not less than 70 per cent. of the possible attendances in each year of the course, and must obtain :—

(1) Not less than 40 per cent. of the possible marks in EACH subject in the examination held at the end of each year.

(2) Not less than 40 per cent. of the possible marks obtainable in EACH year for homework, class work, laboratory work, etc., taken separately, in EACH subject for which such marks are to be awarded.

(3) Not less than 50 per cent. of the grand total of marks obtainable in EACH year. Of this total the possible marks in the examinations constitute 70 per cent. and the remaining 30 per cent. will be the possible marks for home work, class work, laboratory work, etc., in each year.

A "Distinction" may be awarded to any candidate qualified to receive a certificate who gains not less than 85 per cent. of the possible marks in the Final Examination in any subject, and his certificate may be specially endorsed with the name or names of the subjects in which he has thus distinguished himself.

Fee to be paid by each Student entering the Final Examination, Five Shillings.

INSTITUTION OF MECHANICAL ENGINEERS.

HIGHER NATIONAL CERTIFICATE IN MECHANICAL ENGINEERING.

(1). Holders of the Higher National Certificates in Mechanical Engineering who became candidates for Election as Students, Graduates, or Associate Members of the Institution of Mechanical Engineers, and are able to satisfy the Council of their eligibility under the By-laws for one of these classes in respect of occupation and practical training, will be exempted from such subjects of the Associate Membership Examination, as, in the opinion of the Council, correspond to the subjects of the final examination named on their Higher Certificates.

Such candidates will be allowed to sit for the remaining subjects of the Associate Membership Examination for which they are liable, at a special fee of 10s. 6d. per subject (if all such subjects are taken on the same occasion), instead of being required to pay the usual Examination Fee of £3 3s. 0d.

(2). The following list shows the subjects of the Associate Membership Examination from which exemption can be obtained, under the above-mentioned conditions, by holders of Higher National Certificate in Mechanical Engineering, awarded at the Harris Institute, Preston, who have passed in the subjects of final examination indicated as corresponding thereto :—

Subjects of Final Examination for Higher Certificate.	Corresponding Subjects of Associate Membership Examination.
Mathematics	Section A (b)—Applied Mathematics.
Theory of Machines	Section B (a)—Theory of Machines and Machine Design.
Strength of Materials	Section B (b)—Properties and strength of Materials.
Electrical Engineering	Section B (c)—Alternative Subject.
Hydraulics	Ditto.
Heat Engines	Ditto.

(3). In order to obtain the greatest possible extent of exemption from the Associate Membership Examination, candidates in the fourth year of the Course (A1) may have their papers assessed subject to a personal fee of 5s. by each candidate in the subjects of the first year where these subjects are of equal standard to those of the second year and interchangeable.

TIME TABLE.

Senior Course.

First Year (S. 1).

Section A.—

Mathematics	Thursday	7-15 to 9-15
Engineering Drawing	Wednesday	7-15 to 9-15
Engineering Science	Monday	7-15 to 9-15

Section B.—

Mathematics	Tuesday	7-15 to 9-15
Engineering Drawing	Wednesday	7-15 to 9-15
Engineering Science	Friday	7-15 to 9-15

Second Year (S. 2).

Mathematics	Wednesday	7-15 to 9-15
Engineering Drawing	Tuesday	7-15 to 9-15
Engineering Science	Friday	7-15 to 9-15

THIRD YEAR (S. 3).

FINAL FOR LOWER NATIONAL CERTIFICATE.

Mathematics	Monday	7-15	to 9-15
Mechanics	Wednesday	7-10	to 9-35
Heat Engines	Thursday	7-10	to 9-35

ADVANCED COURSE.

FIRST YEAR (A. 1).

Mathematics	Wednesday	7-15	to 9-15
Strength of Materials	Monday	7-15	to 9-15
Machine Design	Friday	7-15	to 9-15

SECOND YEAR (A. 2).

FINAL FOR ADVANCED NATIONAL CERTIFICATE.

Electrical Engineering	Thursday	7-15	to 9-15
Theory of Machines	Wednesday	7-15	to 9-15
Strength of Materials	Monday	7-15	to 9-15

———:o:———

ELECTRICAL ENGINEERING

The conditions of admission to the Courses are as set out under Mechanical Engineering. Students are expected to sit at the Examinations held by the Union of Lancashire and Cheshire Institutes in the Subjects of the Course and to pay their own examination fees.

TIME TABLE.

SENIOR COURSE.

FIRST YEAR (S. 1).

Mathematics	Monday	7-15	to 9-15
Engineering Drawing	Thursday	7-15	to 9-15
Electrical Science	Friday	7-15	to 9-15

SECOND YEAR (S. 2).

Mathematics	Tuesday	7-15	to 9-15
Mechanics	Thursday	7-15	to 9-15
Electrical Science	Wednesday	7-15	to 9-15

Third Year (S. 3).

Final for Senior National Certificate.

Mathematics	Monday	7-15 to 9-15
Electro-Technics	Thursday	7-15 to 9-15
Electrical Laboratory	Tuesday	7-15 to 9-15

ADVANCED COURSE.

First Year (A. 1).

Mathematics	Friday	7-15 to 9-15
Electrical Engineering	Thursday	7-15 to 9-15
Electrical Laboratory	Monday	7-15 to 9-15

Second Year (A. 2).

The following Sections may be taken in different years. For the present Session, provision will be made for Section B. only :—

Section A. :—

Transmission and Distribution of Electrical Energy.
Heat Engines.

Section B. :—

Design of Electrical Machinery.
Electrical Engineering Drawing.
Electrical Engineering Laboratory.

Section C. :—

Electrical Instruments and Apparatus.
Applied Mechanics.

Section B.

Design of Electrical Machinery	Thursday	7-15 to 9 15
Electrical Engineering Drawing	Tuesday	7-15 to 9-15
Electrical Laboratory	Wednesday	7-15 to 9-15

PART TIME DAY AND EVENING ENGINEERING COURSES.

The conditions set out above also apply to these courses. In the first two years MECHANICAL and ELECTRICAL Engineering students will take the same course, and all students must attend on one evening per week in order to complete the course and qualify for the National Certificate Examinations.

Fee : £2 2s. 0d. per session.

TIME TABLE.

MECHANICAL AND ELECTRICAL.

FIRST YEAR (S. 1).

Monday	1-45 to 2-45	Electrical Science.
	3-0 to 5-0	Mathematics.
Thursday	1-45 to 2-45	Electrical Science.
	3-0 to 5-0	Mechanics and Heat Engines.
Friday	7-15 to 9-15	Engineering Drawing.

SECOND YEAR (S. 2).

Monday	1-45 to 3-45	Mechanics and Heat Engines
	4-0 to 5-0	Electrical Science.
Friday	1-45 to 2-45	Electrical Science.
	3-0 to 5-0	Mathematics.
Tuesday	7-15 to 9-15	Engineering Drawing.

MECHANICAL.

THIRD YEAR (S. 3).

Final for Ordinary National Certificate.

Monday	7-15 to 9-15	Mathematics.
Wednesday	2-0 to 4-30	Mechanics.
Thursday	2-0 to 4-30	Heat Engines.

NOTE.—Mechanical students who desire to complete the Senior Course in Electrical Engineering will attend the Evening Classes (S. 3) on Tuesday and Thursday, in addition to the above.

ELECTRICAL.

Third Year (S. 3).

Final for Ordinary National Certificate.

Monday .....7-15 to 9-15 .....Mathematics.
Tuesday ..... 2-0 to 4-30 .....Electrical Laboratory.
Thursday ..... 2-0 to 4-30 .....Electro-Technics.

Note.—Electrical students who desire to complete the Senior Course in Mechanical Engineering will attend the Evening Classes (S. 3) on Wednesday and Thursday in addition to the above.

BUILDING TRADES DEPARTMENT.

BUILDING TRADES DEPARTMENT.

Conditions of Admission to the Courses.

Senior Course.

Students must (a) have passed the Preliminary Technical course ;
or (b) have attended a Secondary or Junior Technical School to the age of 15 years ;
or (c) produce evidence of attainments equivalent to the above ;
or (d) pass an entrance examination.

Students who have obtained a First-Class leaving Certificate in the Day Junior Technical School may be admitted to the Second Year of the Senior Course.

Students taking the Third Year of the Senior Course will take the Third Year Building Trades Course Examinations of the Union of Lancashire and Cheshire Institutes, the fee for this examination to be paid by the student. . First and Second Year students will be examined, and successful students will proceed to the next year of the Course, on the results of school examinations held at the close of the evening session.

Advanced Course.

Students must have passed the Third Year Building Trades Course of the Union of Lancashire and Cheshire Institutes, or produce evidence of equivalent attainments.

For each year of the Advanced Course, students will take the examination of the corresponding year of the Advanced Building Trades Course of The Lancashire and Cheshire Institutes, the fee for this examination to be paid by the student.

Senior Course.

First Year (S. 1).

Section A.—

Mathematics and Science	Tuesday	7-15	to	9-15
Building Construction	Wednesday	7-15	to	9-15
Geometry	Friday	7-15	to	9-15

Section B.—

Building Construction	Monday	7-15	to	9-15
Geometry	Tuesday	7-15	to	9-15
Mathematics and Science	Friday	7-15	to	9-15

SECOND YEAR (S. 2).

Building Science	Monday	7-15 to 9-15
Building Construction	Tuesday	7-15 to 9-15
Mathematics and Geometry	Thursday	7-15 to 9-15

THIRD YEAR (S. 3).

For Students desirous of qualifying for attendance at Advanced Course Examinations :—

Building Construction	Thursday	7-15 to 9-15
and at least one from—		
Structural Engineering (Ely)	Tuesday	7-15 to 9-15
Geometry	Monday	7-15 to 9-15
Mathematics	Wednesday	7-15 to 9-15
and, if necessary, one other subject from—		
Builders Quantities	Tuesday	7-15 to 9-15
Carpentry and Joinery	Friday	7-15 to 9-15
Brickwork and Concreting	Wednesday	7-15 to 9-15

Students who do not wish to proceed to an Advanced Course may choose any three subjects from the above, or may choose any two from the above and—

*Carpentry & Joinery (Practical)	Monday	7-15 to 9-15

The following subjects may be omitted in the Third Year (S. 3), and taken in the Fourth Year (A. 1).

Builders' Quantities
or
Mathematics

Those students who take Builders' Quantities (S. 3) in the Fourth Year, (A. 1) must take Builders' Quantities, (A. 1) in the Fifth Year.

Those students who take Mathematics (S. 3) in the Fourth Year (A. 1), must take Structural Engineering as one subject of the Course.

A Course for Cabinet Makers will be formed if there are sufficient applicants.

ADVANCED COURSE.

Fourth Year (A. 1).

Building Construction	Thursday	7-15 to 9-15
Practice Class	Wednesday	7-15 to 9-15
or		
*Carpentry & Joinery (Practical)	Monday	7-15 to 9-15

and ONE other subject selected from the following :—

Builders Quantities	Monday	7-15 to 9-15
Carpentry and Joinery	Friday	7-15 to 9-15
*Structural Engineering	Monday	7-15 to 9-15
Architecture	Friday	7-15 to 9-15

* Classes will be held if sufficient Students enrol.

Fifth Year (A. 2).

As for Fourth Year (A. 1).

PLUMBING COURSE.

Senior Course.

First Year (S. 1).

Mathematics and Science	Tuesday	7-15 to 9-15
Building Construction	Wednesday	7-15 to 9-15
Geometry	Thursday	7-15 to 9-15

Second Year (S. 2).

Plumbing (Practical)	Monday	7-0 to 9-0
Plumbing (Theory)	Wednesday	7-0 to 8-30
Plumbing Science	Wednesday	8-30 to 9-30

Third Year (S. 3).

Plumbing (Practical)	Monday	7-0 to 9-0
Plumbing (Theory)	Wednesday	7-0 to 8-30
Plumbing Science	Wednesday	8-30 to 9-30

* * *

TEXTILE DEPARTMENT.

* * *

TEXTILE DEPARTMENTS.

COTTON SPINNING AND WEAVING.

Students are expected to sit at the examinations conducted by the Union of Lancashire and Cheshire Institutes, in the subjects of the Senior Course, or those conducted by the City and Guilds of London, in the subjects of the Advanced Course and to pay their own examination fees.

TIME TABLE.

COTTON SPINNING.

" a " signifies alternate weeks.

SENIOR COURSE

FIRST YEAR (S. 1.)

Cotton Spinning	Tuesday	7-15	to	9-15
Textile Mathematics	Monday	7-15	to	9-15
aTextile Drawing	Thursday	7-15	to	9-15
aPractical	Thursday	7-15	to	9-15

SECOND YEAR (S. 2).

Cotton Spinning	Monday	7-15	to	9-15
Textile Mathematics and Mechanics	Friday	7-15	to	9-15
aTextile Drawing	Thursday	8-15	to	9-15
aPractical	Thursday	7-15	to	9-15

THIRD YEAR (S. 3).

Cotton Spinning	Wednesday	7-15	to	9-15
aTextile Drawing	Friday	7-15	to	9-15
aPractical	Friday	7-15	to	9-15
Textile Mechanics	Tuesday	7-15	to	9-15

ADVANCED COURSE.

FIRST YEAR (A. 1).

Cotton Spinning Hons. A.	Thursday	7-15	to	9-15
Textile Engineering	Tuesday	7-15	to	9-15
Practical	Monday	7-15	to	9-15

SECOND YEAR (A. 2).

Cotton Spinning Hons. B.	Tuesday.....	7-15 to 9-15
Practical	Friday.....	7-15 to 9-15
Economics of the Cotton Industry.....	Wednesday.....	7-15 to 9-15

———:o:———

COTTON WEAVING.

" a " signifies alternate weeks.

SENIOR COURSE.

FIRST YEAR (S. 1).

Cotton Weaving	Thursday	7-15 to 9-15
aTextile Design and Colour	Friday.....	7-15 to 9-15
aPractical	Friday.....	7-15 to 9-15
Textile Mathematics	Wednesday.....	7-15 to 9-15

SECOND YEAR (S. 2).

Cotton Weaving	Monday.....	7-15 to 9-15
aPractical	Wednesday.....	7-15 to 9-15
aTextile Design and Colour	Wednesday.....	7-15 to 9-15
Textile Drawing and Mechanics	Thursday	7-15 to 9-15

THIRD YEAR (S. 3).

Cotton Weaving.....	Friday.....	7-15 to 9-15
aTextile Design and Colour	Wednesday.....	7-15 to 9-15
aPractical	Wednesday.....	7-15 to 9-15
Textile Mechanics	Tuesday	7-15 to 9-15
or		
Chemistry	Monday.....	7-0 to 9-30

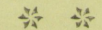
ADVANCED COURSE.

First Year (A. 1).

Cotton Weaving, Hons. A. ...	Wednesday.....	7-15 to 9-15
Practical	Monday.....	7-15 to 9-15
Principles of Art applied to Design	Tuesday	7-15 to 9-15

Second Year (A. 2).

Cotton Weaving, Hons. B.....	Friday.....	7-15 to 9-15
Practical	Monday.....	7-15 to 9-15
Textile Engineering	Tuesday	7-15 to 9-15
or		
Economics of the Cotton Industry	Wednesday	7-15 to 9-15



COMMERCIAL DEPARTMENT.



COMMERCIAL DEPARTMENT.

The aims of the Commercial Evening Classes are :—

(a) To equip students for commercial life in all its ranges.

(b) To prepare students for the group course examinations held by the Union of Lancashire and Cheshire Institutes on dates given below. These are of three grades or years.

(c) To give opportunity to those desirous of literary or linguistic culture.

————:o:————

In order to enter any class, students must satisfy the Principal that their standard of attainments is such as to enable them to profit by the instruction. To qualify for entrance to the first year they must :—

(a) have passed the Preliminary Examination of the Union of Institutes ; or

(b) have attended a Secondary School, or a Junior Technical School, or Junior Commercial School ; or

(c) produce evidence of attainments equivalent to the above ; or

(d) pass an entrance examination.

No student under 15 years of age is admitted.

All students are expected to take the examination at the end of the course in those subjects for which they enrolled at the opening of the session. Students who have completed a course of two years at the Day Commercial School may be permitted to enter the second year classes. The fee for any course is £1 0s. 0d. for the four (or in the 3rd Year three) subjects ; if Typewriting is included, the fee is £1 5s. 0d. The fee for each single subject, if a course is not taken, is 15s. Students who, after entering for a course, fail to make the required number of attendances, are charged 15s. per subject. A student taking a course may, so far as his attainments and the time table permit, sit in a class and enter for an examination of a higher year than the remaining subjects of his course. Transfers from one class to another are not permitted after the first two weeks of the session. The detailed syllabuses of examinations in the subjects will be posted up in the Technical School, on the enrolment nights, September 15th and September 16th, 1926, or may be found complete in the Prospectus of the Lancashire and Cheshire Institutes, price sixpence at any bookseller's.

GROUPED COURSES.

Commercial Courses are of four kinds, namely :—

(a) General Courses.
(b) Courses for Book-keepers.
(c) Courses for Correspondents.
(d) Courses for Shorthand Clerks.

All Courses are now open to both males and females. In the First and Second Years each Course, with the exception of those for Correspondents, consists of **four** subjects. Third Year Courses and Courses for Correspondents consist of three subjects.

In each Course (except the special ones specified later, which do not qualify for a Grouped Course Certificate), one or more subjects are obligatory ; others are generally optional.

From the latter subjects students may select the required number to make up their Course.

Before selecting a Course students should **consult both the time-table printed** (on pages 45 to 48), **and the tutors** who will be present to enrol on September 15th and September 16th, 1926.

For detailed syllabuses see Notices in the Technical School.

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SUBJECTS OF THE GROUPED COURSES.

First Year.

General Course :—Four Subjects.

Obligatory : Commerce.

Optional : Any three of the following :—

Commercial Arithmetic.
English and Commercial Corre pondence.
Geography.
Book-keeping.
Shorthand.
French or Spanish.
Typewriting.
Cotton Spinning.
Cotton Weaving.

Course for Book-keepers. (Four Subjects, all obligatory) :—

Book-keeping.
Commercial Arithmetic.
Commerce.
English and Commercial Correspondence.

Course for Correspondents. (Three Subjects) :—

OBLIGATORY : English and Commercial Correspondence.
French or Spanish.

OPTIONAL : **One** of the following :—

Commerce.
Arithmetic.
Shorthand.

Course for Shorthand Clerks. (Four Subjects) :—

OBLIGATORY : Shorthand.
English and Commercial Correspondence.
Arithmetic.

OPTIONAL : **One** of the following :—

Commerce.
Book-keeping.
Typewriting.

SECOND YEAR.

General Course. (Four Subjects) :—

OBLIGATORY : Commerce.

OPTIONAL : **Three** of the following Subjects (in not more than one of which the first year syllabus may be taken, provided the subject has not been previously offered) :—

Commercial Arithmetic.
English and Commercial Correspondence.
Geography.
Book-keeping.
Shorthand (minimum of 60 words per minute).
French.
Spanish.
Typewriting.
Cotton Spinning.
Cotton Weaving.

Course for Book-keepers. (Four Subjects) :—

OBLIGATORY : Book-keeping.
Commercial Arithmetic.
Commerce.
English and Commercial Correspondence.

Course for Correspondents. (Three Subjects) :—

OBLIGATORY : English and Commercial Correspondence
A Foreign Language (French or Spanish).

OPTIONAL : Any one of the following :—

Commerce.
Commercial Arithmetic.
Geography (First Year Syllabus).
Shorthand.
A second modern Foreign Language (First Year Syllabus).

Course for Shorthand Clerks. (Four Subjects) :—

OBLIGATORY : Shorthand.
English and Commercial Correspondence.

OPTIONAL : Any two of the following subjects :—

Commerce (2nd Year Syllabus).
Book-keeping (1st or 2nd Year Syllabus).
Commercial Arithmetic.
Typewriting.

THIRD YEAR.

General Course. (Three Subjects) :—

OBLIGATORY : Commerce.

OPTIONAL : Any two of the following :—

Book-keeping and Accountancy.
Arithmetic.
English Literature.
Shorthand (minimum of 80 words per minute).
A Modern Language.

Course for Book-keepers. (Three Subjects) :—

OBLIGATORY : Book-keeping and Accountancy.
Commercial Arithmetic.
Commerce.

Course for Correspondents. (Three Subjects) :—

OBLIGATORY : A Modern Foreign Language (French or Spanish).
Commerce (2nd or 3rd Year).

OPTIONAL : Any **one** of the following :—

A second Modern Language (1st or 2nd Year *Syllabus).
Geography (2nd Year Syllabus).
Arithmetic (2nd or 3rd Year Syllabus).
Shorthand.

Course for Shorthand Clerks. (Four Subjects) :—

OBLIGATORY : Shorthand.
Commerce (2nd or 3rd Year Syllabus)*.

OPTIONAL : Any two of the following :—

English and Commercial Correspondence (if sufficient enrol).
Book-keeping (2nd Year Syllabus), or *
Book-keeping and Accountancy.
Arithmetic.
Typewriting.

* In the Third Year Course, if any subject chosen has been taken in a previous year, the next higher stage must be taken.

———:o:———

Time-Table of Evening Commercial Classes.

Subject.	Year.	Place.	Day.	Hour.
Arithmetic	1st	Harris Institute or * Christ Church Schools* Bow Lane.	Monday	7-15 to 8-15, or 8-15 to 9-15
,,	2nd	Harris Institute	Friday	7-0 to 8-0.
,,	3rd	Harris Institute	Friday	8-0 to 9-0.

* All females taking Arithmetic attend the Arithmetic Classes at the Harris Institute. All males taking Arithmetic (except such as also take Geography) attend the Arithmetic Classes at the Christ Church Schools, Bow Lane.

Males taking both Arithmetic and Geography attend both Classes at the Harris Institute.

Book-keeping	1st (Beginners)	Technical School	Wednesday.	7-15 to 8-15, or 8-15 to 9-15.
,,	1st ,,	Christ Church	Wednesday.	7-15 to 8-15, or 8-15 to 9-15.
,,	1st (Slightly more advanced)	Technical School	Thursday	7-15 to 8-15, or 8-15 to 9-15.
,,	2nd	Harris Institute	Wednesday.	7-15 to 9-15.
,,	3rd	Technical School	Wednesday.	7-15 to 9-15.
Commerce	1st	Technical School	Tuesday	7-15 to 8-15, or
,,	1st	Technical School	Friday	8-15 to 9-15.
,,	2nd	Technical School	Tuesday	8-15 to 9-15, or
,,	2nd	Technical School	Friday	7-15 to 8-15.
,,	3rd	Harris Institute	Monday	7-15 to 8-45

Time-Table of Evening Commercial Classes—*continued.*

Cotton Weaving	1st	Technical School	Thursday	7-15 to 9-15.
,,	2nd	Technical School	Monday	7-15 to 9-15.
Cotton Spinning	1st	Technical School	Tuesday	7-15 to 9-15.
,,	2nd	Technical School	Monday	7-15 to 9-15.
English and Com. Correspondence...	1st	Technical School	Tuesday	8-15 to 9-15, or
,,	1st	Technical School	Friday	7-15 to 8-15.
,,	2nd	Technical School	Tuesday	7-15 to 8-15, or
,,	2nd	Technical School	Friday	8-15 to 9-15.
,,	Literature	Harris Institute	Friday	7-0 to 8-0.
French	1st.	Technical School	Tuesday	8-15 to 9-15.
,,	2nd	Technical School	Tuesday	7-15 to 8-15.
,,	3rd	Harris Institute	Thursday	8-15 to 9-15.
Geography	1st	Harris Institute	Monday	7-15 to 8-15.
,,	2nd	Harris Institute	Monday	8-15 to 9-15.
Latin	1st	Harris Institute	Thursday	7-15 to 8-15.

Time-Table of Evening Commercial Classes—*continued.*

§Shorthand	... 1st ...	... In same building as the Arithmetic Classes	Monday	... 7-15 to 8-15.
§ ,, ...	... 1st ...	... In same building as the Arithmetic Classes	Monday	... 8-15 to 9-15.
,, ...	... 2nd A. ...	... Technical School	... Thursday	... 7-15 to 9-15.
,, ...	... 2nd ...	... Harris Institute	... Thursday	... 7-15 to 9-15.
,, ...	... 2nd B. ...	... Technical School	... Thursday	... 7-15 to 9-15.
,,	... 3rd ...	... Harris Institute	... Thursday	... 7-15 to 9-15.

§ In this subject students who have previously done nothing may find it advisable during the first session to work for a local examination. They should consult their tutors on the matter. The second year classes consist of :—A. Advanced Theory and Speed to 60 words per minute ; B. Speed from 60 to 70 words. Students who can do 70 words per minute should join the 3rd year.

Spanish ...	... 1st ...	... Harris Institute	... Tuesday	... 7-15 to 8-15.
Typewriting	... 1st and 2nd Years	Technical School	... Tuesday & Friday	One hour between 6-15 to 9-15.

Students must consult the tutor on the enrolment night as to which hour is available.

SPECIAL COURSES.

(Not qualifying for a Group Course Certificate).

These courses are intended to assist students of an ADVANCED grade to a higher standard of attainments. The Course consists of any three of the following subjects :—

English Language & Literature	Frid. 7-0 to 8-0.	Harris Inst.
Advanced French	Thur. 8-15 to 9-15.	Harris Inst
Latin (suitable for Prof. Prelim.)	Thur. 7-15 to 8-15.	Harris Inst.
Book-keeping	Wed. 7-15 to 9-15.	Technical Sch.
Shorthand (Higher Speeds)	Thur. 7-15 to 9-15.	Harris Inst.
Arithmetic	Frid. 8-15 to 9-15.	Harris Inst.
Spanish (if enough apply)	Tues. 7-15 to 8-15.	Harris Inst.

A Local Examination will be held (in those subjects not otherwise provided for) and certificates will be given.

Royal Society of Arts Examinations.

In most of the classes the work done is sufficient to cover the requirements of the examinations held in March and May, by the Royal Society of Arts, whose certificates are of considerable value, but students are recommended to seek early in the course the advice of their tutors in this respect. Candidates may enter for any number of these examinations, but are advised to make early application. Examinations are not held in May at the Institute unless there are sufficient applications. The syllabuses of these examinations will be posted in the Technical School.

DATES OF THE EXAMINATIONS HELD BY THE UNION OF INSTITUTES.

Geography .....Thursday, March 31st, 1927.
French (All Years) .....Friday, April 1st, 1927.
Type-writing (Stage 1). .....Saturday, April 2nd, 1927.
Shorthand (All Years) .....Tuesday, April 5th, 1927.
English (All Years) .....Wednesday, April 6th, 1927.
Arithmetic (All Years) .....Thursday, April 7th, 1927.
Commerce (All Years) .....Friday, April 8th, 1927.
Type-writing (Stages 2 & 3) .....Saturday, April 9th, 1927.
Book-keeping (All Years).....Monday, April 11th, 1927.
Spanish (All Years).....Tuesday, April 12th, 1927.
Cotton Weaving and Spinning.....Wednesday, April 13th, 1927.

Scholarships and Prizes.

A limited number of Scholarships and Prizes will be awarded at the discretion of the Council.

Regulations applicable to all Students attending Classes at the Harris Institute.

The Lecturers are authorised to report periodically, through the Principal, on the attendance, homework, and conduct of each Student. The Council shall have power in dealing with the students who are unsatisfactory in these and other respects, to remove their names from the Register without return of fee.

HARRIS INSTITUTE, PRESTON.

CLASSES AFFILIATED TO MANCHESTER AND LIVERPOOL UNIVERSITIES.

These provide complete Courses of Instruction for the Joint Matriculation of the Northern Universities; the Intermediate B.Sc. and Intermediate, B.Sc. (Tech.), Manchester; the Intermediate B.Sc., Liverpool; the Intermediate Examinations of the University of London; and the various Preliminary Professional Examinations, including Medical, Dental, and Pharmaceutical.

DAY CLASSES.

ART.

AGRICULTURE.

DAY COMMERCIAL SCHOOL.

DAY JUNIOR TECHNICAL SCHOOL.

MATRICULATION AND INTERMEDIATE SCIENCE.

DENTAL & PHARMACEUTICAL COURSES.

EVENING CLASSES.

ART.

SCIENCE AND MISCELLANEOUS.

ORGANISED COURSES.

BUILDING TRADES.

COMMERCIAL.

COTTON SPINNING. COTTON WEAVING.

MECHANICAL ENGINEERING. SCIENCE.

PHYSICS AND ELECTRICAL ENGINEERING.

All communications to be addressed to

T. R. JOLLY,

August, 1926 Principal and Secretary.

HARRIS INSTITUTE

PRESTON.

PROSPECTUS OF CLASSES

SESSION 1927 - 28.

A. LOCAL COLLEGE

1.	TECHNICAL DAY CLASSES.	RE-OPEN Sept. 26.
2.	EVENING CLASSES	,, ,, 26.
3.	JUNIOR DAY SCHOOLS ... (Technical and Commercial)	,, ,, 13.

B. ART SCHOOL

1.	DAY CLASSES	RE-OPEN Sept. 26
2.	EVENING CLASSES ...	,, ,, 26

Price - Twopence.

PER POST 3d.

SPECIAL NOTICE.—Evening Students will be enrolled at the Technical School, Corporation Street, from 7 to 9 p.m. on Wednesday and Thursday evenings, September 21st and 22nd.

Students who do not enrol on these dates will be charged an extra fee of 2s. 6d. This will be strictly enforced.

HARRIS INSTITUTE

PRESTON.

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1927 - 28.

HARRIS INSTITUTE, PRESTON

Trustees :

Mr. E. J. ANDREW.
Mr. W. F. ASCROFT, J.P.
Mr. H. PARKER, J.P.
Mr. HY. ASTLEY-BELL, J.P.
Mr. ED. DICKSON.
Mr. J. W. E. DICKSON.
Mr. J. H. TOULMIN, J.P.

President :

Mr. EDMUND DICKSON.

COUNCIL.

Vice-Presidents :

Mr. E. J. ANDREW.
Mr. Alderman H. ASTLEY-BELL, J.P., Mr. Alderman T. SNELHAM.

Mr. J. Ambler.
Mr. Councillor F. W. Collinson, J.P.
Mr. J. Croft.
Mr. J. W. E. Dickson.
Mr. W. Dryden, J.P.
Mr. C. E. Fairburn.
Mr. G. J. Gibbs.
Dr. J. E. Healey.
Mr. Councillor R. C. Handley, J.P.
Mr. J. Openshaw, J.P.
Mr. J. H. Toulmin, J.P.
Mr. A. W. Wilson.

Representing the Corporation of Preston :

Mr. Alderman J. Dewhurst.
Mr. Alderman T. Snelham.
Mr. Councillor R. Durham.
Mr. Councillor O. A. Goodier, J.P.
Mr. Coundillor H. E. Rhodes.
Mr. Councillor J. Herbert.
Mrs. Councillor A. M. Pimblett.

Representing the County of Lancaster :

Mr. Windham E. Hale, C.C.
Mr. R. P. Neilson, C.C.
Mr. T. B. Silcock, C.C.

University Representatives :

Professor A. H. Gibson (Manchester).
Dr. A. Holt (Liverpool).

Principal and Secretary :

Mr. T. R. Jolly.

Vice-Principal :

Mr. E. C. Moyle.

Hon. Treasurer :

Mr. E. J. Andrew.

Auditor :

Mr. W. L. Moore.

JULY 31ST, 1927.

STAFF.

Principal :—T. R. JOLLY, J.P., F.C.I.S.
Vice-Principal :—E. C. MOYLE, A.R.C.Sc. (Lond.), A.M.I.MECH.E., WH.EX.

ART SCHOOL.

Headmaster :—W. RATHBONE, A.M.C., A.C.T.C.

Second Master :—G. CLUCAS, A.C.T.C., B. of E. Painting and Drawing Cert.

Assistant Teacher for Crafts :—MISS M. DUCKETT.

Student Teachers :—MISS B. ECKERSLEY ; MISS C. REED.

Assistants for Evening Classes :—

W. GARNER ; S. A. HORSLEY (Textile Design).
F. W. SHARPLES (Painting and Decorating).
F. ALLEN (Junior Course).

BUILDING TRADES DEPARTMENT.

Head :—E. M. PEARSON, A.R.S.I., A.M.I.Struct.E.

Lecturers for Evening Classes.

H. ALLEN
T. CROFT
J. T. HIGGINSON
G. H. BROADBENT, SENR.
H. HOWARTH
W. TAYLOR
J. N. WALKER.

Lecturer in Plumbing Subjects :—J. DIXON.

CHEMISTRY AND PHARMACY DEPARTMENT.

Head :—R. H. JONES, M.Sc., A.I.C., F.C.S.

Lecturer in Chemistry :—E. TAYLOR, M.Sc.

Lecturer in Natural Science :—H. EDMUNDS, B.Sc.

COMMERCIAL DEPARTMENT AND DAY JUNIOR COMMERCIAL SCHOOL.

Head :—F. W. Jackson, B.A.

Assistant Teachers for Junior Commercial School :
Miss R. S. Cross, Cert. ; Miss A. D. Trafford, Cert.
Miss J. Jones ; Mrs. J. T. Nickeas.

Lecturer in Commerce and Book-keeping :—W. Webster.

Lecturers for Evening Classes :

J. Appleby — Miss P. Bridge
H. Catterall — J. Donaldson
G. R. Drysdale — H. W. Hughes
S. Horrocks — W. Hanson
J. Hargreaves — N. Hindley
J. Hilton — H. C. Pye
E. Singleton — F. R. Snalam
W. R. White.

ENGINEERING DEPARTMENTS AND DAY JUNIOR TECHNICAL SCHOOL.

Head :—The Vice-Principal.

Lecturers in Mechanical Engineering :—
J. H. Binfield, Wh.Ex. ; F. W. Walker, A.M.C.T. ;
G. E. Hall, B. Sc.

Chief Lecturer in Electrical Engineering :—A. Woods, Hons. C. & G.

Lecturer in Physics :—F. B. Landolt, B.Sc.

Handicraft Teacher :—J. H. Hulse, Inter.B.Sc.

Lecturers for Evening Classes :—

F. Callow — H. Venning, Inter.B.Sc.
G. Pimley — R. H. Wignall
J. Walmsley — C. C. Wade.

TEXTILE DEPARTMENT.

Head :—

Lecturers for Evening Classes :

R. Chatburn — J. H. Harrison
J. Rathbone — S. Jackson.
J. Martin — J. Preston. — T. Taylor.

Instructor :—E. Blinkhorn.

ADMINISTRATION.

Secretary :—The Principal. *Chief Clerk :*—W. A. Dawson.
Assistant Clerk :—H. R. Walsh.

REGULATIONS —

APPLICABLE TO ALL STUDENTS ATTENDING CLASSES AT THE . . . HARRIS INSTITUTE. . . .

Students are expected to attend punctually at the Classes for which they enrol.

All students are expected to take an examination at the end of the course in those subjects for which they enrolled at the opening of the Session.

Smoking within the School buildings is strictly prohibited; and Students must not loiter about the corridors.

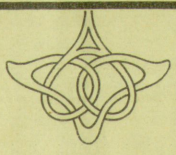
The Lecturers are authorised to report periodically through the Principal, on attendance, homework and conduct of each Student.

The Council shall have power in dealing with Students who are unsatisfactory in these and other respects, to remove their names from the Register without return of fee.

SCHOLARSHIPS AND PRIZES.

A limited number of Scholarships and Prizes will be awarded at the discretion of the Council.

DAY CLASSES



TECHNICAL DAY CLASSES.

COURSES :—

1. Matriculation.
2. Intermediate B.Sc.
3. Preliminary Professional
   - (*a*) Pharmacy.
   - (*b*) Dental.
   - (*c*) Dispensers.
4. Engineering (Mechanical and Electrical).

Classes begin on Monday, September 26th, 1927.

Autumn Term :—26th September, 1927—22nd December, 1927.
Spring Term :—9th January, 1928—5th April, 1928.
Summer Term :—16th April, 1928—9th July, 1928.

VACATIONS.

The Technical Day Classes will be closed :—

For the Christmas Vacation, from 23rd December, 1927, to 7th January, 1928.

For the Easter Vacation from 6th April to 14th April, 1928.

For the Whitsuntide Vacation from 26th May to 3rd June, 1928.
In each case the dates are inclusive.

ENROLMENT.

Students can enrol at the Technical School on Wednesday and Thursday evenings, September 21st and 22nd, from 7 to 9 p.m., or at the Avenham Institute or Technical School on any day after the classes commence.

TECHNICAL DAY CLASSES.

COURSE I.

MATRICULATION.

Northern Universities and University of London.

Time Table :—See page 37.

Classes 1 to 7.

FEE. £3 10s. 0d. per subject, or
£15 15s. 0d. for the full course.

COURSE 2.

INTERMEDIATE B.Sc.

Northern Universities and University of London.

NOTE.—Affiliation with the Universities of Manchester and Liverpool.

The Institute is affiliated to the Universities of Manchester and Liverpool, and recognised as a privileged Institution under their Ordinances, to the extent that the attendance in the courses in Physics, Mathematics and Chemistry at the Institute is accepted as satisfying the attendance for the Intermediate B.Sc. Courses.

Time Table :—See page 37.

Classes 8 to 10.

Fee : £3 10s. 0d. per subject.

COURSE 3.

PRELIMINARY PROFESSIONAL.

(a) PHARMACY.

PHARMACEUTICAL SOCIETY'S EXAMINATION. PART I.

The Institute is recognised by the Pharmaceutical Society for instruction in the subjects of Part I. Examination, viz. :—Chemistry, Physics and Botany.

SPECIAL NOTE.—The Pharmaceutical Society of Great Britain require that candidates must register with them as Pharmaceutical Students before beginning any portion of their curriculum of studies.

All Students must produce evidence of such registration.

Time Table :—See page 38.

Classes 11 to 16.

Fee : £9 10s. 0d. for the course, or
£3 10s. 0d. per subject.

(b) **DENTAL L.D.S., Part I.**

(London, Manchester, Liverpool and Edinburgh).

CHEMISTRY AND PHYSICS.

Time Table : See page 38.

Classes 11 to 14.

Fee : £3 10s. per subject.

(c) **DISPENSERS EXAMINATION.**

CHEMISTRY ONLY.

Organic Chemistry can only be taken by Students who have the requisite knowledge of Inorganic Chemistry.

Time Table : See page 38.

Classes 11 to 13.

Fee : £3 10s. 0d. per subject.

COURSE 4.

ENGINEERING (Part Time Day).

National Certificate Courses in Mechanical and Electrical Engineering.

NOTE.—In the first two years, Mechanical and Electrical Students will take the same course, and all students must attend on one evening per week in order to complete the course and qualify for the National Certificate Examinations.

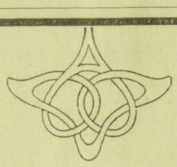
For general regulations and conditions of admission, see under Evening Classes.

Time Table : See page 38.

Classes 17 to 32.

Fee : £2 2s. 0d. per session.

Evening Classes



EVENING CLASSES

The Courses in the Evening Classes proceed by progressive stages, thus :—

(1) A Three-Year's Course (Senior).

(2) A further Two-Year's Course (Advanced).

TECHNICAL COURSES.

5.—MECHANICAL ENGINEERING (National Certificate).

6.—ELECTRICAL ENGINEERING (National Certificate).

7.—BUILDING TRADES.

8.—COTTON SPINNING.

9.—COTTON WEAVING.

10.—CHEMICAL TRADES (National Certificate).

11.—PHARMACY.

COMMERCIAL COURSES.

12.—GENERAL COMMERCIAL.

13.—BOOK-KEEPERS.

14—CORRESPONDENCE.

15.—SHORTHAND CLERKS.

MISCELLANEOUS, SCIENCE, LANGUAGES, Etc.

Physics, Chemistry, Mathematics, Latin, English, French, Spanish, Economics, Geography, etc.

ENROLMENT.

Students will be enrolled at the Technical School on Wednesday and Thursday evenings, September 21st and 22nd, from 7 to 9 p.m.

VACATIONS.

The School will be closed for the Christmas vacation from December 23rd to January 7th.

The dates in each case are inclusive.

Classes begin on Monday, September 26th, 1927.

EVENING CLASSES.

GENERAL REGULATIONS.

CONDITIONS OF ADMISSION.

Before admission a Student must

(a) have passed the Preliminary Technical or Commercial Course, or

(b) have attended the two year's course at a Day Junior Technical or Commercial School, or

(c) have attended a Secondary School to the age of 16 years, or

(d) produce evidence of attainments equivalent to that of the Junior Technical or Commercial Course, or

(e) pass the Entrance Examination to be held at the Technical School on Friday, 23rd September, 1927.

Exceptions to the above conditions may only be made where students are over 16 years of age, in which case such students must satisfy the Principal of the Institute that they are able to benefit by the classes to which they seek admission.

Students under 16 years of age who fail to satisfy the conditions of admission should attend the Evening Junior Courses (Technical or Commercial), conducted by the Preston Education Committee in Evening Continuation Schools. These junior courses link up the work of the Elementary school with the Evening classes of the Institute.

Full particulars may be obtained from The Director of Education, Education Offices, Lancaster Road, Preston.

Scholars leaving the Elementary Day Schools should join an Evening Continuation School immediately, in order to qualify for admission to the Harris Institute as soon as possible.

PROMOTION TO HIGHER YEARS.

To qualify for certificates, and to pass on to the higher years of a course, it is necessary that Students should :—

(a) reach a certain standard of attainments, tested by examinations, held at the end of the Session, and

(b) have made satisfactory progress during the Session, based on records of attendance, homework, classwork, etc.

FEES FOR SESSION.

All fees are payable in advance, and are not returnable.

	£	s.	d.
Single subjects	0	15	0

Theoretical and Practical Chemistry will be charged as separate subjects.

Any Complete Course: Building, *Commercial, Electrical Engineering, Mechanical Engineering, or Textile	1	0	0
School of Art, Evening Classes	1	0	0
Approved Pharmacy and Chemical Trade Courses	2	5	0

*If Typewriting is included in a Commercial Course, an additional fee of 5s. will be charged.

N.B.—Students who do not enrol on the dates given will be charged an additional fee of 2s. 6d. This rule will be strictly enforced.

The Council reserve the right to discontinue any Class in the event of a small number joining.

Students who desire to take the Examinations of the Union of Lancashire and Cheshire Institutes, or the City and Guilds of London Institute, may be called upon to pay the whole or a portion of the Examination Fees.

COURSE 5.

MECHANICAL ENGINEERING.

NATIONAL CERTIFICATE COURSES.

AWARD OF LOWER AND HIGHER CERTIFICATES.

The Institution of Mechanical Engineers, in conjunction with the Board of Education, has approved of the grouped courses of instruction for the award of certificates at the end of—

(1) A Three Years' Course (Senior).
(2) A further Two Years' Course (Advanced).

Students who have completed the course in the Day Junior Technical School, may be admitted to the Second Year of the Senior Course.

ADVANCED COURSE.

Students must have passed the Senior Course, or produce evidence of equivalent attainments.

CONDITIONS OF AWARD OF CERTIFICATE.

In order to obtain a certificate a candidate must make not less than 70 per cent. of the possible attendances in each year of the course, and must obtain :—

(1) Not less than 40 per cent. of the possible marks in EACH subject in the examination held at the end of each year.
(2) Not less than 40 per cent. of the possible marks obtainable in EACH year for homework, class work, laboratory work, etc., taken separately, in EACH subject for which such marks are to be awarded.
(3) Not less than 50 per cent. of the grand total of marks obtainable in EACH year. Of this total the possible marks in the examinations constitute 70 per cent., and the remaining 30 per cent. will be the possible parks for home work, class work, laboratory work, etc., in each year.

A " Distinction " may be awarded to any candidate qualified to receive a certificate who gains not less than 85 per cent. of the possible marks in the Final Examination in any subject, and his certificate may be specially endorsed with the name or names of the subjects in which he has thus distinguished himself.

Fee to be paid by each Student entering the Final Examination, Five Shillings.

NOTE.—Holders of the National Certificates in Mechanical Engineering, who became candidates for Election as Students, Graduates, or Associate Members of the Institute of Mechanical Engineers, and are able to satisfy the Council of their eligibility under the by-laws for one of these classes in respect of occupation and practical training, will be exempted from certain subjects in the Examinations for election as students and associate members.

Particulars relating to these exemptions may be obtained from the Head of the Department.

Time Table :—See page 39. Classes 33 to 50.

COURSE 6.

ELECTRICAL ENGINEERING.

The Institution of Electrical Engineers, in conjunction with the Board of Education, has approved of the grouped courses of instruction for the award of Certificates at the end of—

(1) A Three Years' Course (Senior).

(2) A further Two Years' Course (Advanced).

Students who have completed the course in the Day Junior Technical School may be admitted to the Second Year of the Senior Course.

ADVANCED COURSE.

Students must have passed the Senior Course or produce evidence of equivalent attainments.

Students are expected to sit at the Examinations held by the Union of Lancashire and Cheshire Institutes in the Subjects of the Course, and to pay their own examination fees.

The conditions of award of Certificate are as set out in the Mechanical Engineering Courses, and Exemptions are granted by the Institution of Electrical Engineers to candidates for election as students or associate members to holders of National Certificates.

Time Table :—See page 39.

Classes 51 to 65.

See Course 4. for Part Time Day Classes in Mechanical and Electrical Engineering.

COURSE 7.

BUILDING TRADES.

Students who have obtained a First-Class leaving Certificate in the Day Junior Technical School may be admitted to the Second Year of the Senior Course.

Students taking the Third Year of the Senior Course will take the Third Year Building Trades Course Examinations of the Union of Lancashire and Cheshire Institutes, the fee for this examination to be paid by the student. First and Second Year students will be examined, and successful students will proceed to the next year of the Course, on the results of school examinations held at the close of the evening session.

ADVANCED COURSE.

Students must have passed the Third Year Building Trades Course of the Union of Lancashire and Cheshire Institutes, or produce evidence of equivalent attainments.

NOTE.—Students who desire to qualify for attendance at the Advanced Course Examinations must take Building Construction

in the Third Year (S3) Course, and at least one from :—

Building Science
Geometry
Mathematics

and, if necessary, one other subject from :—

Builders Quantities
Carpentry and Joinery
Brickwork and Concreting.

Students who do not wish to proceed to an Advanced Course may choose any three subjects from the above, or may choose any two from the above and—
*Carpentry & Joinery (Practical).

The following subjects may be omitted in the Third Year (S. 3.), and taken in the Fourth Year (A. 1).

Builders' Quantities, or
Mathematics.

Those students who take Builders' Quantities (S. 3) in the Fourth Year, (A. 1) must take Builders' Quantities (A. 1) in the Fifth Year.

Those students who take Mathematics (S. 3) in the Fourth Year (A. 1), must take Structural Engineering as one subject of the Course.

ADVANCED COURSE.

Fourth Year (A.1).

Building Construction

Practice Class, or

*Carpentery & Joinery (Practical)

and one other subject selected from the following :—

Builders Quantities

Carpentry and Joinery

*Structural Engineering

Architecture

*Classes will be held if sufficient Students enrol.

Fifth Year (A. 2).

As for Fourth Year (A. 1).

Time Table :—See page 41.
Classes 66 to 83.

PLUMBING COURSE.

Time Table :—See page 42.

Classes 84 to 86.

TEXTILE DEPARTMENT.

COURSE 8.

COTTON SPINNING.

Students are expected to sit at the examinations conducted by the Union of Lancashire and Cheshire Institutes, in the subjects of the Senior Course, or those conducted by the City and Guilds of London, in the subjects of the Advanced Course, and to pay their own examination fees.

Time table :—Page 42.

Classes 87 to 104.

COURSE 9.

COTTON WEAVING.

Students are expected to sit at the examinations conducted by the Union of Lancashire and Cheshire Institutes, in the subjects of the Senior Course, or those conducted by the City and Guilds of London, in the subjects of the Advanced Course, and to pay their own examination fees.

Textile Mechanics or Chemistry may be taken in the Third Year of the Senior Course (S 3).

Textile Engineering or Economics of the Cotton Industry may be taken in the Second Year of the Advanced Course (A. 2).

Time Table :—Page 43.

Classes 105 to 124.

CHEMISTRY AND PHARMACY DEPARTMENT.

COURSE 10.

CHEMICAL TRADES.

NATIONAL CERTIFICATE COURSE.

AWARD OF NATIONAL CERTIFICATE.

A Lower Certificate is awarded by the Institute of Chemistry in conjunction with the Board of Education on the satisfactory completion of a Three Years' Senior Course. The conditions are somewhat similar to those set out under Engineering.

Time Table :—Page 46.
Classes 172 to 181.

COURSE 11.

PHARMACY.

Time Table :—Page 47. Classes 182 to 192.

COMMERCIAL COURSES.

Commercial Courses are of four kinds, namely :—

(a)	General Course	Course 12
(b)	Course for Book-keepers	Course 13
(c)	Course for Correspondents	Course 14
(d)	Course for Shorthand Clerks	Course 15.

All Courses are now open to both males and females. In the First and Second Years each Course, with the exception of those for Correspondents, consists of **four** subjects. Third Year Courses and Courses for Correspondents consist of three subjects.

In each Course (except the special ones specified later, which do not qualify for a Grouped Course Certificate), one or more subjects are obligatory ; others are generally optional.

From the latter subjects students may select the required number to make up their Course.

Before selecting a Course, students should **consult both the time-table printed** (on pages 44 to 46), **and the tutors** who will be present to enrol on September 21th and September 22th, 1927.

A student taking a course may, so far as his attainments and the time-table permit, sit in a class and enter for an examination of a higher year than the remaining subjects of his course.....Transfers from one class to another are not permitted after the first two weeks of the session. The detailed syllabuses of examinations in the subjects will be posted up in the Technical School, on the enrolment nights, September 21st, and September 22nd, or may be found complete in the Prospectus of the Lancashire and Cheshire Institutes, price sixpence at any bookseller's.

Students are expected to take the Examinations of the Union of Lancashire and Cheshire Institutes, and to pay the examination fees.

COURSE 12.

GENERAL COURSE.

First Year (S1).

General Course. (Four Subjects) :—

Obligatory : Commerce.

Optional : **Three** of the following Subjects (in not more than one of which the first year syllabus may be taken, provided the subject has not been previously offered) :—

Commercial Arithmetic.
English and Commercial Correspondence.
Geography.
Book-keeping.
Shorthand (minimum of 60 words per minute).
French.
Spanish.
Typewriting.
Cotton Spinning.
Cotton Weaving.

Second Year (S2).

General Course. (Four Subjects) :—

Obligatory : Commerce.

Optional : **Three** of the following Subjects (in not more than one of which the first year syllabus may be taken, provided the subject has not been previously offered) :—

Commercial Arithmetic.
English and Commercial Correspondence.
Geography.
Book-keeping.
Shorthand (minimum of 60 words per minute).
French.
Spanish.
Typewriting.
Cotton Spinning.
Cotton Weaving.

Third Year S3).

General Course. (Three Subjects) :—

Obligatory : Commerce.

Optional : Any two of the following :—

Book-keeping and Accountancy.
Arithmetic.
English Literature.
Shorthand (minimum of 80 words per minute).
A Modern Language.

COURSE 13.

COURSE FOR BOOK-KEEPERS.

FIRST YEAR (S1).

Course for Book-keepers. (Four Subjects) :—

OBLIGATORY : Book-keeping.

Commercial Arithmetic.

Commerce.

English and Commercial Correspondence.

SECOND YEAR (S2).

Course for Book-keepers. (Four Subjects) :—

OBLIGATORY : Book-keeping.

Commercial Arithmetic.

Commerce.

English and Commercial Correspondence.

THIRD YEAR (S3).

Course for Book-keepers. (Three Subjects) :—

OBLIGATORY : Book-keeping and Accountancy.

Commercial Arithmetic.

Commerce.

COURSE 14.

COURSE FOR CORRESPONDENTS.

First Year (S1).

Course for Correspondents. (Three Subjects) :—

Obligatory : English and Commercial Correspondence.
French or Spanish.

Optional : One of the following :—
Commerce.
Arithmetic.
Shorthand.

Second Year (S2).

Course for Correspondents. (Three Subjects) :—

Obligatory : English and Commercial Correspondence.
A Foreign Language (French or Spanish).

Optional : Any one of the following :—
Commerce.
Commercial Arithmetic.
Geography (First Year Syllabus).
Shorthand.
A second modern Foreign Language (First Year Syllabus).

Third Year (S3).

Course for Correspondents. (Three Subjects) :—

Obligatory : A Modern Foreign Language (French or Spanish).
Commerce (2nd or 3rd Year).

Optional : Any one of the following :—
A second Modern Language (1st or 2nd Year *Syllabus).
Geography (2nd Year Syllabus).
Arithmetic (2nd or 3rd Year Syllabus).
Shorthand.

COURSE 15.

COURSE FOR SHORTHAND CLERKS.

FIRST YEAR (S1).

Course for Shorthand Clerks. (Four Subjects) :—

OBLIGATORY : Shorthand.
English and Commercial Correspondence.
Arithmetic.

OPTIONAL : One of the following :—
Commerce.
Book-keeping.
Typewriting.

SECOND YEAR (S2).

Course for Shorthand Clerks. (Four Subjects) :—

OBLIGATORY : Shorthand.
English and Commercial Correspondence.

OPTIONAL : Any two of the following subjects :—
Commerce (2nd Year Syllabus).
Book-keeping (1st or 2nd Year Syllabus).
Commercial Arithmetic.
Typewriting.

THIRD YEAR (S3).

Course for Shorthand Clerks. (Four Subjects) :—

OBLIGATORY : Shorthand.
Commerce (2nd or 3rd Year Syllabus).*

OPTIONAL : Any two of the following :—
English and Commercial Correspondence (if sufficient enrol).
Book-keeping (2nd Year Syllabus), or*
Book-keeping and Accountancy.
Arithmetic.
Typewriting.

* In the Third Year Course, if any subject chosen has been taken in a previous year, the next higher stage must be taken.

TIME-TABLE OF COMMERCIAL CLASSES.

See page 44.

Classes 125 to 171.

Students should note carefully the buildings in which the classes are held.

NOTE.— FIRST YEAR.

All females taking Arithmetic attend class 127 or 128.

All males taking Arithmetic (except such as also take Geography) attend class 125 or 126.

Males taking both Arithmetic and Geography attend classes 127 or 128 and 148.

The classes in Shorthand are held in the same building as the Arithmetic classes.

In Shorthand, students who have previously done nothing may find it advisable during the first session to work for a local examination They should consult their tutors on the matter. The second year classes consist of :—A. Advanced Theory and Speed to 60 words per minute ; B. Speed from 60 to 70 words. Students who can do 70 words per minute should join the 3rd year.

In Typewriting, 1st and 2nd year students must consult the tutor on enrolment night as to which hour is available.

PROPOSED PART TIME DAY CLASSES IN COMMERCIAL SUBJECTS.

Should sufficient students apply, Day classes may be formed for persons over 16 years of age desirous of instruction in any of the following subjects :—

TYPEWRITING, SHORTHAND, OFFICE ROUTINE AND BOOK-KEEPING.

Fee, per Subject, £1 1s. 0d. per term.

MISCELLANEOUS CLASSES AND SPECIAL COURSES.

The following classes are here indicated separately for the benefit of students who desire to take up the study of certain subjects for the Preliminary Professional and other Examinations, and to assist students of an advanced grade to a higher standard of attainments.

A course consists of any three of the following subjects :—

SUBJECT.	CLASS NO.
Arithmetic	163.
Book-keeping	164 or 165.
Chemistry	174 to 181.
Economics of the Cotton Industry	124.
English Language and Literature	167.
French	145, 161, 169.
Latin	147.
Mathematics	172.
Physics	173.
Spanish	146.

A Local Examination will be held in those subjects not otherwise provided for, and certificates will be given.

JUNIOR COURSES.

FULL TIME DAY.

COURSES.—

JUNIOR TECHNICAL.

JUNIOR COMMERCIAL.

Classes begin on Tuesday, September 13th, 1927.

Autumn Term :—13th September, 1927—22nd December, 1927.

Spring Term :—9th January, 1928—5th April, 1928.

Summer Term :—16th April, 1928—23rd July, 1928.

VACATIONS.—

The Schools will be closed for the Christmas Vacation from 23rd December, 1927, to 7th January, 1928 ; for the Easter Vacation, from 6th April, 1928, to 14th April, 1928 ; for the Whitsuntide Vacation, from 26th May, 1928 to 3rd June, 1928.

FEE.—£3 3s. 0d. per Session or £1 1s. 0d. per term.

TIME TABLES :—See pages 48 to 53.

JUNIOR SCHOOLS.

CONDITIONS OF ENTRY, ETC.

(1) Day Junior Technical School.

(2) Day Commercial School.

Candidates desirous of entering the Day Junior Technical School, or the Commercial School, take an Entrance Examination in May of each year, and, if successful, are admitted in the following September. Entry forms can be obtained from the Principal, Harris Institute, Avenham. Candidates must not be less than 13 years of age on the 1st of October. The Council of the Harris Institute offer a limited number of scholarships to candidates, who for two years prior to the date of the Examination, have been in regular attendance at a Public Elementary School within 7 miles of the Preston Town Hall.

A limited number of Scholarships and Maintenance Allowances are also offered by the Lancashire County Council to candidates residing in the County area.

Leaving Certificates, First or Second Class, are given to all who satisfactorily conclude their period of training, and a certain number of free scholarships to Evening Classes are granted to those whose attainments and conduct in the Day School have merited it.

The Cost for books is approximately £2 0s. 0d. per annum.

The School Uniform is as follows :—**Girls.**—Navy Tunic and Girdle, Navy Knickers, White Blouse, with polo collar and long sleeves in winter, Magyar with short sleeves in summer. Blue and green tie, green cap in winter, Curacoas hats with School band in summer. Black cashmere stockings, black footwear, navy coat, if possible, if not, a dark one. School blazers can be obtained if desired.

Boys.—School cap, tie, and school blazers.

The above can be purchased from the School Outfitters on the presentation of the regulation form, which may be obtained at the School.

Every endeavour is made at the end of the course to assist worthy students to obtain suitable posts. Many employers apply to the School for employees and apprentices.

DAY JUNIOR TECHNICAL SCHOOL.

The aim of the School is to provide a suitable education for boys who, having completed the ordinary course of work in the Elementary Day School, desire to enter Engineering, Building and other trades.

The curriculum is planned with the object of providing for the continuance of a general education together with an education in all subjects which are necessary to boys about to enter industrial occupations.

The students are brought into close contact with their future occupation through teachers who have had experience in industry.

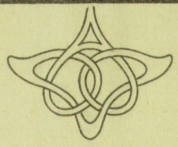
The students also have access to the Engineering laboratories and textile sheds, where they become acquainted with machinery and equipment which helps towards a thorough understanding of the application of scientific principles to industry.

The course of instruction extends over a period of two years, and the subjects taught include the following :—Mathematics, Machinery and Building, Drawing and Geometry, Art, Science (including Applied Mechanics, Electricity, Magnetism, Heat), Metal-work, Woodwork, Geography, History, English, Drill and Organised Games.

DAY COMMERCIAL SCHOOL.

The Course extends over a period of two years, and prepares boys and girls for Clerical posts. The following subjects are taken :—Arithmetic, Algebra, Accounts, Book-keeping, Commerce, Commercial Correspondence, Drawing, Drill, English, French, Games, Geography, History, Office Routine, Mathematics, Shorthand and Typewriting.

ART SCHOOL



ART SCHOOL.

The School is open for three terms of about 13 weeks each, viz. :— 26th September, 1927, to 22nd December, 1927.
9th January, 1928, to 5th April, 1928.
16th April, 1928 to 6th July, 1928.

FEES FOR SESSION (payable in advance).

	£	s.	d.
Full-time Day Students	3	3	0
Evening Classes	1	0	0
Painting and Decorating Class	1	0	0
Students attending one day per week for Single Subjects.....	2	2	0

Classes begin on Monday, September 26th, 1927.

DAY AND EVENING CLASSES.—TIME TABLE (See also pages 54 & 55).

	MORNING. 10-0—12-30.	AFTERNOON. 2-30—4-30.	EVENING. 7-0—9-0.
Monday	Drawing Ornament Styles of Design Lettering Nature Drawing Painting in Monochrome Perspective	Etching & Woodcuts, &c. Still Life Painting Figure Drawing Object Drawing Design Lettering	Drawing & Painting Still Life Nature Study Antique Drawing Elem. & Advanced Drawing Elem. Teachers' Class
Tuesday	Nature Study Drawing Ornament History of Art	Still Life Design Drawing (Elem. & Advanced) Drawing and Painting from Life	Drawing & Painting Still Life *Textile Art (4th yr.) Design Drawing from Life
Wednesday	Geometry Still Life Memory Drawing Drapery Study Principles of Art Design Nature Drawing Modelling and Plaster Casting	Paper, Lino & Woodcuts Stencilling Leather Work Batik Embroidery Wood Decoration Still Life Drawing from the Antique Nature Study	Junior Art Crafts Stencilling—Leaded Glass Etching, Leather work Basketry, Raffia Paper, Lino and Woodcuts Modelling and casting Wood & Plaster Carving *Painting & Decorating *Textile Design (2nd & 3rd years)
Thursday	Anatomy Drawing & Painting Still Life	Drawing & Painting from Life General Drawing & Practice	Figure Drawing 1st & 2nd year Junior Drawing Illustration Drawing from life Teachers Class
Friday	Architecture Figure Composition Object & Memory Drawing Etching Design Woodcarving	Raffia & Basketry Batik Wood Decoration Embroidery Illustration Elem. Figure Drawing Drawing—Objects & Interiors Memory Drawing	*Textile Design (1st year) Embroidery Basketry Raffia Batik *Architecture Practice *English & Arithmetic (1st & 2nd years).

During the Summer term an out-of-door Sketching Class will be held on Tuesday morning.

*These classes will terminate after the Easter Examinations.

OBJECTS OF THE SCHOOL.

The objects of the School are :—

(1) To give instruction in Art to those engaged in trades and professions in which the power of drawing and a knowledge of design are essential or helpful.

(2) To train those wishing to qualify to become teachers of Art in Secondary Schools, or in Schools of Art.

(3) To provide facilities to those desiring to study Art as a branch of general education, or as an accomplishment.

(4) To train those who are desirous of taking up Art as a career, and who intent to specialise as painters, sculptors, illustrators, designers, etc.

(5) To meet the requirements of those engaged in various industrial occupations.

(6) Junior Courses. To prepare young students between the ages of 14 and 16, in order that they may specialise later on, in any of the above courses.

EXAMINATIONS IN ART.

Internal.

Grouped Examinations will be held at the end of each term, comprising the subjects of the various Courses.

The Board of Education will hold Examinations in the following subjects of Art :—

(a) Drawing.

(b) Painting.

(c) Modelling.

(d) Pictorial Design for Reproduction in black and white or colour.

(e) Industrial Design for (i.) Handicrafts and (ii.) Manufactures.

1. The Examination in Drawing will be of a standard suitable for candidates who, after a good general education, including some preliminary instruction in Drawing, up to the age of 16 or later, have devoted themselves to serious and continuous study of Drawing for, as a rule, not less than two years.

2. The Examinations in Painting, Modelling, and Pictorial Design will be of such a standard as could be attained, according to the capacity of the candidate, by two or more years of serious and continuous specialised study after passing the Examination in Drawing.

3. Examinations in Industrial Design will be of such a standard as could be attained through regular attendance at evening or other part-time classes in the intervals of employment for a period of four years after the age of 16.

4. Candidates will not be admitted to the Examinations in Painting, Modelling, or Pictorial Design, unless they have previously passed the Examination in Drawing.

City and Guilds of London.

Students are prepared for these Examinations in the following Subjects :—Painting and Decorating, Embroidery, Principles of Art as applied to Cotton Weaving.

National Society of Art Masters.

A series of Examinations in Drawing arranged for Teachers in Elementary Schools.

SCHOLARSHIPS.

Harris Art Scholarship.

One scholarship of the value of £7 10s. 0d. per annum, tenable for three years, will be awarded annually.

The Scholarship will be open to all Students of the School of Art, who have attended for not less than one year immediately preceding the award, and will be tenable at the Harris Institute.

The Scholarship will be awarded on the results of the annual examinations, in conjunction with the Student's work of the session.

Should one or more of these Scholarships fall vacant before the full period of three years, two or three (as the case may be), will be given instead of one, in the year when they lapse.

Free Studentships.

Free Studentships to the Day Classes are offered to Students of the School (Day or Evening), who are studying with a view to becoming designers, craft workers, or teachers.

Method of award, the same as for the above.

Free Studentships to the Evening Classes of offered to students taking definite courses, and will be awarded on the result of marks given for homework, attendance, and internal examinations.

Special Scholarships are awarded to students who have left or are about to leave elementary schools, who intend to follow occupations requiring an Art Training.

PRIZES :—STEELE BEQUEST.

Three Prizes (one day and two evening) of £5 each are offered for the best work done by Students each Session.

SKETCH CLUB AND STUDENTS' UNION.

The Sketch Club is organised by the Staff and Students for the purpose of encouraging individual effort. Monthly competitions are arranged during the Sessions, and a series of subjects are set for the long vacation.

All Students are eligible. Further information and particulars may be obtained from members of the Staff.

UNION OF LANCASHIRE AND CHESHIRE INSTITUTES.

Students are prepared for the Examinations arranged by the U.L.C.I. Authority in the following Subjects :—Junior Industrial Art, Painting and Decorating, Architecture, Embroidery, Leatherwork, Textile Design, etc.

HARRIS INSTITUTE, PRESTON.

TIME TABLE OF CLASSES. SESSION 1927-28.

A—*Avenham Institute.* C—*Christ Church School.* T—*Technical School.*

TECHNICAL DAY CLASSES.

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	MATRICULATION.						
1	T English and History	F. W. Jackson	11.15–12.15	2—3	..	2—3	3—4
2	T French	F. W. Jackson	..	..	11.15–12.15	..	11.15–12.15 and 2—3
3	T Latin	F. W. Jackson	..	3—4	..	3—4	..
4	T Mathematics	F. B. Landolt	9.30–11.15	11.30–12.30	9.30–11.15	..	..
5	T Physics	F. B. Landolt	3.15–5	9.30–11.15	..	9.30–11	..
6	A Chemistry, Theory	R. H. Jones	..	..	..	11.15–12.15	9.45–10.45
7	A Chemistry, Practical	R. H. Jones	..	..	2.30–4	..	..
	INTER-SCIENCE.						
8	T Mathematics	F. B. Landolt	..	2—5	..	..	..
9	T Physics	F. B. Landolt	..	..	..	..	2—4
10	A Chemistry	R. H. Jones	..	..	2.30–4	..	..

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	PREL. PROFESSIONAL : PHARMACY, DENTAL, DISPENSERS.						
11	A Chemistry, Org. (Theory) ..	R. H. Jones	2—3	..	..	..	..
12	A Chemistry, Inorg. (Theory) ..	R. H. Jones	..	..	9.30-10.30	11.15-12.15	9.45-10.45
13	A Chemistry, Inorg. (Practical) ..	R. H. Jones	..	..	10.30-12.30 and 2.30-4	..	.. 10.45-12.30
14	T Physics	F. B. Landolt	3.15-5	9.30-11.15	..	9.15-11	..
15	A Botany, Theory	H. W. Edmunds	..	11.30-12.30	..	..	..
16	A Botany, Practical	H. W. Edmunds	..	2—4	..	..	..
	PART-TIME DAY & EVENING, MECHANICAL & ELECTRICAL. (National Certificate Course) **S1**						
17	T Mathematics	J. H. Binfield	2—3	..	..	2—3	..
18	T Electrical Science	A. Woods	3—5	..	..	..	..
19	T Mechanics & Heat Engines ..	G. E. Hall	..	..	..	3—5	..
20	T Engineering Drawing (Mechanical)	J. H. Binfield	..	7.15-9.15	..	..	..
21	T Engineering Drawing (Electrical)	F. Callow	..	..	..	7.15-9.15	..
22	T Electrical Science (Motor Engineering)	J. H. Hulse	..	..	..	7.15-9.15	..
	S2						
23	T Mathematics	J. H. Binfield	4—5	..	2—3	..	..
24	T Electrical Science	A. Woods	..	..	3—5	..	..
25	T Mechanics & Heat Engines ..	F. W. Walker	2—4	..	..	..	..
26	T Engineering Drawing	J. H. Binfield	..	..	7.15-9.15	..	..

	MECHANICAL.						
	S3						
27	T Mathematics	G. E. Hall	7.15–9.15	..	..	..	..
28	T Mechanics	F. W. Walker	..	..	2—4.30	..	..
29	T Heat Engines	F. W. Walker	..	..	..	2—4.30	..
	ELECTRICAL.						
	S3						
30	T Mathematics	J. Walmsley	7.15–9.15	..	..	..	..
31	T Electro-Technics	A. Woods	..	..	..	9.30–11.30	..
32	T Electrical Laboratory ..	A. Woods	..	2—4.30	..	..	..

EVENING CLASSES.

	MECHANICAL ENGINEERING. (National Certificate Courses)						
	S1 (A)						
33	T Mathematics	R. H. Wignall	..	..	..	7.15–9.15	..
34	T Engineering Drawing	J. H. Binfield, G. Oliver ..	..	7.15–9.15	..	..	..
35	T Mechanics and Heat Engines	F. W. Walker, G. E. Hall ..	..	..	..	..	7.15–9.15
	S1 (B)						
36	T Mathematics	R. H. Wignall	..	..	..	7.15–9.15	..
37	T Engineering Drawing	J. H. Binfield, G. Oliver ..	..	7.15–9.15	..	..	..
38	T Mechanics and Heat Engines	F. W. Walker, G. E. Hall ..	..	..	..	..	7.15–9.15
	S2						
39	T Mathematics	H. Venning	..	7.15–9.15	..	..	..
40	T Engineering Drawing	J. H. Binfield, H. Kirkham	..	..	7.15–9.15	..	..
41	T Mechanics and Heat Engines	G. E. Hall	..	..	..	..	7.15–9.15
	S3						
42	T Mathematics	G. E. Hall	7.15–9.15	..	..	..	..
43	T Mechanics	F. W. Walker	..	..	7.15–9.15	..	..
44	T Heat Engines	F. W. Walker	..	..	..	7.15–9.15	..

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	A1						
45	T Mathematics	J. Walmsley	..	..	7.15-9.15	..	..
46	T Machine Design	J. H. Binfield	..	..	..	..	7.15-9 15
47	T Strength of Materials	G. Pimley	7.15-9.15	..	..	..	..
	A2						
48	T Heat Engines	E. C. Moyle	7.15-9.15	..	..	..	..
49	T Theory of Machines	E. C. Moyle	..	..	7.15-9.15	..	..
50	T Electrical Engineering for Mechanical Engineers	G. Pimley	..	..	..	..	7.15 9.15
	ELECTRICAL ENGINEERING (National Certificate Course) **S1**						
51	T Mathematics	R. H. Wignall	7.15-9.15	..	..	..	..
52	T Electrical Drawing	F. Callow, —. Morley ..	..	..	..	7.15-9.15	..
53	T Electrical Science	J. H. Hulse, J. Bennett ..	..	..	..	..	7.15-9.15
	S2						
54	T Mathematics	H. Venning	7.15-9.15	..	..	..	..
55	T Mechanics	F. B. Landolt	..	..	..	7.15-9.15	..
56	T Electrical Science	J. H. Hulse	..	..	7.15-9.15	..	..
	S3						
57	T Mathematics	J. Walmsley	7.15-9.15	..	..	..	..
58	T Electro-Technics	A. Woods	..	..	..	7.15-9.15	..
59	T Electrical Laboratory ..	A. Woods	..	7.15-9.15	..	..	..

	A1						
60	T Mathematics	J. Walmsley	..	..	..	..	7.15-9.15
61	T Electrical Engineering ..	C. C. Wade	..	..	..	7.15-9.15	..
62	T Electrical Laboratory ..	C. C. Wade	7.15-9.15	..	..	..	..
	A2						
63	T Electrical Design	G. Pimley	..	..	..	7.15-9.15	..
64	T Electrical Drawing	F. Callow	..	7.15-9.15	..	..	..
65	T Electrical Laboratory ..	G. Pimley	..	..	7.15-9.15	..	..
	BUILDING TRADES.						
	S1 (A)						
66	T Mathematics and Science ..	W. Taylor, F. Campey ..	..	7.15-9.15	..	..	..
67	T Building Construction ..	H. Howarth, F. Campey, and E. Redman	..	..	7.15-9.15	..	..
68	T Geometry	J. N. Walker, F. Campey, and G. H. Broadbent	..	..	..	..	7.15-9.15
	S1 (B)						
69	T Mathematics and Science ..	W. Taylor, J. Spiby ..	..	..	..	..	7.15-9.15
70	T Building Construction ..	H. Howarth, H. Allen ..	7.15-9.15	..	..	..	..
71	T Geometry	J. N. Walker, G. H. Broadbent	..	7.15-9.15	..	..	..
	S2						
72	T Mathematics and Geometry ..	W. Taylor, J. Spiby, and E. Redman	..	..	..	7.15-9.15	..
73	T Building Construction ..	E. M. Pearson, T. Croft and E. Redman	..	7.15-9.15	..	..	..
74	T Building Science	E. M. Pearson, J. Spiby ..	7.15-9.15	..	..	..	..

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	S3						
75	T Building Construction ..	H. Howarth	..	..	..	7.15-9.15	..
76	T Quantities	J. T. Higginson	..	7.15-9.15	..	..	..
77	T Geometry	J. N. Walker	7.15-9.15	..	..	..	..
78	T Brickwork and Concreting ..	T. Croft	..	..	7.15-9.15	..	..
79	T Carpentry	H. Allen	..	..	..	..	7.15-9.15
	A1 and 2						
80	T Building Construction ..	E. M. Pearson	..	..	..	7.15-9.15	..
81	T Practice Class	G. H. Broadbent (senr.) ..	..	..	7.15-9.15	..	..
82	T Carpentry and Joinery ..	E. M. Pearson	..	..	..	..	7.15-9.15
83	T Quantities	J. T. Higginson	7.15-9.15	..	..	..	..
	Architecture (See Art School)						
	PLUMBING.						
	S2 and 3						
84	(Workshop) Plumbing, Practical	J. Dixon	7—9	..	..	..	..
85	T Plumbing, Theory	J. Dixon	..	..	7-8.30	..	..
86	T Plumbing, Science	J. Dixon	..	..	8.30-9.30	..	..
	COTTON SPINNING.	* Alternate weeks.					
	S1						
87	T Mathematics	R. Kinnear	7.15-9.15	..	..	..	..
88	T Textile Drawing	S. Jackson	..	..	7.15-9.15*	..	..
89	T Cotton Spinning, Practical ..	J. H. Harrison	..	..	..	7.15-9.15*	..
90	T Cotton Spinning, Theory ..	J. H. Harrison	..	7.15-9.15	..	..	..

	COTTON SPINNING—*cont.*						
	S2						
91	T Mathematics ..	R. Chatburn	..	7.15-9.15	..	..	..
92	T Textile Drawing	S. Jackson	..	..	7.15-9.15*	..	..
93	T Cotton Spinning, Practical ..	J. H. Harrison	..	..	..	7.15-9.15*	..
94	T Cotton Spinning, Theory ..	J. H. Harrison	7.15-9.15	..	..	..	..
	S3						
95	T Cotton Spinning, Theory ..	J. Rathbone	..	..	7.15-9.15	..	..
96	T Cotton Spinning, Practical ..	J. Rathbone	..	..	..	..	7.15-9.15*
97	T Textile Drawing	S. Jackson	..	..	..	..	7.15-9.15*
98	T Textile Mechanics	J. Adamson	..	7.15-9.15	..	..	..
	A1						
99	T Cotton Spinning, Theory ..	J. Rathbone	..	..	..	7.15-9.15	..
100	T Cotton Spinning, Practical ..	J. Rathbone	7.15-9.15	..	..	..	..
101	T Textile Engineering	G. E. Hall	..	7.15-9.15	..	..	..
	A2						
102	T Cotton Spinning, Theory ..	J. Rathbone	..	7.15-9.15	..	..	..
103	T Cotton Spinning, Practical ..	J. Rathbone	..	..	..	..	7.15-8.15
104	T Textile Economics	W. Webster	..	..	7.15-9.15	..	..

	COTTON WEAVING.	* Alternate weeks.					
	S1						
105	T Mathematics	R. Kinnear, H. Richmond ..	..	..	7.15-9.15	..	..
106	A Textile Design and Colour ..	W. T. Garnar	..	..	..	..	7—9*
107	T Cotton Weaving, Practical ..	E. Blinkhorn	..	..	..	..	7.15-9.15*
108	T Cotton Weaving, Theory ..	T. Taylor, H. Richmond ..	..	..	..	7.15-9.15	..

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	S2						
109	T Cotton Weaving, Theory ..	J. Preston	7.15-9.15	..	..	..	..
110	T Cotton Weaving, Practical ..	E. Blinkhorn	..	..	7.15-9.15*	..	..
111	T Textile Design and Colour ..	S. A. Horsley	..	..	7—9*	..	..
112	T Textile Drawing & Mechanics	J. Preston, J. J. Blackhurst.	..	..	..	7.15-9.15	..
	S3						
113	T Cotton Weaving, Theory ..	J. Martin	..	..	..	..	7.15-9.15
114	T Cotton Weaving, Practical ..	E. Blinkhorn, J. J. Blackhurst	..	..	7.15-9.15	..	..
115	T Textile Mechanics	J. Adamson	..	7.15-9.15	..	..	..
116	A Textile Chemistry	R. H. Jones	7—9.30	..	..	..	..
117	A Textile Design & Colour ..	S. A. Horsley	..	..	7—9	..	..
	A1						
118	T Cotton Weaving, Hons. A. ..	T. Taylor	..	..	7.15-9.15	..	..
119	T Cotton Weaving, Practical ..	E. Blinkhorn	7.15-9.15	..	..	..	..
120	A Principles of Art	W. T. Garnar	..	7—9	..	..	..
	A2						
121	T Cotton Weaving, Hons. B. ..	T. Taylor	..	..	..	..	7.15-9.15
122	T Cotton Weaving, Practical ..	E. Blinkhorn	7.15-9.15	..	..	..	..
123	T Textile Engineering	G. E. Hall	..	7.15-9.15	..	..	..
124	T Economics of Cotton Industry	W. Webster	..	..	7.15-9.15	..	..
	COMMERCIAL COURSES.						
	S1						
125	C Arithmetic	E. Singleton	7.15-8.15	..	..	..	..
126	C Arithmetic	E. Singleton	8.15-9.15	..	..	..	..
127	A Arithmetic	F. R. Snalam	7.15-8.15	..	..	..	..
128	A Arithmetic	F. R. Snalam	8.15-9.15	..	..	..	..
129	T Book-keeping (Beginners) ..	G. R. Drysdale	..	..	7.15-8.15	..	..
130	T Book-keeping (Beginners) ..	G. R. Drysdale	..	..	8-15-9.15	..	..
131	C Book-keeping	J. Donaldson	..	..	7.15-8.15	..	..

	COMMERCIAL COURSES.							
	S1—*cont.*							
132	C Book-keeping	J. Donaldson	..	..	8.15-9.15	..	..	
133	T Book-keeping (more advanced)		..	..	..	7.15-8.15	..	
134	T Commerce	W. Webster	..	7.15-8.15	..	..	..	
135	T Commerce	W. Webster	..	..	..	..	8.15-9.15	
136	T English and Com. Corr. ..	H. W. Hughes	..	8.15-9.15	..	..	..	
137	T English and Com. Corr. ..	H. W. Hughes	..	..	..	..	7.15-8.15	
138	C Shorthand	H. W. Hughes	7.15-8.15	..	..	..	..	
139	C Shorthand	H. W. Hughes	8.15-9.15	..	..	..	..	
140	A Shorthand	S. Horrocks	7.15-8.15	..	..	..	..	
141	A Shorthand	S. Horrocks	8.15-9.15	..	..	..	..	
142	T Typewriting	J. Hilton	..	6.15-7.15	..	..	..	
143	T Typewriting	J. Hilton	..	7.15-8.15	..	..	..	
144	T Typewriting	J. Hilton	..	8.15-9.15	..	..	..	
145	T French	F. W. Jackson	..	8.15-9.15	..	..	..	
146	A Spanish	J. Appleby	..	7.15-8.15	..	..	..	
147	A Latin	F. W. Jackson	..	..	..	7.15-8.15	..	
148	A Geography	H. C. Pye	7.15-8.15	..	..	..	..	
	S2							
149	A Arithmetic	E. Singleton	..	..	..	..	7—8	
150	A Book-keeping	P. Bridge	..	..	7.15-9.15	..	..	
151	C Book-keeping	.. .. ..	..	..	7.15-9.15	..	..	
152	T Commerce	W. Webster	..	8.15-9.15	..	..	..	
153	T Commerce	W. Webster	..	..	..	..	7.15-8.15	
154	T English and Com. Corr. ..	H. W. Hughes	..	7.15-8.15	..	..	..	
155	T English and Com. Corr. ..	H. W. Hughes	..	..	..	..	8.15-9.15	
156	T Shorthand	W. Hanson	..	..	..	7.15-9.15	..	
157	T Shorthand	W. R. White	..	..	..	7.15-9.15	..	
158	T Typewriting	J. Hilton	..	..	..	..	6.15-7.15	
159	T Typewriting	J. Hilton	..	..	..	..	7.15-8.15	
160	T Typewriting	J. Hilton	..	..	..	..	8.15-9.15	
161	T French	F. W. Jackson	..	7.15-8.15	..	..	..	
162	A Geography	H. C. Pye	8.15-9.15	..	..	..	..	

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	COMMERCIAL COURSES.						
	S3						
163	A Arithmetic	E. Singleton	..	..	..	..	8—9
164	T Book-keeping	N. Hindley	..	..	7.15-9.15	..	..
165	T Book-keeping	H. Catterall	..	..	7.15-9.15	..	..
166	A Commerce	W. Webster	7—8.30	..	..	..	..
167	A English Language & Literature	F. R. Snalam	..	..	..	..	7—8
168	A Shorthand	H. W. Hughes	..	..	..	7.15-9.15	..
169	A French	F. W. Jackson	..	..	..	8.15-9.15	..
170	T Cotton Spinning, Theory ..	J. H. Harrison	..	7.15-9.15	..	..	..
171	T Cotton Weaving, Theory ..	T. Taylor	..	..	..	7.15-9.15	..
	CHEMISTRY. (National Certificate Course)						
	S1						
172	A Mathematics	F. B. Landolt	7—9	..	..	..	..
173	T Physics	F. B. Landolt	..	7—9.15	..	..	..
174	A Inorganic Chemistry	R. H. Jones	..	..	..	..	7—9.30
	S2						
175	A Physical Chemistry	R. H. Jones	..	..	8—9.30	..	..
176	A Organic Chemistry	E. Taylor	..	7—9.30	..	..	..
177	A Inorganic Chemistry	R. H. Jones	..	..	7—8	7—9.30	..
	S3						
178	A Organic Chemistry	E. Taylor	..	..	7—9.30	..	..
179	A Inorganic Chemistry (Theory)	F. Jackson	..	7—8	..	..	..
180	A Inorganic Chemistry(Practical)	R. H. Jones & E. Taylor ..	..	..	..	7—9.30	..
181	A Physical Chemistry	F. Jackson	..	8—9.30	..	..	..

PHARMACY.

	S1						
182	A Botany	H. W. Edmunds	7—9	..	..	..	..
183	T Physics	F. B. Landolt	..	7—9.15	..	..	..
184	A Chemistry	R. H. Jones	..	..	..	..	7—9.30
	S2						
185	Botany	H. W. Edmunds	7—9	..	..	..	..
186	Organic Chemistry, or ..	E. Taylor	..	7—9.30	..	..	..
187	Physics	F. B. Landolt	..	7—9.15	..	..	..
188	Inorganic Chemistry (Theory)	R. H. Jones	..	..	7—8	..	..
189	Inorganic Chemistry(Practical)	.. .. ..	..	..	..	7—9.30	..
	S3						
190	Organic Chemistry	E. Taylor	..	7—9.30	..	..	..
191	Inorganic Chemistry (Theory)	R. H. Jones	..	..	7—8	..	..
192	Inorganic Chemistry(Practical)	.. .. ..	..	..	..	7—9.30	..

DAY JUNIOR TECHNICAL SCHOOL.

TIME TABLE.

Monday—	9.15—11.15.	11.15—11.30.	11.30—12.30.	1.45—2.45.	2.45—3.	3—5.
1A.	.. Workshop	.. Interval	.. Mathematics	.. Geography	.. Interval	.. Science
1B.	.. Science	.. Interval	.. Mathematics	.. Geography	.. Interval	.. Workshop
	9.15—10.15.	10.15—10.30.	10.30—12.30.	1.45—3.30.	3.30—4.	4—5.
2A.	.. Mathematics	.. Interval	.. Science	.. Mathematics	.. Drill	.. History
2B.	.. Mathematics	.. Interval	.. Geometry	.. Mathematics	.. Drill	.. History
Tuesday—	9.15—10.15.	10.15—10.30.	10.30—12.30.	1.45—3.	3—4.30.	4.30—5.
1A.	.. History	.. Interval	.. Workshop	.. Mathematics	.. Art	.. Drill
1B.	.. History	.. Interval	.. Geometry	.. Mathematics	.. Art	.. Drill
	9.15—11.15.	11.15—11.30.	11.30—12.30.	1.45—3.	3—5.	
2A.	.. Geometry	.. Interval	.. Geography	.. Mathematics	.. Workshop	
2B.	.. Science	.. Interval	.. Geography	.. Mathematics	.. Mechanics	
Wednesday	9.15—11.15.	11.15—11.30.	11.30—12.30.	1.45—2.45.	2.45—3.	3—5.
1A.	.. Science	.. Interval	.. English	.. Mathematics	.. Interval	.. Workshop
1B.	.. Workshop	.. Interval	.. English	.. Mathematics	.. Interval	.. Science
	9.15—10.15.	10.15—10.30.	10.30—12.30.	1.45—2.45.	2.45—3.45.	3.45—5.
2A.	.. Geography	.. Interval	.. Mechanics	.. Mathematics	.. English	.. Art
2B.	.. Geography	.. Interval	.. Workshop	.. English	.. Mathematics	.. Art
Thursday—	9.15—11.15.	11.15—11.30.	11.30—12.30.		2—4.	
1A.	.. Geometry	.. Interval	.. Mathematics		{ Games, weather permitting,	
1B.	.. Workshop	.. Interval	.. Mathematics		or Mathematics (2—3).	
	9.15—10.15.	10.15—10.45.	10.45—12.30.			
2A.	.. Mathematics	.. Drill	.. Tech. Drawing		{ Games, weather permitting,	
2B.	.. Mathematics	.. Drill	.. Tech. Drawing		or Workshop (2—3).	
Friday—	9.15—10.15.	10.15—10.30.	10.30—12.30.	1.45—3.15.	3.15—3.45.	3.45—5.
1A.	.. English	.. Interval	.. Tech. Drawing	.. Mathematics	.. Drill	.. English
1B.	.. English	.. Interval	.. Tech. Drawing	.. Mathematics	.. Drill	.. English
	9.15—10.15.	10.15—10.30.	10.30—12.30.	1.45—3.45.	3.45—4.	4—5.
2A.	.. English	.. Interval	.. Science	.. Workshop	.. Interval	.. Workshop
2B.	.. English	.. Interval	.. Workshop	.. Science	.. Interval	.. Workshop

DAY JUNIOR TECHNICAL SCHOOL.

TIME TABLE ANALYSIS (FIRST YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
Mathematics ..	E. C. Moyle ; G. E. Hall	11.30–12.30	1.45–3.0	1.45–2.45	11.30–12.30	1.45 3.15
English ..	R. S. Cross ; G. E. Hall ..	....	....	11.30–12.30	....	9.15–10.15 3.45–5.0
History ..	R. S. Cross	....	9.15–10.15	....	....	....
Geography ..	F. W. Jackson	1.45–2.45	....	....	....	....
Science	E. M. Pearson	3.0–5.0 (A) 9.15–11.15 (B)	....	9.15–11.15 (A) 3.0–5.0 (B)	....	....
Workshop ..	J. H. Hulse	9.15–11.15 (A) 3.0–5.0 (B)	10.30–12.30 (A)	3.0–5.0 (A) 9.15–11.15 (B)	.... 9.15–11.15 (B)	....
Geometry ..	G. E. Hall	....	10.30–12.30 (B)	....	9.15–11.15 (A)	....
Technical Drawing ..	J. H. Binfield ; E. M. Pearson ..	....	....	....	....	10.30–12.30
Art	G. Clucas	....	3.0–4.30	....	....	....
Drill & Games ..	E. H. Trinder	....	4.30–5.0	....	2.0–4.0	3.15–3.45
Intervals ..		11.15–11.30 2.45–3.0	10.15–10.30	11.15–11.30 2.45–3.0	11.15–11.30	10.15–10.30 ....

DAY JUNIOR TECHNICAL SCHOOL.

(SECOND YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
Mathematics ..	E. C. Moyle ; G. E. Hall ; J. H. Binfield ; F. W. Walker ..	9.15–10.15 1.45–3.30	1.45–3.0	1.45–2.45 (A) 2.45–3.45 (B)	9.15–10.15	....
English ..	J. T. Nickeas	....	....	2.45–3.45 (A) 1.45–2.45 (B)	....	9.15–10.15 ....
History ..	R. S. Cross	4.0–5.0	....	....	....	....
Geography ..	F. W. Jackson	....	11.30–12.30	9.15–10.15	....	....
Science	A. Woods	10.30–12.30 (A)	9.15–11.15 (B)	3.0–5.0 (A)	....	10.30–12.30 (A) 1.45–3.45 (B)
Applied Mechs. .	F. W. Walker	....	3.0–5.0 (B)	10.30–12.30 (A)	....	....
Workshop ..	J. H. Hulse	....	3.0–5.0 (A)	10.30–12.30 (B)	....	1.45–3.45 (A) 10.30–12.30 (B) 4.0–5.0
Geometry ..	J. H. Binfield	10.30–12.30 (B)	9.15–11.15 (A)	....	....	....
Tech. Drawing	J. H. Binfield	....	....	....	10.45–12.30	....
Art	G. Clucas	....	....	3.45–5.0	....	....
Drill & Games ..	E. H. Trinder	3.30–4.0	....	....	10.15–10.45 2.0–4.0	....
Intervals ..		10.15–10.30	11.15–11.30	10.15–10.30	....	10.15–10.30 3.45–4.0

DAY JUNIOR COMMERCIAL SCHOOL.

TIME TABLE.

Monday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.	1.45—2.45.	2.45—3.45.	3.45—4.15
1A.	English	French	Interval	History	Shorthand	Com. Corr.	Drill
1B.	French	English	Interval	History	Shorthand	Typing	Drill
2A.	Shorthand	Mathematics	Interval	English	History	Geography	
2B.	Shorthand	Mathematics	Interval	English	History	Geography	

Tuesday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.	1.45—2.45.	2.45—3.45.	3.45—4.15
1A.	Geography	Mathematics	Interval	French	Arithmetic	English	
1B.	Geography	Mathematics	Interval	French	Arithmetic	English	
2A.	Shorthand	Book-keeping	Interval	Mathematics	Typing	Com. Corr.	Drill
2B.	Typing	Book-keeping	Interval	Mathematics	Com. Corr.	Typing	Drill

Wednesday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.	1.45—3.45.
1A.	Shorthand	Typing	Interval	Arithmetic	Games or Preparation
1B.	Shorthand	Com Corr.	Interval	Arithmetic	Games or Preparation
2A.	Arithmetic	English	Interval	French	Games or Preparation
2B.	Arithmetic	English	Interval	French	Games or Preparation

Thursday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.	1.45—2.45.	2.45—3.45.
1A.	Mathematics	Office Routine	Interval	Arithmetic	Shorthand	French
1B.	Mathematics	Office Routine	Interval	Arithmetic	Shorthand	French
2A.	Shorthand	Arithmetic	Interval	French	Book-keeping	Book-keeping
2B.	Shorthand	Arithmetic	Interval	French	Book-keeping	Book-keeping

Friday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.	1.45—2.45.	2.45—3.45.
1A.	Shorthand	Accounts	Interval	History	Drawing	English
1B.	Shorthand	Accounts	Interval	History	Drawing	English
2A.	Arithmetic	Office Routine	Interval	French	English	Drawing
2B.	Arithmetic	Office Routine	Interval	French	English	Drawing

DAY JUNIOR COMMERCIAL SCHOOL.

TIME TABLE ANALYSIS (FIRST YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
English ..	A. D. Trafford	9.15–10.15 (A) 10.15–11.0 (B)	2.45–3.45	....	....	2.45–3.45 ....
French	J. Nickeas	9.15–10.15 (B) 10.15–11.0 (A)	11.15–12.0	....	2.45–3.45	....
History ..	R. S. Cross	11.15–12.0	....	....	....	11.15–12.0
Geography ..	A. D. Trafford	....	9.15–10.15	....	....	....
Com. Corr. ..	R. S. Cross	2.45–3.45 (A)	....	10.15–11.0 (B)	....	....
Office Routine ..	R. S. Cross	....	....	....	10.15–11.0	....
Arithmetic ..	A. D. Trafford	....	1.45–2.45	11.15–12.0	11.15–12.0	....
Mathematics ..	R. S. Cross	....	10.15–11.0	....	9.15–10.15	....
Accounts ..	A. D. Trafford	....	....	....	....	10.15–11.0
Typewriting ..	J. Jones	2.45–3.45 (B)	....	10.15–11.0 (A)	....	....
Shorthand ..	J. Jones	1.45–2.45	....	9.15–10.15	1.45–2.45	9.15–10.15
Drawing ..	G. A. Clucas	....	....	....	....	1.45–2.45
Drill & Games ..	A. D. Trafford	3.45–4.15	....	1.45–3.45	....	....
Intervals ..		11–11.15	11–11.15	11–11.15	11–11.15	11–11.15

DAY JUNIOR COMMERCIAL SCHOOL.

(SECOND YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
English ..	A. D. Trafford	11.15–12.0	....	10.15–11.0	....	1.45–2.45
French	J. Nickeas..	....	....	11.15–12.0	11.15–12.0	11.15–12.0
History ..	R. S. Cross	1.45–2.45	....	....	....	....
Geography ..	A. D. Trafford	2.45–3.45	....	....	....	....
Com. Corr. ..	R. S. Cross	....	2.45–3.45 (A) 1.45–2.45 (B)	....	....	....
Office Routine ..	R. S. Cross	....	....	....	....	10.15–11.0
Arithmetic ..	A. D. Trafford	....	....	9.15–10.15	10.15–11.0	9.15–10.15
Mathematics ..	R. S. Cross	10.15–11.0	11.15–12.0	....	....	....
Book-keeping ..	W. Webster	....	10.15–11.0	....	1.45–3.45	....
Typewriting ..	W. Webster	....	1.45–2.45 (A) 9.15–10.15 (B)	....	....	....
Shorthand ..	W. Webster	9.15–10.15	9.15–10.15 (A)	....	9.15–10.15	....
Drawing ..	G. A. Clucas	....	....	....	....	2.45–3.45
Drill & Games ..	A. D. Trafford	....	3.45–4.15	1.45–3.45	....	....
Intervals ..		11–11.15	11–11.15	11–11.15	11–11.15	11–11.15

ART SCHOOL.

Day.	Room.	Times of Classes.	Subjects.	Teachers.
Monday ..	2	10.0—12.30	Perspective, General Drawing, Lettering	G. A. Clucas
	3 and 4	2.30—4.30	Painting Still Life, Drawing Antique, Etching, Woodcuts, &c.	W. Rathbone
	3	2.30—4.30	Design, General Drawing	& G. A. Clucas
	1	7.0—9.0	Industrial Art Drawing (Lettering, Nature, &c.)	G. A. Clucas
	3	7.0—9 0	Painting Still Life, Elementary Teachers' Class	W. Rathbone & M. Duckett
	4	7.0—9.0	Drawing Antique	W. Rathbone
Tuesday ..	Harris Museum ..	10.0—12.30	Nature Study, Drawing Antique and Animals	W. Rathbone
	Reference Library		History and Methods of Art	& G. A. Clucas
	3	2.30—4.30	General Drawing—Design	W. Rathbone
	4	2-30—4.30	Drawing and Painting from Life	W. Rathbone
	1	7.0—9.0	Design (Industrial Students)	G. A. Clucas & C. Reed
	2	7.0—9.0	Textile Design—4th year*	W. Garner
	3	7.0—9.0	Painting Still Life—Illustration and General Drawing ..	W. Rathbone & M. Duckett
	4	.. ..	Drawing from life	W. Rathbone
Wednesday ..	2	9.30—10.0	General knowledge and Principles of Art	W. Rathbone
	3	10.0—12.30	Design, Nature Drawing and General Drawing	G. A. Clucas
	5	10.0—12.30	Modelling and Plaster Casting	W. Rathbone
	3	2.30—4.30	Paper, Lino and Woodcuts	W. Rathbone
	1	2.30—4.30	Leatherwork, Embroidery, Batik, Wood Decoration ..	M. Duckett
	3	2.30—4.30	Antique and General Work	W. Rathbone
	1	7.0—9.0	Textile Design, 2nd and 3rd years	S. A. Horsley
	2	7.0—9.0	Junior Course—Crafts	B. Eckersley & C. Reed
	3	7.0—9.0	Stencilling, Leaded Glass, Etching and General Work ..	G. A. Clucas
	5	7.0—9.0	Modelling and Casting, Plaster and Wood Carving, Paper, Lino and Woodcuts	W. Rathbone
	5	7.0—9.0	Leatherwork, Basketry, Raffia	M. Duckett
	6	6.30—7.30	Painting and Decorating (Theoretical)*	F. W. Sharples
	6	7.30—9.30	Painting and Decorating (Practical)*	F. W. Sharples

Day.	Room.	Times of Classes.	Subjects.	Teachers.
Thursday ..	1	10.0—12.30	Anatomy	G. A. Clucas
	3	10.30-12.30	Painting Still Life	W. Rathbone
	3	2.30—4.30	Painting Still Life, Illustration and Practice	W. Rathbone
	4	2.30—4.30	Drawing and Painting from Life	W. Rathbone
	2	7.0—9.0	1st and 2nd year Junior Drawing (Objects, Nature, &c.) ..	B. Eckersley & C. Reed
	3	7.0—9.0	Drawing Antique, Illustration, Teachers' Class	W. Rathbone
	4	7.0—9.0	Drawing from Life	W. Rathbone
Friday ..	2	10.0—12.30	Architecture, Design	G. A. Clucas
	1	10.0—12.30	Object and Memory Drawing, Illustration	W. Rathbone
	4	10.0—12.30	Etching	G. A. Clucas
	5	10.0—12.30	Woodcarving	W. Rathbone
	1	2.30—4.30	Crafts—Embroidery, Leatherwork, Basketry and Wood Decoration	M. Duckett
	2	2.30—4.30	Memory Drawing—Illustration	W. Rathbone
	1	7.0—9.0	Textile Design—1st year*	W. Garner S. A. Horsley
	2	7.0—9.0	Architecture—Practice .. ..*	G. A. Clucas
	3	7.0—9.0	Crafts—Batik, Raffia, Leatherwork, Embroidery	M. Duckett
	C.	....	English and Arithmetic, 1st and 2nd years Junior Art* ..	F. Allen

* These Classes will terminate after the Easter Examination.

ART SCHOOL

HARRIS INSTITUTE, PRESTON

CLASSES AFFILIATED TO MANCHESTER AND LIVERPOOL UNIVERSITIES.

These provide complete Courses of Instruction for the Joint Matriculation of the Northern Universities; the Intermediate B.Sc. and Intermediate B.Sc. (Tech.), Manchester; the Intermediate B.Sc., Liverpool; the Intermediate Examinations of the University of London; and the various Preliminary Professional Examinations, including Medical, Dental, and Pharmaceutical.

DAY CLASSES.

ART.
AGRICULTURE.
DAY COMMERCIAL SCHOOL.
DAY JUNIOR TECHNICAL SCHOOL.
MATRICULATION AND INTERMEDIATE SCIENCE.
DENTAL & PHARMACEUTICAL COURSES.

EVENING CLASSES.

ART.
SCIENCE AND MISCELLANEOUS.
ORGANISED COURSES.
BUILDING TRADES.
COMMERCIAL.
COTTON SPINNING. COTTON WEAVING.
MECHANICAL ENGINEERING. SCIENCE.
PHYSICS AND ELECTRICAL ENGINEERING.

All communications to be addressed to—

T. R. JOLLY,
Principal and Secretary.

August, 1927.

Whitehead PRINTER, PRESTON

Further Corrections
F.S + T.C.S.

Corrected
Textile

HARRIS INSTITUTE

PRESTON

Prospectus of Classes

SESSION 1928-29

A—LOCAL COLLEGE

1. **TECHNICAL DAY CLASSES. Re-open Sept. 24**
3. **EVENING CLASSES ... ... ,, ,, 24**
2. **JUNIOR DAY SCHOOLS ... ,, ,, 11**
   (Technical and Commercial)

B—ART SCHOOL

1. **DAY CLASSES ... ... Re-open Sept. 24**
2. **EVENING CLASSES ... ... ,, ,, 24**

Price - - Twopence

PER POST 3d.

SPECIAL NOTICE—Evening Students will be enrolled at the Technical School, Corporation Street, from 7 to 9 p.m. on Wednesday and Thursday evenings, September 19th and 20th.

Students who do not enrol on these dates will be charged an extra fee of 2/6. This will be strictly enforced

HARRIS INSTITUTE

PRESTON

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COMMERCIAL DEPARTMENT AND DAY JUNIOR COMMERCIAL SCHOOL.

Head :—F. W. Jackson, B.A., L.C.P.

Assistant Teachers for Junior Commercial School :
Miss R. S. Cross, Cert. ; Miss A. D. Trafford, Cert.
Miss J. Jones, P.C.T. ; Mrs. J. Nickeas, Cert.

Lecturer in Commercial Subjects :—W. Webster, B.Sc. (Amer.).

Lecturers for Evening Classes :

J. Appleby
H. Catterall, F.C.I.S.
G. R. Drysdale, F.C.C.S.
A. Hargreaves
J. Hilton
E. Singleton, Cert.
W. R. White
Miss P. Bridge, A.L.A.A.
J. Donaldson, A.S.A.A.
H. W. Hughes, F.Ins.S.T.
W. Hanson
N. Hindley, A.C.A.
H. C. Pye
F. R. Snalam, Cert.

ENGINEERING DEPARTMENTS AND DAY JUNIOR TECHNICAL SCHOOL.

Head :—The Vice-Principal.

Lecturers in Mechanical Engineering :—
J. H. Binfield, Wh.Ex. ; F. W. Walker, A.M.C.T. ;
G. E. Hall, B.Sc.

Chief Lecturer in Electrical Engineering :—A. Woods, Hons. C. & G.

*Lecturer in Physics :*F. B. Landolt, B.Sc.

Handicraft Teacher :—J. H. Hulse, Inter.B.Sc.

Practical Engineer :—J. Jenkins.

Lecturers for Evening Classes :—

F. Callow
C. Pimley
J. Walmsley
H. Venning, Inter.B.Sc.
R. H. Wignall
C. C. Wade, A.I.E.E.
M. Lavery (Motor Body Building)

TEXTILE DEPARTMENT.

Head :—D. Atkinson, F.T.I.

Lecturers and Assistants for Evening Classes :—

Jno. E. Adamson, F.T.I.
R. Chatburn
J. Rathbone
J. Martin
W. Jackson
J. J. Blackhurst
P. Addison
J. H. Harrison
S. Jackson
J. Preston
T. Taylor
H. Richmond

Instructor :—E. Blinkhorn.

ADMINISTRATION.

Secretary :—The Principal. *Chief Clerk :*—W. A. Dawson.
Assistant Clerk :—H. R. Walsh.

REGULATIONS—

APPLICABLE TO ALL STUDENTS ATTENDING CLASSES AT THE . . . HARRIS INSTITUTE. . . .

Students are expected to attend punctually at the Classes for which they enrol.

All students are expected to take an examination at the end of the course in those subjects for which they enrolled at the opening of the Session.

Smoking within the School buildings is strictly prohibited: and Students must not loiter about the corridors.

The Lecturers are authorised to report periodically through the Principal, on attendance, homework and conduct of each Student.

The Council shall have power in dealing with Students who are unsatisfactory in these and other respects, to remove their names from the Register without return of fee.

SCHOLARSHIPS AND PRIZES.

A limited number of Scholarships and Prizes will be awarded at the discretion of the Council.

DAY CLASSES



TECHNICAL DAY CLASSES.

COURSES :—

1. Matriculation.
2. Intermediate B.Sc.
3. Preliminary Professional
   - (*a*) Pharmacy.
   - (*b*) Dental.
   - (*c*) Dispensers.
4. Commercial Subjects.
5. Engineering (Mechanical and Electrical).
6. Textile (Cotton Spinning and Weaving).

Classes begin on Monday, September 24th, 1928.

Autumn Term :—24th September, 1928—20th December, 1928.

Spring Term :—7th January, 1929—27th March, 1929.

Summer Term :—8th April, 1929—5th July, 1929.

VACATIONS.

The Technical Day Classes will be closed :—

For the Christmas Vacation, from 21st December, 1928, to 5th January, 1929.

For the Easter Vacation from 28th March to 6th April, 1929.

For the Whitsuntide Vacation from 18th May to 25th May, 1929.
In each case the dates are inclusive.

ENROLMENT.

Students can enrol at the Technical School on Wednesday and Thursday evenings, September 19th and 20th, from 7 to 9 p.m., or at the Avenham Institute or Technical School on any day after the classes commence.

TECHNICAL DAY CLASSES.

COURSE I.

MATRICULATION.

Northern Universities and University of London.

Time Table :—See page 38.

Classes 1 to 7.

FEE. £3 10s. 0d. per subject, or
£15 15s. 0d. for the full course.

COURSE 2.

INTERMEDIATE B.Sc.

Northern Universities and University of London.

NOTE.—Affiliation with the Universities of Manchester and Liverpool.

The Institute is affiliated to the Universities of Manchester and Liverpool, and recognised as a privileged Institution under their Ordinances, to the extent that the attendance in the courses in Physics, Mathematics and Chemistry at the Institute is accepted as satisfying the attendance for the Intermediate B.Sc. Courses.

Time Table :—See page 38.

Classes 8 to 10.

Fee : £3 10s. 0d. per subject.

COURSE 3.

PRELIMINARY PROFESSIONAL.

(a) PHARMACY.

PHARMACEUTICAL SOCIETY'S EXAMINATION. PART I.

The Institute is recognised by the Pharmaceutical Society for instruction in the subjects of Part I. Examination, viz. :—Chemistry, Physics and Botany.

SPECIAL NOTE.—The Pharmaceutical Society of Great Britain require that candidates must register with them as Pharmaceutical Students before beginning any portion of their curriculum of studies.

All Students must produce evidence of such registration.

Time Table :—See page 39.
Classes 11 to 16.
Fee : £9 10s. 0d. for the course, or
£3 10s. 0d. per subject.

(b) DENTAL L.D.S., Part 1.
(London, Manchester, Liverpool and Edinburgh).

CHEMISTRY AND PHYSICS.

Time Table : See page 39.
Classes 11 to 14.
Fee : £3 10s. per subject.

(c) DISPENSERS EXAMINATION.

CHEMISTRY ONLY.

Organic Chemistry can only be taken by Students who have the requisite knowledge of Inorganic Chemistry.

Time Table : See page 39.
Classes 11 to 13.
Fee : £3 10s. 0d. per subject.

COURSE 4.

COMMERCIAL SUBJECTS.

Time Table : See page 39.
Classes 17 to 21.
Fees: £1 per subject per term, or £2 10s. per term for the course.

COURSE 5.

ENGINEERING (Part Time Day).

National Certificate Courses in Mechanical and Electrical Engineering.

NOTE.—In the first two years, Mechanical and Electrical Students will take the same course, and all students must attend on one evening per week in order to complete the course and qualify for the National Certificate Examinations.

For general regulations and conditions of admission, see under Evening Classes.

Time Table : See pages 39 and 40.

Classes 22 to 38.

Fee : £2 2s. 0d. per session.

COURSE 6.

TEXTILE (Part Day Time).

A part time course in Cotton Spinning, Weaving and Designing, suitable for students who desire a good general knowledge of the principles and processes involved in the making and selling of cotton and artificial silk fabrics.

The classes shown in the Time Table are held in the mornings of each day, but arrangements, where necessary, may be made for tuition in the ancillary subjects in afternoon or evening classes.

Time Table :—See page 40.

Classes 39—47.

Fee : £1 1s. 0d. per class for the session.

Evening Classes



EVENING CLASSES

The Courses in the Evening Classes proceed by progressive stages, thus :—

(1) A Three-Year's Course (Senior).
(2) A further Two-Year's Course (Advanced).

TECHNICAL COURSES.

7.—MECHANICAL ENGINEERING (National Certificate).
8.—ELECTRICAL ENGINEERING (National Certificate).
9.—BUILDING TRADES.
10—MOTOR BODY BUILDING.
11.—COTTON SPINNING.
12.—COTTON WEAVING.
13.—CHEMICAL TRADES (National Certificate).
14.—PHARMACY.

COMMERCIAL COURSES.

15.—GENERAL COMMERCIAL.
16.—BOOK-KEEPERS.
17.—CORRESPONDENTS.
18.—SHORTHAND CLERKS.

MISCELLANEOUS, SCIENCE, LANGUAGES, Etc.

Physics, Chemistry, Mathematics, Latin, English, French, Spanish, Economics, Geography, etc.

ENROLMENT.

Students will be enrolled at the Technical School on Wednesday and Thursday evenings, September 19th and 20th, from 7 to 9 p.m.

VACATIONS.

The School will be closed for the Christmas vacation from December 21st to January 5th.

The dates in each case are inclusive.

Classes begin on Monday, September 24th, 1928.

EVENING CLASSES.

GENERAL REGULATIONS.

CONDITIONS OF ADMISSION.

Before admission a Student must

(a) have passed the Preliminary Technical or Commercial Course, or

(b) have attended the two year's course at a Day Junior Technical or Commercial School, or

(c) have attended a Secondary School to the age of 16 years, or

(d) produce evidence of attainments equivalent to that of the Junior Technical or Commercial Course, or

(e) pass the Entrance Examination to be held at the Technical School on Friday, 21st September, 1928.

Exceptions to the above conditions may only be made where students are over 16 years of age, in which case such students must satisfy the Principal of the Institute that they are able to benefit by the classes to which they seek admission.

Students under 16 years of age who fail to satisfy the conditions of admission should attend the Evening Junior Courses (Technical or Commercial), conducted by the Preston Education Committee in Evening Continuation Schools. These junior courses link up the work of the Elementary school with the Evening classes of the Institute.

Full particulars may be obtained from The Director of Education, Education Offices, Lancaster Road, Preston.

Scholars leaving the Elementary Day Schools should join an Evening Continuation School immediately, in order to qualify for admission to the Harris Institute as soon as possible.

PROMOTION TO HIGHER YEARS.

To qualify for certificates, and to pass on to the higher years of a course, it is necessary that Students should :—

(a) reach a certain standard of attainments, tested by examinations, held at the end of the Session, and

(b) have made satisfactory progress during the Session, based on records of attendance, homework, classwork, etc.

FEES FOR SESSION.

All fees are payable in advance, and are not returnable.

	£	s.	d.
Single subjects	0	15	0

Theoretical and Practical Chemistry will be charged as separate subjects.

Any Complete Course : Building, *Commercial, Electrical Engineering, Mechanical Engineering, or Textile	1	0	0
School of Art, Evening Classes	1	0	0
Approved Pharmacy and Chemical Trade Courses	2	5	0

*If Typewriting is included in a Commercial Course, an additional fee of 5s. will be charged.

N.B.—Students who do not enrol on the dates given will be charged an additional fee of 2s. 6d. This rule will be strictly enforced.

The Council reserve the right to discontinue any Class in the event of a small number joining.

Students who desire to take the Examinations of the Union of Lancashire and Cheshire Institutes, or the City and Guilds of London Institute, may be called upon to pay the whole or a portion of the Examination Fees.

COURSE 7.

MECHANICAL ENGINEERING.

NATIONAL CERTIFICATE COURSES.

AWARD OF LOWER AND HIGHER CERTIFICATES.

The Institution of Mechanical Engineers, in conjunction with the Board of Education, has approved of the grouped courses of instruction for the award of certificates at the end of—

(1) A Three Years' Course (Senior).
(2) A further Two Years' Course (Advanced).

Students who have completed the course in the Day Junior Technical School, may be admitted to the Second Year of the Senior Course.

ADVANCED COURSE.

Students must have passed the Senior Course, or produce evidence of equivalent attainments.

CONDITIONS OF AWARD OF CERTIFICATE.

In order to obtain a certificate a candidate must make not less than 70 per cent. of the possible attendances in each year of the course, and must obtain :—

(1) Not less than 40 per cent. of the possible marks in EACH subject in the examination held at the end of each year.
(2) Not less than 40 per cent. of the possible marks obtainable in EACH year for homework, class work, laboratory work, etc., taken separately, in EACH subject for which such marks are to be awarded.
(3) Not less than 50 per cent. of the grand total of marks obtainable in EACH year. Of this total the possible marks in the examinations constitute 70 per cent., and the remaining 30 per cent. will be the possible parks for home work, class work, laboratory work, etc., in each year.

A " Distinction " may be awarded to any candidate qualified to receive a certificate who gains not less than 85 per cent. of the possible marks in the Final Examination in any subject, and his certificate may be specially endorsed with the name or names of the subjects in which he has thus distinguished himself.

Fee to be paid by each Student entering the Final Examination, Five Shillings.

NOTE.—Holders of the National Certificates in Mechanical Engineering, who became candidates for Election as Students, Graduates, or Associate Members of the Institute of Mechanical Engineers, and are able to satisfy the Council of their eligibility under the by-laws for one of these classes in respect of occupation and practical training, will be exempted from certain subjects in the Examinations for election as students and associate members.

Particulars relating to these exemptions may be obtained from the Head of the Department.

Time Table :—See page 41. Classes 48 to 62.

COURSE 8.

ELECTRICAL ENGINEERING.

The Institution of Electrical Engineers, in conjunction with the Board of Education, has approved of the grouped courses of instruction for the award of Certificates at the end of—

(1) A Three Years' Course (Senior).

(2) A further Two Years' Course (Advanced).

Students who have completed the course in the Day Junior Technical School may be admitted to the Second Year of the Senior Course.

ADVANCED COURSE.

Students must have passed the Senior Course or produce evidence of equivalent attainments.

Students are expected to sit at the Examinations held by the Union of Lancashire and Cheshire Institutes in the Subjects of the Course, and to pay their own examination fees.

The conditions of award of Certificate are as set out in the Mechanical Engineering Courses, and Exemptions are granted by the Institution of Electrical Engineers to candidates for election as students or associate members to holders of National Certificates.

Time Table :—See pages 41 and 42.

Classes 63 to 77.

See Course 5. for Part Time Day Classes in Mechanical and Electrical Engineering.

COURSE 9.

BUILDING TRADES.

Students who have obtained a First-Class leaving Certificate in the Day Junior Technical School may be admitted to the Second Year of the Senior Course.

Students taking the Third Year of the Senior Course will take the Third Year Building Trades Course Examinations of the Union of Lancashire and Cheshire Institutes, the fee for this examination to be paid by the student. First and Second Year students will be examined, and successful students will proceed to the next year of the Course, on the results of school examinations held at the close of the evening session.

ADVANCED COURSE.

Students must have passed the Third Year Building Trades Course of the Union of Lancashire and Cheshire Institutes, or produce evidence of equivalent attainments.

NOTE.—Students who desire to qualify for attendance at the Advanced Course Examinations must take Building Construction in the Third Year (S3) Course, and at least one from :—

Building Science
Geometry
Mathematics

and, if necessary, one other subject from :—

Builders Quantities
Carpentry and Joinery
Brickwork and Concreting.

Students who do not wish to proceed to an Advanced Course may choose any three subjects from the above, or may choose any two from the above and—
*Carpentry & Joinery (Practical).

The following subjects may be omitted in the Third Year (S. 3.), and taken in the Fourth Year (A. 1).

Builders' Quantities or
Mathematics.

Those students who take Builders' Quantities (S. 3) in the Fourth Year, (A. 1) must take Builders' Quantities (A. 1) in the Fifth Year.

Those students who take Mathematics (S. 3) in the Fourth Year (A. 1), must take Structural Engineering as one subject of the Course.

ADVANCED COURSE.

Fourth Year (A.1).

Building Construction

Practice Class, or

*Carpentery & Joinery (Practical)

and one other subject selected from the following :—

Builders Quantities

Carpentry and Joinery

*Structural Work, or Building Equipment including Sanitation.

Architecture

*Classes will be held if sufficient Students enrol.

Fifth Year (A. 2).

As for Fourth Year (A. 1).

Time Table :—See pages 42 and 43.
Classes 78 to 95.

PLUMBING COURSE.

Time Table :—See page 43.

Classes 96 to 98.

COURSE 10.

MOTOR BODY BUILDING.

The classes in Motor Body Building and Technical Drawing are intended to prepare students for the City and Guilds of London Institute Examinations, in either Motor Car Body Work and Road Carriage Building or Commercial Motor Body Building.

Conditions on which certificates are awarded by this Examining Body are set out in the Programme of the City and Guilds of London Institute which students should consult.

Students will pay their own Examination Fees.

Time Table :—Page 43.

Classes 99 to 102.

TEXTILE DEPARTMENT.

Students may take either the Cotton Spinning or the Cotton Weaving Course.

Senior Students are expected to sit at the examinations conducted by the Union of Lancashire and Cheshire Institutes, and qualify for a certificate endorsed by the Board of Education.

Advanced Students take the examinations of the City and Guilds of London Institute, and should obtain a Full Technological Certificate.

Students should specially note that the Sessional Records (Homework and Classwork marks), together with attendance percentage, are taken into account by the Examining bodies.

Students pay their own Examination Fees.

COURSE 11.

COTTON SPINNING.

Time Table :—Page 44.

Classes 103 to 120.

COURSE 12.

COTTON WEAVING.

Time Table :—Page 45.

Classes 121 to 140.

In the Third Year Senior Course (S3), weaving students may attend either Textile Mechanics or Chemistry.

In the Second Year Advanced Course (A2), weaving students may attend the class in Textile Engineering, or Economics of the Textile Industry, or both.

CHEMISTRY AND PHARMACY DEPARTMENT.

COURSE 13.

CHEMICAL TRADES.

NATIONAL CERTIFICATE COURSE.

AWARD OF NATIONAL CERTIFICATE.

A Lower Certificate is awarded by the Institute of Chemistry in conjunction with the Board of Education on the satisfactory completion of a Three Years' Senior Course. The conditions are somewhat similar to those set out under Engineering.

Time Table :—Pages 47 and 48.
Classes 188 to 197.

COURSE 14.

PHARMACY.

Time Table :—Page 48. Classes 198 to 208.

COMMERCIAL COURSES.

Commercial Courses are of four kinds, namely :—

(a)	General Course	Course 15
(b)	Course for Book-keepers	Course 16
(c)	Course for Correspondents	Course 17
(d)	Course for Shorthand Clerks	Course 18

All Courses are now open to both males and females. In the First and Second Years each Course, with the exception of those for Correspondents, consists of **four** subjects. Third Year Courses and Courses for Correspondents consist of three subjects.

In each Course (except the special ones specified later, which do not qualify for a Grouped Course Certificate), one or more subjects are obligatory ; others are generally optional.

From the latter subjects students may select the required number to make up their Course.

Before selecting a Course, students should **consult both the time-table printed** (on pages 46 & 47), **and the tutors** who will be present to enrol on September 19th and September 20th, 1928.

A student taking a course may, so far as his attainments and the time-table permit, sit in a class and enter for an examination of a higher year than the remaining subjects of his course.....Transfers from one class to another are not permitted after the first two weeks of the session. The detailed syllabuses of examinations in the subjects will be posted up in the Technical School, on the enrolment nights, September 19th, and September 20th, or may be found complete in the Prospectus of the Lancashire and Cheshire Institutes, price sixpence at any bookseller's.

Students are expected to take the Examinations of the Union of Lancashire and Cheshire Institutes, and to pay the examination fees.

COURSE 12

GENERAL COURSE.

First Year (S1).

General Course. (Four Subjects) :—

Obligatory : Commerce.

Optional : **Three** of the following Subjects (in not more than one of which the first year syllabus may be taken, provided the subject has not been previously offered) :—

Commercial Arithmetic.
English and Commercial Correspondence.
Geography.
Book-keeping.
Shorthand
French.
Spanish.
Typewriting.
Cotton Spinning.
Cotton Weaving.

Second Year (S2).

General Course. (Four Subjects) :—

Obligatory : Commerce.

Optional : **Three** of the following Subjects (in not more than one of which the first year syllabus may be taken, provided the subject has not been previously offered) :—

Commercial Arithmetic.
English and Commercial Correspondence.
Geography.
Book-keeping.
Shorthand (minimum of 60 words per minute).
French.
Spanish.
Typewriting.
Cotton Spinning.
Cotton Weaving.

Third Year S3).

General Course. (Three Subjects) :—

Obligatory : Commerce.

Optional : Any two of the following :—

Book-keeping and Accountancy.
Arithmetic.
English Literature.
Shorthand (minimum of 80 words per minute).
A Modern Language.

COURSE 16.

COURSE FOR BOOK-KEEPERS.

FIRST YEAR (S1).

Course for Book-keepers. (Four Subjects) :—

OBLIGATORY : Book-keeping.

Commercial Arithmetic.

Commerce.

English and Commercial Correspondence.

SECOND YEAR (S2).

Course for Book-keepers. (Four Subjects) :—

OBLIGATORY : Book-keeping.

Commercial Arithmetic.

Commerce.

English and Commercial Correspondence.

THIRD YEAR (S3).

Course for Book-keepers. (Three Subjects) :—

OBLIGATORY : Book-keeping and Accountancy.

Commercial Arithmetic.

Commerce.

COURSE 17.

COURSE FOR CORRESPONDENTS.

FIRST YEAR (S1).

Course for Correspondents. (Three Subjects) :—

OBLIGATORY : English and Commercial Correspondence.
French or Spanish.

OPTIONAL : One of the following :—
Commerce.
Arithmetic.
Shorthand.

SECOND YEAR (S2).

Course for Correspondents. (Three Subjects) :—

OBLIGATORY : English and Commercial Correspondence.
A Foreign Language (French or Spanish).

OPTIONAL : Any one of the following :—
Commerce.
Commercial Arithmetic.
Geography (First Year Syllabus).
Shorthand.
A second modern Foreign Language (First Year Syllabus).

THIRD YEAR (S3).

Course for Correspondents. (Three Subjects) :—

OBLIGATORY : A Modern Foreign Language (French or Spanish).
Commerce (2nd or 3rd Year).

OPTIONAL : Any one of the following :—
A second Modern Language (1st or 2nd Year *Syllabus).
Geography (2nd Year Syllabus).
Arithmetic (2nd or 3rd Year Syllabus).
Shorthand.

*If in the Third Year Course any subject chosen has been taken in a previous year, the next higher stage must be taken.

COURSE 15

COURSE FOR SHORTHAND CLERKS.

First Year (S1).

Course for Shorthand Clerks. (Four Subjects) :—

Obligatory : Shorthand.
English and Commercial Correspondence.
Arithmetic.

Optional : One of the following :—
Commerce.
Book-keeping.
Typewriting.

Second Year (S2).

Course for Shorthand Clerks. (Four Subjects) :—

Obligatory : Shorthand.
English and Commercial Correspondence.

Optional : Any two of the following subjects :—
Commerce (2nd Year Syllabus).*
Book-keeping (1st or 2nd Year Syllabus).*
Commercial Arithmetic.
Typewriting.

Third Year (S3).

Course for Shorthand Clerks. (Four Subjects) :—

Obligatory : Shorthand.
Commerce (2nd or 3rd Year Syllabus).*

Optional : Any two of the following :—
English and Commercial Correspondence (if sufficient enrol).
Book-keeping (2nd Year Syllabus), or*
Book-keeping and Accountancy.
Arithmetic.
Typewriting.

*If in the Second or Third Year Course, any subject chosen has been taken in a previous year, the next higher stage must be taken.

TIME-TABLE OF COMMERCIAL CLASSES.

See pages 46 and 47.

Classes 141 to 187.

Students should note carefully the buildings in which the classes are held.

NOTE.— FIRST YEAR.

All females taking Arithmetic attend class 143 or 144.

All males taking Arithmetic (except such as also take Geography) attend class 141 or 142.

Males taking both Arithmetic and Geography attend classes 143 or 144 and 164.

The classes in Shorthand are held in the same building as the Arithmetic classes.

In Shorthand, students who have previously done nothing may find it advisable during the first session to work for a local examination They should consult their tutors on the matter. The second year classes consist of:—A. Theory and Speed to 60 words per minute; B. Speed from 60 to 70 words. Students who can do 70 words per minute should join the 3rd year.

In Typewriting, 1st and 2nd year students must consult the tutor on enrolment night as to which hour is available.

NOTE—That the Shorthand Theory Class for **beginners** does not prepare for the U.L.C.I. Examination in Shorthand Advanced Theory which is necessary for Group Course Candidates who wish to secure Scholarships.

PART TIME DAY CLASSES IN COMMERCIAL SUBJECTS.

Part Time Day classes have been formed for persons over 16 years of age desirous of instruction in any of the following subjects:—

TYPEWRITING, SHORTHAND, OFFICE ROUTINE, BOOK-KEEPING AND COMMERCIAL CORRESPONDENCE.

See Course 4.

MISCELLANEOUS CLASSES AND SPECIAL COURSES.

The following classes are here indicated separately for the benefit of students who desire to take up the study of certain subjects for the Preliminary Professional and other Examinations, and to assist students of an advanced grade to a higher standard of attainments.

A course consists of any three of the following subjects :—

SUBJECT.	CLASS NO.
Arithmetic	179.
Book-keeping	180 or 181.
Chemistry	190 to 197.
Economics of the Cotton Industry	140.
English Language and Literature	183.
French	161, 177, 185.
Latin	163.
Mathematics	188.
Physics	189.
Spanish	162.
Geography	164.

A Local Examination will be held in those subjects not otherwise provided for, and certificates will be given.

JUNIOR COURSES.

FULL TIME DAY.

COURSES.—

JUNIOR TECHNICAL.

JUNIOR COMMERCIAL.

Classes begin on Tuesday, September 11th, 1928.

Autumn Term :—11th September, 1928—20th December, 1928.

Spring Term :—7th January, 1929—27th March, 1929.

Summer Term :—8th April, 1929—18th July, 1922.

VACATIONS.—

The Schools will be closed for the Christmas Vacation from 21st December, 1928, to 5th January, 1929 ; for the Easter Vacation, from 28th March, 1929, to 6th April, 1929 ; for the Whitsuntide Vacation, from 18th May, 1929 to 25th May, 1929.

FEE.—£3 3s. 0d. per Session or £1 1s. 0d. per term.

TIME TABLES :—See pages 49 to 54.

JUNIOR SCHOOLS.

CONDITIONS OF ENTRY, ETC.

(1) Day Junior Technical School.

(2) Day Commercial School.

Candidates desirous of entering the Day Junior Technical School, or the Commercial School, take an Entrance Examination in May of each year, and, if successful, are admitted in the following September. Entry forms can be obtained from the Principal, Harris Institute, Avenham. Candidates must not be less than 13 years of age on the 1st of October. The Council of the Harris Institute offer a limited number of scholarships to candidates, who for two years prior to the date of the Examination, have been in regular attendance at a Public Elementary School within 7 miles of the Preston Town Hall.

A limited number of Scholarships and Maintenance Allowances are also offered by the Lancashire County Council to candidates residing in the County area.

Leaving Certificates, First or Second Class, are given to all who satisfactorily conclude their period of training, and a certain number of free scholarships to Evening Classes are granted to those whose attainments and conduct in the Day School have merited it.

The Cost for books is approximately £2 0s. 0d. per annum.

The School Uniform is as follows :—**Girls.**—Navy Tunic and Girdle, Navy Knickers, White Blouse, with polo collar and long sleeves in winter, Magyar with short sleeves in summer. Blue and green tie, green cap in winter, Curacoas hats with School band in summer. Black cashmere stockings, black footwear, navy coat, if possible, if not, a dark one. School blazers can be obtained if desired.

Boys.—School cap, tie, and school blazers.

The above can be purchased from the School Outfitters on the presentation of the regulation form, which may be obtained at the School.

Every endeavour is made at the end of the course to assist worthy students to obtain suitable posts. Many employers apply to the School for employees and apprentices.

DAY JUNIOR TECHNICAL SCHOOL.

The aim of the School is to provide a suitable education for boys who, having completed the ordinary course of work in the Elementary Day School, desire to enter Engineering, Building and other trades.

The curriculum is planned with the object of providing for the continuance of a general education together with an education in all subjects which are necessary to boys about to enter industrial occupations.

The students are brought into close contact with their future occupation through teachers who have had experience in industry.

The students also have access to the Engineering laboratories and textile sheds, where they become acquainted with machinery and equipment which helps towards a thorough understanding of the application of scientific principles to industry.

The course of instruction extends over a period of two years, and the subjects taught include the following:—Mathematics, Machines and Building, Drawing and Geometry, Art, Science (including Applied Mechanics, Electricity, Magnetism, Heat), Metal-work, Woodwork, Geography, History, English, Drill and Organised Games.

Boys who obtain a Leaving Certificate may be admitted to the Second year of the Senior Course in Mechanical or Electrical Engineering or the Building Trades Course, and are thus able to complete the specialized courses in the Evening or Part Time Day Classes with the least possible delay.

DAY JUNIOR COMMERCIAL SCHOOL.

The Course extends over a period of two years, and prepares boys and girls for Clerical posts. The following subjects are taken:—Arithmetic, Algebra, Accounts, Book-keeping, Commerce, Commercial Correspondence, Drawing, Drill, English, French, Games, Geography, History, Office Routine, Mathematics, Shorthand and Typewriting.

ART SCHOOL



ART SCHOOL.

The School is open for three terms of about 13 weeks each, viz. :— 24th September, 1928, to 20th December, 1928.
7th January, 1929, to 28th March, 1929.
8th April, 1929 to 5th July, 1929.

FEES FOR SESSION (payable in advance).

	£	s.	d.
Full-time Day Students	3	3	0
Evening Classes	1	0	0
Painting and Decorating Class	1	0	0
Students attending one day per week for Single Subjects.....	2	2	0

Classes begin on Monday, September 24th, 1928.

DAY AND EVENING CLASSES.—TIME TABLE (See also pages 55 & 56).

	MORNING. 10-0—12-30.	AFTERNOON. 2-30—4-30.	EVENING. 7-0—9-0.
Monday	Drawing Ornament Styles of Design Lettering Nature Drawing Perspective	Etching & Woodcuts, &c. Still Life Painting Figure Drawing Object Drawing Design Lettering	Drawing & Painting Still Life Nature Study Antique Drawing Industrial Art Illustration Elem. Teachers' Class Drawing from Life
Tuesday	Nature Study Drawing, Antique History of Art Wood Decoration, Lino. Cuts Decorative Paintg., &c.	Still Life Design Drawing (Elem. & Advanced) Wood Decoration, Lino Cuts, &c.	Drawing & Painting Still Life *Textile Art (4th yr.) Design (Indust. & Crafts Wood Decoration, &c.
Wednesday	General Drawing Still Life Principles of Art Design Nature Drawing Modelling and Plaster Casting	Leather Work Batik Embroidery Still Life Drawing from the Antique Nature Study Practice or Games	Junior Art Crafts Stencilling—Leaded Glass Etching, Leather work Basketry, Raffia Modelling and casting Wood & Plaster Carving *Painting & Decorating *Textile Design (2nd & 3rd years)
Thursday	Anatomy Drawing & Painting Still Life	Drawing & Painting still Life General Drawing Illustration and Poster Design	1st & 2nd year Junior Drawing Illustration Drawing from life Teachers Class Wood Decoration, &c.
Friday	Architecture Figure Composition Object & Memory Drawing Design Drawing from Life	Raffia & Basketry Batik Leather Work Embroidery Illustration Elem. Figure Drawing Drawing—Objects & Interiors Memory Drawing Drawing from Life	*Textile Design (1st year) Embroidery Basketry Raffia Batik *Architecture] Practice *English & Arithmetic (1st & 2nd years). *Painting & Decorating

During the Summer term an out-of-door Sketching Class will be held on Tuesday morning.

*These classes will terminate after the Easter Examinations.

OBJECTS OF THE SCHOOL.

The objects of the School are :—

(1) To give instruction in Art to those engaged in trades and professions in which the power of drawing and a knowledge of design are essential or helpful.

(2) To train those wishing to qualify to become teachers of Art in Secondary Schools, or in Schools of Art.

(3) To provide facilities to those desiring to study Art as a branch of general education, or as an accomplishment.

(4) To train those who are desirous of taking up Art as a career, and who intent to specialise as painters, sculptors, illustrators, designers, etc.

(5) To meet the requirements of those engaged in various industrial occupations.

(6) Junior Courses. To prepare young students between the ages of 14 and 16, in order that they may specialise later on, in any of the above courses.

EXAMINATIONS IN ART.

INTERNAL.

Grouped Examinations will be held at the end of each term, comprising the subjects of the various Courses.

The Board of Education will hold Examinations in the following subjects of Art :—

(a) Drawing.

(b) Painting.

(c) Modelling.

(d) Pictorial Design for Reproduction in black and white or colour.

(e) Industrial Design for (i.) Handicrafts and (ii.) Manufactures.

1. The Examination in Drawing will be of a standard suitable for candidates who, after a good general education, including some preliminary instruction in Drawing, up to the age of 16 or later, have devoted themselves to serious and continuous study of Drawing for, as a rule, not less than two years.

2. The Examinations in Painting, Modelling, and Pictorial Design will be of such a standard as could be attained, according to the capacity of the candidate, by two or more years of serious and continuous specialised study after passing the Examination in Drawing.

3. Examinations in Industrial Design will be of such a standard as could be attained through regular attendance at evening or other part-time classes in the intervals of employment for a period of four years after the age of 16.

4. Candidates will not be admitted to the Examinations in Painting, Modelling, or Pictorial Design, unless they have previously passed the Examination in Drawing.

City and Guilds of London.

Students are prepared for these Examinations in the following Subjects :—Painting and Decorating, Embroidery, Principles of Art as applied to Cotton Weaving.

National Society of Art Masters.

A series of Examinations in Drawing arranged for Teachers in Elementary Schools.

UNION OF LANCASHIRE AND CHESHIRE INSTITUTES.

Students are prepared for the Examinations arranged by the U.L.C.I. Authority in the following Subjects :—Junior Industrial Art, Painting and Decorating, Architecture, Embroidery, Leather-work, Textile Design, etc.

SCHOLARSHIPS.

Harris Art Scholarship.

One scholarship of the value of £7 10s. 0d. per annum, tenable for three years, will be awarded annually.

The Scholarship will be open to all Students of the School of Art, who have attended for not less than one year immediately preceding the award, and will be tenable at the Harris Institute.

The Scholarship will be awarded on the results of the annual examinations, in conjunction with the Student's work of the session.

Should one or more of these Scholarships fall vacant before the full period of three years, two or three (as the case may be), will be given instead of one, in the year when they lapse.

Free Studentships.

Free Studentships to the Day Classes are offered to Students of the School (Day or Evening), who are studying with a view to becoming designers, craft workers, or teachers.

Method of award, the same as for the above.

Free Studentships to the Evening Classes of offered to students taking definite courses, and will be awarded on the result of marks given for homework, attendance, and internal examinations.

Special Scholarships are awarded to students who have left or are about to leave elementary schools, who intend to follow occupations requiring an Art Training.

PRIZES :—STEELE BEQUEST.

Three Prizes (one day and two evening) of £5 each are offered for the best work done by Students each Session.

SKETCH CLUB AND STUDENTS' UNION.

The Sketch Club is organised by the Staff and Students for the purpose of encouraging individual effort. Monthly competitions are arranged during the Sessions, and a series of subjects are set for the long vacation.

All Students are eligible. Further information and particulars may be obtained from members of the Staff.

HARRIS INSTITUTE, PRESTON.

TIME TABLE OF CLASSES. SESSION 1928-29.

A—*Avenham Institute.* C—*Christ Church School.* T—*Technical School.*

TECHNICAL DAY CLASSES.

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	MATRICULATION.						
1	T English and History	F. W. Jackson	11.15-12.15	2—3	..	2—3	3—4
2	T French	F. W. Jackson	..	..	11.15-12.15	..	11.15-12.15 and 2—3
3	T Latin	F. W. Jackson	..	3—4	..	3—4	..
4	T Mathematics	F. B. Landolt	9.30-11.15	11.30-12.30	9.30-11.15	..	..
5	T Physics	F. B. Landolt	3.15-5	9.30-11.15	..	9.30-11	..
6	A Chemistry, Theory	R. H. Jones	..	..	..	11.15-12.15	9.45-10.45
7	A Chemistry, Practical	R. H. Jones	..	..	2.30-4	..	..
	INTER-SCIENCE.						
8	T Mathematics	F. B. Landolt	..	2—5	..	..	..
9	T Physics	F. B. Landolt	..	..	..	..	2—4
10	A Chemistry	R. H. Jones	..	..	9.30--10.30 10.30–12.30 2.30-4	11.15-12.15	9.45-10.45 10.45-12.30

	PREL. PROFESSIONAL : PHARMACY, DENTAL, DISPENSERS.							
11	A Chemistry, Org. (Theory) ..	R. H. Jones	2—3	..	..	..	..
12	A Chemistry, Inorg. (Theory) ..	R. H. Jones	..	..	9.30-10.30	11.15-12.15	9.45-10.45
13	A Chemistry, Inorg. (Practical) ..	R. H. Jones	..	..	10.30-12.30 and 2.30-4	..	.. 10.45-12.30
14	T Physics	F. B. Landolt	3.15-5	9.30-11.15	..	9.15-11	..
15	A Botany, Theory	H. W. Edmunds	..	11.30-12.30	..	..	..
16	A Botany, Practical	H. W. Edmunds	..	2—4	..	..	..
	PART TIME DAY COMMERCIAL CLASSES.						
17	T Typewriting	J. Jones	9.15-10.15	..	..	9.15-10.15	..
18	T Shorthand	J. Jones	10.15-11.15	..	11.15-12.15	10.15-11.15	..
19	T Bookkeeping	W. Webster	..	..	9.15-11.15	..	..
20	T Office Routine	J. Jones	11.15-12.15	..	..	..	..
21	T Commercial Correspondence ..	R. Cross	..	..	..	11.15-12.15	..
	PART TIME DAY ENGINEERING. (National Certificate Course) **S1 (A)**						
22a	T Mathematics	G. E. Hall	4—5	..	..	4—5	..
23	T Electrical Science	A. Woods	2—4	..	..	..	..
24	T Engineering Drawing	J. H. Binfield	..	..	..	2—4	..
25	T Mechanics	F. B. Landolt	..	..	..	7.15-9.15	..
	S1 (B)						
22b	T Mathematics	~~G. E. Hall~~ J.H.B.	4—5	..	..	4—5	..
26	T Mechanics and Heat Engines	~~G. E. Hall~~ J.H.B. ..	2—4	..	..	..	..
27	T Engineering drawing	J. H. Binfield	..	..	..	2—4	..

Electrical Science

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	S2 (A)						
28a	T Mathematics	J. H. Binfield	4—5	..	2—3	..	..
29a	T Mechanics and Heat Engines	F. W. Walker	2—4	..	..	..	..
30	T Electrical Science	A. Woods	..	..	3—5	..	..
31	T Engineering Drawing	J. H. Binfield	..	..	7.15-9.15	..	..
	S2 (B)						
28b	T Mathematics	J. H. Binfield	4—5	..	2—3	..	..
29b	T Mechanics and Heat Engines	F. W. Walker	2—4	..	..	..	..
32	T Engineering Drawing	J. H. Binfield	..	..	3—5	..	..
	MECHANICAL ENGINEERING. S3						
33	T Mathematics	G. E. Hall	7.15-9.15	..	..	..	..
34	T Mechanics	F. W. Walker	..	..	2—4.30	..	..
35	T Heat Engines	F. W. Walker	..	..	..	2—4.30	..
	ELECTRICAL ENGINEERING. S3						
36	T Mathematics	J. Walmsley	7.15-9.15	..	..	..	..
37	T Electro-Technics	A. Woods	..	..	..	9.30-11.30	..
38	T Electrical Laboratory	A. Woods	..	2—4.30	..	..	..
	TEXTILE CLASSES. (Spinning and Weaving Cotton).						
39	T Spinning Mechanism	D. Atkinson	..	9.30-10.45	..	..	..
40	T Spinning (Practical)	D. Atkinson	..	10.45-12.0	..	..	..
41	T Weaving Mechanism	D. Atkinson	9.30-10.45	..	..	..	..
42	T Weaving Practical	E. Blinkhorn	10.45-12.0	..	..	..	10.45-12.0
43	T Weaving Calculations	D. Atkinson	..	..	9.30-10.45	..	..
44	T Cloth, Dissection, Analysis	D. Atkinson	..	..	10.45-12.0	..	..
45	T Fabric Structure	D. Atkinson	..	..	..	9.30-10.45	..
46	T Practical Designing	D. Atkinson	..	..	..	10-45-12.0	..
47	T Yarn Preparation	D. Atkinson	..	..	..	..	9.30-10.45

	MECHANICAL ENGINEERING. (National Certificate Courses)						
	S1						
48	T Mathematics	R. H. Wignall	..	..	..	7.15-9.15	..
49	T Engineering Drawing	J. H. Binfield, G. Oliver ..	..	7.15-9.15	..	..	..
50	T Mechanics and Heat Engines	F. W. Walker, ...	7.15-9.15	..	..	..	..
	S2						
51	T Mathematics	H. Venning	..	7.15-9.15	..	..	..
52	T Engineering Drawing	J. H. Binfield, H. Kirkham	..	..	7.15-9.15	..	..
53	T Mechanics and Heat Engines	G. E. Hall	..	..	..	..	7.15-9.15
	S3						
54	T Mathematics	G. E. Hall	7.15-9.15	..	..	..	..
55	T Mechanics	F. W. Walker	..	..	7.15-9.15	..	..
56	T Heat Engines	F. W. Walker	..	..	..	7.15-9.15	..
	A1						
57	T Mathematics	J. Walmsley	..	..	7.15-9.15	..	..
58	T Machine Design	J. H. Binfield	7.15-9.15	..	..	..	..
59	T Strength of Materials	G. Pimley	..	..	..	..	7.15-9.15
	A2						
60	T Heat Engines	E. C. Moyle	7.15-9.15	..	..	..	..
61	T Theory of Machines	E. C. Moyle	..	..	7.15-9.15	..	..
62	T Electrical Engineering for Mechanical Engineers	J. H. Hulse	..	..	..	7.15-9.15	..
	ELECTRICAL ENGINEERING (National Certificate Course)						
	S1						
63	T Mathematics	R. H. Wignall	7.15-9.15	..	..	..	..
64	T Electrical Drawing	F. Callow, —. Morley ..	..	..	..	7.15-9.15	..
65	T Electrical Science	J. H. Hulse, J. Bennett ..	..	..	..	..	7.15-9.15

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	S2						
66	T Mathematics	H. Venning	7.15-9.15	..	..	..	..
67	T Mechanics	F. B. Landolt	..	..	..	7.15-9.15	..
68	T Electrical Science	J. H. Hulse	..	..	7.15-9.15	..	..
	S3						
69	T Mathematics	J. Walmsley	7.15-9.15	..	..	..	..
70	T Electro-Technics	A. Woods	..	..	..	7.15-9.15	..
71	T Electrical Laboratory ..	A. Woods	..	7.15-9.15	..	..	..
	A1						
72	T Mathematics	J. Walmsley	..	..	..	..	7.15-9.15
73	T Electrical Engineering ..	C. C. Wade	..	..	..	7.15-9.15	..
74	T Electrical Laboratory ..	C. C. Wade	7.15-9.15	..	..	..	..
	A2						
75	T Electrical Design	G. Pimley	..	..	..	7.15-9.15	..
76	T Electrical Drawing	F. Callow	..	7.15-9.15	..	..	..
77	T Electrical Laboratory ..	G. Pimley	..	..	7.15-9.15	..	..
	BUILDING TRADES.						
	S1 (A)						
78	T Mathematics and Science ..	W. Taylor, F. Campey ..	..	7.15-9.15	..	..	..
79	T Building Construction ..	H. Howarth, F. Campey, and E. Redman	..	..	7.15-9.15	..	..
80	T Geometry	J. N. Walker, F. Campey, and G. H. Broadbent	..	..	..	..	7.15-9.15
	S1 (B)						
81	T Mathematics and Science ..	W. Taylor, J. Spiby ..	..	..	..	..	7.15-9.15
82	T Building Construction ..	H. Howarth, H. Allen ..	7.15-9.15	..	..	..	..
83	T Geometry	J. N. Walker, G. H. Broadbent	..	7.15-9.15	..	..	..

	S2						
84	T Mathematics and Geometry ..	W. Taylor, J. Spiby, and E. Redman	..	..	..	7.15-9.15	..
85	T Building Construction ..	E. M. Pearson, T. Croft and E. Redman	..	7.15-9.15	..	..	..
86	T Building Science	E. M. Pearson, J. Spiby ..	7.15-9.15	..	..	..	..
	S3						
87	T Building Construction ..	H. Howarth	..	..	..	7.15-9.15	..
88	T Quantities	J. T. Higginson	..	7.15-9.15	..	..	..
89	T Geometry	J. N. Walker	7.15-9.15	..	..	..	..
90	T Brickwork and Concreting ..	T. Croft	..	..	7.15-9.15	..	..
91	T Carpentry	H. Allen	..	..	..	..	7.15-9.15
	A1 and 2						
92	T Building Construction ..	E. M. Pearson	..	..	..	7.15-9.15	..
93	T Practice Class	G. H. Broadbent (senr.) ..	..	..	7.15-9.15	..	..
94	T Carpentry and Joinery ..	E. M. Pearson	..	..	..	..	7.15-9.15
95	T Quantities	J. T. Higginson	7.15-9.15	..	..	..	..
	Architecture (See Art School)						
	PLUMBING.						
	S2 and 3						
96	(Workshop) Plumbing, Practical	J. Dixon	7—9	..	..	..	..
97	T Plumbing, Theory	J. Dixon	..	..	7-8.30	..	..
98	T Plumbing, Science	J. Dixon	..	..	8.30-9.30	..	..
	MOTOR BODY BUILDING.						
99	T Technical Drawing	H. Lavery	..	..	..	..	7.20-9.20
100	T Body Building	H. Lavery	..	..	..	7.20-9.20	..
101	T Mathematics	.. ..	To be	arranged	..	..	..
102	T Science	.. ..			..	..	..

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	COTTON SPINNING.	* Alternate weeks.					
	S1						
103	T Mathematics	P. Addison	7.15-9.15	..	..	..	..
104	T Textile Drawing	S. Jackson	..	..	7.15-9.15*	..	..
105	T Cotton Spinning, Practical ..	J. H. Harrison	..	..	..	7.15-9.15*	..
106	T Cotton Spinning, Theory ..	J. H. Harrison	..	7.15-9.15	..	..	..
	S2						
107	T Mathematics and Mechanics ..	R. Chatburn	..	7.15-9.15	..	..	..
108	T Textile Drawing	S. Jackson	..	..	7.15-9.15*	..	..
109	T Cotton Spinning, Practical ..	J. H. Harrison	..	..	..	7.15-9.15*	..
110	T Cotton Spinning, Theory ..	J. H. Harrison	7.15-9.15	..	..	..	..
	S3						
111	T Cotton Spinning, Theory ..	J. Rathbone	..	..	7.15-9.15	..	..
112	T Cotton Spinning, Practical ..	J. Rathbone	..	..	..	..	7.15-9.15*
113	T Textile Drawing	S. Jackson	..	..	..	..	7.15-9.15*
114	T Textile Mechanics	J. Adamson	..	7.15-9.15	..	..	..
	A1						
115	T Cotton Spinning, Theory ..	J. Rathbone	..	..	..	7.15-9.15	..
116	T Cotton Spinning, Practical ..	J. Rathbone	7.15-9.15	..	..	..	..
117	T Textile Engineering	G. E. Hall	..	7.15-9.15	..	..	..
	A2						
118	T Cotton Spinning, Theory ..	J. Rathbone	..	7.15-9.15	..	..	..
119	T Cotton Spinning, Practical ..	J. Rathbone	..	..	..	..	7.15-8.15
120	T Textile Economics	W. Webster	..	..	7.15-9.15	..	..

COTTON WEAVING.

* Alternate weeks.

	S1							
121	T	Mathematics	P. Addison, H. Richmond	..	..	7.15–9.15	..	..
122	A	Textile Design and Colour	W. T. Garnar	..	..	..	..	7—9*
123	T	Cotton Weaving, Practical	E. Blinkhorn, W. Jackson, T. Taylor	..	..	..	..	7.15–9.15*
124	T	Cotton Weaving, Theory	D. Atkinson, H. Richmond	..	..	..	7.15–9.15	..
	S2							
125	T	Cotton Weaving, Theory	D. Atkinson J. Preston,	7.15–9.15	..	..	..	..
126	T	Cotton Weaving, Practical	E. Blinkhorn, J. J. Blackhurst	..	..	7.15–9.15*	..	..
127	T	Textile Design and Colour	S. A. Horsley	..	..	7—9*	..	..
128	T	Textile Drawing & Mechanics	J. Preston, J. J. Blackhurst.	..	..	..	7.15–9.15	..
	S3							
129	T	Cotton Weaving, Theory	J. Martin	..	..	..	..	7.15–9.15
130	T	Cotton Weaving, Practical	E. Blinkhorn, J. J. Blackhurst	..	..	7.15–9.15*	..	..
131	T	Textile Mechanics	J. Adamson	..	7.15–9.15	..	..	..
132	A	Textile Chemistry	R. H. Jones	7—9.30	..	..	..	..
133	A	Textile Design & Colour	S. A. Horsley	..	..	7—9*	..	..
	A1							
134	T	Cotton Weaving, Hons. A.	T. Taylor	..	..	7.15–9.15	..	..
135	T	Cotton Weaving, Practical	E. Blinkhorn, J. Martin	7.15–9.15	..	..	..	..
136	A	Principles of Art	W. T. Garnar	..	7—9	..	..	..
	A2							
137	T	Cotton Weaving, Hons. B.	D. Atkinson	..	..	..	..	7.15–9.15
138	T	Cotton Weaving, Practical	E. Blinkhorn	7.15–9.15	..	..	..	..
139	T	Textile Engineering	G. E. Hall	..	7.15–9.15	..	..	..
140	T	Economics of Cotton Industry	W. Webster	..	..	7.15–9.15	..	..

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	COMMERCIAL COURSES.						
	S1						
141	C Arithmetic	E. Singleton	7.15-8.15	..	..	..	..
142	C Arithmetic	E. Singleton	8.15-9.15	..	..	..	..
143	A Arithmetic	F. R. Snalam	7.15-8.15	..	..	..	..
144	A Arithmetic	F. R. Snalam	8.15-9.15	..	..	..	..
145	T Book-keeping (Beginners) ..	G. R. Drysdale	..	..	7.15-8.15	..	..
146	T Book-keeping (Beginners) ..	G. R. Drysdale	..	..	8-15-9.15	..	..
147	C Book-keeping	J. Donaldson	..	..	7.15-8.15	..	..
148	C Book-keeping	J. Donaldson	..	..	8.15-9.15	..	..
149	T Book-keeping	H. Catterall..	..	..	..	7.15-8.15	..
150	T Commerce	W. Webster	..	7.15-8.15	..	..	..
151	T Commerce	W. Webster	..	..	..	..	8.15-9.15
152	T English and Com. Corr. ..	H. W. Hughes	..	8.15-9.15	..	..	..
153	T English and Com. Corr. ..	H. W. Hughes	..	..	..	..	7.15-8.15
154	C Shorthand	H. W. Hughes	7.15-8.15	..	..	..	..
155	C Shorthand	H. W. Hughes	8.15-9.15	..	..	..	..
156	A Shorthand	J. Jones	7.15-8.15	..	..	..	..
157	A Shorthand	J. Jones	8.15-9.15	..	..	..	..
158	T Typewriting	J. Hilton	..	6.15-7.15	..	..	..
159	T Typewriting	J. Hilton	..	7.15-8.15	..	..	..
160	T Typewriting	J. Hilton	..	8.15-9.15	..	..	..
161	T French	F. W. Jackson	..	8.15-9.15	..	..	..
162	A Spanish	J. Appleby	..	7.15-8.15	..	..	..
163	A Latin	F. W. Jackson	..	..	..	7.15-8.15	..
164	A Geography	H. C. Pye	7.15-8.15	..	..	..	..

	S2							
165	A Arithmetic	E. Singleton	..	..	..	..	..	7—8
166	A Book-keeping	P. Bridge	..	..	7.15-9.15	..	..	..
167	C Book-keeping	H. Catterall	..	..	7.15-9.15	..	..	..
168	T Commerce	W. Webster	..	8.15-9.15	..	..	..	..
169	T Commerce	W. Webster	..	..	..	..	..	7.15-8.15
170	T English and Com. Corr. ..	H. W. Hughes	..	7.15-8.15	..	..	..	..
171	T English and Com. Corr. ..	H. W. Hughes	..	..	..	..	..	8.15-9.15
172	T Shorthand	W. Hanson	..	..	..	7.15-9.15	..	..
173	T Shorthand	W. R. White	..	..	..	7.15-9.15	..	..
174	T Typewriting	J. Hilton	..	..	..	..	..	6.15-7.15
175	T Typewriting	J. Hilton	..	..	..	..	..	7.15-8.15
176	T Typewriting	J. Hilton	..	..	..	..	..	8.15-9.15
177	T French	F. W. Jackson	..	7.15-8.15	..	..	..	..
178	A Geography	H. C. Pye	8.15-9.15	..	..	..	..	..
	S3							
179	A Arithmetic	E. Singleton	..	..	..	..	..	8—9
180	T Book-keeping	N. Hindley	..	..	7.15-9.15	..	..	..
181	T Book-keeping	H. Catterall	..	..	7.15-9.15	..	..	..
182	A Commerce	W. Webster	7—8.30	..	..	..	..	..
183	A English Language & Literature	F. R. Snalam	..	..	..	..	..	7—8
184	A Shorthand	H. W. Hughes	..	..	..	7.15-9.15	..	..
185	A French	F. W. Jackson	..	..	..	8.15-9.15	..	..
186	T Cotton Spinning, Theory ..	J. H. Harrison	..	7.15-9.15	..	..	..	..
187	T Cotton Weaving, Theory ..	T. Taylor	..	..	..	7.15-9.15	..	..
	CHEMISTRY. (National Certificate Course) **S1**							
188	A Mathematics	F. B. Landolt	7—9	..	..	..	..	..
189	T Physics	F. B. Landolt	..	7—9.15	..	..	..	..
190	A Inorganic Chemistry	R. H. Jones	..	..	..	..	..	7—9 30

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	S2						
191	A Physical Chemistry	R. H. Jones	..	..	8—9.30	..	..
192	A Organic Chemistry	E. Taylor	..	7—9.30	..	..	..
193	A Inorganic Chemistry	R. H. Jones & F. Jackson..	..	..	7—8	7—9.30	..
	S3						
194	A Organic Chemistry	E. Taylor	..	8—9.30	7—8	..	..
195	A Inorganic Chemistry (Theory)	F. Jackson	..	7—8	..	..	..
196	A Inorganic Chemistry(Practical)	R. H. Jones & F. Jackson..	..	..	..	7—9.30	..
197	A Physical Chemistry	E. Taylor	..	..	8—9.30	..	..
	PHARMACY.						
	S1						
198	A Botany	H. W. Edmunds	7—9	..	..	..	..
199	T Physics	W. H. Edmunds	..	7—9.15	..	..	..
200	A Chemistry	R. H. Jones	..	..	..	..	7—9.30
	S2						
201	ABotany	H. W. Edmunds	7—9	..	..	..	..
202	AOrganic Chemistry, or ..	E. Taylor	..	7—9.30	..	..	..
203	T Physics	H. W. Edmunds	..	7—9.15	..	..	..
204	AInorganic Chemistry (Theory)	R. H. Jones	..	..	7—8	..	..
205	AInorganic Chemistry(Practical)	R. H. Jones & F. Jackson..	..	..	..	7—9.30	..
	S3						
206	AOrganic Chemistry	E. Taylor	..	7—9.30	..	..	..
207	AInorganic Chemistry (Theory)	R. H. Jones	..	..	7—8	..	..
208	AInorganic Chemistry(Practical)	R. H. Jones & F. Jackson..	..	..	..	7—9.30	..

DAY JUNIOR TECHNICAL SCHOOL.

TIME TABLE.

Monday—	9.15—11.15.	11.15—11.30.	11.30—12.30.	1.45—2.45.		2.45—4.45.
1A.	.. Workshop	.. Interval	.. Mathematics	.. Geography		.. Science
1B.	.. Science	.. Interval	.. Mathematics	.. Geography		.. Workshop
	9.15—10.15.	10.15—10.30.	10.30—12.30.	1.45—3.15.	3.15—3.45.	3.45—4.45.
2A.	.. Mathematics	.. Interval	.. Science	.. Mathematics	.. Drill	.. History
2B.	.. Mathematics	.. Interval	.. Geometry	.. Mathematics	.. Drill	.. History
Tuesday—	9.15—10.15.	10.15—10.30.	10.30—12.30.	1.45—2-45.	2.45—4.15.	4.15—4.45.
1A.	.. History	.. Interval	.. Workshop	.. Mathematics	.. Art	.. Drill
1B.	.. History	.. Interval	.. Geometry	.. Mathematics	.. Art	.. Drill
	9.15—11.15.	11.15—11.30.	11.30—12.30.	1.45—3.45.	2.45—4.45	
2A.	.. Geometry	.. Interval	.. Geography	.. Mathematics	.. Mechanics	
2B.	.. Science	.. Interval	.. Geography	.. Mathematics	.. Workshop	
Wednesday	9.15—11.15.	11.15—11.30.	11.30—12.30.	1.45—2.45.		2.45—4.45.
1A.	.. Science	.. Interval	.. English	.. Mathematics		.. Workshop
1B.	.. Workshop	.. Interval	.. English	.. Mathematics		.. Science
	9.15—10.15.	10.15—10.30.	10.30—12.30.	1.45—2.45.	2.45—3.45.	3.45—4.45.
2A.	.. Geography	.. Interval	.. Workshop	.. Mathematics	.. English	.. Art
2B.	.. Geography	.. Interval	.. Mechanics	.. English	.. Mathematics	.. Art
Thursday—	9.15—11.15.	11.15—11.30.	11.30—12.30.	2—4.		
1A.	.. Geometry	.. Interval	.. Mathematics	Games, weather permitting,		
1B.	.. Workshop	.. Interval	.. Mathematics	or Mathematics (2—3).		
	9.15—10.15.	10.15—10.45.	10.45—12.30.			
2A.	.. Mathematics	.. Drill	.. Tech. Drawing			
2B.	.. Mathematics	.. Drill	.. Tech. Drawing	Games, weather permitting, or Workshop (2—3).		
Friday—	9.15—10.15.	10.15—10.30.	10.30—12.30.	1.45—3.15.	3.15—3.45.	3.45—4.45.
1A.	.. English	.. Interval	.. Tech. Drawing	.. Mathematics	.. Drill	.. English
1B.	.. English	.. Interval	.. Tech. Drawing	.. Mathematics	.. Drill	.. English
	9.15—10.15.	10.15—10.30.	10.30—12.30.	1.45—3.45.		3.45—4.45.
2A.	.. English	.. Interval	.. Science	.. Workshop		.. Workshop
2B.	.. English	.. Interval	.. Workshop	.. Science		.. Workshop

DAY JUNIOR TECHNICAL SCHOOL.

TIME TABLE ANALYSIS (FIRST YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
Mathematics ..	E. C. Moyle ; G. E. Hall	11.30–12.30	1.45–2.45	1.45–2.45	11.30–12.30	1.45 3.15
English ..	R. S. Cross ; G. E. Hall ..	....	....	11.30–12.30	....	9.15–10.15 3.45–4.45
History ..	R. S. Cross	....	9.15–10.15	....	....	....
Geography ..	F. W. Jackson	1.45–2.45	....	....	....	....
Science	E. M. Pearson	2.45–4.45 (A) 9.15–11.15 (B)	....	9.15–11.15 (A) 2.45–4.45(B)	....	....
Workshop ..	J. H. Hulse	9.15–11.15 (A) 3.0–5.0 (B)	10.30–12.30 (A)	2.45–4.45 (A) 9.15–11.15 (B)	.... 9.15–11.15 (B)	....
Geometry ..	G. E. Hall	....	10.30–12.30 (B)	....	9.15–11.15 (A)	....
Technical Drawing ..	J. H. Binfield ; E. M. Pearson ..	....	....	....	....	10.30–12.30
Art	G. Clucas	....	2.45–4.15	....	....	....
Drill & Games ..	E. H. Trinder	....	4.15–4.45	....	2.0–4.0	3.15–3.45
Intervals ..		11.15–11.30	10.15–10.30	11.15–11.30	11.15–11.30	10.15–10.30 ....

DAY JUNIOR TECHNICAL SCHOOL.

(SECOND YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
Mathematics ..	E. C. Moyle ; G. E. Hall ; J. H. Binfield ; F. W. Walker ..	9.15–10.15 1.45–3.15	1.45–2.45	1.45–2.45 (A) 2.45–3.45 (B)	9.15–10.15	....
English ..	J. T. Nickeas	....	....	2.45–3.45 (A) 1.45–2.45 (B)	....	9.15–10.15 ....
History ..	R. S. Cross	3.45–4.45	....	....	....	....
Geography ..	F. W. Jackson	....	11.30–12.30	9.15–10.15	....	....
Science	A. Woods	10.30–12.30 (A)	9.15–11.15 (B)	2.45–4.45	....	10.30–12.30 (A) 1.45–3.45 (B)
Applied Mechs. .	F. W. Walker	....	2.45–4.45 (A)	10.30–12.30 (B)	....	....
Workshop ..	J. H. Hulse	....	2.45–4.45 (B)	10.30–12.30 (A)	....	1.45–3.45 (A) 10.30–12.30 (B) 3.45–4.45
Geometry ..	J. H. Binfield	10.30–12.30 (B)	9.15–11.15 (A)	....	....	....
Tech. Drawing	J. H. Binfield	....	....	....	10.45–12.30	....
Art	G. Clucas	....	....	3.45– 4.45	....	....
Drill & Games ..	E. H. Trinder	3.15–4.15	....	....	10.15–10.45 2.0–4.0	....
Intervals ..		10.15–10.30	11.15–11.30	10.15–10.30	....	10.15–10.30

DAY JUNIOR COMMERCIAL SCHOOL.

TIME TABLE.

Monday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—2.45.	2.45—3.45.	3.45—4.15
1A.	English	French	Interval	History	Arithmetic	Com. Corr.	Drill
1B.	French	English	Interval	History	Shorthand	Typing	Drill
2A.	Shorthand	Mathematics	Interval	English	History	Geography	
2B.	Shorthand	Mathematics	Interval	English	History	Geography	

Tuesday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—2.45.	2.45—3.45.	3.45—4.15
1A.	Geography	Mathematics	Interval	French	Shorthand	English	
1B.	Geography	Mathematics	Interval	Shorthand	Arithmetic	English	
2A.	Shorthand	Book-keeping	Interval	Mathematics	Typing	Com. Corr.	Drill
2B.	Typing	Book-keeping	Interval	Mathematics	Com. Corr.	Typing	Drill

Wednesday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—3.45.
1A.	Typing	Shorthand	Interval	Arithmetic	Games or Preparation
1B.	Com. Corr.	French	Interval	Arithmetic	Games or Preparation
2A.	Arithmetic	English	Interval	French	Games or Preparation
2B.	Arithmetic	English	Interval	French	Games or Preparation

Thursday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—2.45.	2.45—3.45.
1A.	Mathematics	History	Interval	Arithmetic	Shorthand	French
1B.	Mathematics	History	Interval	Arithmetic	French	Shorthand
2A.	Shorthand	Arithmetic	Interval	French	Book-keeping	Book-keeping
2B.	Shorthand	Arithmetic	Interval	French	Book-keeping	Book-keeping

Friday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—2.45.	2.45—3.45.
1A.	Shorthand	Accounts	Interval	Commerce	Drawing	English
1B.	Shorthand	Accounts	Interval	Commerce	Drawing	English
2A.	Arithmetic	Commerce	Interval	French	English	Drawing
2B.	Arithmetic	Commerce	Interval	French	English	Drawing

DAY JUNIOR COMMERCIAL SCHOOL.

TIME TABLE ANALYSIS (FIRST YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
English ..	A. D. Trafford	9.15–10.15 (A) 10.15–11.0 (B)	2.45–3.45	....	....	2.45–3.45 ....
French	J. Nickeas	9.15–10.15 (B) 10.15–11.0 (A)	11.15–12.15(A)	10.15–11.0 (B)	2.45–3.45 (A) (1.45–2.45 (B)	....
History ..	R. S. Cross	11.15–12.15	....	....	10.15–11.0	....
Geography ..	A. D. Trafford	....	9.15–10.15	....	....	....
Com. Corr. ..	R. S. Cross	2.45–3.45 (A)	....	9.15–10.15 (B)	....	....
Commerce ..	R. S. Cross	....	....	....	....	11.15–12.15
Arithmetic ..	A. D. Trafford	1.45–2.45	....	11.15–12.15	11.15–12.15	....
Mathematics ..	R. S. Cross	....	10.15–11.0	....	9.15–10.15	....
Accounts ..	A. D. Trafford	....	....	....	....	10.15–11.0
Typewriting ..	J. Jones	2.45–3.45 (B)	....	10.15–11.0 (A)	....	....
Shorthand ..	J. Jones	....	1.45–2.45 (A) 11.15–12.15 (B)	10.15–11.0 (A)	1.45–2.45 (A) 2.45–3.45 (B)	9.15–10.15
Drawing ..	G. A. Clucas	....	....	....	....	1.45–2.45
Drill & Games ..	A. D. Trafford	3.45–4.15	....	1.45–3.45	....	....
Intervals ..		11–11.15	11–11.15	11–11.15	11–11.15	11–11.15

DAY JUNIOR COMMERCIAL SCHOOL.

(SECOND YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
English ..	A. D. Trafford	11.15-12.15	....	10.15-11.0	....	1.45-2.45
French	J. Nickeas..	....	....	11.15-12.15	11.15-12.15	11.15-12.15
History ..	R. S. Cross	1.45-2.45	....	....	....	....
Geography ..	A. D. Trafford	2.45-3.45	....	....	....	....
Com. Corr. ..	R. S. Cross	....	2.45-3.45 (A) 1.45-2.45 (B)	....	....	....
Commerce ..	R. S. Cross	....	....	....	....	10.15-11.0
Arithmetic ..	A. D. Trafford	....	....	9.15-10.15	10.15-11.0	9.15-10.15
Mathematics ..	R. S. Cross	10.15-11.0	11.15-12.15	....	....	....
Book-keeping ..	W. Webster	....	10.15-11.0	....	1.45-3.45	....
Typewriting ..	W. Webster	....	1.45-2.45 (A) 9.15-10.15 (B)	....	....	....
Shorthand ..	W. Webster	9.15-10.15	9.15-10.15 (A)	....	9.15-10.15	....
Drawing ..	G. A. Clucas	....	....	....	....	2.45-3.45
Drill & Games ..	A. D. Trafford	....	3.45-4.15	1.45-3.45	....	....
Intervals ..		11-11.15	11-11.15	11-11.15	11-11.15	11-11.15

ART SCHOOL.

Day.	Room.	Times of Classes.	Subjects.	Teachers.
Monday ..	1	10.0—12.30	Perspective, General Drawing, Lettering	G. A. Clucas
	3 and 4	2.30—4.30	Painting Still Life, Drawing Antique, Etching, Woodcuts, &c.	W. Rathbone
	3	2.30—4.30	Design, General Drawing	& G. A. Clucas
	2	7.0—9.0	Industrial Art Drawing (Lettering, Nature, &c.)	G. A. Clucas & C. Reed.
	3	7.0—9.0	Drawing Antique and Still Life, Illustrations	W. Rathbone
		7.0—9.0	Elementary Teachers Class	& M. Duckett.
	4	7.0—9.0	Drawing from Life	W. Rathbone.
Tuesday ..	Harris Museum ..	10.0—12.30	Nature Study, Drawing Antique and Animals	G. A. Clucas
	Reference Library	10.0—12.30	History and Methods of Art	G. A. Clucas.
	2	10.0—12.30	Crafts—Decoration applied to objects, Decorative Painting Lino Cuts, Stencilling	W. Rathbone
	2	2.30—4.30	Crafts—Decoration applied to objects, Decorative Painting Lino Cuts, Stencilling	W. Rathbone.
	2	2.30—4.30	General Drawing and Design	W. Rathbone.
	1	7.0—9.0	Textile Design, 4th year *	W. Garnar.
	2	7.0—9.0	Design (Industrial Students)	G. A. Clucas & C. Reed.
	3	7.0—9.0	Painting Still Life, Illustration and General Drawing ..	W. Rathbone &
		7.0—9.0	Decoration applied to objects, Lino Cuts, Stencilling	.. B. Eckersley
	4	7.0—9.0	Design for Crafts and Teachers	M. Duckett.
Wednesday..	2	9.30—10.0	General knowledge and Principles of Art	W. Rathbone
	3	10.0—12.30	Design, Nature Drawing and General Drawing	G. A. Clucas
	5	10.0—12.30	Modelling and Plaster Casting	W. Rathbone
	2	2.30—4.30	Practice or Games	W. Rathbone.
	3	.. ..	Crafts—Leatherwork, Embroidery, Batik, Basketry ..	M. Duckett.
	3	.. ..	General Drawing—Painting Still Life	W. Rathbone
	1	7.0—9.0	Textile Design, 2nd and 3rd years*	S. A. Horsley
	2	7.0—9.0	Junior Course—Crafts	B. Eckersley
	3	7.0—9.0	Stencilling, Leaded Glass, Etching and General Work ..	G. A. Clucas
	5	7.0—9.0	Modelling and Casting, Plaster and Wood Carving,	W. Rathbone
	3	7.0—9.0	Leatherwork, Basketry, Raffia	M. Duckett
	6	7.0—7.30	Painting and Decorating (Theoretical)*	F. W. Sharples
	6	7.30—9.0	Painting and Decorating (Practical)*	F. W. Sharples

DAY.	ROOM.	TIMES OF CLASSES.	SUBJECTS.	TEACHERS.
Thursday ..	1	10.0—12.30	Anatomy	G. A. Clucas
	3	10.30-12.30	Painting Still Life	W. Rathbone
	3	2.30—4.30	Painting Still Life, Illustration, Posters, &c.	W. Rathbone
	2	7.0—9.0	1st and 2nd year Junior Drawing (Design & Colour) ..	C. Reed
	3	7.0—9.0	Decoration applied to objects, Illustration, Teachers' Class Lino Cuts	W. Rathbone & B. Eckersley.
	4	7.0—9.0	Drawing from Life	W. Rathbone.
Friday ..	1	10.0—12.30	Architecture, Design	G. A. Clucas
	2	10.0—12.30	Object and Memory Drawing, Illustration	W. Rathbone
	4	10.0—12.30	Drawing from Life	W. Rathbone
	3	2.30—4.30	Crafts—Embroidery, Leatherwork, Basketry	M. Duckett
	4	2.30—4.30	Drawing from Life	W. Rathbone
	2	2.30—4.30	Memory Drawing—Illustration	W. Rathbone
	1	7.0—9.0	Textile Design—1st year*	W. Garner S. A. Horsley
	2	7.0—9.0	Architecture—Practice .. ..*	G. A. Clucas
	3	7.0—9.0	Crafts—Batik, Raffia, Embroidery	M. Duckett
	C.	....	English and Arithmetic, 1st and 2nd years Junior Art* ..	F. Allen
	6	7.0—7.30	Painting & Decorating (Theoretical)*	F. W. Sharples.
	6	7.30—9.0	Painting & Decorating (Practical)*	F. W. Sharples.

* These Classes will terminate after the Easter Examination.

HARRIS INSTITUTE, PRESTON

CLASSES AFFILIATED TO MANCHESTER AND LIVERPOOL UNIVERSITIES.

These provide complete Courses of Instruction for the Joint Matriculation of the Northern Universities; the Intermediate B.Sc. and Intermediate B.Sc. (Tech.), Manchester; the Intermediate B.Sc., Liverpool; the Intermediate Examinations of the University of London; and the various Preliminaty Professional Examinations, including Medical, Dental, and Pharmaceutical.

DAY CLASSES.

ART.
AGRICULTURE.
PART TIME DAY ENGINEERING COURSES.
PART TIME DAY COMMERCIAL SCHOOL.
DAY JUNIOR TECHNICAL AND COMMERCIAL SCHOOLS.
MATRICULATION AND INTERMEDIATE SCIENCE.
DENTAL & PHARMACEUTICAL COURSES.
PART TIME TEXTILE CLASSES.

EVENING CLASSES.

ART.
SCIENCE AND MISCELLANEOUS.
ORGANISED COURSES.
BUILDING TRADES.
COMMERCIAL.

COTTON SPINNING. COTTON WEAVING.
MECHANICAL ENGINEERING. SCIENCE.
PHYSICS AND ELECTRICAL ENGINEERING.

All communications to be addressed to—

T. R. JOLLY,
Principal and Secretary.

August, 1928.

Whitehead PRINTER, PRESTON

HARRIS INSTITUTE, PRESTON

PROSPECTUS
of
CLASSES

SESSION — 1929-30

A—LOCAL COLLEGE

1. TECHNICAL DAY CLASSES. Re-open Sept.23
3. EVENING CLASSES ... ... „ „ 23
2. JUNIOR DAY SCHOOLS ... „ „ 10
(*Technical and Commercial*)

B—ART SCHOOL

1. DAY CLASSES ... ... Re-open Sept. 23
2. EVENING CLASSES ... ... „ „ 23



SPECIAL NOTICE—Evening Students will be enrolled at the Technical College, Corporation Street, from 7 to 9 p.m. on Wednesday and Thursday evenings, September 18th and 19th.

Students who do not enrol on these dates will be charged an extra fee of 2/6. This will be strictly enforced

PRICE TWOPENCE .... *Per Post* 3d.

HARRIS INSTITUTE, PRESTON

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1929 - 30.

HARRIS INSTITUTE, PRESTON.

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Retained in Consultative Capacity: Mr. T. R. Jolly, J.P.

Principal:

Mr. E. C. Moyle.

STAFF

Principal :—E. C. MOYLE, A.R.C.Sc. (Lond.),

ART SCHOOL

Headmaster :—W. RATHBONE, A.R.M.S., A.M.C.

Second Master :—G. A. CLUCAS, A.C.T.C., B. of E. Painting and Drawing Cert.

Assistant Teacher :—MISS M. DUCKETT, C. & G. (Emb.), A.C.T.C.

Student Teachers :—MISS B. ECKERSLEY ; MISS H. MANGAN.

Assistants for Evening Classes :—

W. GARNAR ; S. A. HORSLEY (Textile Design).
F. W. SHARPLES (Painting and Decorating).
F. ALLEN (Cert.) Junior Course.

BUILDING TRADES DEPARTMENT.

Head :—E. M. PEARSON, A.R.S.I., A.M.I.Struct.E.

Lecturers for Evening Classes.

H. ALLEN	G. H. BROADBENT, SENR.
F. CAMPEY	H. HOWARTH
T. CROFT	J. T. HIGGINSON
W. TAYLOR	J. N. WALKER.

Lecturer in Plumbing Subjects :—J. DIXON.

CHEMISTRY AND PHARMACY DEPARTMENT.

Head :—R. H. JONES, M.Sc., A.I.C.
Lecturer in Chemistry.—E. TAYLOR, M.Sc.
Lecturer in Natural Science :—H. W. EDMUNDS, B.Sc.
Lecturer for Evening Classes :—F. JACKSON, B.Sc.
Lecturer in Physics: F. B. LANDOLT, B.Sc.

COMMERCIAL DEPARTMENT AND DAY JUNIOR COMMERCIAL SCHOOL.

Head :—F. W. Jackson, B.A., L.C.P.

Assistant Teachers for Junior Commercial School :

Miss R. S. Cross, Cert. ; Miss A. Ellison, Cert. Inter B.A.
Miss J. Jones, P.C.T. ; Mrs. J. Nickeas, Cert.

Lecturer in Commercial Subjects :—W. Webster, B.Sc. (Amer.).

Lecturers for Evening Classes :

J. Appleby
H. Catterall, F.C.I.S.
G. R. Drysdale, F.C.C.S.
A. Hargreaves
J. Hilton
E. Singleton, Cert.
W. R. White
Miss P. Bridge, A.L.A.A.
J. Donaldson, A.S.A.A.
H. W. Hughes, F.Ins.S.T.
W. Hanson
N. Hindley, A.C.A.
H. C. Pye
F. R. Snalam, Cert.

ENGINEERING DEPARTMENTS AND DAY JUNIOR TECHNICAL SCHOOL.

Head :—The Principal.

Lecturers in Mechanical Engineering :—

J. H. Binfield, Wh.Ex. ; F. W. Walker, A.M.C.T. ;
G. E. Hall, B.Sc.

Chief Lecturer in Electrical Engineering :—A. Woods, Hons. C. & G.

*Lecturer in Physics :*F. B. Landolt, B.Sc.

Handicraft Teacher :—J. H. Hulse, Inter.B.Sc.

Practical Engineer :—J. Jenkins. *Electrical Mechanic :* O. Jones.

Lecturers for Evening Classes :—

F. Callow
G. Pimley
J. Walmsley
H. Venning, Inter.B.Sc.
R. H. Wignall
C. C. Wade, A.M.I.E.E.

M. Lavery (Motor Body Building) ; W. E. Bamber.

TEXTILE DEPARTMENT.

Head :—D. Atkinson, F.T.I.

Lecturers and Assistants for Evening Classes :—

Jno. E. Adamson, F.T.I.
R. Chatburn
J. Rathbone
J. Martin
W. Jackson
J. J. Blackhurst
P. Addison
J. H. Harrison
S. Jackson
J. Preston
T. S. Taylor
H. Richmond

Instructor :—E. Blinkhorn.

TYPOGRAPHY. *Lecturer :*—E. Jones.

ADMINISTRATION.

Chief Clerk :—W. A. Dawson. *Assistant Clerk :*—H. R. Walsh.
Junior Clerks :—J. A. Gorton, E. Shimell.

REGULATIONS—

APPLICABLE TO ALL STUDENTS ATTENDING CLASSES AT THE . . . HARRIS INSTITUTE. . . .

Students are expected to attend punctually at the Classes for which they enrol.

All students are expected to take an examination at the end of the course in those subjects for which they enrolled at the opening of the Session.

Smoking within the School buildings is strictly prohibited: and Students must not loiter about the corridors.

The Lecturers are authorised to report periodically through the Principal, on attendance, homework and conduct of each Student.

The Council shall have power in dealing with Students who are unsatisfactory in these and other respects, to remove their names from the Register without return of fee.

SCHOLARSHIPS AND PRIZES.

A limited number of Scholarships and Prizes will be awarded at the discretion of the Council.

Prizes are also awarded by the Preston Building Trades Employers' Association, the Preston and District Engineers and Iron-founders Employers' Association, and the North Lancashire Master Cotton Spinners and Manufacturers' Association.

DAY CLASSES



TECHNICAL DAY CLASSES.

COURSES :—

1. Matriculation.
2. Intermediate B.Sc.
3. Preliminary Professional
   - (*a*) Pharmacy.
   - (*b*) Dental.
   - (*c*) Dispensers.
4. Commercial Subjects.
5. Engineering (Mechanical and Electrical).
6. Textile (Cotton Spinning and Weaving).

Classes begin on Monday, September 23rd, 1929.

Autumn Term :—23rd September, 1929—20th December, 1929.

Spring Term :—6th January, 1930—17th April, 1930.

Summer Term :—28th April, 1930—4th July, 1930.

VACATIONS.

The Technical Day Classes will be closed :—

For the Christmas Vacation, from 21st December, 1929, to 3rd January, 1930.

For the Easter Vacation from 18th April to 26th April, 1930.

For the Whitsuntide Vacation from 7th June to 14th June, 1930.
In each case the dates are inclusive.

ENROLMENT.

Students can enrol at the Technical College on Wednesday and Thursday evenings, September 18th and 19th, from 7 to 9 p.m., or at the Avenham Institute or Technical College on any day after the classes begin.

TECHNICAL DAY CLASSES.

COURSE I.

MATRICULATION.

Northern Universities and University of London.

Time Table :—See page 38.

Classes 1 to 7.

FEE. £3 10s. 0d. per subject, or
£15 15s. 0d. for the full course.

COURSE 2.

INTERMEDIATE B.Sc.

Northern Universities and University of London.

NOTE.—Affiliation with the Universities of Manchester and Liverpool.

The Institute is affiliated to the Universities of Manchester and Liverpool, and recognised as a privileged Institution under their Ordinances, to the extent that the attendance in the courses in Physics, Mathematics and Chemistry at the Institute is accepted as satisfying the attendance for the Intermediate B.Sc. Courses.

Time Table :—See page 38.

Classes 8 to 10.

Fee : £3 10s. 0d. per subject.

COURSE 3.

PRELIMINARY PROFESSIONAL.

(a) PHARMACY.

PHARMACEUTICAL SOCIETY'S EXAMINATION. PART I.

The Institute is recognised by the Pharmaceutical Society for instruction in the subjects of Part I. Examination, viz. :—Chemistry, Physics and Botany.

SPECIAL NOTE.—The Pharmaceutical Society of Great Britain require that candidates must register with them as Pharmaceutical Students before beginning any portion of their curriculum of studies.

All Students must produce evidence of such registration.

Time Table :—See page 39.
Classes 11 to 16.
Fee : £9 10s. 0d. for the course, or
£3 10s. 0d. per subject.

(b) DENTAL L.D.S., Part 1.
(London, Manchester, Liverpool and Edinburgh).

CHEMISTRY AND PHYSICS.

Time Table : See page 39.
Classes 11 to 14.
Fee : £3 10s. per subject.

(c) DISPENSERS EXAMINATION.

CHEMISTRY ONLY.

Organic Chemistry can only be taken by Students who have the requisite knowledge of Inorganic Chemistry.

Time Table : See page 39.
Classes 11 to 13.
Fee : £3 10s. 0d. per subject.

COURSE 4.

COMMERCIAL SUBJECTS.

Time Table : See page 39.
Classes 17 to 21.
Fees: £1 per subject per term, or £2 10s. per term for the course.

COURSE 5.

ENGINEERING (Part Time Day).

National Certificate Courses in Mechanical and Electrical Engineering.

NOTE.—In the first two years, Mechanical and Electrical Students will take the same course, and all students must attend on one evening per week in order to complete the course and qualify for the National Certificate Examinations.

For general regulations and conditions of admission, see under Evening Classes.

Time Table : See pages 39 and 40.

Classes 22 to 36.

Fee : £2 2s. 0d. per session.

COURSE 6.

TEXTILE (Part Time, Day).

A part time course in Cotton Spinning, Weaving and Designing, suitable for students who desire a good general knowledge of the principles and processes involved in the making and selling of cotton and artificial silk fabrics.

The classes shown in the Time Table are held in the mornings of each day, but arrangements, where necessary, may be made for tuition in the ancillary subjects in afternoon or evening classes.

Time Table :—See page 40.

Classes 37—45.

Fee : £1 1s. 0d. per class for the session.

Evening Classes



EVENING CLASSES.

The Courses in the Evening Classes proceed by progressive stages, thus :—

(1) A Three-Year's Course (Senior).
(2) A further Two-Year's Course (Advanced).

TECHNICAL COURSES.

7.—MECHANICAL ENGINEERING (National Certificate).
8.—ELECTRICAL ENGINEERING (National Certificate).
9.—BUILDING TRADES.
10.—MOTOR BODY BUILDING.
11.—COTTON SPINNING.
12.—COTTON WEAVING.
13.—CHEMICAL TRADES (National Certificate).
14.—PHARMACY.

COMMERCIAL COURSES.

15.—GENERAL COMMERCIAL.
16.—SHORTHAND CLERKS.

MISCELLANEOUS, SCIENCE, LANGUAGES, Etc.

Physics, Chemistry, Mathematics, Latin, English, French, Spanish, Economics, Geography, Typography.

ENROLMENT.

Students will be enrolled at the Technical College on Wednesday and Thursday evenings, September 18th and 19th, from 7 to 9 p.m.

Classes begin on Monday, September 23rd, 1929.

VACATIONS.

The College will be closed for the Christmas vacation from December 21st to January 3rd.

The dates in each case are inclusive.

EVENING CLASSES.

GENERAL REGULATIONS.

CONDITIONS OF ADMISSION.

Before admission a Student must

(a) have passed the Preliminary Technical or Commercial Course, or

(b) have attended the two year's course at a Day Junior Technical or Commercial School, or

(c) have attended a Secondary School to the age of 16 years, or

(d) produce evidence of attainments equivalent to that of the Junior Technical or Commercial Course, or

(e) pass the Entrance Examination to be held at the Technical College on Friday, 20th September, 1929.

Exceptions to the above conditions may only be made where students are over 16 years of age, in which case such students must satisfy the Principal of the Institute that they are able to benefit by the classes to which they seek admission.

Students under 16 years of age who fail to satisfy the conditions of admission should attend the Evening Junior Courses (Technical or Commercial), conducted by the Preston Education Committee in Evening Continuation Schools. These junior courses link up the work of the Elementary school with the Evening classes of the Institute.

Full particulars may be obtained from The Director of Education, Education Offices, Lancaster Road, Preston.

Scholars leaving the Elementary Day Schools should join an Evening Continuation School immediately, in order to qualify for admission to the Harris Institute as soon as possible.

PROMOTION TO HIGHER YEARS.

To qualify for certificates, and to pass on to the higher years of a course, it is necessary that Students should :—

(a) reach a certain standard of attainments, tested by examinations, held at the end of the Session, and

(b) have made satisfactory progress during the Session, based on records of attendance, homework, classwork, etc.

FEES FOR SESSION.

All fees are payable in advance, and are not returnable.

	£	s.	d.
Single subjects	0	15	0
Any Complete Course : Building, Chemistry, *Commercial, Electrical Engineering, Mechanical Engineering, Pharmacy or Textile	1	0	0
School of Art, Evening Classes	1	0	0

*If Typewriting is included in a Commercial Course, an additional fee of 5s. will be charged.

N.B.—Students who do not enrol on the dates given will be charged an additional fee of 2s. 6d. This rule will be strictly enforced.

The Council reserve the right to discontinue any Class in the event of a small number joining.

Students who desire to take the Examinations of the Union of Lancashire and Cheshire Institutes, or the City and Guilds of London Institute, may be called upon to pay the whole or a portion of the Examination Fees.

COURSE 7.

MECHANICAL ENGINEERING.

NATIONAL CERTIFICATE COURSES.

AWARD OF LOWER AND HIGHER CERTIFICATES.

The Institution of Mechanical Engineers, in conjunction with the Board of Education, has approved of the grouped courses of instruction for the award of certificates at the end of—

(1) A Three Years' Course (Senior).
(2) A further Two Years' Course (Advanced).

Students who have completed the course in the Day Junior Technical School, may be admitted to the Second Year of the Senior Course.

ADVANCED COURSE.

Students must have passed the Senior Course, or produce evidence of equivalent attainments.

CONDITIONS OF AWARD OF CERTIFICATE.

In order to obtain a certificate a candidate must make not less than 70 per cent. of the possible attendances in each year of the course, and must obtain :—

(1) Not less than 40 per cent. of the possible marks in EACH subject in the examination held at the end of each year.
(2) Not less than 40 per cent. of the possible marks obtainable in EACH year for homework, class work, laboratory work, etc., taken separately, in EACH subject for which such marks are to be awarded.
(3) Not less than 50 per cent. of the grand total of marks obtainable in EACH year. Of this total the possible marks in the examinations constitute 70 per cent., and the remaining 30 per cent. will be the possible marks for home work, class work, laboratory work, etc., in each year.

A " Distinction " may be awarded to any candidate qualified to receive a certificate who gains not less than 85 per cent. of the possible marks in the Final Examination in any subject, and his certificate may be specially endorsed with the name or names of the subjects in which he has thus distinguished himself.

Fee to be paid by each Student entering the Final Examination, Five Shillings.

NOTE.—Holders of the National Certificates in Mechanical Engineering, who became candidates for Election as Students, Graduates, or Associate Members of the Institute of Mechanical Engineers, and are able to satisfy the Council of their eligibility under the by-laws for one of these classes in respect of occupation and practical training, will be exempted from certain subjects in the Examinations for election as students and associate members.

Particulars relating to these exemptions may be obtained from the Head of the Department.

Time Table :—See page 41. Classes 46 to 60.

COURSE 8.

ELECTRICAL ENGINEERING.

The Institution of Electrical Engineers, in conjunction with the Board of Education, has approved of the grouped courses of instruction for the award of Certificates at the end of—

(1) A Three Years' Course (Senior).

(2) A further Two Years' Course (Advanced).

Students who have completed the course in the Day Junior Technical School may be admitted to the Second Year of the Senior Course.

ADVANCED COURSE.

Students must have passed the Senior Course or produce evidence of equivalent attainments.

Students are expected to sit at the Examinations held by the Union of Lancashire and Cheshire Institutes in the Subjects of the Course, and to pay their own examination fees.

The conditions of award of Certificate are as set out in the Mechanical Engineering Courses, and Exemptions are granted by the Institution of Electrical Engineers to candidates for election as students or associate members to holders of National Certificates.

Time Table :—See pages 41 and 42.

Classes 61 to 75.

See Course 5. for Part Time Day Classes in Mechanical and Electrical Engineering.

COURSE 9.

BUILDING TRADES.

Students who have obtained a First-Class leaving Certificate in the Day Junior Technical School may be admitted to the Second Year of the Senior Course.

Students taking the Third Year of the Senior Course will take the Third Year Building Trades Course Examinations of the Union of Lancashire and Cheshire Institutes, the fee for this examination to be paid by the student. First and Second Year students will be examined, and successful students will proceed to the next year of the Course, on the results of school examinations held at the close of the evening session.

ADVANCED COURSE.

Students must have passed the Third Year Building Trades Course of the Union of Lancashire and Cheshire Institutes, or produce evidence of equivalent attainments.

NOTE.—Students who desire to qualify for attendance at the Advanced Course Examinations must take Building Construction in the Third Year (S3) Course, and at least one from :—

Building Science
Geometry
Mathematics

and, if necessary, one other subject from :—

Builders Quantities
Carpentry and Joinery
Brickwork and Concreting.

Students who do not wish to proceed to an Advanced Course may choose any three subjects from the above.

The following subjects may be omitted in the Third Year (S. 3.), and taken in the Fourth Year (A. 1).

Builders' Quantities or
Mathematics.

Those students who take Builders' Quantities in the Fourth Year, must take Builders' Quantities and pricing in the Fifth Year.

Those students who take Mathematics in the Fourth Year (A. 1), must take Structural Engineering as one subject of the Course.

ADVANCED COURSE.

Fourth Year (A.1).

Building Construction and two other subjects selected from the following,—

Practice Class.

Builders Quantities

Carpentry and Joinery

*Structural Work, or Building Equipment including Sanitation.

Architecture

*Classes will be held if sufficient Students enrol.

Fifth Year (A. 2).

As for Fourth Year (A. 1).

Time Table :—See pages 42 and 43.
Classes 76 to 94.

PLUMBING COURSE.

Time Table :—See page 43.

Classes 95 to 100.

COURSE 10.

MOTOR BODY BUILDING.

The classes in Motor Body Building and Technical Drawing are intended to prepare students for the City and Guilds of London Institute Examinations, in either Motor Car Body Work and Road Carriage Building or Commercial Motor Body Building.

Conditions on which certificates are awarded by this Examining Body are set out in the Programme of the City and Guilds of London Institute which students should consult.

Students will pay their own Examination Fees.

Time Table :—Page 43.

Classes101 to 103.

TYPOGRAPHY.

Time Table :—Page 48.

Classes 211 to 212.

The Classes in Typography prepare students for the City and Guilds of London Institute Examinations. For full syllabus see the Programme of the City and Guilds of London Institute.

TEXTILE DEPARTMENT.

Students may take either the Cotton Spinning or the Cotton Weaving Course.

Senior Students are expected to sit at the examinations conducted by the Union of Lancashire and Cheshire Institutes, and qualify for a certificate endorsed by the Board of Education.

Advanced Students take the examinations of the City and Guilds of London Institute, and should obtain a Full Technological Certificate.

Students should specially note that the Sessional Records (Homework and Classwork marks), together with attendance percentage, are taken into account by the Examining bodies.

Students pay their own Examination Fees.

COURSE 11.—**COTTON SPINNING.**

Time Table :—Page 44.

Classes 104 to 121.

COURSE 12.—**COTTON WEAVING.**

Time Table :—Page 45.

Classes 122 to 141.

In the Third Year Senior Course (S3), weaving students may attend either Textile Mechanics or Chemistry.

In the Second Year Advanced Course (A2), weaving students may attend the class in Textile Engineering, or Economics of the Textile Industry, or both.

CHEMISTRY AND PHARMACY DEPARTMENT.

COURSE 13.—CHEMICAL TRADES.

NATIONAL CERTIFICATE COURSE.

AWARD OF NATIONAL CERTIFICATE.

A Lower Certificate is awarded by the Institute of Chemistry in conjunction with the Board of Education on the satisfactory completion of a Three Years' Senior Course. The conditions are somewhat similar to those set out under Engineering.

Time Table :—Pages 47 and 48.
Classes 200 to 210.

COURSE 14.—PHARMACY.

Time Table :—Page 48. Classes 200 to 207.

COMMERCIAL COURSES.

Commercial Courses are as follows :—

(a) General Course ... ... Course ...15.
(b) Course for Shorthand Clerks... Course ...16.

All Courses are now open to both males and females. In the First and Second Years each Course consists of **four** subjects. Third Year Courses consist of three subjects.

In each Course (except the special ones specified later, which do not qualify for a Grouped Course Certificate), one or more subjects are obligatory ; others are generally optional.

From the latter subjects students may select the required number to make up their Course.

Before selecting a Course, students should **consult both the time-table printed** (on pages 46 & 47), **and the tutors** who will be present to enrol on September 18th and September 19th, 1929.

A student taking a course may, so far as his attainments and the time-table permit, sit in a class and enter for an examination of a higher year than the remaining subjects of his course.....Transfers from one class to another are not permitted after the first two weeks of the session. The detailed syllabuses of examinations in the subjects will be posted up in the Technical College, on the enrolment nights, September 18th, and September 19th, or may be found complete in the Prospectus of the Lancashire and Cheshire Institutes, price 1s. 6d. at any bookseller's.

Students are expected to take the Examinations of the Union of Lancashire and Cheshire Institutes, and to pay the examination fees.

COMMERCIAL COURSES—Advanced.

If a sufficient number of students enrol, classes will be formed in the following Subjects, according to Syllabus on pages 279 to 298 in the Prospectus of the Union of Lancashire and Cheshire Institutes :

1.—A Modern Language.
2.—Accountancy and Auditing.
3.—Company Law.
4.—Mercantile Law.
5.—Banking and Currency.

COURSE 15.

GENERAL COURSE.

First Year (S1).

General Course. (Four Subjects) :—

Obligatory : Commerce.

Optional : **Three** of the following Subjects :—

Commercial Arithmetic.
English and Commercial Correspondence.
Geography.
Book-keeping.
Shorthand
French.
Spanish.
Typewriting.
Cotton Spinning.
Cotton Weaving.

Second Year (S2).

General Course. (Four Subjects) :—

Obligatory : Commerce.

Optional : **Three** of the following Subjects :—

Commercial Arithmetic.
English and Commercial Correspondence.
Geography.
Book-keeping.
Shorthand (minimum of 60 words per minute).
French.
Spanish.
Typewriting.
Cotton Spinning.
Cotton Weaving.

Third Year S3).

General Course. (Three Subjects) :—

Obligatory : Commerce.

Optional : Any two of the following :—

Book-keeping and Accountancy.
Arithmetic.
English Literature.
Shorthand (minimum of 80 words per minute).
A Modern Language.

COURSE 16.

COURSE FOR SHORTHAND CLERKS.

First Year (S1).

Course for Shorthand Clerks. (Four Subjects) :—

Obligatory : Shorthand.
English and Commercial Correspondence.

Optional : Any Two of the following :—
Commercial Arithmetic
Book-keeping.
Typewriting.

Second Year (S2).

Course for Shorthand Clerks. (Four Subjects) :—

Obligatory : Shorthand.
English and Commercial Correspondence.

Optional : Any two of the following :—
Commerce (2nd Year Syllabus).*
Book-keeping (1st or 2nd Year Syllabus).*
Commercial Arithmetic.
Typewriting.

Third Year (S3).

Course for Shorthand Clerks. (Four Subjects) :—

Obligatory : Shorthand.
Commerce (2nd or 3rd Year Syllabus).*

Optional : Any two of the following :—
English and Commercial Correspondence, or
English Langusge and Literature (if sufficient enrol).
Book-keeping (2nd Year Syllabus), or*
Book-keeping and Accountancy.
Commercial Arithmetic.
Typewriting.

*If in the Second or Third Year Course, any subject chosen has been taken in a previous year, the next higher stage must be taken.

TIME-TABLE OF COMMERCIAL CLASSES.

See pages 46 and 47.

Classes 142 to 188.

Students should note carefully the buildings in which the classes are held.

NOTE.— FIRST YEAR.

All females taking Arithmetic attend class 144 or 145.

All males taking Arithmetic (except such as also take Geography) attend class 142 or 143.

Males taking both Arithmetic and Geography attend classes 144 or 145 and 165.

The classes in Shorthand are held in the same building as the Arithmetic classes.

In Shorthand, students who have previously done nothing may find it advisable during the first session to work for a local examination They should consult their tutors on the matter. The second year classes consist of :—A. Theory and Speed to 60 words per minute ; B. Speed from 60 to 70 words. Students who can do 70 words per minute should join the 3rd year.

In Typewriting, 1st and 2nd year students must consult the tutor on enrolment night as to which hour is available.

NOTE—That the Shorthand Theory Class for **beginners** does not prepare for the U.L.C.I. Examination in Shorthand Advanced Theory which is necessary for Group Course Candidates who wish to secure Scholarships.

PART TIME DAY CLASSES IN COMMERCIAL SUBJECTS.

Part Time Day classes have been formed for persons over 16 years of age desirous of instruction in any of the following subjects :—

TYPEWRITING, SHORTHAND, OFFICE ROUTINE, BOOK-KEEPING AND COMMERCIAL CORRESPONDENCE.

See Course 4.—For routine see page 39

MISCELLANEOUS CLASSES AND SPECIAL COURSES.

The following classes are here indicated separately for the benefit of students who desire to take up the study of certain subjects for the Preliminary Professional and other Examinations, and to assist students of an advanced grade to a higher standard of attainments.

A course consists of any three of the following subjects :—

SUBJECT.	CLASS NO.
Arithmetic	180.
Book-keeping	181 or 182.
Chemistry	189 to 199.
Economics of the Cotton Industry	141.
English Language and Literature	184.
French	162, 178, 186.
Latin	164.
Mathematics	189.
Physics	190.
Spanish	163.
Geography	165.

A Local Examination will be held in those subjects not otherwise provided for, and certificates will be given.

JUNIOR COURSES.

FULL TIME DAY.

COURSES.—

JUNIOR TECHNICAL.

JUNIOR COMMERCIAL.

Classes begin on Tuesday, September 10th, 1929.

Autumn Term :—10th September, 1929—20th December, 1929.

Spring Term :—6th January, 1930—17th April, 1930.

Summer Term :—28th April, 1930—17th July, 1930.

VACATIONS.—

The Schools will be closed for the Christmas Vacation from 21st December, 1929, to 4th January, 1930 ; for the Easter Vacation, from 18th April, 1930, to 26th April, 1930; for the Whitsuntide Vacation, from 7th June, 1930 to 14th June, 1930.

FEE.—£1 10s. 0d. per Session or 10s. 0d. per term.

TIME TABLES :—See pages 49 to 54.

DAY JUNIOR SCHOOLS.

CONDITIONS OF ENTRY, ETC.

(1) Day Junior Technical School.
(2) Day Commercial School.

ENTRANCE AND SCHOLARSHIP EXAMINATIONS.

Each boy or girl admitted must not be less than 13 years old at the date of admission, and must pass the School Entrance Examination.

The Entrance Examination will be held on Saturday, the 10th of May, at the Harris Institute, Avenham.

Entries must be made on a form which can be obtained from the School and forwarded to the Principal, Harris Institute, on or before the 16th April, 1930.

Fee, £1 10s. for Session, September to July. This may be paid by three instalments of 10/-.

Parents or Guardians will be required to sign an agreement form undertaking that the pupil attends regularly for two years, or in default, pay the sum of £3 3s. 0d.

The Council of the Harris Institute offer a limited number of Scholarships (providing free tuition only), to boys not less than 13 years of age on October 1st, 1930, and who for two years prior to the date of the Examination have been in regular attendance at a Day School within 7 miles of the Preston Town Hall.

The Preston Local Education Committee award a number of Free Admissions to the School, and Book allowances are given to Candidates residing in the County Borough of Preston.

The Lancashire County Council also award a limited number of Exhibitions on the result of this Entrance Examination (open to candidates residing in the Administrative County) subject to certain conditions, the Exhibitions provide free tuition, travelling expenses, and allowance for books and maintenance. Full particulars as to these Exhibitions may be obtained from the Director of Education, County Offices, Preston.

Leaving Certificates, First or Second Class, are given to all who satisfactorily conclude their period of training, and a certain number of free scholarships to Evening Classes are granted to those whose attainments and conduct in the Day School have merited it.

The School Uniform is as follows :—**Girls.**—Navy Tunic and Girdle, Navy Knickers, White Blouse, with polo collar and long sleeves in winter, Blue and Green Tie, Green Cap in winter, Curacoas Hats with School Band in summer, Black Cashmere Stockings, Black Footwear, Navy Coat. School Blazers can be obtained, if desired.

Boys.—School cap, tie, and school blazers.

The above can be purchased from the School Outfitters on the presentation of the regulation form, which may be obtained at the School.

Every endeavour is made at the end of the course to assist worthy students to obtain suitable posts. Many employers apply to the School for employees and apprentices.

DAY JUNIOR TECHNICAL SCHOOL.

The aim of the School is to provide a suitable education for boys who, having completed the ordinary course of work in the Elementary Day School, desire to enter Engineering, Building and other trades.

The curriculum is planned with the object of providing for the continuance of a general education together with an education in all subjects which are necessary to boys about to enter industrial occupations.

The students are brought into close contact with their future occupation through teachers who have had experience in industry.

The students also have access to the Engineering laboratories and textile sheds, where they become acquainted with machinery and equipment which helps towards a thorough understanding of the application of scientific principles to industry.

The course of instruction extends over a period of two years, and the subjects taught include the following:—Mathematics, Machines and Building, Drawing and Geometry, Art, Science (including Applied Mechanics, Electricity, Magnetism, Heat), Metalwork, Woodwork, Geography, History, English, Drill and Organised Games.

Boys who obtain a Leaving Certificate may be admitted to the Second year of the Senior Course in Mechanical or Electrical Engineering or the Building Trades Course, and are thus able to complete the specialized courses in the Evening or Part Time Day Classes with the least possible delay.

DAY JUNIOR TECHNICAL SCHOOL.

ENTRANCE EXAMINATION.

SYLLABUSES.

Accuracy is of great importance. A thorough knowledge of the following will be required :—

Arithmetic.

The fundamental rules. Vulgar and decimal fractions. Percentages and averages. Ratio, proportion, simple interest and simple profit and loss. Elementary mensuration, rectangles and triangles. Circumference and area of circle. Surface and volume of simple solids,—prism and cylinder (weights of simple solids, given weight per unit volume). Elementary algebra. Use of symbols Addition, subtraction, multiplication and division.

English.—

(1) An essay; (2) Paraphrase condensation and expansion of passages ; (3) The parts of speech and elementary parsing ; (4) Easy analysis of sentences. ; (5) The use of words in sentences to illustrate their meaning ; (6) Simple letters.

The maximum marks may be obtained independently of sections 3 and 4.

Dictation.—

About a dozen lines from any of such readers as are in ordinary use in the seventh standard of an Elementary school.

DAY JUNIOR COMMERCIAL SCHOOL.

The Course extends over a period of two years, and prepares boys and girls for Clerical posts. The following subjects are taken :—Arithmetic, Algebra, Accounts, Book-keeping, Commerce, Commercial Correspondence, Drawing, Drill, English, French, Games, Geography, History, Office Routine, Mathematics, Shorthand and Typewriting.

DAY JUNIOR COMMERCIAL SCHOOL.

ENTRANCE EXAMINATION.

SYLLABUSES.

Accuracy is of great importance. A thorough knowledge of the following will be required.

Arithmetic.—

Simple rules including the use of brackets. Money tables—Ordinary weights and measures (excluding Troy weight and Apothecaries weight). Reduction of money. The simple rules as applied to weights and measures. Simple vulgar fractions. Terminating decimals. Practice. Proportion by unitary method. Easy percentages. Simple interest. The Metric System.

English.—

(1) An essay; (2) Paraphrase, condensation and expansion of passages; (3) The parts of speech and elementary parsing; (4)Easy analysis of sentences; (5)The use of words in sentences to illustrate their meaning; (6) Simple letters.

The maximum marks may be obtained independently of sections 3 and 4.

Dictation.—

About a dozen lines from any of such readers as are in ordinary use in the seventh standard of an Elementary School.

ART SCHOOL



ART SCHOOL.

The School is open for three terms, viz. :—
23rd September, 1929, to 20th December, 1929.
6th January, 1930, to 17th April, 1930.
28th April, 1930, to 4th July, 1930.

FEES FOR SESSION (payable in advance).

	£	s.	d.
Full-time Day Students	3	3	0
Evening Classes	1	0	0
Painting and Decorating Class	1	0	0
Students attending one day per week for Single Subjects.....	2	2	0

Classes begin on Monday, September 23rd, 1929.

DAY AND EVENING CLASSES.—TIME TABLE (See also pages 55 & 56).

	MORNING. 10-0—12-30.	AFTERNOON. 2-30—4-30.	EVENING. 7-0—9-0.
Monday	Drawing Ornament Styles of Design Lettering Nature Drawing Perspective	Etching & Woodcuts, &c. Still Life Painting Figure Drawing Object Drawing Design Lettering Memory Drawing	Drawing & Painting Still Life Nature Study Antique Drawing Industrial Art Illustration Elem. Teachers' Class Drawing from Life
Tuesday	Nature Study Drawing, Antique History of Art Wood Decoration, Lino. Cuts Decorative Paintg., &c.	Still Life Design Drawing (Elem. & Advanced) Wood Decoration, Lino Cuts, &c.	Drawing & Painting Still Life *Textile Art (4th yr.) Design (Indust. & Crafts Wood Decoration, &c.
Wednesday	General Drawing Still Life Principles of Art Design Nature Drawing Modelling and Plaster Casting Architectural Drawing	Leather Work Batik Embroidery Still Life Drawing from the Antique Nature Study Practice or Games Modelling and Casting	Junior Art Crafts Stencilling—Leaded Glass Etching, Leather work Basketry, Raffia Modelling and casting Wood & Plaster Carving *Painting & Decorating *Textile Design (2nd & 3rd years)
Thursday	Anatomy Drawing & Painting Still Life	Drawing & Painting still Life General Drawing Illustration and Poster Design	1st & 2nd year Junior Drawing Illustration Drawing from life Teachers Class Wood Decoration, &c.
Friday	Architecture Figure Composition Object & Memory Drawing Design Drawing from Life	Raffia & Basketry Batik Leather Work Embroidery Illustration Elem. Figure Drawing Drawing—Objects & Interiors Memory Drawing Drawing from Life	*Textile Design (1st year) Embroidery Basketry Raffia Batik *Architecture *English & Arithmetic (1st & 2nd years). *Painting & Decorating

During the Summer term an out-of-door Sketching Class will be held on Tuesday morning.

*These classes will terminate after the Easter Examinations.

OBJECTS OF THE SCHOOL.

The objects of the School are :—

(1) To give instruction in Art to those engaged in trades and professions in which the power of drawing and a knowledge of design are essential or helpful.

(2) To train those wishing to qualify to become teachers of Art in Secondary Schools, or in Schools of Art.

(3) To provide facilities to those desiring to study Art as a branch of general education, or as an accomplishment.

(4) To train those who are desirous of taking up Art as a career, and who intend to specialise as painters, sculptors, illustrators, designers, etc.

(5) To meet the requirements of those engaged in various industrial occupations.

(6) Junior Courses. To prepare young students between the ages of 14 and 16, in order that they may specialise later on, in any of the above courses.

EXAMINATIONS IN ART.

INTERNAL.

Grouped Examinations will be held at the end of each term, comprising the subjects of the various Courses.

The Board of Education will hold Examinations in the following subjects of Art :—

(a) Drawing.

(b) Painting.

(c) Modelling.

(d) Pictorial Design for Reproduction in black and white or colour.

(e) Industrial Design for (i.) Handicrafts and (ii.) Manufactures.

1. The Examination in Drawing will be of a standard suitable for candidates who, after a good general education, including some preliminary instruction in Drawing, up to the age of 16 or later, have devoted themselves to serious and continuous study of Drawing for, as a rule, not less than two years.

2. The Examinations in Painting, Modelling, and Pictorial Design will be of such a standard as could be attained, according to the capacity of the candidate, by two or more years of serious and continuous specialised study after passing the Examination in Drawing.

3. Examinations in Industrial Design will be of such a standard as could be attained through regular attendance at evening or other part-time classes in the intervals of employment for a period of four years after the age of 16.

4. Candidates will not be admitted to the Examinations in Painting, Modelling, or Pictorial Design, unless they have previously passed the Examination in Drawing.

City and Guilds of London.

Students are prepared for these Examinations in the following Subjects :—Painting and Decorating, Embroidery, Principles of Art as applied to Cotton Weaving.

National Society of Art Masters.

A series of Examinations in Drawing arranged for Teachers in Elementary Schools.

UNION OF LANCASHIRE AND CHESHIRE INSTITUTES.

Students are prepared for the Examinations arranged by the U.L.C.I. Authority in the following Subjects :—Junior Industrial Art, Painting and Decorating, Architecture, Embroidery, Leatherwork, Textile Design, etc.

SCHOLARSHIPS.

Harris Art Scholarship.

One scholarship of the value of £7 10s. 0d. per annum, tenable for three years, will be awarded annually.

The Scholarship will be open to all Students of the School of Art, who have attended for not less than one year immediately preceding the award, and will be tenable at the Harris Institute.

The Scholarship will be awarded on the results of the annual examinations, in conjunction with the Student's work of the session.

Should one or more of these Scholarships fall vacant before the full period of three years, two or three (as the case may be), will be given instead of one, in the year when they lapse.

Free Studentships.

Free Studentships to the Day Classes are offered to Students of the School (Day or Evening), who are studying with a view to becoming designers, craft workers, or teachers.

Method of award, the same as for the above.

Free Studentships to the Evening Classes of offered to students taking definite courses, and will be awarded on the result of marks given for homework, attendance, and internal examinations.

Special Scholarships are awarded to students who have left or are about to leave elementary schools, who intend to follow occupations requiring an Art Training.

PRIZES :—STEELE BEQUEST.

Three Prizes (one day and two evening) of £5 each are offered for the best work done by Students each Session.

SKETCH CLUB AND STUDENTS' UNION.

The Sketch Club is organised by the Staff and Students for the purpose of encouraging individual effort. Monthly competitions are arranged during the Sessions, and a series of subjects are set for the long vacation.

All Students are eligible. Further information and particulars may be obtained from members of the Staff.

HARRIS INSTITUTE, PRESTON.

TIME TABLE OF CLASSES. SESSION 1929-30.

A—*Avenham Institute.* C—*Christ Church School (Bow Lane).* T—*Technical College*

TECHNICAL DAY CLASSES.

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	MATRICULATION.						
1	T English and History	F. W. Jackson	11.15-12.15	2—3	..	2—3	3—4
2	T French	F. W. Jackson	..	..	11.15-12.15	..	11.15-12.15 and 2—3
3	T Latin	F. W. Jackson	..	3—4	..	3—4	..
4	T Mathematics	F. B. Landolt	9.30-11.15	11.30-12.30	9.30-11.15	..	..
5	T Physics	F. B. Landolt	3.15-5	9.30-11.15	..	9.30-11	..
6	A Chemistry, Theory	R. H. Jones	..	..	..	11.15-12.15	9.45-10.45
7	A Chemistry, Practical	R. H. Jones	..	..	2.30-4	..	..
	INTER-SCIENCE.						
8	T Mathematics	F. B. Landolt	..	2—5	..	..	..
9	T Physics	F. B. Landolt	..	..	..	..	2—4
10	A Chemistry	R. H. Jones	..	..	9.30—10.30 10.30—12.30 2.30-4	11.15-12.15	9.45-10.45 10.45-12.30

	PREL. PROFESSIONAL : PHARMACY, DENTAL, DISPENSERS.						
11	A Chemistry, Org. (Theory) ..	R. H. Jones	2—3	..	..	..	..
12	A Chemistry, Inorg. (Theory) ..	R. H. Jones	..	..	9.30-10.30	11.15-12.15	9.45-10.45
13	A Chemistry, Inorg. (Practical) ..	R. H. Jones	..	..	10.30-12.30 and 2.30-4	..	.. 10.45-12.30
14	T Physics	F. B. Landolt	3.15-5	9.30-11.15	..	9.15-11	..
15	A Botany, Theory	H. W. Edmunds	10.30-11.30	11.30-12.30	..	..	..
16	A Botany, Practical	H. W. Edmunds	..	2—4	..	..	..
	PART TIME DAY COMMERCIAL CLASSES.						
17	T Typewriting	J. Jones	9.15-10.15	..	..	9.15-10.15	..
18	T Shorthand	J. Jones	10.15-11.15	..	11.15-12.15	10.15-11.15	..
19	T Bookkeeping	W. Webster	..	..	9.15-11.15	..	..
20	T Office Routine	J. Jones	11.15-12.15	..	..	..	..
21	T Commercial Correspondence ..	R. Cross	..	..	..	11.15-12.15	..
	PART TIME DAY ENGINEERING. (National Certificate Course). **S1**						
22	T Mathematics	G. E. Hall	4—5	..	..	4—5	..
23	T Mechanics and Heat Engines	G. E. Hall	2—4	..	..	..	..
24	T Engineering drawing	J. H. Binfield	..	..	..	2—4	..
25	T Electrical Science	J. H. Hulse	..	..	..	..	7.15-9.15

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	S2						
26	T Mathematics	J. H. Binfield	4—5	..	2—3	..	..
27	T Mechanics and Heat Engines	F. W. Walker	2—4	..	..	..	..
28	T Engineering Drawing	J. H. Binfield	..	..	3—5	..	..
29	T Electrical Science	J. H. Hulse	..	..	7.15–9.15	..	..
30	T Elec. Equipment (Motor Eng.)	W. E. Bamber	..	..	..	7.15–9.15	..
	MECHANICAL ENGINEERING.						
	S3						
31	T Mathematics	G. E. Hall	7.15–9.15	..	..	..	..
32	T Mechanics	F. W. Walker	..	..	2—4.30	..	..
33	T Heat Engines	F. W. Walker	..	..	..	2—4.30	..
	ELECTRICAL ENGINEERING.						
	S3						
34	T Mathematics	J. Walmsley	7.15–9.15	..	..	..	..
35	T Electro-Technics	A. Woods	..	..	..	9.30–11.30	..
36	T Electrical Laboratory ..	A. Woods	..	2—4.30	..	..	..
	TEXTILE CLASSES.						
	(Spinning and Weaving Cotton).						
37	T Spinning Mechanism	D. Atkinson	..	9.30–10.45	..	..	..
38	T Spinning (Practical)	D. Atkinson	..	10.45–12.0	..	..	..
39	T Weaving Mechanism	D. Atkinson	9.30–10.45	..	..	..	..
40	T Weaving Practical	E. Blinkhorn	10.45–12.0	..	..	..	10.45–12.0
41	T Weaving Calculations ..	D. Atkinson	..	..	9.30–10.45	..	..
42	T Cloth, Dissection, Analysis ..	D. Atkinson	..	..	10.45–12.0	..	..
43	T Fabric Structure	D. Atkinson	..	..	..	9.30–10.45	..
44	T Practical Designing	D. Atkinson	..	..	..	10-45–12.0	..
45	T Yarn Preparation	D. Atkinson	..	..	..	..	9.30–10.45

	MECHANICAL ENGINEERING. (National Certificate Courses)						
	S1						
46	T Mathematics	R. H. Wignall	..	..	..	7.15-9.15	..
47	T Engineering Drawing	J. H. Binfield, G. Oliver ..	..	7.15-9.15	..	..	..
48	T Mechanics and Heat Engines	F. W. Walker, ...	7.15-9.15	..	..	..	..
	S2						
49	T Mathematics	H. Venning	..	7.15-9.15	..	..	..
50	T Engineering Drawing	J. H. Binfield, ...	..	..	7.15-9.15	..	..
51	T Mechanics and Heat Engines	G. E. Hall	..	..	..	..	7.15-9.15
	S3						
52	T Mathematics	G. E. Hall	7.15-9.15	..	..	..	..
53	T Mechanics	F. W. Walker	..	..	7.15-9.15	..	..
54	T Heat Engines	F. W. Walker	..	..	..	7.15-9.15	..
	A1						
55	T Mathematics	J. Walmsley	..	..	7.15-9.15	..	..
56	T Machine Design	J. H. Binfield	7.15-9.15	..	..	..	..
57	T Strength of Materials	G. Pimley	..	..	..	..	7.15-9.15
	A2						
58	T Heat Engines	E. C. Moyle	7.15-9.15	..	..	..	..
59	T Theory of Machines	E. C. Moyle	..	..	7.15-9.15	..	..
60	T Electrical Engineering for Mechanical Engineers	J. H. Hulse	..	..	..	7.15-9.15	..
	ELECTRICAL ENGINEERING (National Certificate Course)						
	S1						
61	T Mathematics	R. H. Wignall	7.15-9.15	..	..	..	..
62	T Electrical Drawing	F. Callow, —. Morley ..	..	..	..	7.15-9.15	..
63	T Electrical Science	J. H. Hulse, J. Bennett ..	..	..	..	..	7.15-9.15

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	S2						
64	T Mathematics	H. Venning	7.15-9.15	..	..	..	..
65	T Mechanics	F. B. Landolt	..	..	..	7.15-9.15	..
66	T Electrical Science	J. H. Hulse	..	..	7.15-9.15	..	..
	S3						
67	T Mathematics	J. Walmsley	7.15-9.15	..	..	..	..
68	T Electro-Technics	A. Woods	..	..	..	7.15-9.15	..
69	T Electrical Laboratory ..	A. Woods	..	7.15-9.15	..	..	..
	A1						
70	T Mathematics	J. Walmsley	..	..	..	..	7.15-9.15
71	T Electrical Engineering ..	C. C. Wade	..	..	..	7.15-9.15	..
72	T Electrical Laboratory ..	C. C. Wade	7.15-9.15	..	..	..	..
	A2						
73	T Electrical Design	G. Pimley	..	..	..	7.15-9.15	..
74	T Electrical Drawing	F. Callow	..	7.15-9.15	..	..	..
75	T Electrical Laboratory ..	G. Pimley	..	..	7.15-9.15	..	..
	BUILDING TRADES.						
	S1 (A)						
76	T Mathematics and Science ..	W. Taylor, F. Campey ..	..	7.15-9.15	..	..	..
77	T Building Construction ..	H. Howarth, F. Campey, and J. Greenwood ..	..	..	7.15-9.15	..	..
78	T Geometry	J. N. Walker, F. Campey, and G. H. Broadbent	..	..	..	..	7.15-9.15
	S1 (B)						
79	T Mathematics and Science ..	W. Taylor, H. Fisher ..	..	..	..	..	7.15-9.15
80	T Building Construction ..	H. Howarth, H. Allen ..	7.15-9.15	..	..	..	..
81	T Geometry	J. N. Walker, J. Spiby ..	..	7.15-9.15	..	..	..

	S2						
82	T Mathematics and Geometry ..	W. Taylor, J. Spiby, and H. Fisher	..	..	..	7.15-9.15	..
83	T Building Construction ..	E. M. Pearson, G. H. Broadbent, jun. and H. Yeadon	..	7.15-9.15	..	..	..
84	T Building Science	E. M. Pearson, J. Spiby ..	7.15-9.15	..	..	..	..
	S3						
85	T Building Construction ..	H. Howarth and H. Yeadon.	..	..	..	7.15-9.15	..
86	T Quantities	J. T. Higginson	..	7.15-9.15	..	..	..
87	T Geometry	J. N. Walker & J. Greenwood	7.15-9.15	..	..	..	..
88	T Brickwork and Concreting ..	T. Croft	..	..	7.15-9.15	..	..
89	T Carpentry	H. Allen	..	..	..	..	7.15-9.15
	A1 and 2						
90	T Building Construction ..	E. M. Pearson	..	..	..	7.15-9.15	..
91	T Practice Class	G. H. Broadbent (senr.) ..	..	..	7.15-9.15	..	..
92	T Carpentry and Joinery ..	F. Campey	..	..	..	..	7.15-9.15
93	T Structural Work or Building Equipm't including Sanitation.	E. M. Pearson	..	..	7.15-9.15	..	..
94	T Quantities and Pricing ..	J. T. Higginson	7.15-9.15	..	..	..	..
	Architecture (See Art School)						
	PLUMBING.						
	S2 and 3						
95	(Workshop) Plumbing, Practical	J. Dixon and F. Coupe ..	7—9	..	..	..	..
96	T Plumbing, Theory	J. Dixon and F. Coupe ..	..	..	7-8.30	..	..
97	T Plumbing, Science	J. Dixon and F. Coupe ..	..	..	8.30-9.30	..	..
98	T Mathematics and Science, or	W. Taylor and J. Spiby ..	..	7.15-9.15	..	..	..
99	T Mathematics and Geometry ..	W. Taylor, J. Spiby, H. Fisher	..	..	..	7.15-9.15	..
100	T Building Construction (Major C. & G.)	E. M. Pearson, G. H. Broadbent	..	7.15—9.15	..	..	..
	MOTOR BODY BUILDING.						
101	T Technical Drawing	H. Lavery	..	..	..	..	7.20-9.20
102	T Body Building	H. Lavery	..	..	..	7.20-9.20	..
103	T Mathematics	C. Turner	..	..	7.15-9.15	..	..

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	COTTON SPINNING.	* Alternate weeks.					
	S1						
104	T Mathematics	P. Addison	7.15-9.15	..	..	..	..
105	T Textile Drawing	S. Jackson	..	..	7.15-9.15*	..	..
106	T Cotton Spinning, Practical ..	J. H. Harrison	..	..	..	7.15-9.15*	..
107	T Cotton Spinning, Theory ..	J. H. Harrison	..	7.15-9.15	..	..	..
	S2						
108	T Mathematics and Mechanics ..	R. Chatburn	..	7.15-9.15	..	..	..
109	T Textile Drawing	S. Jackson	..	..	7.15-9.15*	..	..
110	T Cotton Spinning, Practical ..	J. H. Harrison	..	..	..	7.15-9.15*	..
111	T Cotton Spinning, Theory ..	J. H. Harrison	7.15-9.15	..	..	..	..
	S3						
112	T Cotton Spinning, Theory ..	J. Rathbone	..	..	7.15-9.15	..	..
113	T Cotton Spinning, Practical ..	J. Rathbone	..	..	..	..	7.15-9.15*
114	T Textile Drawing	S. Jackson	..	..	..	..	7.15-9.15*
115	T Textile Mechanics	J. Adamson	..	7.15-9.15	..	..	..
	A1						
116	T Cotton Spinning, Theory ..	J. Rathbone	..	..	..	7.15-9.15	..
117	T Cotton Spinning, Practical ..	J. Rathbone	7.15-9.15	..	..	..	..
118	T Textile Engineering	G. E. Hall	..	7.15-9.15	..	..	..
	A2						
119	T Cotton Spinning, Theory ..	J. Rathbone	..	7.15-9.15	..	..	..
120	T Cotton Spinning, Practical ..	J. Rathbone	..	..	..	..	7.15-9.15
121	T Textile Economics	W. Webster	..	..	7.15-9.15	..	..

	COTTON WEAVING.	* Alternate weeks.					
	S1						
122	T Mathematics	P. Addison, H. Richmond..	..	..	7.15-9.15	..	..
123	A Textile Design and Colour ..	W. T. Garnar	..	..	..	..	7—9*
124	T Cotton Weaving, Practical ..	E. Blinkhorn, W. Jackson, H. Richmond	..	..	..	..	7.15-9.15*
125	T Cotton Weaving, Theory ..	D. Atkinson, J. Martin ..	..	..	..	7.15-9.15	..
	S2						
126	T Cotton Weaving, Theory ..	D. Atkinson J. Preston,	7.15-9.15	..	..	..	..
127	T Cotton Weaving, Practical ..	E. Blinkhorn, J. J. Blackhurst	..	..	7.15-9.15*	..	..
128	A Textile Design and Colour ..	S. A. Horsley	..	..	7—9*	..	..
129	T Textile Drawing & Mechanics	J. Preston, J. J. Blackhurst.	..	..	..	7.15-9.15	..
	S3						
130	T Cotton Weaving, Theory ..	J. Martin	..	..	..	..	7.15-9.15
131	T Cotton Weaving, Practical ..	E. Blinkhorn, J. J. Blackhurst	..	..	7.15-9.15*	..	..
132	T Textile Mechanics	J. Adamson	..	7.15-9.15	..	..	..
133	A Textile Chemistry	R. H. Jones	7—9.30	..	..	..	..
134	A Textile Design & Colour ..	S. A. Horsley	..	..	7—9*	..	..
	A1						
135	T Cotton Weaving, Hons. A. ..	T. Taylor	..	..	7.15-9.15	..	..
136	T Cotton Weaving, Practical ..	E. Blinkhorn, T. Taylor	7.15-9.15	..	..	..	..
137	A Design and Colour	W. T. Garnar	..	7—9	..	..	..
	A2						
138	T Cotton Weaving, Hons. B. ..	D. Atkinson..	..	..	..	..	7.15-9.15
139	T Cotton Weaving, Practical ..	E. Blinkhorn	7.15-9.15	..	..	..	..
140	T Textile Engineering	G. E. Hall	..	7.15-9.15	..	..	..
141	T Economics of Cotton Industry	W. Webster	..	..	7.15-9.15	..	..

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	COMMERCIAL COURSES.						
	S1						
142	C Arithmetic	E. Singleton	7.15-8.15	..	..	..	..
143	C Arithmetic	E. Singleton	8.15-9.15	..	..	..	..
144	A Arithmetic	F. R. Snalam	7.15-8.15	..	..	..	..
145	A Arithmetic	F. R. Snalam	8.15-9.15	..	..	..	..
146	T Book-keeping (Beginners) ..	G. R. Drysdale	..	..	7.15-8.15	..	..
147	T Book-keeping (Beginners) ..	G. R. Drysdale	..	..	8-15-9.15	..	..
148	C Book-keeping	J. Donaldson	..	..	7.15-8.15	..	..
149	C Book-keeping	J. Donaldson	..	..	8.15-9.15	..	..
150	T Book-keeping	H. Catterall..	..	..	..	7.15-8.15	..
151	T Commerce	W. Webster	..	7.15-8.15	..	..	..
152	T Commerce	W. Webster	..	..	..	..	8.15-9.15
153	T English and Com. Corr. ..	H. W. Hughes	..	8.15-9.15	..	..	..
154	T English and Com. Corr. ..	H. W. Hughes	..	..	..	..	7.15-8.15
155	C Shorthand	H. W. Hughes	7.15-8.15	..	..	..	..
156	C Shorthand	H. W. Hughes	8.15-9.15	..	..	..	..
157	A Shorthand	J. Jones	7.15-8.15	..	..	..	..
158	A Shorthand	J. Jones	8.15-9.15	..	..	..	..
159	T Typewriting	J. Hilton	..	6.15-7.15	..	..	..
160	T Typewriting	J. Hilton	..	7.15-8.15	..	..	..
161	T Typewriting	J. Hilton	..	8.15-9.15	..	..	..
162	T French	F. W. Jackson	..	8.15-9.15	..	..	..
163	A Spanish	J. Appleby	..	7.15-8.15	..	..	..
164	A Latin	F. W. Jackson	..	..	..	7.15-8.15	..
165	A Geography	H. C. Pye	7.15-8.15	..	..	..	..

	S2							
166	A Arithmetic	E. Singleton	..	..	..	..	7—8
167	A Book-keeping	P. Bridge	..	..	7.15-9.15	..	..
168	C Book-keeping	H. Catterall	..	..	7.15-9.15	..	..
169	T Commerce	W. Webster	..	8.15-9.15	..	..	..
170	T Commerce	W. Webster	..	..	..	..	7.15-8.15
171	T English and Com. Corr. ..	H. W. Hughes	..	7.15-8.15	..	..	..
172	T English and Com. Corr. ..	H. W. Hughes	..	..	..	..	8.15-9.15
173	T Shorthand	W. Hanson	..	..	..	7.15-9.15	..
174	T Shorthand	W. R. White	..	..	..	7.15-9.15	..
175	T Typewriting	J. Hilton	..	..	..	..	6.15-7.15
176	T Typewriting	J. Hilton	..	..	..	..	7.15-8.15
177	T Typewriting	J. Hilton	..	..	..	..	8.15-9.15
178	T French	F. W. Jackson	..	7.15-8.15	..	..	..
179	A Geography	H. C. Pye	8.15-9.15	..	..	..	..
	S3							
180	A Arithmetic	E. Singleton	..	..	..	..	8—9
181	T Book-keeping	N. Hindley	..	..	7.15-9.15	..	..
182	T Book-keeping	H. Catterall	..	..	7.15-9.15	..	..
183	A Commerce	W. Webster	7.30—9	..	..	..	..
184	A English Language & Literature	F. R. Snalam	..	..	..	..	7—8
185	A Shorthand	H. W. Hughes	..	..	..	7.15-9.15	..
186	A French	F. W. Jackson	..	..	..	8.15-9.15	..
187	T Cotton Spinning, Theory ..	J. H. Harrison	..	7.15-9.15	..	..	..
188	T Cotton Weaving, Theory ..	T. Taylor	..	..	..	7.15-9.15	..
	CHEMISTRY. (National Certificate Course)							
	S1							
189	A Mathematics	F. B. Landolt	7—9	..	..	..	..
190	T Physics	F. B. Landolt	..	7—9.15	..	..	..
191	A Inorganic Chemistry	R. H. Jones	..	..	..	..	7—9.30

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	S2						
192	A Physical Chemistry	R. H. Jones	..	..	8—9.30	..	..
193	A Organic Chemistry	E. Taylor	..	7—9.30	..	..	..
194	A Inorganic Chemistry	R. H. Jones	..	..	7—8	..	..
195	A Inorganic Chemistry(Practical)	R. H. Jones & F. Jackson..	..	..	..	7—9.30	..
	S3						
196	A Organic Chemistry	E. Taylor	..	8—9.30	7—8	..	..
197	A Inorganic Chemistry (Theory)	F. Jackson	..	7—8	..	..	..
198	A Inorganic Chemistry(Practical)	R. H. Jones & F. Jackson..	..	..	..	7—9.30	..
199	A Physical Chemistry	E. Taylor	..	..	7—3	..	..
	PHARMACY.						
	S1						
200	A Botany	H. W. Edmunds	7—9	..	..	..	..
201	T Physics	W. H. Edmunds	..	7—9.15	..	..	..
202	A Chemistry	R. H. Jones	..	..	..	..	7—9.30
	S2						
203	ABotany	H. W. Edmunds	7—9	..	..	..	..
204	AOrganic Chemistry, or ..	E. Taylor	..	7—9.30	..	..	..
205	T Physics	H. W. Edmunds	..	7—9.15	..	..	..
206	AInorganic Chemistry (Theory)	R. H. Jones	..	..	7—8	..	..
207	AInorganic Chemistry(Practical)	R. H. Jones & F. Jackson..	..	..	..	7—9.30	..
	S3						
208	AOrganic Chemistry	E. Taylor	..	7—9.30	..	..	..
209	AInorganic Chemistry (Theory)	R. H. Jones	..	..	7—8	..	..
210	AInorganic Chemistry(Practical)	R. H. Jones & F. Jackson..	..	..	..	7—9.30	..
211	Typography (Theory)	E. Jones	..	7.15 - 8.15	..	..	..
212	Typography (Practical) ..	E. Jones	..	..	..	7.15—8.15	..

DAY JUNIOR TECHNICAL SCHOOL.

TIME TABLE.

Monday—	9.15—11.15.	11.15—12.15.	1.45—2.45.			2.45—4.45.		
1A.	Workshop	Mathematics	Geography			Science		
1B.	Science	Mathematics	Geography			Workshop		
	9.15—10.15.	10.15—12.15.	1.45—3.15.	3.15—3.45.		3.45—4.45.		
2A.	Mathematics	Science	Mathematics	Drill		History		
2B.	Mathematics	Geometry	Mathematics	Drill		History		
Tuesday—	9.15—10.15.	10.15—12.15.	1.45—2-45.	2.45—4.15.		4.15—4.45.		
1A.	History	Workshop	Mathematics	Art		Drill		
1B.	History	Geometry	Mathematics	Art		Drill		
	9.15—11.15.	11.15—12.15.	1.45—3-45.	2.45—4.45				
2A.	Geometry	Geography	Mathematics	Mechanics				
2B.	Science	Geography	Mathematics	Workshop				
Wednesday	9.15—11.15.	11.15—12.15.	1.45—2.45.	2—4.				
1A.	Science	English	Mathematics	{ Games, weather permitting,				
1B.	Workshop	English	Mathematics	{ or Mathematics (2—3).				
	9.15—10.15.	10.15—12.15.	1.45—2.45.					
2A.	Geography	Workshop	Mathematics	{ Games, weather permitting,				
2B.	Geography	Mechanics	English	{ or Workshop (2—3).				
Thursday—	9.15—11.15.	11.15—12.15.		1.45—2.45		2.45—4.45.		
1A.	Geometry	Mathematics		Mathematics		Workshop		
1B.	Workshop	Mathematics		Mathematics		Science		
	9.15—10.15.	10.15—10.45	10.45—12.15.	1.45—2 45	2.45—3.45.		3.45—4.45.	
2A.	Mathematics	Drill	Tech. Drawing	Mathematics	English		Art	
2B.	Mathematics	Drill	Tech. Drawing	English	Mathematics		Art	
Friday—	9.15—10.15.	10.15—12.15.	1.45—3.15.	3.15—3.45.		3.45—4.45		
1A.	English	Tech. Drawing	Mathematics	Drill		English		
1B.	English	Tech. Drawing	Mathematics	Drill		English		
	9.15—10.15.	10.15—12.15.	1.45—3.45.			3.45—4.45.		
2A.	English	Science	Workshop			Workshop		
2B.	English	Workshop	Science			Workshop		

DAY JUNIOR TECHNICAL SCHOOL.

TIME TABLE ANALYSIS (FIRST YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
Mathematics ..	E. C. Moyle ; G. E. Hall	11.15–12.15	1.45–2.45	1.45—2.45	11.15–12.15 1.45–2.45	1.45 3.15
English ..	R. S. Cross ; G. E. Hall ..	....	....	11.15–12.15	....	9.15–10.15 3.45–4.45
History ..	R. S. Cross	....	9.15–10.15	....	....	....
Geography ..	F. W. Jackson	1.45–2.45	....	....	....	....
Science	E. M. Pearson	2.45–4.45 (A) 9.15–11.15 (B)	....	9.15–11.15 (A)	.... 2.45–4.45(B)	....
Workshop ..	J. H. Hulse	9.15–11.15 (A) 3.0–5.0 (B)	10.15–12.15 (A)	.... 9.15–11.15 (B)	2.45–4.45(A) 9.15–11.15 (B)	....
Geometry ..	G. E. Hall	....	10.15–12.15 (B)	....	9.15–11.15 (A)	....
Technical Drawing ..	J. H. Binfield ; E. M. Pearson ..	....	....	....	....	10.15–12.15
Art	G. A. Clucas	....	2.45–4.15	....	....	....
Organised Games	A. Woods	....	....	2.0–4.0	....	....
Drill	E. H. Trinder	....	4.15–4.45	.....	.....	3.15–3.45

DAY JUNIOR TECHNICAL SCHOOL.
(SECOND YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
Mathematics ..	E. C. Moyle ; G. E. Hall ; J. H. Binfield ; F. W. Walker ..	9.15-10.15 1.45-3.15	1.45-2.45	1.45-2.45 (A) 2.45-3.45 (B)	9.15-10.15	....
English ..	J. Nickeas	....	....	....	2.45-3.45 (A) 1.45-2.45 (B)	9.15-10.15 ....
History ..	R. S. Cross	3.45-4.45	....	....	....	....
Geography ..	F. W. Jackson	....	11-15-12.15	9.15-10.15	....	....
Science	A. Woods	10.15-12.15 (A)	9.15-11.15 (B)	2.45-4.45	....	10.15-12.15 (A) 1.45-3.45 (B)
Applied Mechs. .	F. W. Walker	....	2.45-4.45 (A)	10.15-12.15 (B)	....	....
Workshop ..	J. H. Hulse	....	2.45-4.45 (B)	10.15-12.15 (A)	....	1.45-3.45 (A) 10.15-12.15 (B) 3.45-4.45
Geometry ..	J. H. Binfield	10.15-12.15 (B)	9.15-11.15 (A)	....	....	....
Tech. Drawing	J. H. Binfield	....	....	....	10.45-12.15	....
Art	G. A. Clucas	....	....	....	3.45-4.45	....
Organised Games	A. Woods	.....	....	2.0-4.0	....	....
Drill ..	E. H. Trinder	3.15-4.15	.....	.....	10.15-10.45	.....

DAY JUNIOR COMMERCIAL SCHOOL.

TIME TABLE.

	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—2.45.	2.45—3.45.	3.45—4.15
Monday—							
1A.	English	French	Interval	History	Arithmetic	Com. Corr.	Drill
1B.	French	English	Interval	History	Shorthand	Typing	Drill
2A.	Shorthand	Commerce	Interval	English	History	Geography	
2B.	Shorthand	Commerce	Interval	English	History	Geography	
Tuesday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—2.45.	2.45—3.45.	3.45—4.15
1A.	Geography	Mathematics	Interval	French	Shorthand	English	
1B.	Geography	Mathematics	Interval	Shorthand	Arithmetic	English	
2A.	Shorthand	Book-keeping	Interval	Mathematics	Typing	Com. Corr.	Drill
2B.	Typing	Book-keeping	Interval	Mathematics	Com. Corr.	Typing	Drill
Wednesday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—2.45.	2.45—3.45.	
1A.	Typing	Shorthand	Interval	Arithmetic	Shorthand	French	
1B.	Com. Corr.	French	Interval	Arithmetic	French	Shorthand	
2A.	Arithmetic	English	Interval	French	Book-keeping	Book-keeping	
2B.	Arithmetic	English	Interval	French	Book-keeping	Book-keeping	
Thursday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—3.45.		
1A.	Mathematics	History	Interval	Arithmetic	Games or Preparation		
1B.	Mathematics	History	Interval	Arithmetic	Games or Preparation		
2A.	Shorthand	Arithmetic	Interval	French	Games or Preparation		
2B.	Shorthand	Arithmetic	Interval	French	Games or Preparation		
Friday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—2.45.	2.45—3.45.	
1A.	Shorthand	English	Interval	Commerce	Drawing	English	
1B.	Shorthand	English	Interval	Commerce	Drawing	English	
2A.	Arithmetic	Commerce	Interval	French	English	Drawing	
2B.	Arithmetic	Commerce	Interval	French	English	Drawing	

DAY JUNIOR COMMERCIAL SCHOOL.

TIME TABLE ANALYSIS (FIRST YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
English ..	A. Ellison	9.15–10.15 (A) 10.15–11.0 (B)	2.45–3.45	....	....	10.15–11.0 2.45–3.45
French	J. Nickeas	9.15–10.15 (B) 10.15–11.0 (A)	11.15–12.15 (A)	10.15–11.0 (B)	2.45–3.45 (A) (1.45–2.45 (B)	....
History ..	R. S. Cross	11.15–12.15	....	....	10.15–11.0	....
Geography ..	A. Ellison	....	9.15–10.15	....	....	....
Com. Corr. ..	R. S. Cross	2.45–3.45 (A)	....	9.15–10.15 (B)	....	....
Commerce ..	R. S. Cross	....	....	....	....	11.15–12.15
Arithmetic ..	A. Ellison	1.45–2.45	....	11.15–12.15	11.15–12.15	....
Mathematics ..	R. S. Cross	....	10.15–11.0	....	9.15–10.15	....
English ..	A.Ellison	....	....	....	....	10.15–11.0
Typewriting ..	J. Jones	2.45–3.45 (B)	....	9.15–1.15 (A)	....	....
Shorthand ..	J. Jones	1.45–2.45 (B)	1.45–2.45 (A) 11.15–12.15 (B)	9.15–10.15 (A) 1.45–2.45 (A) 2.45–3.45 (B)	....	9.15–10.15 (A&B)
Drawing ..	G. A. Clucas	....	....	....	....	1.45–2.45
Drill & Games ..	A. Ellison	3.45–4.15	....	....	1.45–3.45	....
Intervals ..		11–11.15	11–11.15	11–11.15	11–11.15	11–11.15

DAY JUNIOR COMMERCIAL SCHOOL.

(SECOND YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
English ..	A. Ellison	11.15-12.15	....	10.15-11.0	....	1.45-2.45
French	J. Nickeas..	....	....	11.15-12.15	11.15-12.15	11.15-12.15
History ..	R. S. Cross	1.45-2.45	....	....	....	....
Geography ..	A. Ellison	2.45-3.45	....	....	....	....
Com. Corr. ..	R. S. Cross	....	2.45-3.45 (A) 1.45-2.45 (B)	....	....	....
Commerce ..	R. S. Cross	....	....	....	....	10.15-11.0
Arithmetic ..	A. Ellison	....	....	9.15-10.15	10.15-11.0	9.15-10.15
Mathematics ..	R. S. Cross	10.15-11.0	11.15-12.15	....	....	....
Book-keeping ..	W. Webster	....	10.15-11.0	1 5-3.45	....	....
Typewriting ..	W. Webster	....	1.45-2.45 (A) 9.15-10.15 (B or A) 2.45-3.45 (B)	....	....	....
Shorthand ..	W. Webster	9.15-10.15	9.15-10.15 (A or B)	....	9.15-10.15	....
Drawing ..	G. A. Clucas	....	....	....	....	2.45-3.45
Drill & Games ..	A. Ellison	....	3.45-4.15	....	1.45-3.45	....
Intervals ..		11-11.15	11-11.15	11-11.15	11-11.15	11-11.15

ART SCHOOL.

Day.	Room.	Times of Classes.	Subjects.	Teachers.
Monday ..	I	10.0—12.30	Perspective, General Drawing, Lettering	G. A. Clucas
	3 and 4	2.30—4.30	Painting Still Life, Drawing Antique, Etching, Woodcuts, &c.	W. Rathbone
	3	2.30—4.30	Design, General Drawing, Memory Drawing	& G. A. Clucas
	2	7.0—9.0	Industrial Art Drawing (Lettering, Nature, &c.)	G. A. Clucas
				H. Mangan.
	3	7.0—9.0	Drawing Antique and Still Life, Illustrations	W. Rathbone
		7.0—9.0	Elementary Teachers Class	& M. Duckett.
	4	7.0—9.0	Drawing from Life	W. Rathbone.
Tuesday ..	Harris Museum ..	10.0—12.30	Nature Study, Drawing Antique and Animals	G. A. Clucas
	Reference Library	10.0—12.30	History and Methods of Art	G. A. Clucas.
	2	10.0—12.30	Crafts—Decoration applied to objects, Decorative Painting	
			Lino Cuts, Stencilling	W. Rathbone
	2	2.30—4.30	Crafts—Decoration applied to objects, Decorative Painting	
			Lino Cuts, Stencilling	W. Rathbone.
	2	2.30—4.30	General Drawing and Design	W. Rathbone.
	1	7.0—9.0	Textile Design, 4th year	W. Garnar.
	2	7.0—9.0	Design (Industrial Students)	G. A. Clucas
				H. Mangan.
	3	7.0—9.0	Painting Still Life, Illustration and General Drawing ..	W. Rathbone &
		7.0—9.0	Decoration applied to objects, Lino Cuts, Stencilling	.. B. Eckersley.
	4	7.0—9.0	Design for Crafts and Teachers	M. Duckett.
Wednesday..	2	9.30—10.0	General knowledge and Principles of Art	W. Rathbone
	3	10.0—12.30	Design, Nature Drawing and General Drawing, etc... ..	G. A. Clucas
	5	10.0—12.30	Modelling and Plaster Casting, Architectural Drawing ..	W. Rathbone
	2	2.30—4.30	Practice or Games, Modelling and Casting	W. Rathbone.
	3	.. ..	Crafts—Leatherwork, Embroidery, Batik, Basketry ..	M. Duckett.
	3	.. ..	General Drawing—Painting Still Life	W. Rathbone
	1	7.0—9.0	Textile Design, 2nd and 3rd years	S. A. Horsley
	2	7.0—9.0	Junior Course—Crafts	B. Eckersley
	3	7.0—9.0	Stencilling, Leaded Glass, Etching and General Work ..	G. A. Clucas
	5	7.0—9.0	Modelling and Casting, Plaster and Wood Carving,	W. Rathbone
	3	7.0—9.0	Leatherwork, Basketry, Raffia	M. Duckett
	6	7.0—7.30	Painting and Decorating (Theoretical)*	F. W. Sharples
	6	7.30—9.0	Painting and Decorating (Practical)*	F. W. Sharples

Day.	Room.	Times of Classes.	Subjects.	Teachers.
Thursday ..	1	10.0—12.30	Anatomy	G. A. Clucas
	3	10.30-12.30	Painting Still Life	W. Rathbone
	3	2.30—4.30	Painting Still Life, Illustration, Posters, &c...	W. Rathbone
	2	7.0—9.0	1st and 2nd year Junior Drawing (Design & Colour) ..	H. Mangan
	3	7.0—9.0	Decoration applied to objects, Illustration, Teachers' Class Lino Cuts	W. Rathbone & B. Eckersley.
	4	7.0—9.0	Drawing from Life	W. Rathbone.
Friday ..	1	10.0—12.30	Architecture, Design	G. A. Clucas
	2	10.0—12.30	Object and Memory Drawing, Illustration	W. Rathbone
	4	10.0—12.30	Drawing from Life	W. Rathbone
	3	2.30—4.30	Crafts—Embroidery, Leatherwork, Basketry	M. Duckett
	4	2.30—4.30	Drawing from Life	W. Rathbone
	2	2.30—4.30	Memory Drawing—Illustration	W. Rathbone
	1	7.0—9.0	Textile Design—1st year*	W. Garnar S. A. Horsley
	2	7.0—9.0	Architecture .. ..*	G. A. Clucas
	3	7.0—9.0	Crafts—Batik, Raffia, Embroidery	M. Duckett
	C.	....	English and Arithmetic, 1st and 2nd years Junior Art* ..	F. Allen
	6	7.0—7.30	Painting & Decorating (Theoretical)*	F. W. Sharples.
	6	7.30—9.0	Painting & Decorating (Practical)*	F. W. Sharples.

* These Classes will terminate after the Easter Examination.

HARRIS INSTITUTE, PRESTON

CLASSES AFFILIATED TO MANCHESTER AND LIVERPOOL UNIVERSITIES.

These provide complete Courses of Instruction for the Joint Matriculation of the Northern Universities; the Intermediate B.Sc. and Intermediate B.Sc. (Tech.), Manchester; the Intermediate B.Sc., Liverpool; the Intermediate Examinations of the University of London; and the various Preliminaty Professional Examinations, including Medical, Dental, and Pharmaceutical.

DAY CLASSES.

ART.
AGRICULTURE.
PART TIME DAY ENGINEERING COURSES.
PART TIME DAY COMMERCIAL SCHOOL.
DAY JUNIOR TECHNICAL AND COMMERCIAL SCHOOLS.
MATRICULATION AND INTERMEDIATE SCIENCE.
DENTAL & PHARMACEUTICAL COURSES.
PART TIME TEXTILE CLASSES.

EVENING CLASSES.

ART.
SCIENCE AND MISCELLANEOUS.
ORGANISED COURSES.
BUILDING TRADES.
COMMERCIAL.

COTTON SPINNING. COTTON WEAVING.
MECHANICAL ENGINEERING. SCIENCE.
PHYSICS AND ELECTRICAL ENGINEERING.

All communications to be addressed to—

E. C. MOYLE,
Principal.

August, 1929.

Whitehead
PRINTERS PRESTON

HARRIS INSTITUTE, PRESTON

PROSPECTUS
of
CLASSES

SESSION — 1930-31

A—LOCAL COLLEGE

1. TECHNICAL DAY CLASSES. Re-open Sept. 22
3. EVENING CLASSES ... ... „ „ 22
2. JUNIOR DAY SCHOOLS ... „ „ 9
(*Technical and Commercial*)

B—ART SCHOOL

1. DAY CLASSES ... ... Re-open Sept. 22
2. EVENING CLASSES ... ... „ „ 22



SPECIAL NOTICE—Evening Students will be enrolled at the Technical College, Corporation Street, from 7 to 9 p.m. on Wednesday and Thursday evenings, September 17th and 18th.

Students who do not enrol on these dates will be charged an extra fee of 2/6. This will be strictly enforced

PRICE TWOPENCE .... *Per Post* **3d.**

HARRIS INSTITUTE, PRESTON

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1930 - 31.

HARRIS INSTITUTE, PRESTON.

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Dr. A. Holt (Liverpool).

Principal:

Mr. E. C. Moyle.

STAFF

Principal :—E. C. MOYLE, A.R.C.Sc. (Lond.), A.M.I.Mech.E., Wh.Ex.

ART SCHOOL

Headmaster :—W. RATHBONE, A.R.M.S., A.M.C.

Second Master :—G. A. CLUCAS, A.C.T.C., B. of E. Painting and Drawing Cert.

Assistant Teachers—MISS M. DUCKETT, C. & G. (Emb.), A.C.T.C. ; B. of E. (Emb.) ; MISS B. ECKERSLEY, B. of E. (Emb.).

Student Teacher :—MISS H. MANGAN.

Assistants for Evening Classes :—

W. GARNAR ; S. A. HORSLEY (Textile Design).

F. W. SHARPLES, C. & G. Medal ; E. CATTERALL (Painting and Decorating).

F. ALLEN (Cert.) Junior Course.

BUILDING TRADES DEPARTMENT.

Head :—E. M. PEARSON, A.R.S.I., A.M.I.Struct.E.

Lecturers for Evening Classes.

H. ALLEN — G. H. BROADBENT, SENR.
F. CAMPEY — H. HOWARTH
T. CROFT — J. T. HIGGINSON
W. TAYLOR — J. N. WALKER.
G. H. BROADBENT, JUNR.

Lecturer in Plumbing Subjects :—J. DIXON.

CHEMISTRY AND PHARMACY DEPARTMENT.

Head :—R. H. JONES, M.Sc. (Vict.), A.I.C.

Lecturer in Chemistry :—E. TAYLOR, M.Sc. (Leeds).

Lecturer in Natural Science :—H. W. EDMUNDS, B.Sc. (Birm.)

Lecturer in Physics :—F. B. LANDOLT, B.Sc. (Lond.).

Demonstrator in Chemistry :—MISS R. C. FALLOWS.

Chemical Laboratory Steward :—J. GARDNER.

Lecturers in Chemistry for Evening Classes :

F. JACKSON, B.Sc. (Manc.). — J. N. ALDINGTON, B.Sc. (Lond.).

Mathematics : J. SLATER, B.Sc. (Manc.).

COMMERCIAL DEPARTMENT AND DAY JUNIOR COMMERCIAL SCHOOL.

Head :—F. W. JACKSON, B.A., L.C.P.
Assistant Teachers for Junior Commercial School :
MISS R. S. CROSS, Cert. ; MISS A. ELLISON, Cert. Inter B.A.
MISS J. JONES, P.C.T. ; MRS. J. NICKEAS, Cert.
Lecturer in Commercial Subjects :—W. WEBSTER, B.Sc. (Amer.).

Lecturers for Evening Classes :

J. APPLEBY
F. BRADSHAW
H. CATTERALL, F.C.I.S.
G. R. DRYSDALE, F.C.C.S.
J. HILTON
E. SINGLETON, Cert.
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W. HANSON
N. HINDLEY, A.C.A.
H. C. PYE
G. RICHARDSON
F. R. SNALAM, Cert.

ENGINEERING DEPARTMENT.

Head :—T. M. NAYLOR, M.Sc. (Man.), A.M.I.C.E., A.M.I.Mech.E.
Lecturer in Electrical Engineering (with special responsibility) :
A. WOODS.
Senior Lecturer in Mechanical Engineering :—
F. W. WALKER, A.M.C.T.
Lecturers :—G. E. HALL, B.Sc. (Man.), H. C. W. VENNING, A.M.I.Mech.E
Practical Engineer :—J. JENKINS.
Electrical Mechanic :—O. JONES.

Lecturers for Evening Classes :

F. CALLOW.
J. H. HULSE.
G. PIMLEY, A.I.E.E.
C. TURNER
J. WALMSLEY.
W. E. BAMBER.
H. LAVERY (Motor Body Building)
W. R. TUSON.
C. C. WADE, A.M.I.E.E.
R. H. WIGNALL.

JUNIOR TECHNICAL SCHOOL.

Head :—THE PRINCIPAL.
The Staff consists of teachers from the Engineering, Building and Commercial Departments.

TEXTILE DEPARTMENT.

Head :—D. ATKINSON, F.T.I.
Instructor :—W. JACKSON.

Lecturers and Assistants for Evening Classes :—

P. ADDISON
R. CHATBURN
S. JACKSON
J. PRESTON, A.T.I.
H. RICHMOND
J. J. BLACKHURST
J. H. HARRISON
J. MARTIN
J. RATHBONE
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TYPOGRAPHY. *Lecturer :*—

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Custodian :—E. TRINDER

REGULATIONS—

APPLICABLE TO ALL STUDENTS ATTENDING CLASSES AT THE . . . HARRIS INSTITUTE. . . .

Students are expected to attend punctually at the Classes for which they enrol.

All students are expected to take an examination at the end of the course in those subjects for which they enrolled at the opening of the Session.

Smoking within the School buildings is strictly prohibited: and Students must not loiter about the corridors.

The Lecturers are authorised to report periodically through the Principal, on attendance, homework and conduct of each Student.

The Council shall have power in dealing with Students who are unsatisfactory in these and other respects, to remove their names from the Register without return of fee.

SCHOLARSHIPS AND PRIZES.

A limited number of Scholarships and Prizes will be awarded at the discretion of the Council.

Prizes are also awarded by the Preston Building Trades Employers' Association, the Preston and District Engineers and Iron-founders Employers' Association, the North Lancashire Master Cotton Spinners and Manufacturers' Association, the National Registration of Plumbers and the Preston Master Printers Association

Day Classes



TECHNICAL DAY CLASSES

COURSES :—

1. Matriculation.
2. Intermediate B.Sc.
3. Preliminary Professional
   - (*a*) Pharmacy.
   - (*b*) Dental.
   - (*c*) Dispensers.
4. Commercial Subjects.
5. Engineering (Mechanical and Electrical).
6. Textile (Cotton Spinning and Weaving).

Classes begin on Monday, September 22nd, 1930.

Autumn Term :—22nd September, 1930—19th December, 1930.

Spring Term :—5th January, 1931—2nd April, 1931.

Summer Term :—14th April, 1931—3rd July, 1931.

VACATIONS.

The Technical Day Classes will be closed :—

For the Christmas Vacation, from 20th December, 1930, to 3rd January, 1931.

For the Easter Vacation from 3rd April to 11th April, 1931.

For the Whitsuntide Vacation from 22nd May to 30th May, 1931. In each case the dates are inclusive.

ENROLMENT.

Students can enrol at the Technical College on Wednesday and Thursday evenings, September 17th and 18th, from 7 to 9 p.m., or at the Avenham Institute or Technical College on any day after the classes begin.

TECHNICAL DAY CLASSES.

COURSE .

MATRICULATION.

Northern Universities and University of London.

Time Table :—See page 36.

Classes 1 to 8.

FEE. £3 10s. 0d. per subject, or
£15 15s. 0d. for the full course.

COURSE 2.

INTERMEDIATE B.Sc.

Northern Universities and University of London.

NOTE.—Affiliation with the Universities of Manchester and Liverpool.

The Institute is affiliated to the Universities of Manchester and Liverpool, and recognised as a privileged Institution under their Ordinances, to the extent that the attendance in the courses in Physics, Mathematics and Chemistry at the Institute is accepted as satisfying the attendance for the Intermediate B.Sc. Courses.

Time Table :—See page 36.

Classes 9 to 11.

Fee : £3 10s. 0d. per subject.

COURSE 3.

PRELIMINARY PROFESSIONAL.

(a) PHARMACY.

PHARMACEUTICAL SOCIETY'S EXAMINATION. PART I.

The Institute is recognised by the Pharmaceutical Society for instruction in the subjects of Part I. Examination, viz. :—Chemistry, Physics and Botany.

SPECIAL NOTE.—The Pharmaceutical Society of Great Britain require that candidates must register with them as Pharmaceutical Students before beginning any portion of their curriculum of studies.

All Students must produce evidence of such registration.

Time Table :—See page 37.
Classes 12 to 17.
Fee : £9 10s. 0d. for the course, or
£3 10s. 0d. per subject.

(b) DENTAL L.D.S., Part 1. (Conjoint).
(London, Manchester, Liverpool and Edinburgh).

CHEMISTRY AND PHYSICS.

Time Table : See page 37.
Classes 12 to 15.
Fee : £3 10s. per subject.

(c) DISPENSERS EXAMINATION.

CHEMISTRY ONLY.

Organic Chemistry can only be taken by Students who have the requisite knowledge of Inorganic Chemistry.

Time Table : See page 37.
Classes 12 to 14.
Fee : £3 10s. 0d. per subject.

COURSE 4.

COMMERCIAL SUBJECTS.

Time Table : See page 37.
Classes 18 to 22.
Fees: £1 per subject per term, or £2 10s. per term for the course.

COURSE 5.

ENGINEERING (Part Time Day).

National Certificate Courses in Mechanical and Electrical Engineering.

NOTE.—In the first two years, Mechanical and Electrical Students will take the same course, and all students must attend on one evening per week in order to complete the course and qualify for the National Certificate Examinations.

For general regulations and conditions of admission, see under Evening Classes (Pages 15 to 18

Time Table : See pages 37 and 38.

Classes 23 to 45.

Fee : £2 2s. 0d. per session.

COURSE 6.

TEXTILE (Part Time, Day).

A part time course in Cotton Spinning, Weaving and Designing, suitable for students who desire a good general knowledge of the principles and processes involved in the making and selling of cotton and artificial silk fabrics.

The classes shown in the Time Table are held in the mornings of each day, but arrangements, where necessary, may be made for tuition in the ancillary subjects in afternoon or evening classes.

Time Table :—See page 38.

Classes 46—54.

Fee : £1 1s. 0d. per class for the session.

Evening Classes



EVENING CLASSES

The Courses in the Evening Classes proceed by progressive stages thus :—

(1) A Three-Year's Course (Senior).
(2) A further Two-Year's Course (Advanced).

TECHNICAL COURSES.

7.—MECHANICAL ENGINEERING (National Certificate).

8.—ELECTRICAL ENGINEERING (National Certificate).

9.—BUILDING TRADES (National Certificate).

10.—COTTON SPINNING.

11.—COTTON WEAVING.

12.—CHEMICAL TRADES (National Certificate).

13.—PHARMACY.

14.—INTERMEDIATE (B.Sc.).

COMMERCIAL COURSES.

15.—GENERAL COMMERCIAL.

16.—SHORTHAND CLERKS.

17.—ADVANCED COMMERCIAL.

MISCELLANEOUS, SCIENCE, LANGUAGES, Etc.

Physics, Chemistry, Mathematics, Latin, English, French, German, Spanish, Economics, Geography, Typography.

ENROLMENT.

Students will be enrolled at the Technical College on Wednesday and Thursday evenings, September 17th and 18th, from 7 to 9 p.m.

Classes begin on Monday, September 22nd, 1930.

VACATIONS.

The College will be closed for the Christmas vacation from December 20th to January 2nd.

The dates in each case are inclusive.

EVENING CLASSES.

GENERAL REGULATIONS.

CONDITIONS OF ADMISSION.

Before admission a Student must

(a) have passed the Preliminary Technical or Commercial Course, or

(b) have attended the two year's course at a Day Junior Technical or Commercial School, or

(c) have attended a Secondary School to the age of 16 years, or

(d) produce evidence of attainments equivalent to that of the Junior Technical or Commercial Course, or

(e) pass the Entrance Examination to be held at the Technical College on Friday, 19th September, 1930.

Exceptions to the above conditions may only be made where students are over 16 years of age, in which case such students must satisfy the Principal of the Institute that they are able to benefit by the classes to which they seek admission.

Students under 16 years of age who fail to satisfy the conditions of admission should attend the Evening Junior Courses (Technical or Commercial), conducted by the Preston Education Committee in Evening Continuation Schools. These junior courses link up the work of the Elementary school with the Evening classes of the Institute.

Full particulars may be obtained from The Director of Education, Education Offices, Lancaster Road, Preston.

Scholars leaving the Elementary Day Schools should join an Evening Continuation School immediately, in order to qualify for admission to the Harris Institute as soon as possible.

PROMOTION TO HIGHER YEARS.

To qualify for certificates, and to pass on to the higher years of a course, it is necessary that Students should :—

(a) reach a certain standard of attainments, tested by examinations, held at the end of the Session, and

(b) have made satisfactory progress during the Session, based on records of attendance, homework, classwork, etc.

FEES FOR SESSION.

All fees are payable in advance, and are not returnable.

	£	s.	d.
Single subjects	0	15	0
Any complete Course approved by the Principal	0	15	0

*If Typewriting is included in a Commercial Course, an additional fee of 5s. will be charged.

N.B.—Students who do not enrol on the dates given will be charged an additional fee of 2s. 6d. This rule will be strictly enforced.

The Council reserve the right to discontinue any Class in the event of a small number joining.

Students who desire to take the Examinations of the Union of Lancashire and Cheshire Institutes, or the City and Guilds of London Institute, may be called upon to pay the whole or a portion of the Examination Fees.

NATIONAL CERTIFICATE COURSES.

National Certificate Courses are arranged in the following :—
Mechanical Engineering
Electrical Engineering
Chemical Trades and
Building Trades.

Certificates are awarded at the end of

(a) a Three Years' Course (Senior).

(b) a further Two Years' Course (Advanced).

The Certificates in each case are awarded by the Board of Education in conjunction with one of the following Professional Institutions :—

(a)	Mechanical Engineering :	Institution of Mechanical Engineers.
(b)	Electrical Engineering :	Institution of Electrical Engineers.
(c)	Chemical Trades :	Institute of Chemistry.
(d)	Building Trades :	Institute of Builders.

Conditions of Award of Certificate.

In order to obtain a certificate a candidate must make not less than 70 per cent. of the possible attendances in each year of the course, and must obtain :—

(1) Not less than 40 per cent. of the possible marks in EACH subject in the examination held at the end of each year.

(2) Not less than 40 per cent. of the possible marks obtainable in EACH year for homework, class work, laboratory work, etc., taken separately, in EACH subject for which such marks are to be awarded.

(3) Not less than 50 per cent. of the grand total of marks obtainable in EACH year. Of this total the possible marks in the examinations constitute 70 per cent., and the remaining 30 per cent. will be the possible marks for home work, class work, laboratory work, etc., in each year.

A " Distinction " may be awarded to any candidate qualified to receive a certificate who gains not less than 85 per cent. of the possible marks in the Final Examination in any subject, and his certificate may be specially endorsed with the name or names of the subjects in which he has thus distinguished himself.

Fee to be paid by each Student entering the Final Examination, Five Shillings.

COURSE 7.
MECHANICAL ENGINEERING.

NATIONAL CERTIFICATE COURSES (See page 17).

AWARD OF LOWER AND HIGHER CERTIFICATES.

The Institution of Mechanical Engineers, in conjunction with the Board of Education, has approved of the grouped courses of instruction for the award of certificates at the end of—

(1) A Three Years' Course (Senior).
(2) A further Two Years' Course (Advanced).

Students who have completed the course in the Day Junior Technical School, may be admitted to the Second Year of the Senior Course.

ADVANCED COURSE.

Students must have passed the Senior Course, or produce evidence of equivalent attainments.

COURSE 8.
ELECTRICAL ENGINEERING.

NATIONAL CERTIFICATE COURSES (See page 17).

The Institution of Electrical Engineers, in conjunction with the Board of Education, has approved of the grouped courses of instruction for the award of Certificates at the end of—

(1) A Three Years' Course (Senior).
(2) A further Two Years' Course (Advanced).

Students who have completed the course in the Day Junior Technical School may be admitted to the Second Year of the Senior Course.

ADVANCED COURSE.

Students must have passed the Senior Course or produce evidence of equivalent attainments.

Electrical students are expected to sit at the Examinations held by the Union of Lancashire and Cheshire Institutes in the Subjects of the Course.

Time Table :–Mechanical and Electrical (See pages 39 & 40). Classes 55 to 84.

See Course 5. for Part Time Day Classes in Mechanical and Electrical Engineering.

NOTE.—Holders of the National Certificates in Mechanical or Electrical Engineering, who became candidates for Election as Students, Graduate, or Associate Members of the Institute of Mechanical or Electrical Engineers, and are able to satisfy the Council of their eligibility under the by-laws for one of these classes in respect of occupation and practical training, will be exempted from certain subjects in the Examinations for election as students and associate members.

Particulars relating to these exemptions may be obtained from the Head of the Department.

COURSE 9.

BUILDING TRADES.

NATIONAL CERTIFICATE COURSES (See page 17).

The Institute of Builders, in conjunction with the Board of Education, award an Ordinary Certificate on the satisfactory completion of a Three Year Senior Course, and a Higher Certificate after a further Two Year Advanced Course.

The conditions governing the award of National Certificates are given on Page 17.

Senior Course (Ordinary Certificate).

1st Year. See Page 40. Classes 85 to 90.

2nd Year. See Page 41. Classes 91 to 93.

3rd Year. Building Construction, and at least one from the following :—

Building Science
Building Geometry
Building Mathematics
and if necessary one from either
Builders Quantities or
Builders Book-keeping.

Students who do not desire to obtain a National Certificate may in their 3rd year, select any three subjects given in the 3rd Year Course (See page 41).

Advanced Course (Higher Certificate).

1st Year :—One subject from Group 1.

Two other subjects, of which not more than one may be from Group 3.

2nd Year :—Three other subjects set out for the Advanced Course, not taken in the 1st year ; these three subjects being selected in accordance with the scheme for the 1st year.

PLUMBING COURSE.

Time Table :—See page 42. Classes 85 to 90 and 114 to 123

TYPOGRAPHY.

Time Table :—Page 48.
Classes 242 to 247.

The Classes in Typography prepare students for the City and Guilds of London Institute Examinations. For full syllabus see the Programme of the City and Guilds of London Institute.

TEXTILE DEPARTMENT.

Students may take either the Cotton Spinning or the Cotton Weaving Course.

Senior Students are expected to sit at the examinations conducted by the Union of Lancashire and Cheshire Institutes, and qualify for a certificate endorsed by the Board of Education.

Advanced Students take the examinations of the City and Guilds of London Institute, and should obtain a Full Technological Certificate.

Students should specially note that the Sessional Records (Homework and Classwork marks), together with attendance percentage, are taken into account by the Examining bodies.

COURSE 10.—COTTON SPINNING.

Time Table :—Page 42 and 43.
Classes 124 to 141.

COURSE 11.—COTTON WEAVING.

Time Table :—Page 43 and 44.
Classes 142 to 161.

In the Third Year Senior Course (S3), weaving students may attend either Textile Mechanics or Chemistry.

In the Second Year Advanced Course (A2), weaving students must take the Hons. B Lecture, and Practical class and one of the following,—

(1) Textile Engineering
(2) Economics of the Cotton Industry.

CHEMISTRY AND PHARMACY DEPARTMENT.

COURSE 12.

CHEMICAL TRADES.

NATIONAL CERTIFICATE COURSES (See page 17).

The Institute of Chemistry, in conjunction with the Board of Education, award an Ordinary Certificate on the satisfactory completion of a three year Senior Course, and a Higher Certificate after a further two year Advanced Course.

Time Tables, pages 46 and 47. Classes 215 to 227.

COURSE 13.

PHARMACY.

Time Tables, page 47. Classes 228 to 238.

COURSE 14.

INTERMEDIATE B.Sc.

Time Table, page 47. Classes 239 to 241.

COMMERCIAL COURSES.

COURSE 15.—**SENIOR GENERAL COURSE.**

COURSE 16.—**SENIOR COURSE FOR SHORTHAND CLERKS.**

COURSE 17.—**ADVANCED COMMERCIAL COURSE.**

SENIOR COURSES (15 and 16).

In the First and Second Years each Course consists of **four** subjects. Third Year Courses consist of three subjects.

In each Course (except the special ones specified later, which do not qualify for a Grouped Course Certificate), one or more subjects are obligatory ; others are generally optional.

From the latter subjects students may select the required number to make up their Course.

Before selecting a Course, students should **consult both the time-table printed** (on pages 44 & 46), **and the tutors** who will be present to enrol on September 17th and September 18th, 1930.

A student taking a course may, so far as his attainments and the time-table permit, sit in a class and enter for an examination of a higher year than the remaining subjects of his course.....Transfers from one class to another are not permitted after the first two weeks of the session. The detailed syllabuses of examinations in the subjects may be found complete in the Prospectus of the Lancashire and Cheshire Institutes.

Students are expected to take the Examinations of the Union of Lancashire and Cheshire Institutes.

ADVANCED COURSE (18).

This Course is intended to assist in preparing for the Professional Secretarial and Accountancy Examinations.

SENIOR COURSE 15.

GENERAL COURSE.

FIRST YEAR (S1).

General Course. (Four Subjects) :—

OBLIGATORY : Commerce.

OPTIONAL : **Three** of the following Subjects :—

Commercial Arithmetic.
English and Commercial Correspondence.
Geography.
Book-keeping.
Shorthand
French.
Spanish.
Typewriting.
Cotton Spinning.
Cotton Weaving.

SECOND YEAR (S2).

General Course. (Four Subjects) :—

OBLIGATORY : Commerce.

OPTIONAL : **Three** of the following Subjects :—

Commercial Arithmetic.
English and Commercial Correspondence.
Geography.
Book-keeping.
Shorthand (minimum of 60 words per minute).
French.
Spanish.
Typewriting.
Cotton Spinning.
Cotton Weaving.

THIRD YEAR S3).

General Course. (Three Subjects) :—

OBLIGATORY : Commerce.

OPTIONAL : Any two of the following :—

Book-keeping and Accountancy.
Arithmetic.
English Literature.
Shorthand (minimum of 80 words per minute).
A Modern Language.

SENIOR COURSE 16.

COURSE FOR SHORTHAND CLERKS.

First Year (S1).

Course for Shorthand Clerks. (Four Subjects) :—

Obligatory : Shorthand.
English and Commercial Correspondence.

Optional : Any Two of the following :—
Commercial Arithmetic
Book-keeping.
Typewriting.

Second Year (S2).

Course for Shorthand Clerks. (Four Subjects) :—

Obligatory : Shorthand.
English and Commercial Correspondence.

Optional : Any two of the following :—
Commerce (2nd Year Syllabus).*
Book-keeping (1st or 2nd Year Syllabus).*
Commercial Arithmetic.
Typewriting.

Third Year (S3).

Course for Shorthand Clerks. (Four Subjects) :—

Obligatory : Shorthand.
Commerce (2nd or 3rd Year Syllabus).*

Optional : Any two of the following :—
English and Commercial Correspondence, or English Language and Literature (if sufficient enrol).
Book-keeping (2nd Year Syllabus), or*
Book-keeping and Accountancy.
Commercial Arithmetic.
Typewriting.

*If in the Second or Third Year Course, any subject chosen has been taken in a previous year, the next higher stage must be taken.

TIME-TABLE OF COMMERCIAL CLASSES.

See pages 44, 45 and 46.
Classes 162 to 214.

Students should note carefully the buildings in which the classes are held.

NOTE.— FIRST YEAR.

All females taking Arithmetic attend class 164 or 165.

All males taking Arithmetic (except such as also take Geography) attend class 162 or 163.

Males taking both Arithmetic and Geography attend classes 164 or 165 and 185.

The classes in Shorthand are held in the same building as the Arithmetic classes.

In Shorthand, students who have previously done nothing may find it advisable during the first session to work for a local examination They should consult their tutors on the matter. The second year classes consist of :—A. Revision, Theory and Speed to 60 words per minute ; B. Speed from 60 to 80 words. Students who can do 80 words per minute should join the 3rd year.

In Typewriting, 1st and 2nd year students must consult the tutor on enrolment night as to which hour is available.

NOTE—That the Shorthand Theory Class for **beginners** does not prepare for the U.L.C.I. Examination in Shorthand Advanced Theory which is necessary for Group Course Candidates who wish to secure Scholarships.

PART TIME DAY CLASSES IN COMMERCIAL SUBJECTS.

Part Time Day classes have been formed for persons over 16 years of age desirous of instruction in any of the following subjects :—

TYPEWRITING, SHORTHAND, OFFICE ROUTINE, BOOK-KEEPING AND COMMERCIAL CORRESPONDENCE.

See Course 4.—For routine see page 37

ADVANCED COMMERCIAL COURSE (17)

Three subjects, **one** at least to be chosen from Group A.

Group A.	**Group B.**
Accounting and Auditing.	Company Law.
Economics	A second Modern language
A Modern Language	Banking and Currency.

Time table page 46. Classes 209 to 214.

MISCELLANEOUS CLASSES AND SPECIAL COURSES.

The following classes are here indicated separately for the benefit of students who desire to take up the study of certain subjects for the Preliminary Professional and other Examinations, and to assist students of an advanced grade to a higher standard of attainments.

A course consists of any three of the following subjects :—

SUBJECT.	CLASS NO.
Arithmetic	200.
Book-keeping	201 or 202.
Chemistry	217 to 227.
Economics of the Cotton Industry	161.
English Language and Literature	204.
French	182, 198, 206, 214.
Latin	184.
Mathematics	215.
Physics	216, 240
German	213
Spanish	183.
Geography	185, 199.
Shorthand	205.

A Local Examination will be held in those subjects not otherwise provided for, and certificates will be given.

JUNIOR COURSES.

FULL TIME DAY

COURSES.—

JUNIOR TECHNICAL.

JUNIOR COMMERCIAL.

Classes begin on Tuesday, September 9th, 1930

Autumn Term :—9th September, 1930—19th December, 1930.

Spring Term :—5th January, 1931—3rd April, 1931.

Summer Term :—14th April, 1931—16th July, 1931.

VACATIONS.—

The Schools will be closed for the Christmas Vacation from 19th December, 1930, to 4th January, 1931 ; for the Easter Vacation, from 3rd April, 1931, to 13th April, 1931; for the Whitsuntide Vacation, from 22nd May, 1931 to 1st June, 1931.

FEE.—£1 10s. 0d. per Session or 10s. 0d. per term.

TIME-TABLES :—See pages 49 to 54.

DAY JUNIOR SCHOOLS.

CONDITIONS OF ENTRY, ETC.

(1) Day Junior Technical School.
(2) Day Commercial School.

ENTRANCE AND SCHOLARSHIP EXAMINATIONS.

Each boy or girl admitted must not be less than 13 years old at the date of admission, and must pass the School Entrance Examination.

The Entrance Examination will be held on Saturday, the 9th May, at the Harris Institute, Avenham, or the Technical College.

Entries must be made on a form which can be obtained from the School and forwarded to the Principal, Harris Institute, on or before the 20th April, 1931.

Fee, £1 10s. for Session, September to July. This may be paid by three instalments of 10/-.

Parents or Guardians will be required to sign an agreement form undertaking that the pupil attends regularly for two years, or in default, pay the sum of £3 3s. 0d.

The Council of the Harris Institute offer a limited number of Scholarships (providing free tuition only), to boys not less than 13 years of age on October 1st, 1931, and who for two years prior to the date of the Examination have been in regular attendance at a Day School within 7 miles of the Preston Town Hall.

The Preston Local Education Committee award a number of Free Admissions to the School, and Book allowances are given to Candidates residing in the County Borough of Preston.

The Lancashire County Council also award a limited number of Exhibitions on the result of this Entrance Examination (open to candidates residing in the Administrative County) subject to certain conditions, the Exhibitions provide free tuition, travelling expenses, and allowance for books and maintenance. Full particulars as to these Exhibitions may be obtained from the Director of Education, County Offices, Preston.

Leaving Certificates, First or Second Class, are given to all who satisfactorily conclude their period of training, and a certain number of free scholarships to Evening Classes are granted to those whose attainments and conduct in the Day School have merited it.

The School Uniform is as follows :—**Girls.**—Navy Tunic and Girdle, Navy Knickers, White Blouse, with polo collar and long sleeves, Blue and Green Tie, Green Cap in winter, Curacoas Hats with School Band in summer, Black Cashmere Stockings, Black Footwear, Navy Coat. School Blazers can be obtained, if desired.

Boys.—School cap, tie, and school blazers.

The above can be purchased from the School Outfitters on the presentation of the regulation form, which may be obtained at the School.

Every endeavour is made at the end of the course to assist worthy students to obtain suitable posts. Many employers apply to the School for employees and apprentices.

DAY JUNIOR TECHNICAL SCHOOL.

The aim of the School is to provide a suitable education for boys who, having completed the ordinary course of work in the Elementary Day School, desire to enter Engineering, Building and other trades.

The curriculum is planned with the object of providing for the continuance of a general education together with an education in all subjects which are necessary to boys about to enter industrial occupations.

The students are brought into close contact with their future occupation through teachers who have had experience in industry.

The students also have access to the Engineering laboratories and textile sheds, where they become acquainted with machinery and equipment which helps towards a thorough understanding of the application of scientific principles to industry.

The course of instruction extends over a period of two years, and the subjects taught include the following:—Mathematics, Machines and Building, Drawing and Geometry, Art, Science (including Applied Mechanics, Electricity, Magnetism, Heat), Metalwork, Woodwork, Geography, History, English, Drill and Organised Games.

Boys who obtain a Leaving Certificate may be admitted to the Second year of the Senior Course in Mechanical or Electrical Engineering or the Building Trades Course, and are thus able to complete the specialized courses in the Evening or Part Time Day Classes with the least possible delay.

DAY JUNIOR TECHNICAL SCHOOL.

ENTRANCE EXAMINATION.

SYLLABUSES.

Accuracy is of great importance. A thorough knowledge of the following will be required :—

Arithmetic.

The fundamental rules. Vulgar and decimal fractions. Percentages and averages. Ratio, proportion, simple interest and simple profit and loss. Elementary mensuration, rectangles and triangles. Circumference and area of circle. Surface and volume of simple solids,—prism and cylinder (weights of simple solids, given weight per unit volume). Elementary algebra. Use of symbols Addition, subtraction, multiplication and division.

English.—

(1) An essay; (2) Paraphrase condensation and expansion of passages ; (3) The parts of speech and elementary parsing ; (4) Easy analysis of sentences. ; (5) The use of words in sentences to illustrate their meaning ; (6) Simple letters.

The maximum marks may be obtained independently of sections 3 and 4.

Dictation.—

About a dozen lines from any of such readers as are in ordinary use in the seventh standard of an Elementary school.

DAY JUNIOR COMMERCIAL SCHOOL.

The Course extends over a period of two years, and prepares boys and girls for Clerical posts. The following subjects are taken :—Arithmetic, Algebra, Accounts, Book-keeping, Commerce, Commercial Correspondence, Drawing, Drill, English, French, Games, Geography, History, Office Routine, Mathematics, Shorthand and Typewriting.

DAY JUNIOR COMMERCIAL SCHOOL.

ENTRANCE EXAMINATION.

SYLLABUSES.

Accuracy is of great importance. A thorough knowledge of the following will be required.

Arithmetic.—

Simple rules including the use of brackets. Money tables—Ordinary weights and measures (excluding Troy weight and Apothecaries weight). Reduction of money. The simple rules as applied to weights and measures. Simple vulgar fractions. Terminating decimals. Practice. Proportion by unitary method. Easy percentages. Simple interest. The Metric System.

English.—

(1) An essay; (2) Paraphrase, condensation and expansion of passages; (3) The parts of speech and elementary parsing; (4)Easy analysis of sentences; (5)The use of words in sentences to illustrate their meaning; (6) Simple letters.

The maximum marks may be obtained independently of sections 3 and 4.

Dictation.—

About a dozen lines from any of such readers as are in ordinary use in the seventh standard of an Elementary School.

ART SCHOOL



ART SCHOOL.

The School is open for three terms, viz. :—

22nd September, 1930, to 19th December, 1930.
5th January, 1931, to 2nd April, 1931.
13th April, 1931, to 3rd July, 1931.

FEES FOR SESSION (payable in advance).

	£	s.	d.
Full-time Day Students	3	3	0
Evening Classes		15	0
Students attending one day per week for Single Subjects.....	2	2	0

Classes begin on Monday, September 22nd, 1930.

DAY AND EVENING CLASSES.—TIME TABLE (See also pages 55 & 56).

	MORNING. 10-0—12-30.	AFTERNOON. 2-30—4-30.	EVENING. 7-0—9-0.
Monday	Drawing Ornament Styles of Design Lettering Nature Drawing Animals	Etching & Woodcuts, &c. Still Life Painting Figure Drawing Object Drawing Design Lettering Memory Drawing	Drawing & Painting Still Life Nature Study Drawing (Industrial and Craft) Illustration Elem. Teachers' Class Drawing from Life
Tuesday	Nature Study Drawing, Antique History of Art Wood Decoration, Lino. Cuts Decorative Paintg., &c.	Still Life Design Drawing (Elem. & Advanced) Wood Decoration, Lino Cuts, &c.	Drawing & Painting Still Life *Textile Art (4th yr.) Design (Indust. & Crafts Wood Decoration, &c.
Wednesday	General Drawing Still Life Principles of Art Design Nature Drawing Modelling and Plaster Casting Architectural Drawing	Leather Work Batik Embroidery Still Life Drawing from the Antique Nature Study Practice or Games Modelling and Casting	Junior Art Crafts Etching, Leather work Embroidery Perspective Modelling and casting Wood & Plaster Carving *Painting & Decorating (1st year). *Textile Design (2nd & 3rd years)
Thursday	Anatomy Drawing & Painting Still Life	Drawing & Painting still Life General Drawing Illustration and Poster Design Drawing from Life	1st & 2nd year Junior Drawing Illustration, Antique Drawing from life Teachers Class Wood Decoration, &c. *Painting & Decorating (2nd, 3rd & 4th years).
Friday	Architecture Figure Composition Object & Memory Drawing Design Drawing figure in action	Raffia & Basketry Batik Leather Work Embroidery Illustration Elem. Figure Drawing Drawing—Objects & Interiors Memory Drawing	Embroidery Basketry Raffia Batik *Architecture *English & Arithmetic (1st & 2nd years).

During the Summer term an out-of-door Sketching Class will be held on Wednesday and Friday Afternoons.

*These classes will terminate after the U.L.C.I. Examinations.

OBJECTS OF THE SCHOOL.

The objects of the School are :—

(1) To give instruction in Art to those engaged in trades and professions in which the power of drawing and a knowledge of design are essential or helpful.

(2) To train those wishing to qualify to become teachers of Art in Secondary Schools, or in Schools of Art.

(3) To provide facilities to those desiring to study Art as a branch of general education, or as an accomplishment.

(4) To train those who are desirous of taking up Art as a career, and who intend to specialise as painters, sculptors, illustrators, designers, etc.

(5) To meet the requirements of those engaged in various industrial occupations.

(6) Junior Courses. To prepare young students between the ages of 14 and 16, in order that they may specialise later on, in any of the above courses.

EXAMINATIONS IN ART.

Internal.

Grouped Examinations will be held at the end of each term, comprising the subjects of the various Courses.

The Board of Education will hold Examinations in the following subjects of Art :—

(a) Drawing.

(b) Painting.

(c) Modelling.

(d) Pictorial Design for Reproduction in black and white or colour.

(e) Industrial Design for (i.) Handicrafts and (ii.) Manufactures

1. The Examination in Drawing will be of a standard suitable for candidates who, after a good general education, including some preliminary instruction in Drawing, up to the age of 16 or later, have devoted themselves to serious and continuous study of Drawing for, as a rule, not less than two years.

2. The Examinations in Painting, Modelling, and Pictorial Design will be of such a standard as could be attained, according to the capacity of the candidate, by two or more years of serious and continuous specialised study after passing the Examination in Drawing.

3. Examinations in Industrial Design will be of such a standard as could be attained through regular attendance at evening or other part-time classes in the intervals of employment for a period of four years after the age of 16.

4. Candidates will not be admitted to the Examinations in Painting, Modelling, or Pictorial Design, unless they have previously passed the Examination in Drawing.

City and Guilds of London.

Students are prepared for these Examinations in the following Subjects :—Painting and Decorating, Embroidery, Principles of Art as applied to Cotton Weaving.

National Society of Art Masters.

A series of Examinations in Drawing arranged for Teachers in Elementary Schools.

UNION OF LANCASHIRE AND CHESHIRE INSTITUTES.

Students are prepared for the Examinations arranged by the U.L.C.I. Authority in the following Subjects :—Junior Industrial Art, Painting and Decorating, Architecture, Embroidery, Leatherwork, Woodcarving, Textile Design, etc.

SCHOLARSHIPS.

Harris Art Scholarship.

One scholarship of the value of £7 10s. 0d. per annum, tenable for three years, will be awarded annually.

The Scholarship will be open to all Students of the School of Art, who have attended for not less than one year immediately preceding the award, and will be tenable at the Harris Institute.

The Scholarship will be awarded on the results of the annual examinations, in conjunction with the Student's work of the session.

Should one or more of these Scholarships fall vacant before the full period of three years, two or three (as the case may be), will be given instead of one, in the year when they lapse.

Free Studentships.

Free Studentships to the Day Classes are offered to Students of the School (Day or Evening), who are studying with a view to becoming designers, craft workers, or teachers.

Method of award, the same as for the above.

Free Studentships to the Evening Classes of offered to students taking definite courses, and will be awarded on the result of marks given for homework, attendance, and internal examinations.

Special Scholarships are awarded to students who have left or are about to leave elementary schools, who intend to follow occupations requiring an Art Training.

PRIZES :—STEELE BEQUEST.

Three Prizes (one day and two evening) of £4 each are offered for the best work done by Students each Session.

SKETCH CLUB AND STUDENTS' UNION.

The Sketch Club is organised by the Staff and Students for the purpose of encouraging individual effort. Monthly competitions are arranged during the Sessions, and a series of subjects are set for the long vacation.

All Students are eligible. Further information and particulars may be obtained from members of the Staff.

HARRIS INSTITUTE, PRESTON.

TIME TABLE OF CLASSES. SESSION 1930-31.

A—*Avenham Institute.* C—*Christ Church School (Bow Lane).* T—*Technical College*

TECHNICAL DAY CLASSES.

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	MATRICULATION.						
1	T English and History	F. W. Jackson	11.15–12.15	..	11.15–12.15	2—3	3—4
2	T French	F. W. Jackson	..	2—3	..	..	11.15–12.15 and 2—3
3	T Latin	F. W. Jackson	..	3—4	..	3—4	..
4	T Mathematics	F. B. Landolt	9.30–11.15	11.30–12.30	9.30–11.15	..	..
5	T Physics	F. B. Landolt	3.15–5	9.30–11.15 & 3–4.30	..	..	..
6	A Chemistry, Theory	R. H. Jones	..	..	..	11.15–12.15	9.45–10.45
7	A Chemistry, Practical	R. H. Jones	..	..	2.30–4	..	..
8	T Geography	F. W. Jackson	..	..	..	11.15–12.15	..
	INTER-SCIENCE.						
9	T Mathematics	F. B. Landolt	..	2—5	..	..	..
10	T Physics	F. B. Landolt	..	..	..	..	2—4
11	A Chemistry	R. H. Jones	..	..	9.30—10.30 10.30–12.30 2.30–4	11.15–12.15	9.45–10.45 10.45–12.30

	PREL. PROFESSIONAL: PHARMACY, DENTAL, MEDICAL, DISP							
12	A Chemistry, Org. (Theory) ..	R. H. Jones	2—3	..	..	..	..
13	A Chemistry, Inorg. (Theory) ..	R. H. Jones	..	..	9.30-10.30	11.15-12.15	9.45-10.45
14	A Chemistry, Inorg. (Practical) ..	R. H. Jones	..	..	10.30-12.30 and 2.30-4	..	..
15	T Physics	F. B. Landolt	3.15-5	9.30-11.15	..	9.30-11	10.45-12.30 ..
16	A Botany, Theory	H. W. Edmunds	10.30-11.30	11.30-12.30	..	..	..
17	A Botany, Practical	H. W. Edmunds	..	2—4	..	2–4	..
	PART TIME DAY COMMERCIAL CLASSES.						
18	T Typewriting	J. Jones	9.15-10.15	..	..	9.15-10.15	..
19	T Shorthand	J. Jones	10.15-11.15	..	11.15-12.15	10.15-11.15	..
20	T Bookkeeping	W. Webster	..	..	9.15-11.15	..	..
21	T Office Routine	J. Jones	11.15-12.15	..	..	..	..
22	T Commercial Correspondence ..	R. Cross	..	..	..	11.15-12.15	..
	PART TIME DAY ENGINEERING. (National Certificate Course).						
	S1						
23	T Mathematics	G. E. Hall	..	..	9–10 & 2–3	..	..
24	T Mechanics and Heat Engines	G. E. Hall	..	..	10–12	..	..
25	T Engineering drawing	H. W. Venning	..	..	3—5	..	..
26	T Electrical Science	A. Woo	..	..	..	..	7.15-9.15
27	T Elec. Equipment (Motor Eng.) .	W. E. Bamber	..	..	..	7.15-9-15	..
	S2						
28	T Mathematics	H. W. Venning	11.15-12.15 and 4–5	..	..	..	..
29	T Mechanics and Heat Engines	T. M. Naylor & F. W. Walker	2—4	..	..	..	..
30	T Engineering Drawing	G. E. Hall	9.15–11.15	..	..	..	..
31	T Electrical Science, ...	J. H. Hulse	..	..	7.15-9.15	..	..
32	T Elec. Equipment (Motor Eng.)	W. E. Bamber	..	..	..	7.15-9.15	..

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	MECHANICAL ENGINEERING.						
	S3 (National Certificate)						
33	T Mathematics	G. E. Hall	7.15–9.15	..	..	..	..
34	T Mechanics	F. W. Walker	..	..	2—4.30	..	..
35	T Heat Engines	F. W. Walker	..	..	9.15–12	2—4.30	..
	S3 (A) (Non Certificate)						
36	T Engineering Drawing	H. W. Venning	..	..	9—11	..	..
37	T Mechanics	T. M. Naylor	..	..	11—12	..	..
38	T Heat Engines	T. M. Naylor	..	..	2—4.30	..	..
39	T Mathematics	G. E. Hall	7.15–9.15	..	..	..	..
	A1 or 2						
40	T Mechanical Engineering ..	T. M. Naylor	..	..	..	9.30—12 2—4.30	..
41	T Electrical Engineering for Mechanical Engineers ..	J. H. Hulse	..	..	..	7.15–9.15	..
42	T Mathematics	J. Walmsley	..	..	..	..	7.15–9.15
	ELECTRICAL ENGINEERING.						
	S3 (National Certificate)						
43	T Mathematics	G. E. Hall	7.15–9.15	..	..	..	..
44	T Electro-Technics	A. Woods	..	..	..	9.30–11.30	..
45	T Electrical Laboratory ..	A. Woods	..	2—4.30	..	..	..
	TEXTILE CLASSES.						
	(Spinning and Weaving Cotton).						
46	T Spinning Mechanism	D. Atkinson	..	9.30–10.45	..	..	..
47	T Spinning (Practical)	D. Atkinson	..	10 45–12.0	..	..	..
48	T Weaving Mechanism	D. Atkinson	9.30–10.45	..	..	..	..
49	T Weaving Practical	[redacted] W. Jackson.	10.45–12.0	..	..	..	10.45–12.0
50	T Weaving Calculations ..	D. Atkinson	..	..	9.30–10.45	..	..
51	T Cloth, Dissection, Analysis ..	D. Atkinson	..	..	10.45–12.0	..	..
52	T Fabric Structure	D. Atkinson	..	..	..	9.30–10.45	..
53	T Practical Designing	D. Atkinson	..	..	..	10-45–12.0	..
54	T Yarn Preparation	D. Atkinson	..	..	..	..	9.30–10.45

	MECHANICAL ENGINEERING. (National Certificate Courses)						
	S1						
55	T Mathematics	R. H. Wignall, W. R. Tuson	..	..	..	7.15-9.15	..
56	T Engineering Drawing	J. H. Binfield	..	7.15-9.15	..	..	..
57	T Mechanics and Heat Engines	F. W. Walker, ...	7.15-9.15	..	..	..	..
	S2						
58	T Mathematics	H. Venning	..	7.15-9.15	..	..	..
59	T Engineering Drawing	J. H. Binfield, ...	..	..	7.15-9.15	..	..
60	T Mechanics and Heat Engines	G. E. Hall	..	..	..	..	7.15-9.15
	S3						
61	T Mathematics	G. E. Hall	7.15-9.15	..	..	..	..
62	T Mechanics	F. W. Walker	..	..	7.15-9.15	..	..
63	T Heat Engines	F. W. Walker	..	..	..	7.15-9.15	..
	A1						
64	T Mathematics	J. Walmsley	..	..	..	..	7.15-9.15
65	T Machine Design	H. W. Venning	7.15-9.15	..	..	..	..
66	T Strength of Materials	H. W. Venning	..	..	7.15–9.15	..	7.15-9.15
	A2						
67	T Heat Engines	T. M. Naylor	7.15-9.15	..	..	..	..
68	T Theory of Machines	T. M. Naylor	..	..	7.15-9.15	..	..
69	T Electrical Engineering for Mechanical Engineers	J. H. Hulse	..	..	..	7.15-9.15	..
	ELECTRICAL ENGINEERING (National Certificate Course)						
	S1						
70	T Mathematics	R. H. Wignall, W. R. Tuson	7.15-9.15	..	..	..	..
71	T Electrical Drawing	F. Callow, J. Morley ..	..	..	..	7.15-9.15	..
72	T Electrical Science	A. Woods	..	..	..	..	7.15-9.15

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	S2						
73	T Mathematics	H. Venning	..	7.15-9.15	..	..	..
74	T Mechanics	F. B. Landolt	..	..	..	7.15-9.15	..
75	T Electrical Science	J. H. Hulse	..	..	7.15-9.15	..	..
	S3						
76	T Mathematics	G. E. Hall	7.15-9.15	..	..	..	..
77	T Electro-Technics	A. Woods	..	..	..	7.15-9.15	..
78	T Electrical Laboratory ..	A. Woods	..	7.15-9.15	..	..	..
	A1						
79	T Mathematics	J. Walmsley	..	..	..	..	7.15-9.15
80	T Electrical Engineering ..		..	..	..	7.15-9.15	..
81	T Electrical Laboratory ..		7.15-9.15	..	..	..	..
	A2						
82	T Electrical Transmission and Distribution	C. C. Wade	..	..	..	7.15-9.15	..
83	T Electrical Laboratory ..	C. C. Wade	..	..	7.15-9.15	..	..
84	T Mechanical Engineering for Electrical Engineers ..	T. M. Naylor..	..	7.15-9.15	..	..	..
	BUILDING TRADES.						
	S1 (A)						
85	T Mathematics and Science ..	W. Taylor, F. Campey ..	..	7.15-9.15	..	..	..
86	T Building Construction ..	H. Howarth, F. Campey,	..	..	7.15-9.15	..	..
87	T Geometry	J. N. Walker, and G. H. Broadbent	..	..	..	..	7.15-9.15
	S1 (B)						
88	T Mathematics and Science ..	W. Taylor, H. Fisher ..	..	..	..	..	7.15-9.15
89	T Building Construction ..	H. Howarth, H. Allen ..	7.15-9.15	..	..	..	..
90	T Geometry	J. N. Walker, J. Spiby ..	..	7.15-9.15	..	..	..

	S2						
91	T Mathematics and Geometry ..	W. Taylor, J. Spiby, and H. Fisher	..	..	..	7.15-9.15	..
92	T Building Construction ..	G. H. Broadbent, junr., H. Yeadon & H. Walters ..	..	7.15-9.15	..	..	..
93	T Building Science	E. M. Pearson, J. Spiby ..	7.15-9.15	..	..	..	..
	S3						
94	T Building Construction ..	H. Howarth and H. Yeadon .	..	..	..	7.15-9.15	..
95	T Quantities	J. T. Higginson	..	7.15-9.15	..	..	..
96	T Geometry	J. N. Walker & H. Walters .	7.15-9.15	..	..	..	..
97	T Brickwork and Concreting ..	T. Croft	..	..	7.15-9.15	..	..
98	T Carpentry	H. Allen	..	..	..	..	7.15-9.15
99	T Mathematics	G. E. Hall	7.15-9.15	..	..	..	..
100	T Building Science	E. M. Pearson	..	..	7.15-9.15	..	..
	A1 and A2						
	Group 1.						
101	T Building Construction (A or B)	E. M. Pearson	..	..	..	7.15-9.15	..
102	T Builders Quantities	J. T. Higginson	..	7.15-9.15	..	..	..
103	T Bldrs. Quantities and Pricing .	J. T. Higginson	7.15-9.15	..	..	..	..
104	T Structural Work	E. M. Pearson	..	..	..	..	7.15-9.15
	Group 2						
105	T Carpentry and Joinery ..	F. Campey	..	..	..	..	7.15-9.15
106	A Architectural and Building History (See Art School) ..						
107	T Building Equipment	E. M. Pearson	..	..	..	..	7.15-9.15
108	T Builders Mathematics.. ..		7.15-9.15	..	..	..	..
109	T Builders Book-keeping ..						
110	T Surveying and Levelling ..						
	Group 3, Practice Class						
111	T Building Construction A or B .	G. H. Broadbent, senr. ..	..	..	7.15-9.15	..	..
112	T Carpentry and Joinery ..						
113	T Structural Work						

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	S1 (S1A or S1B—Building Trades).						
	S2						
114	Plumbing, Practical	J. Dixon and F. Coupe ..	7—9	..	..	..	..
115	Plumbing, Theory	J. Dixon and F. Coupe ..	..	..	7—8.30	..	..
116	Plumbing, Science	J. Dixon and F. Coupe ..	..	..	8.30-9.30	..	..
117	Mathematics and Science ..	W. Taylor and J. Spiby ..	..	7.15-9.15	..	..	..
	S3						
118	Plumbing, Practical	J. Dixon and F. Coupe ..	7—9	..	..	..	..
119	Plumbing, Theory	J. Dixon and F. Coupe ..	..	..	8.30-9.30	..	..
120	Mathematics and Geometry ..	W. Taylor	..	..	..	7.15-9.15	..
121	Or Building Construction ..	G. H. Broadbent	..	7.15-9.15	..	..	..
	A						
122	Plumbing, Practical	J. Dixon	7—9	..	..	..	..
123	Plumbing, Theory	J. Dixon	..	..	7-9.30	..	..
	COTTON SPINNING.	* Alternate weeks.					
	S1						
124	T Mathematics	P. Addison	7.15-9.15	..	..	..	..
125	T Textile Drawing	S. Jackson	..	..	7.15-9.15*	..	..
126	T Cotton Spinning, Practical ..	J. H. Harrison	..	..	..	7.15-9.15*	..
127	T Cotton Spinning, Theory ..	J. H. Harrison	..	7.15-9.15	..	..	..
	S2						
128	T Mathematics and Mechanics ..	R. Chatburn	..	7.15-9.15	..	..	..
129	T Textile Drawing	S. Jackson	..	..	7.15-9.15*	..	..
130	T Cotton Spinning, Practical ..	J. H. Harrison	..	..	..	7.15-9.15*	..
131	T Cotton Spinning, Theory ..	J. H. Harrison	7.15-9.15	..	..	..	..
	S3						
132	T Cotton Spinning, Theory ..	J. Rathbone	..	..	7.15-9.15	..	..
133	T Cotton Spinning, Practical ..	J. Rathbone	..	..	..	..	7.15-9.15*
134	T Textile Drawing	S. Jackson	..	..	..	..	7.15-9.15*
135	T Textile Mechanics	J. Adamson	..	7.15-9.15	..	..	..

	A1							
136	T Cotton Spinning, Theory ..	J. Rathbone	..	..	..	..	7.15-9.15	..
137	T Cotton Spinning, Practical ..	J. Rathbone	7.15-9.15	..	..	..	..	..
138	T Textile Engineering	G. E. Hall	..	7.15-9.15	..	..	..	..
	A2							
139	T Cotton Spinning, Theory ..	J. Rathbone	..	7.15-9.15	..	..	..	..
140	T Cotton Spinning, Practical ..	J. Rathbone	..	..	..	..	7.15-9.15	
141	T Textile Economics	W. Webster	..	..	7.15-9.15	..	..	
	COTTON WEAVING.	* Alternate weeks.						
	S1							
142	T Mathematics	P. Addison, H. Richmond..	..	..	7.15-9.15	..	..	
143	A Textile Drawing		..	..	..	..	7.15–9.15*	
144	T Cotton Weaving, Practical ..	W. Jackson	..	..	..	..	7.15-9.15*	
145	T Cotton Weaving, Theory ..	D. Atkinson, T. Taylor ..	..	..	..	7.15-9.15	..	
	S2							
146	T Cotton Weaving, Theory ..	D. Atkinson, H. Richmond	7.15-9.15	..	..	..	..	
147	T Cotton Weaving, Practical ..	W. Jackson .. .. J. J. Blackhurst	..	..	7.15-9.15*	..	..	
148	A Textile Design and Colour ..	S. A. Horsley	..	..	7—9*	..	..	
149	T Textile Drawing & Mechanics	J. Preston, J. J. Blackhurst.	..	..	..	7.15-9.15	..	
	S3							
150	T Cotton Weaving, Theory ..	J. Martin	..	..	..	..	7.15-9.15	
151	T Cotton Weaving, Practical ..	W. Jackson .. .. J. J. Blackhurst	..	..	7.15-9.15*	..	..	
152	T Textile Mechanics	J. Preston..	..	7.15-9.15	..	..	..	
153	A Textile Chemistry	R. H. Jones	7—9.30	..	..	..	..	
154	A Textile Design & Colour ..	S. A. Horsley	..	..	7—9*	..	..	

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	A1						
155	T Cotton Weaving, Hons. A. ..	T. Taylor	..	..	7.15–9.15	..	..
156	T Cotton Weaving, Practical ..	W. Jackson, J. Martin ..	7.15–9.15	..	..	..	..
157	A Design and Colour	W. T. Garnar	..	7—9	..	..	..
	A2						
158	T Cotton Weaving, Hons. B. ..	D. Atkinson..	..	..	..	..	7.15–9.15
159	T Cotton Weaving, Practical ..	W. Jackson	7.15–9.15	..	..	..	..
160	T Textile Engineering	G. E. Hall	..	7.15–9.15	..	..	..
161	T Economics of Cotton Industry	W. Webster	..	..	7.15–9.15	..	..
	COMMERCIAL COURSES.						
	S1						
162	C Arithmetic	E. Singleton	7.15–8.15	..	..	..	..
163	C Arithmetic	E. Singleton	8.15–9.15	..	..	..	..
164	A Arithmetic	F. R. Snalam	7.15–8.15	..	..	..	..
165	A Arithmetic	F. R. Snalam	8.15–9.15	..	..	..	..
166	T Book-keeping (Beginners) ..	G. R. Drysdale	..	..	7.15–8.15	..	..
167	T Book-keeping (Beginners) ..	G. R. Drysdale	..	..	8-15–9.15	..	..
168	C Book-keeping	J. Donaldson	..	..	7.15–8.15	..	..
169	C Book-keeping	J. Donaldson	..	..	8.15–9.15	..	..
170	T Book-keeping	H. Catterall..	..	..	..	7.15–8.15	..
171	T Commerce	W. Webster	..	7.15–8.15	..	..	..
172	T Commerce	W. Webster	..	..	..	..	8.15–9.15
173	T English and Com. Corr. ..	H. W. Hughes	..	8.15–9.15	..	..	..
174	T English and Com. Corr. ..	H. W. Hughes	..	..	..	..	7.15–8.15
175	C Shorthand (More Adv. Theory)	H. W. Hughes	7.15–8.15	..	..	..	..
176	C Shorthand (Elementary) ..	H. W. Hughes	8.15–9.15	..	..	..	..

177	A Shorthand (Elementary) ..	J. Jones	7.15-8.15	..	..	..	..
178	A Shorthand (More Adv. Theory)	J. Jones	8.15-9.15	..	..	..	..
179	T Typewriting	J. Hilton	..	6.15-7.15	..	..	..
180	T Typewriting	J. Hilton	..	7.15-8.15	..	..	..
181	T Typewriting	J. Hilton	..	8.15-9.15	..	..	..
182	T French	F. W. Jackson	..	8.15-9.15	..	..	..
183	A Spanish	J. Appleby	..	7.15-8.15	..	..	..
184	A Latin	F. W. Jackson	..	..	..	7.15-8.15	..
185	A Geography	H. C. Pye	7.15-8.15	..	..	..	..
	S2						
186	A Arithmetic	E. Singleton	..	..	..	..	7—8
187	A Book-keeping	P. Bridge	..	..	7.15-9.15	..	..
188	C Book-keeping	H. Catterall	..	..	7.15-9.15	..	..
189	T Commerce	W. Webster	..	8.15-9.15	..	..	..
190	T Commerce	W. Webster	..	..	..	..	7.15-8.15
191	T English and Com. Corr. ..	H. W. Hughes	..	7.15-8.15	..	..	..
192	T English and Com. Corr. ..	H. W. Hughes	..	..	..	..	8.15-9.15
193a	A Shorthand (Initial Speed) ..	J. Jones	..	..	..	7.15-9.15	..
193	T Shorthand (60 to 80 words) ..	W. Hanson	..	..	..	7.15-9.15	..
194	T Shorthand (50 to 60 words) ..	W. R. White	..	..	..	7.15-9.15	..
195	T Typewriting	J. Hilton	..	..	..	..	6.15-7.15
196	T Typewriting	J. Hilton	..	..	..	..	7.15-8.15
197	T Typewriting	J. Hilton	..	..	..	..	8.15-9.15
198	T French	F. W. Jackson	..	7.15-8.15	..	..	..
199	A Geography	H. C. Pye	8.15-9.15	..	..	..	..

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	S3						
200	A Arithmetic	E. Singleton	..	..	..	..	8—9
201	T Book-keeping	N. Hindley	..	..	7.15-9.15	..	..
202	T Book-keeping	H. Catterall	..	..	7.15-9.15	..	..
203	A Commerce	W. Webster	7.30—9	..	..	..	..
204	A English Language & Literature	F. R. Snalam	..	..	..	..	7—8
205	A Shorthand (From 80 words)	H. W. Hughes	..	..	..	7.15-9.15	..
206	A French	F. W. Jackson	..	..	..	8.15-9.15	..
207	T Cotton Spinning, Theory	J. H. Harrison	..	7.15-9.15	..	..	..
208	T Cotton Weaving, Theory	T. Taylor	..	..	..	7.15-9.15	..
	A1 and 2						
209	Accounting and Auditing	..	..	..	7.15-8.15	..	..
210	Company Law	..	..	..	8.15-9.15	..	..
211	Banking	..	7.15-8.15	..	..	..	..
212	Economics	..	8.15-9.15	..	..	..	..
213	German	..	..	8.15-9.15	..	..	..
214	French	..	..	..	..	..	7.15-8.15
	CHEMISTRY. (National Certificate Course) **S1**						
215	A Mathematics	F. B. Landolt	7—9	..	..	..	..
216	T Physics	H. W. Edmunds	..	7—9.15	..	..	..
217	A Inorganic Chemistry	R. H. Jones	..	..	..	..	7—9 30
	S2						
218	A Physical Chemistry	R. H. Jones	..	..	8—9.30	..	..
219	A Organic Chemistry	E. Taylor	..	7—9.30	..	..	..
220	A Inorganic Chemistry	R. H. Jones	..	..	7—8	..	..
221	A Inorganic Chemistry(Practical)	R. H. Jones & F. Jackson	..	..	..	7—9.30	..

	S3						
222	A Organic Chemistry	J. N. Aldington	8—9.30	..	8—9.30	..	..
223	A Inorganic Chemistry (Theory)	F. Jackson	..	7—8	..	..	..
224	A Inorganic Chemistry(Practical)	R. H. Jones & F. Jackson..	..	..	..	7—9.30	..
225	A Physical Chemistry	E. Taylor	..	..	7—8	..	..
	A1						
226	A Organic Chemistry	J. N. Aldington & E. Taylor	7—8	7—9.30	..	..	..
227	A Inorganic (including Physical)	F. Jackson	8—9.30	..	..	..	..
		R. H. Jones & F. Jackson	..	..	..	..	7—9.30
	PHARMACY.						
	S1						
228	A Botany	H. W. Edmunds	7—9	..	..	..	..
229	T Physics	H. W. Edmunds	..	7—9.15	..	..	..
230	A Chemistry	R. H. Jones	..	..	..	..	7—9.30
	S2						
231	ABotany	H. W. Edmunds	7—9	..	..	7—9	..
232	AOrganic Chemistry, or ..	E. Taylor	..	7—9.30	..	..	..
233	T Physics	H. W. Edmunds	..	7—9.15	..	..	..
234	AInorganic Chemistry (Theory)	R. H. Jones	..	..	7—8	..	..
235	AInorganic Chemistry(Practical)	E. Taylor	..	..	8—9.30	..	..
	S3						
236	AOrganic Chemistry	E. Taylor	..	7—9.30	..	..	..
237	AInorganic Chemistry (Theory)	R. H. Jones	..	..	7—8	..	..
238	AInorganic Chemistry(Practical)	E. Taylor	..	..	8—9.30	..	..
	INTER. B.Sc. COURSE						
239	A Inorganic Chemistry	F. Jackson	7—8	..	..	..	7—9.30
240	T Physics	F. B. Landolt	..	7—9.30	..	..	..
241	A Mathematics	J. Slater	8—9.30	..	7—9.30	..	..

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday
	TYPOGRAPHY. *Alternate Weeks.						
242	Grade 1, Theory		..	7—8	..	..	..
243	Grade 2, Composing		..	8—9.15	..	..	..
244	Workshop, Gd. 1		..	..	..	*7—8	..
245	Workshop, Gd. 2		..	..	..	*8.15 9.15	..
246	Final, Theory and Gd. 2, Machines		..	..	7—8	..	..
247	Workshop, Final and Gd. 2, Machines		..	..	..	7—8 8.15 9.15	..
	MOTOR BODY BUILDING						
248	Technical Drawing	H. Lavery	7.20-9.20	..	..	..	..
249	Body Building	H. Lavery	..	..	..	..	7.20-9.20

DAY JUNIOR TECHNICAL SCHOOL.

TIME TABLE.

Monday—	9.15—11.15.	11.15—12.15.	1.45—2.45.		2.45—4.45
1A.	Workshop	Mathematics	Geography		Science
1B.	Science	Mathematics	Geography		Workshop
	9.15—11.15.	11.15—12.15.	1.45—3.15.	3.15—3.45.	3.45—4.45.
2A.	Science	Mathematics	Mathematics	Drill	History
2B.	Geometry	Mathematics	Mathematics	Drill	History
Tuesday—	9.15—10.15.	10.15—12.15.	1.45—2-45.	2.45—4.15.	4.15—4.45.
1A.	History	Workshop	Mathematics	Art	Drill
1B.	History	Geometry	Mathematics	Art	Drill
	9.15—11.15.	11.15—12.15.	1.45—3-45.	2.45—4.45	
2A.	Geometry	Geography	Mathematics	Workshop	
2B.	Science	Geography	Mathematics	Mechanics	
Wednesday	9.15—11.15.	11.15—12.15.	1.45—2.45.	2—4.	
1A.	Science	English	Mathematics	Games, weather permitting, or Mathematics (2—3).	
1B.	Workshop	English	Mathematics		
	9.15—10.15.	10.15—12.15.	1.45—2.45.		
2A.	Geography	Science	Mathematics	Games, weather permitting, or Workshop (2—3).	
2B.	Geography	Workshop	English		
Thursday—	9.15—11.15.	11.15—12.15.		1.45—2.45	2.45—4.45.
1A.	Geometry	Mathematics		Mathematics	Workshop
1B.	Workshop	Mathematics		Mathematics	Science
	9.15—10.15.	10.15—10.45	10.45—12.15.	1.45—2.45	2.45—3.45.	3.45—4.45
2A.	Mathematics	Drill	Tech. Drawing	Mathematics	English	Art
2B.	Mathematics	Drill	Tech. Drawing	Mathematics	English	Art
Friday—	9.15—10.15.	10.15—12.15.	1.45—3.15.	3.15—3.45.	3.45—4.45
1A.	English	Tech. Drawing	Mathematics	Drill	English
1B.	English	Tech. Drawing	Mathematics	Drill	English
	9.15—10.15.	10.15—12.15.	1.45—3.45.		3.45—4.45.
2A.	English	Mechanics	Workshop		Workshop
2B.	English	Workshop	Science		Workshop

DAY JUNIOR TECHNICAL SCHOOL.

TIME TABLE ANALYSIS (FIRST YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
Mathematics ..	E. C. Moyle ; G. E. Hall	11.15–12.15	1.45–2.45	....	11.15–12.15 1.45–2.45	1.45 3.15
English ..	R. S. Cross ; G. E. Hall ..	....	....	11.15 -12.15	....	9.15–10.15 3.45–4.45
History ..	R. S. Cross	....	9.15–10.15	....	....	....
Geography ..	F. W. Jackson	1.45–2.45	....	....	....	....
Science	E. M. Pearson	2.45–4.45 (A) 9.15–11.15 (B)	....	9.15–11.15 (A)	.... 2.45–4.45(B)	....
Workshop ..	J. H. Hulse	9.15–11.15 (A) 2.45–4.45 (B)	10.15–12.15 (A)	.... 9.15–11.15 (B)	2.45–4.45(A) 9.15–11.15 (B)	....
Geometry ..	G. E. Hall	....	10.15–12.15 (B)	....	9.15–11.15 (A)	....
Technical Drawing ..	E. M. Pearson ; H. W. Venning ..	....	....	....	....	10.15–12.15
Art	G. A. Clucas	....	2.45–4.15	....	....	....
Organised Games	A. Woods	....	....	2.0–4.0	....	....
Drill	E. H. Trinder	....	4.15–4.45	.....	.....	3.15–3.45

DAY JUNIOR TECHNICAL SCHOOL.
(SECOND YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
Mathematics ..	E. C. Moyle ; G. E. Hall ; H. W. Venning ; F. W. Walker ..	11.15–12.15 1.45–3.15	1.45–2.45	....	9.15–10.15 1.45–2.45	....
English ..	J. Nickeas	....	....	....	2.45–3.45	9.15–10.15 ....
History ..	R. S. Cross	3.45–4.45	....	....	....	....
Geography ..	F. W. Jackson	....	11-15–12.15	9.15–10.15	....	....
Science	A. Woods	9.15–11.15 (A)	9.15–11.15 (B)	10.15–12.15 (A)	....	1.45–3.45 (B)
Applied Mechs. .	F. W. Walker	....	2.45–4.45 (B)	....	....	10.15–12.15 (A)
Workshop ..	J. H. Hulse	....	2.45–4.45 (B)	10.15–12.15 (A)	....	1.45–3.45 (A) 10.15–12.15 (B) 3.45–4.45
Geometry ..	H. W. Venning	10.15–12.15 (B)	9.15–11.15 (A)	....	....	....
Tech. Drawing	H, W. Venning	....	....	....	10.45–12.15	....
Art	G. A. Clucas	....	....	....	3.45–4.45	....
Organised Games	A. Woods	.....	....	2.0–4.0	....	....
Drill ..	E. H. Trinder	3.15–4.15	.....	.....	10.15–10.45	.....

DAY JUNIOR COMMERCIAL SCHOOL.

TIME TABLE.

Monday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—2.45.	2.45—3.45.	3.45—4.15
1A.	English	French	Interval	History	Arithmetic	Com. Corr.	Drill
1B.	French	English	Interval	History	Shorthand	Typing	Drill
2A.	Shorthand	Commerce	Interval	English	History	Geography	
2B.	Shorthand	Commerce	Interval	English	History	Geography	

Tuesday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—2.45.	2.45—3.45.	3.45—4.15
1A.	Geography	Mathematics	Interval	French	Shorthand	English	
1B.	Geography	Mathematics	Interval	Shorthand	Arithmetic	English	
2A.	Shorthand	Book-keeping	Interval	Mathematics	Typing	Com. Corr.	Drill
2B.	Typing	Book-keeping	Interval	Mathematics	Com. Corr.	Typing	Drill

Wednesday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—2.45.	2.45—3.45.
1A.	Typing	Shorthand	Interval	Arithmetic	Shorthand	French
1B.	Com. Corr.	French	Interval	Arithmetic	French	Shorthand
2A.	Arithmetic	English	Interval	French	Book-keeping	Book-keeping
2B.	Arithmetic	English	Interval	French	Book-keeping	Book-keeping

Thursday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—3.45.
1A.	Mathematics	History	Interval	Arithmetic	Games or Preparation
1B.	Mathematics	History	Interval	Arithmetic	Games or Preparation
2A.	Shorthand	Arithmetic	Interval	French	Games or Preparation
2B.	Shorthand	Arithmetic	Interval	French	Games or Preparation

Friday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—2.45.	2.45—3.45.
1A.	Shorthand	Arithmetic	Interval	Commerce	Drawing	English
1B.	Shorthand	Arithmetic	Interval	Commerce	Drawing	English
2A.	Arithmetic	Commerce	Interval	French	English	Drawing
2B.	Arithmetic	Commerce	Interval	French	English	Drawing

DAY JUNIOR COMMERCIAL SCHOOL.

TIME TABLE ANALYSIS (FIRST YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
English ..	A. Ellison	9.15–10.15 (A) 10.15–11.0 (B)	2.45–3.45	....	....	.... 2.45–3.45
French	J. Nickeas	9.15–10.15 (B) 10.15–11.0 (A)	11.15–12.15(A)	10.15–11.0 (B)	2.45–3.45 (A) (1.45–2.45 (B)	....
History ..	R. S. Cross	11.15–12.15	....	....	10.15–11.0	....
Geography ..	A. Ellison	....	9.15–10.15	....	....	....
Com. Corr. ..	R. S. Cross	2.45–3.45 (A)	....	9.15–10.15 (B)	....	....
Commerce ..	R. S. Cross	....	....	....	....	11.15–12.15
Arithmetic ..	A. Ellison	1.45–2.45	....	11.15–12.15	11.15–12.15	10.15–11.0
Mathematics ..	R. S. Cross	....	10.15–11.0	....	9.15–10.15	....
Typewriting ..	J. Jones	2.45–3.45 (B)	....	9.15–1.15 (A)	....	....
Shorthand ..	J. Jones	1.45–2.45 (B)	1.45–2.45 (A) 11.15–12.15 (B)	9.15–10.15 (A) 1.45–2.45 (A) 2.45–3.45 (B)	....	9.15–10.15 (A&B)
Drawing ..	G. A. Clucas	....	....	....	....	1.45–2.45
Drill & Games ..	A. Ellison	3.45–4.15	....	....	1.45–3.45	....
Intervals ..		11–11.15	11–11.15	11–11.15	11–11.15	11–11.15

DAY JUNIOR COMMERCIAL SCHOOL.

(SECOND YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
English ..	A. Ellison	11.15-12.15	....	10.15-11.0	....	1.45-2.45
French	J. Nickeas..	....	....	11.15-12.15	11.15-12.15	11.15-12.15
History ..	R. S. Cross	1.45-2.45	....	....	....	....
Geography ..	A. Ellison	2.45-3.45	....	....	....	....
Com. Corr. ..	R. S. Cross	....	2.45-3.45 (A) 1.45-2.45 (B)	....	....	....
Commerce ..	R. S. Cross	....	....	....	....	10.15-11.0
Arithmetic ..	A. Ellison	....	....	9.15-10.15	10.15-11.0	9.15-10.15
Mathematics ..	R. S. Cross	10.15-11.0	11.15-12.15	....	....	....
Book-keeping ..	W. Webster	....	10.15-11.0	1 5 -3.45	....	....
Typewriting ..	W. Webster	....	1.45-2.45 (A) 9,15-10.15 (B or A) 2.45-3.45 (B)	....	....	....
Shorthand ..	W. Webster	9.15-10.15	9.15-10.15 (A or B)	....	9.15-10.15	....
Drawing ..	G. A. Clucas	....	....	....	....	2.45-3.45
Drill & Games ..	A. Ellison	....	3.45-4.15	....	1.45-3.45	....
Intervals ..		11-11.15	11-11.15	11-11.15	11-11.15	11-11.15

ART SCHOOL.

Day.	Room.	Times of Classes.	Subjects.	Teachers.
Monday ..	1	10.0—12.30	General Drawing, Lettering, Animals	G. A. Clucas
	3 and 4	2.30—4.30	Painting Still Life, Drawing Antique, Etching, Woodcuts, &c.	W. Rathbone & G. A. Clucas
	3	2.30—4.30	Design, General Drawing, Memory Drawing	
	2	7.0—9.0	Industrial Art Drawing (Lettering, Nature, &c.)	G. A. Clucas H. Mangan.
	3	7.0—9.0	Drawing (Industrial and Crafts), Still Life	W. Rathbone, M. Duckett.
		7.0—9.0	Elementary Teachers Class, Illustration	& B. Eckersley.
	4	7.0—9.0	Drawing from Life	W. Rathbone.
Tuesday ..	Harris Museum ..	10.0—12.30	Nature Study, Drawing Antique and Animals	G. A. Clucas
	Reference Library	10.0—12.30	History and Methods of Art	W. Rathbone & G.A. Clucas.
	2	10.0—12.30	Crafts—Decoration applied to objects, Decorative Painting Lino Cuts, Stencilling	
	2	2.30—4.30	Crafts—Decoration applied to objects, Decorative Painting Lino Cuts, Stencilling	W. Rathbone. & B, Eckersley
	2	2.30—4.30	General Drawing and Design	W. Rathbone.
	1	7.0—9.0	Textile Design, 4th year	W. Garnar.
	2	7.0—9.0	Design (Industrial Students)	G. A. Clucas H. Mangan.
	3	7.0—9.0	Painting Still Life, Illustration and Industrial Design ..	W. Rathbone &
		7.0—9.0	Decoration applied to objects, Lino Cuts, Stencilling ..	B. Eckersley.
	4	7.0—9.0	Design, Industrial and Crafts	M. Duckett.
Wednesday..	2	9.30—10.0	General knowledge and Principles of Art	W. Rathbone
	3	10.0—12.30	Design, Nature Drawing and General Drawing, etc... ..	G. A. Clucas
	5	10.0—12.30	Modelling and Plaster Casting, Architectural Drawing ..	W. Rathbone
	2	2.30—4.30	Practice or Games, Modelling and Casting	W. Rathbone.
	3	.. ..	Crafts—Leatherwork, Embroidery, Batik, Basketry ..	M. Duckett.
	3	.. ..	General Drawing—Painting Still Life	W. Rathbone
	1	7.0—9.0	Textile Design, 2nd and 3rd years	S. A. Horsley
	2	7.0—9.0	Junior Course—Crafts	B. Eckersley
	5	7.0—9.0	Modelling and Casting, Plaster and Wood Carving,	W. Rathbone
	3	7.0—9.0	Leatherwork, Embroidery and General	M. Duckett
	6	7.0—7.30	Painting and Decorating (Theoretical)*	F. W. Sharples
	6	7.30—9.0	Painting and Decorating (Practical)*	F. W. Sharples
	4	7.0—9.0	Perspective	G. A. Clucas

Day.	Room.	Times of Classes.	Subjects.	Teachers.
Thursday ..	1	10.0—12.30	Anatomy	G. A. Clucas
	3	10.30-12.30	Painting Still Life	W. Rathbone
	3	2.30—4.30	Painting Still Life, Illustration, Posters, &c...	W. Rathbone
	2	7.0—9.0	1st and 2nd year Junior Drawing (Design & Colour) ..	H. Mangan
	3	7.0—9.0	Decoration applied to objects, Illustration, Teachers' Class Lino Cuts, Antique	W. Rathbone & B. Eckersley.
	4	7.0—9.0	Drawing from Life	W. Rathbone.
	5	7.0—7.30	Painting and Decorating (Theoretical), 2nd year*	E. Catterall
	5	7.0—9.0	Painting and Decorating (Practical), 2nd year*	E. Catterall
	6	7.0—7.30	Painting and Decorating, Theoretical, 3rd and 4th years* ..	F. Sharples
	6	7.0—9.0	Painting and Decorating, Practical, 3rd and 4th year* ..	F. Sharples
Friday ..	1	10.0—12.30	Architecture, Design	G. A. Clucas
	2	10.0—12.30	Object and Memory Drawing, Illustration	W. Rathbone
	4	10.0—12.30	Drawing from Life	W. Rathbone
	3	2.30—4.30	Crafts—Embroidery, Leatherwork, Basketry	M. Duckett
	4	2.30—4.30	Drawing from Life	W. Rathbone
	2	2.30—4.30	Memory Drawing—Illustration	W. Rathbone
		7.0—9.0	Architecture .. ..*	G. A. Clucas
	2	7.0—9.0	Crafts—Batik, Raffia, Embroidery	M. Duckett
	3 C.	....	English and Arithmetic, 1st and 2nd years Junior Art* ..	F. Allen

* These Classes will terminate after the U.L.C.I. Examination.

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E. C. MOYLE,
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July, 1930.

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SESSION — 1931-32

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1. **TECHNICAL DAY CLASSES. Re-open Sept.21**
2. **JUNIOR DAY SCHOOLS** ... „ „ 8
   (Technical and Commercial)
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B—

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Lecturers for Evening Classes :

F. Callow
J. H. Hulse
G. Pimley, A.I.E.E.
C. Turner
W. E. Bamber
W. A. Creasy, B.Sc., A.I.C.
H. Lavery (Motor Body Building)
W. R. Tuson, B.Sc.
R. H. Wignall
J. Etock

JUNIOR TECHNICAL SCHOOL.

Head :—The Principal.
The Staff consists of teachers from the Engineering, Building and Commercial Departments.

TEXTILE DEPARTMENT.

Head :—D. Atkinson, F.T.I.
Instructor :—W. Jackson.

Lecturers and Assistants for Evening Classes :—

P. Addison
R. Chatburn
S. Jackson
J. Preston, A.T.I.
H. Richmond
J. W. Blackhurst
J. H. Harrison
J. Martin
J. Rathbone
T. S. Taylor
W. Dagger

TYPOGRAPHY.

Lecturer :—J. Taylor.

ADMINISTRATION.

Chief Clerk :—H. R. Walsh. *Clerks* :—J. A. Gorton ; Miss E. Shimell.
Junior Clerk :—Miss M. Nelson.
Custodians :—E. Trinder (Technical College) ;
W. D. Breeze (Avenham Institute).
Assistant Custodian :—F. Gardiner.

REGULATIONS—

APPLICABLE TO ALL STUDENTS ATTENDING CLASSES AT THE . . . HARRIS INSTITUTE. . . .

Students are expected to attend punctually at the Classes for which they enrol.

All students are expected to take an examination at the end of the course in those subjects for which they enrolled at the opening of the Session.

Smoking within the School buildings is strictly prohibited: and Students must not loiter about the corridors.

The Lecturers are authorised to report periodically through the Principal, on attendance, homework and conduct of each Student.

The Council shall have power in dealing with Students who are unsatisfactory in these and other respects, to remove their names from the Register without return of fee.

SCHOLARSHIPS AND PRIZES.

A limited number of Scholarships and Prizes will be awarded at the discretion of the Council.

Prizes are also awarded by the Preston Building Trades Employers' Association, the Preston and District Engineers and Iron-founders Employers' Association, the North Lancashire Master Cotton Spinners and Manufacturers' Association, the National Registration of Plumbers and the Preston Master Printers' Association

Day Classes



TECHNICAL DAY CLASSES

COURSES :—

1. Matriculation.
2. Intermediate B.Sc.
3. Preliminary Professional
   - (*a*) Pharmacy.
   - (*b*) Dental.
   - (*c*) Dispensers.
   - (*d*) Elementary Biology.
4. Commercial Subjects.
5. Engineering (Mechanical and Electrical).
6. Building Trades.
7. Textile (Cotton Spinning and Weaving).

Classes begin on Monday, September 21st, 1931.

Autumn Term :—21st September, 1931—23rd December, 1931.
Spring Term :—11th January, 1932—24th March, 1932.
Summer Term :—5th April, 1932—1st July, 1932.

VACATIONS.

The Technical Day Classes will be closed :—

For the Christmas Vacation, from 24th December, 1931, to 8th January, 1932.

For the Easter Vacation from 25th March, to 4th April, 1932.

For the Whitsuntide Vacation from 13th May to 21st May, 1932. In each case the dates are inclusive.

ENROLMENT.

Students can enrol at the Technical College on Wednesday and Thursday evenings, September 16th and 17th, from 7 to 9 p.m., or at the Avenham Institute or Technical College on any day after the classes begin.

TECHNICAL DAY CLASSES.

COURSE 1.

MATRICULATION.

Northern Universities and University of London.

Time Table :—See page 36.

Classes 1 to 8.

FEE. £3 10s. 0d. per subject, or
£15 15s. 0d. for the full course.

COURSE 2.

INTERMEDIATE B.Sc.

Northern Universities and University of London.

NOTE.—Affiliation with the Universities of Manchester and Liverpool.

The Institute is affiliated to the Universities of Manchester and Liverpool, and recognised as a privileged Institution under their Ordinances, to the extent that the attendance in the courses in Physics, Mathematics and Chemistry at the Institute is accepted as satisfying the attendance for the Intermediate B.Sc. Courses.

Time Table :—See page 36.

Classes 9 to 11.

Fee : £3 10s. 0d. per subject.

COURSE 3.

PRELIMINARY PROFESSIONAL.

(a) PHARMACY.

PHARMACEUTICAL SOCIETY'S EXAMINATION. PART I.

The Institute is recognised by the Pharmaceutical Society for instruction in the subjects of Part I. Examination, viz. :—Chemistry, Physics and Botany.

SPECIAL NOTE.—The Pharmaceutical Society of Great Britain require that candidates must register with them as Pharmaceutical Students before beginning any portion of their curriculum of studies.

All Students must produce evidence of such registration.

Time Table :—See page 37.
Classes 12 to 17.
Fee : £9 10s. 0d. for the course, or
£3 10s. 0d. per subject.

(b) DENTAL L.D.S., Part 1. (Conjoint).
(London, Manchester, Liverpool and Edinburgh).

CHEMISTRY AND PHYSICS.

Time Table : See page 37.
Classes 12 to 15.
Fee : £3 10s. per subject.

(c) DISPENSERS' EXAMINATION.

CHEMISTRY ONLY.

Organic Chemistry can be taken only by Students who have the requisite knowledge of Inorganic Chemistry.

Time Table : See page 37.
Classes 12 to 14.
Fee : £3 10s. 0d. per subject.

(d) ELEMENTARY BIOLOGY.

A course for Gardeners and Nurserymen. See time table page 37, Class 17 (a).

Fee : £1 1s. 0d.

COURSE 4.

COMMERCIAL SUBJECTS.

Time Table : See page 37.
Classes 18 to 22.
Fees: £1 per subject per term, or £2 10s. per term for the course.

COURSE 5.

ENGINEERING (Part Time Day).

National Certificate Courses in Mechanical and Electrical Engineering.

NOTE.—In the first two years, Mechanical and Electrical Students will take the same course, and all students must attend on one evening per week in order to complete the course and qualify for the National Certificate Examinations.

For general regulations and conditions of admission, see under Evening Classes (Pages 15 to 18).

Time Table : See pages 37 and 38.
Classes 23 to 45.
Fee : £2 2s. 0d. per session.

COURSE 6.

BUILDING TRADES.

Part time Day Classes will be formed if a sufficient number of Students enrol.

COURSE 7.

TEXTILE (Part Time, Day).

A part time course in Cotton Spinning, Weaving and Designing, suitable for students who desire a good general knowledge of the principles and processes involved in the making and selling of cotton and artificial silk fabrics.

The classes shown in the Time Table are held in the mornings of each day, but arrangements, where necessary, may be made for tuition in the ancillary subjects in afternoon or evening classes.

Time Table :—See page 38.

Classes 46—54.

Fee : £1 1s. 0d. per morning for the session.

£4 4s. 0d. for the full course.

Evening Classes



EVENING CLASSES

The Courses in the Evening Classes proceed by progressive stages thus :—

(1) A Three-Years' Course (Senior).
(2) A further Two-Years' Course (Advanced).

TECHNICAL COURSES.

8.—MECHANICAL ENGINEERING (National Certificate).

9.—ELECTRICAL ENGINEERING (National Certificate).

10.—BUILDING TRADES (National Certificate).

11.—COTTON SPINNING.

12.—COTTON WEAVING.

13.—PURE & APPLIED CHEMISTRY (National Certificate).

14.—PHARMACY.

15.—INTERMEDIATE (B.Sc.).

COMMERCIAL COURSES.

16.—GENERAL COMMERCIAL.

17.—SHORTHAND CLERKS.

18.—ADVANCED COMMERCIAL.

MISCELLANEOUS, SCIENCE, LANGUAGES, Etc.

Physics, Chemistry, Mathematics, Latin, English, French, German, Spanish, Economics, Geography, Typography.

ENROLMENT.

Students will be enrolled at the Technical College on Wednesday and Thursday evenings, September 16th and 17th, from 7 to 9 p.m.

Classes begin on Monday, September 21st, 1931.

VACATIONS.

The College will be closed for the Christmas vacation from December 24th 1931, to January 6th 1932, and for the Easter vacation from March 24th 1932 to March 30th 1932.

The dates in each case are inclusive.

EVENING CLASSES.

GENERAL REGULATIONS.

CONDITIONS OF ADMISSION.

Before admission a Student must

(a) have passed the Preliminary Technical or Commercial Course, or

(b) have attended the two year's course at a Day Junior Technical or Commercial School, or

(c) have attended a Secondary School to the age of 16 years, or

(d) produce evidence of attainments equivalent to that of the Junior Technical or Commercial Course, or

(e) pass the Entrance Examination to be held at the Technical College on Friday, 18th September, 1931.

Exceptions to the above conditions may be made only where students are over 16 years of age, in which case such students must satisfy the Principal of the Institute that they are able to benefit by the classes to which they seek admission.

Students under 16 years of age who fail to satisfy the conditions of admission should attend the Evening Junior Courses (Technical or Commercial), conducted by the Preston Education Committee in Evening Continuation Schools. These junior courses link up the work of the Elementary school with the Evening classes of the Institute.

Full particulars may be obtained from The Director of Education, Education Offices, Lancaster Road, Preston.

Scholars leaving the Elementary Day Schools should join an Evening Continuation School immediately, in order to qualify for admission to the Harris Institute as soon as possible.

Tea may be had (at a small charge) in the Technical College Dining Room from 6 p.m.

PROMOTION TO HIGHER YEARS.

To qualify for certificates, and to pass on to the higher years of a course, it is necessary that Students should :—

(a) reach a certain standard of attainments, tested by examinations, held at the end of the Session, and

(b) have made satisfactory progress during the Session, based on records of attendance, homework, classwork, etc.

FEES FOR SESSION.

All fees are payable in advance, and are not returnable.

	£	s.	d.
Single subjects	0	15	0
Any complete Course approved by the Principal	0	15	0

*If Typewriting is included in a Commercial Course, an additional fee of 5s. will be charged.

N.B.—Students who do not enrol on the dates given will be charged an additional fee of 2s. 6d. This rule will be strictly enforced.

The Council reserve the right to discontinue any Class in the event of a small number joining.

Students who desire to take the Examinations of the Union of Lancashire and Cheshire Institutes, or the City and Guilds of London Institute, may be called upon to pay the whole or a portion of the Examination Fees.

NATIONAL CERTIFICATE COURSES.

National Certificate Courses are arranged in the following :—
Mechanical Engineering
Electrical Engineering
Pure and Applied Chemistry and
Building Trades.

Certificates are awarded at the end of

(a) a Three Years' Course (Senior).

(b) a further Two Years' Course (Advanced).

The Certificates in each case are awarded by the Board of Education in conjunction with one of the following Professional Institutions :—

(a)	Mechanical Engineering :	Institution of Mechanical Engineers.
(b)	Electrical Engineering :	Institution of Electrical Engineers.
(c)	Pure & Applied Chemistry	Institute of Chemistry.
(d)	Building Trades :	Institute of Builders.

Conditions of Award of Certificate.

In order to obtain a certificate a candidate must make not less than 70 per cent. of the possible attendances in each year of the course, and must obtain :—

(1) Not less than 40 per cent. of the possible marks in EACH subject in the examination held at the end of each year.

(2) Not less than 40 per cent. of the possible marks obtainable in EACH year for homework, class work, laboratory work, etc., taken separately, in EACH subject for which such marks are to be awarded.

(3) Not less than 50 per cent. of the grand total of marks obtainable in EACH year. Of this total the possible marks in the examinations constitute 70 per cent., and the remaining 30 per cent. will be the possible marks for home work, class work, laboratory work, etc., in each year.

A " Distinction " may be awarded to any candidate qualified to receive a certificate who gains not less than 85 per cent. of the possible marks in the Final Examination in any subject, and his certificate may be specially endorsed with the name or names of the subjects in which he has thus distinguished himself.

Fee to be paid by each Student entering the Final Examination, Five Shillings.

COURSE 8.
MECHANICAL ENGINEERING.

NATIONAL CERTIFICATE COURSES (See page 17).

AWARD OF LOWER AND HIGHER CERTIFICATES.

The Institution of Mechanical Engineers, in conjunction with the Board of Education, has approved of the grouped courses of instruction for the award of certificates at the end of—

(1) A Three Years' Course (Senior).
(2) A further Two Years' Course (Advanced).

Students who have completed the course in the Day Junior Technical School, may be admitted to the Second Year of the Senior Course.

ADVANCED COURSE.

Students must have passed the Senior Course, or produce evidence of equivalent attainments.

COURSE 9.
ELECTRICAL ENGINEERING.

NATIONAL CERTIFICATE COURSES (See page 17).

The Institution of Electrical Engineers, in conjunction with the Board of Education, has approved of the grouped courses of instruction for the award of Certificates at the end of—

(1) A Three Years' Course (Senior).
(2) A further Two Years' Course (Advanced).

Students who have completed the course in the Day Junior Technical School may be admitted to the Second Year of the Senior Course.

ADVANCED COURSE.

Students must have passed the Senior Course or produce evidence of equivalent attainments.

Electrical students are expected to sit at the Examinations held by the Union of Lancashire and Cheshire Institutes in the Subjects of the Course.

Time Table :–Mechanical and Electrical (See pages 39 & 40). Classes 55 to 84.

See Course 5. for Part Time Day Classes in Mechanical and Electrical Engineering.

NOTE.—Holders of the National Certificates in Mechanical or Electrical Engineering, who became candidates for Election as Students, Graduate, or Associate Members of the Institute of Mechanical or Electrical Engineers, and are able to satisfy the Council of their eligibility under the by-laws for one of these classes in respect of occupation and practical training, will be exempted from certain subjects in the Examinations for election as students and associate members.

Particulars relating to these exemptions may be obtained from the Head of the Department.

COURSE 10.

BUILDING TRADES.

NATIONAL CERTIFICATE COURSES (See page 17).

The Institute of Builders, in conjunction with the Board of Education, award an Ordinary Certificate on the satisfactory completion of a Three Year Senior Course, and a Higher Certificate after a further Two Year Advanced Course.

The conditions governing the award of National Certificates are given on Page 17.

Senior Course (Ordinary Certificate).

1st Year. See Page 40. Classes 85 to 90.

2nd Year. See Page 41. Classes 91 to 93.

3rd Year. Building Construction, and at least one from the following :—

Building Science
Building Geometry
Building Mathematics
and if necessary one from either
Builders Quantities or
Builders Book-keeping.

Students who do not desire to obtain a National Certificate may in their 3rd year, select any three subjects given in the 3rd Year Course (See page 41).

Advanced Course (Higher Certificate).

1st Year :—One subject from Group 1.
Two other subjects, of which not more than one may be from Group 3.

2nd Year :—Three other subjects set out for the Advanced Course, not taken in the 1st year ; these three subjects being selected in accordance with the scheme for the 1st year.

PLUMBING COURSE.

Time Table :—See page 42. Classes 85 to 90 and 114 to 123

CARPENTRY & JOINERY COURSE (Trade Course).

Time Table :—See page 41. Classes 108—110.

TEXTILE DEPARTMENT.

Students may take either the Cotton Spinning or the Cotton Weaving Course.

Senior Students are expected to sit at the examinations conducted by the Union of Lancashire and Cheshire Institutes, and qualify for a certificate endorsed by the Board of Education.

Advanced Students take the examinations of the City and Guilds of London Institute, and should obtain a Full Technological Certificate.

Students should specially note that the Sessional Records (Homework and Classwork marks), together with attendance percentage are taken into account by the Examining bodies.

COURSE 11.—COTTON SPINNING.

Time Table :—Page 42 and 43.
Classes 124 to 141.

COURSE 12.—COTTON WEAVING.

Time Table :—Page 43 and 44.
Classes 142 to 161.

In the Third Year Senior Course (S3), weaving students may attend either Textile Mechanics or Chemistry.

In the Second Year Advanced Course (A2), weaving students must take the Hons. B Lecture, and Practical class and one of the following,—

(1) Textile Engineering
(2) Economics of the Cotton Industry.

TYPOGRAPHY.

Time Table :—Page 48.
Classes 242 to 246.

The Classes in Typography prepare students for the City and Guilds of London Institute Examinations. For full syllabus see the Programme of the City and Guilds of London Institute.

CHEMISTRY AND PHARMACY DEPARTMENT.

COURSE 13.

PURE AND APPLIED CHEMISTRY.

NATIONAL CERTIFICATE COURSES (See page 17).

The Institute of Chemistry, in conjunction with the Board of Education, award an Ordinary Certificate on the satisfactory completion of a three year Senior Course, and a Higher Certificate after a further two year Advanced Course.

Time Tables, pages 46 and 47. Classes 215 to 227.

COURSE 14.

PHARMACY.

Time Tables, page 47. Classes 228 to 238.

COURSE 15.

INTERMEDIATE B.Sc.

Time Table, page 47. Classes 239 to 241.

Students taking final B.Sc. will attend S2 or S3 or other Classes as requirements demand.

Hons. B.Sc. Students attend A2.

COMMERCIAL COURSES.

COURSE 16.—**SENIOR GENERAL COURSE.**
COURSE 17.—**SENIOR COURSE FOR SHORTHAND CLERKS.**
COURSE 18.—**ADVANCED COMMERCIAL COURSE.**

SENIOR COURSES (16 and 17).

In the First and Second Years each Course consists of **four** subjects. Third Year Courses consist of three subjects.

In each Course (except the special ones specified later, which do not qualify for a Grouped Course Certificate), one or more subjects are obligatory; others are generally optional.

From the latter subjects students may select the required number to make up their Course.

Before selecting a Course, students should **consult both the time-table printed** (on pages 44 to 46), **and the tutors** who will be present to enrol on September 16th and September 17th, 1931.

A student taking a course may, so far as his attainments and the time-table permit, sit in a class and enter for an examination of a higher year than the remaining subjects of his course.....Transfers from one class to another are not permitted after the first two weeks of the session. The detailed syllabuses of examinations in the subjects may be found complete in the Prospectus of the Lancashire and Cheshire Institutes.

Students are expected to take the Examinations of the Union of Lancashire and Cheshire Institutes.

ADVANCED COURSE (18).

This Course is intended to assist in preparing for the Professional Secretarial and Accountancy Examinations.

SENIOR COURSE 16.

GENERAL COURSE.

First Year (S1).

General Course. (Four Subjects) :—

Obligatory : Commerce.

Optional : **Three** of the following Subjects :—

Commercial Arithmetic.
English and Commercial Correspondence.
Geography.
Book-keeping.
Shorthand
French.
Spanish.
Typewriting.
Cotton Spinning.
Cotton Weaving.

Second Year (S2).

General Course. (Four Subjects) :—

Obligatory : Commerce.

Optional : **Three** of the following Subjects :—

Commercial Arithmetic.
English and Commercial Correspondence.
Geography.
Book-keeping.
Shorthand (minimum of 60 words per minute).
French.
Spanish.
Typewriting.
Cotton Spinning.
Cotton Weaving.

Third Year (S3).

General Course. (Three Subjects) :—

Obligatory : Commerce.

Optional : Any two of the following :—

Book-keeping and Accountancy.
Arithmetic.
English Literature.
Shorthand (minimum of 80 words per minute).
A Modern Language.

SENIOR COURSE 17.

COURSE FOR SHORTHAND CLERKS.

First Year (S1).

Course for Shorthand Clerks. (Four Subjects) :—

Obligatory : Shorthand.
English and Commercial Correspondence.

Optional : Any Two of the following :—
Commercial Arithmetic
Book-keeping.
Typewriting.

Second Year (S2).

Course for Shorthand Clerks. (Four Subjects) :—

Obligatory : Shorthand.
English and Commercial Correspondence.

Optional : Any two of the following :—
Commerce (2nd Year Syllabus).*
Book-keeping (1st or 2nd Year Syllabus).*
Commercial Arithmetic.
Typewriting.

Third Year (S3).

Course for Shorthand Clerks. (Four Subjects) :—

Obligatory : Shorthand.
Commerce (2nd or 3rd Year Syllabus).*

Optional : Any two of the following :—
English and Commercial Correspondence, or English Language and Literature (if sufficient enrol).
Book-keeping (2nd Year Syllabus), or*
Book-keeping and Accountancy.
Commercial Arithmetic.
Typewriting.

*If in the Second or Third Year Course, any subject chosen has been taken in a previous year, the next higher stage must be taken.

TIME-TABLE OF COMMERCIAL CLASSES

See pages 44, 45 and 46.

Classes 162 to 214.

Students should note carefully the buildings in which the classes are held.

NOTE.— FIRST YEAR.

All females taking Arithmetic attend class 164 or 165.

All males taking Arithmetic (except such as also take Geography) attend class 162 or 163.

Males taking both Arithmetic and Geography attend classes 164 or 165 and 185.

The classes in Shorthand are held in the same building as the Arithmetic classes.

In Shorthand, students who have previously done nothing may find it advisable during the first session to work for a local examination They should consult their tutors on the matter. The second year classes consist of :—A. Revision, Theory and Speed to 60 words per minute ; B. Speed 50 to 60 words; C. Speed from 60 to 80 words. Students who can do 80 words per minute should join the 3rd year.

In Typewriting, students must consult the tutor on enrolment night as to which hour is available.

NOTE—That the Shorthand Theory Class for **beginners** does not prepare for the U.L.C.I. Examination in Shorthand Advanced Theory which is necessary for Group Course Candidates who wish to secure Scholarships.

PART TIME DAY CLASSES IN COMMERCIAL SUBJECTS.

Part Time Day classes have been formed for persons over 16 years of age desirous of instruction in any of the following subjects :—

TYPEWRITING, SHORTHAND, OFFICE ROUTINE, BOOK-KEEPING AND COMMERCIAL CORRESPONDENCE.

See Course 4 —For routine see page 37

ADVANCED COMMERCIAL COURSE (18)

Three subjects, **one** at least to be chosen from Group A.

Group A.	**Group B.**
Accounting and Auditing.	Company Law.
Economics	A second Modern language
A Modern Language	Banking and Currency.

Time table page 46. Classes 209 to 214.

MISCELLANEOUS CLASSES AND SPECIAL COURSES.

The following classes are here indicated separately for the benefit of students who desire to take up the study of certain subjects for the Preliminary Professional and other Examinations, and to assist students of an advanced grade to a higher standard of attainments.

A course consists of any three of the following subjects :—

SUBJECT.	CLASS NO.
Arithmetic	200.
Book-keeping	201 or 202.
Chemistry	217 to 227.
Economics of the Cotton Industry	161.
English Language and Literature	204.
French	182, 198, 206, 214.
Latin	184.
Mathematics	215.
Physics	216, 240
German	213
Spanish	183.
Geography	185, 199.
Shorthand	205.

A Local Examination will be held in those subjects not otherwise provided for, and certificates will be given.

JUNIOR COURSES.

FULL TIME DAY

COURSES.—

JUNIOR TECHNICAL.

JUNIOR COMMERCIAL.

Classes begin on Tuesday, September 8th, 1931

Autumn Term :—8th September, 1931—23rd December, 1931.

Spring Term :—11th January, 1932—24th March, 1932.

Summer Term :—5th April, 1932—14th July, 1932.

VACATIONS.—

The Schools will be closed for the Christmas Vacation from 24th December, 1931, to 8th January, 1932 ; for the Easter Vacation, from 25th March, 1932, to 4th April, 1932; for the Whitsuntide Vacation, from 13th May, 1932 to 21st May, 1932.

In each case the dates are inclusive.

FEE.—£1 10s. 0d. per Session or 10s. 0d. per term

TIME TABLES :—See pages 49 to 54.

DAY JUNIOR SCHOOLS.

CONDITIONS OF ENTRY, ETC.

(1) Day Junior Technical School.
(2) Day Commercial School.

ENTRANCE AND SCHOLARSHIP EXAMINATIONS.

Each boy or girl admitted must not be less than 13 years old at the date of admission, and must pass the School Entrance Examination.

The Entrance Examination will be held on Saturday, the 7th May, at the Harris Institute, Avenham, or the Technical College.

Entries must be made on a form which can be obtained from the School and forwarded to the Principal, Harris Institute, Corporation Street, on or before the 22nd April, 1932.

Fee, £1 10s. for Session, September to July. This may be paid by three instalments of 10/-.

Parents or Guardians will be required to sign an agreement form undertaking that the pupil attends regularly for two years, or in default, pay the sum of £3 3s. 0d.

The Council of the Harris Institute offer a limited number of Scholarships (providing free tuition only), to boys or girls not less than 13 years of age on October 1st, 1932, and who for two years prior to the date of the Examination have been in regular attendance at a Day School within 7 miles of the Preston Town Hall.

The Preston Local Education Committee award a number of Free Admissions to the School, and Book allowances are given to Candidates residing in the County Borough of Preston.

The Lancashire County Council also award a limited number of Exhibitions on the result of this Entrance Examination (open to candidates residing in the Administrative County) subject to certain conditions, the Exhibitions provide free tuition, travelling expenses, and allowance for books and maintenance. Full particulars as to these Exhibitions may be obtained from the Director of Education, County Offices, Preston.

Leaving Certificates, First or Second Class, are given to all who satisfactorily conclude their period of training, and a certain number of free scholarships to Evening Classes are granted to those whose attainments and conduct in the Day School have merited it.

The School Uniform is as follows :—**Girls.**—Navy Tunic and Girdle, Navy Knickers, White Blouse, with polo collar and long sleeves, Blue and Green Tie, Green Cap in winter, Curacoas Hats with School Band in summer, Black Cashmere Stockings, Black Footwear, Navy Coat. School Blazers can be obtained, if desired.

Boys.—School cap, tie, and school blazers.

The above can be purchased from the School Outfitters on the presentation of the regulation form, which may be obtained at the School.

Every endeavour is made at the end of the course to assist worthy students to obtain suitable posts. Many employers apply to the School for employees and apprentices.

DAY JUNIOR TECHNICAL SCHOOL.

The aim of the School is to provide a suitable education for boys who desire to enter Engineering, Building and other trades.

The curriculum is planned with the object of providing for the continuance of a general education together with an education in all subjects which are necessary to boys about to enter industrial occupations.

The students are brought into close contact with their future occupation through teachers who have had experience in industry.

The students also have access to the Engineering laboratories and textile sheds, where they become acquainted with machinery and equipment which helps towards a thorough understanding of the application of scientific principles to industry.

The course of instruction extends over a period of two years, and the subjects taught include the following:—Mathematics, Machines and Building, Drawing and Geometry, Art, Science (including Applied Mechanics, Electricity, Magnetism, Heat), Metalwork, Woodwork, Geography, History, English, Drill and Organised Games.

Boys who obtain a Leaving Certificate may be admitted to the Second year of the Senior Course in Mechanical or Electrical Engineering or the Building Trades Course, and are thus able to complete the specialized courses in the Evening or Part Time Day Classes with the least possible delay.

DAY JUNIOR TECHNICAL SCHOOL.

ENTRANCE EXAMINATION.

SYLLABUSES.

Accuracy is of great importance. A thorough knowledge of the following will be required :—

Arithmetic.

The fundamental rules. Vulgar and decimal fractions. Percentages and averages. Ratio, proportion, simple interest and simple profit and loss. Elementary mensuration, rectangles and triangles. Circumference and area of circle. Surface and volume of simple solids,—prism and cylinder (weights of simple solids, given weight per unit volume). Elementary algebra. Use of symbols Addition, subtraction, multiplication and division.

English.—

(1) An essay; (2) Paraphrase condensation and expansion of passages ; (3) The parts of speech and elementary parsing ; (4) Easy analysis of sentences. ; (5) The use of words in sentences to illustrate their meaning ; (6) Simple letters.

The maximum marks may be obtained independently of sections 3 and 4.

Dictation.—

About a dozen lines from any of such readers as are in ordinary use in the higher classes of an Elementary school.

DAY JUNIOR COMMERCIAL SCHOOL.

The Course extends over a period of two years, and prepares boys and girls for clerical posts. The following subjects are taken :—Arithmetic, Algebra, Accounts, Book-keeping, Commerce, Commercial Correspondence, Drawing, Drill, English, French, Games, Geography, History, Office Routine, Mathematics, Shorthand and Typewriting.

DAY JUNIOR COMMERCIAL SCHOOL.

ENTRANCE EXAMINATION.

SYLLABUSES.

Accuracy is of great importance. A thorough knowledge of the following will be required.

Arithmetic.—

Simple rules including the use of brackets. Money tables—Ordinary weights and measures (excluding Troy weight and Apothecaries weight). Reduction of money. The simple rules as applied to weights and measures. Simple vulgar fractions. Terminating decimals. Practice. Proportion by unitary method. Easy percentages. Simple interest. The Metric System.

English.—

(1) An essay; (2) Paraphrase, condensation and expansion of passages; (3) The parts of speech and elementary parsing; (4)Easy analysis of sentences; (5)The use of words in sentences to illustrate their meaning; (6) Simple letters.

The maximum marks may be obtained independently of sections 3 and 4.

Dictation.—

About a dozen lines from any of such readers as are in ordinary use in the higher classes of an Elementary School

Art School



ART SCHOOL.

The School is open for three terms, viz. :—
21st September, 1931, to 23rd December, 1931.
11th January, 1932, to 24th March, 1932.
5th April, 1932, to 1st July, 1932.

FEES FOR SESSION (payable in advance).

	£	s.	d.
Full-time Day Students	3	3	0
Evening Classes		15	0
Students attending one day per week for Single Subjects.....	2	2	0

Classes begin on Monday, September 21st, 1931.

DAY AND EVENING CLASSES.—TIME TABLE (See also pages 49 & 50).

	MORNING. 10-0—12-30.	AFTERNOON. 2-30—4-30.	EVENING. 7-0—9-0.
Monday	Drawing Ornament Styles of Design Lettering Nature Drawing Animals	Etching & Woodcuts, &c. Still Life Painting Figure Drawing Object Drawing Design Lettering Memory Drawing	Drawing & Painting Still Life Nature Study Drawing (Industrial and Craft) Illustration Elem. Teachers' Class Drawing from Life
Tuesday	Perspective Drawing, Antique History of Art	Fabric Printing Drawing (Elem. & Advanced) Wood Decoration, Lino Cuts, &c. Antique	Drawing & Painting Still Life *Textile Art (4th yr.) Design (Indust. Crafts & Commercial) Wood Decoration, &c. Illustration
Wednesday	General Drawing Still Life Principles of Art Design Nature Drawing Architectural Drawing	Poster Design Crafts (various) Still Life Drawing from the Antique Nature Study Practice or Games Modelling and Casting	Junior Course, Form & Colour Etching Embroidery Leather Work Perspective Modelling and casting Wood & Plaster Carving *Painting & Decorating (1st year). *Textile Design (2nd & 3rd years) Commercial Art
Thursday	Anatomy Drawing & Painting Still Life	Drawing & Painting Still Life General Drawing Illustration and Poster Design Drawing from Life	Junior Course Design and Colour Illustration, Antique Drawing from life Teachers Class Wood Decoration, &c. *Painting & Decorating (2nd, 3rd & 4th years).
Friday	Architecture Figure Composition Object & Memory Drawing Design Fabric Printing	Leather Work (Theory Embroidery (&Prac. Illustration Elem. Figure Drawing Drawing—Objects & Interiors Memory Drawing	Crafts (various) *Architecture *English & Arithmetic (1st & 2nd years).

During the Summer term an out-of-door Sketching Class will be held on Wednesday and Friday Afternoons.

*These classes will terminate after the U.L.C.I. Examinations.

OBJECTS OF THE SCHOOL.

The objects of the School are :—

(1) To give instruction in Art to those engaged in trades and professions in which the power of drawing and a knowledge of design are essential or helpful.

(2) To train those wishing to qualify to become teachers of Art in Secondary Schools, or in Schools of Art.

(3) To provide facilities to those desiring to study Art as a branch of general education, or as an accomplishment.

(4) To train those who are desirous of taking up Art as a career, and who intend to specialise as painters, sculptors, illustrators, designers, etc.

(5) To meet the requirements of those engaged in various industrial occupations.

(6) Junior Courses. To prepare young students between the ages of 14 and 16, in order that they may specialise later on, in any of the above courses.

EXAMINATIONS IN ART.

Internal.

Grouped Examinations will be held at the end of each term, comprising the subjects of the various Courses.

The Board of Education will hold Examinations in the following subjects of Art :—

(a) Drawing.

(b) Painting.

(c) Modelling.

(d) Pictorial Design for Reproduction in black and white or colour.

(e) Industrial Design for (i.) Handicrafts and (ii.) Manufactures

1. The Examination in Drawing will be of a standard suitable for candidates who, after a good general education, including some preliminary instruction in Drawing, up to the age of 16 or later, have devoted themselves to serious and continuous study of Drawing for, as a rule, not less than two years.

2. The Examinations in Painting, Modelling, and Pictorial Design will be of such a standard as could be attained, according to the capacity of the candidate, by two or more years of serious and continuous specialised study after passing the Examination in Drawing.

3. Examinations in Industrial Design will be of such a standard as could be attained through regular attendance at evening or other part-time classes in the intervals of employment for a period of four years after the age of 16.

4. Candidates will not be admitted to the Examinations in Painting, Modelling, or Pictorial Design, unless they have previously passed the Examination in Drawing.

City and Guilds of London.

Students are prepared for these Examinations in the following Subjects :—Painting and Decorating, Embroidery, Principles of Art as applied to Cotton Weaving.

National Society of Art Masters.

A series of Examinations in Drawing arranged for Teachers in Elementary Schools.

UNION OF LANCASHIRE AND CHESHIRE INSTITUTES.

Students are prepared for the Examinations arranged by the U.L.C.I. Authority in the following Subjects :—Junior Industrial Art, Painting and Decorating, Architecture, Embroidery, Leather-work, Woodcarving, Textile Design, etc.

SCHOLARSHIPS.

Harris Art Scholarship.

One scholarship of the value of £7 10s. 0d. per annum, tenable for three years, will be awarded annually.

The Scholarship will be open to all Students of the School of Art, who have attended for not less than one year immediately preceding the award, and will be tenable at the Harris Institute.

The Scholarship will be awarded on the results of the annual examinations, in conjunction with the Student's work of the session.

Should one or more of these Scholarships fall vacant before the full period of three years, two or three (as the case may be), will be given instead of one, in the year when they lapse.

Free Studentships.

Free Studentships to the Day Classes are offered to Students of the School (Day or Evening), who are studying with a view to becoming designers, craft workers, or teachers.

Method of award, the same as for the above.

Free Studentships to the Evening Classes of offered to students taking definite courses, and will be awarded on the result of marks given for homework, attendance, and internal examinations.

Special Scholarships are awarded to students who have left or are about to leave elementary schools, who intend to follow occupations requiring an Art Training.

PRIZES:—"STEELE" BEQUEST.

Three Prizes (one day and two evening) of £4 each are offered for the best work done by Students each Session.

SKETCH CLUB AND STUDENTS' UNION.

The Sketch Club is organised by the Staff and Students for the purpose of encouraging individual effort. Monthly competitions are arranged during the Sessions, and a series of subjects are set for the long vacation.

All Students are eligible. Further information and particulars may be obtained from members of the Staff.

HARRIS INSTITUTE, PRESTON.

TIME TABLE OF CLASSES. SESSION 1931-32.

A—*Avenham Institute.* C—*Christ Church School (Bow Lane).* T—*Technical College*

TECHNICAL DAY CLASSES.

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	MATRICULATION.						
1	T English and History	F. W. Jackson	11.15–12.15	..	11.15–12.15	2—3	3—4
2	T French	F. W. Jackson	..	2—3	..	..	11.15–12.15
3	T Latin	F. W. Jackson	..	3—4	..	3—4	2—3 ..
4	T Mathematics	F. B. Landolt	9.30–11.15	11.30–12.30	9.30–11.15	..	..
5	T Physics	F. B. Landolt	3.15–5 ..	9.30–11.15 & 3–4.30	..	..	10–11.30
6	T Chemistry, Theory	R. H. Jones	..	..	4—5	9.30–10.30	..
7	T Chemistry, Practical	R. H. Jones	..	..	2.30–4.0		..
8	T Geography	F. W. Jackson	..	..	..	11.15–12.15	..
	INTER-SCIENCE.						
9	T Mathematics	F. B. Landolt	..	..	..	..	2—4
10	T Physics	F. B. Landolt	..	2—5*	..	..	..
11	T Chemistry	R. H. Jones	2—3	..	9.30—10.30 10.30–12.30 2.30–4	11.15–12.15 2—4	9.45–10.45 10.45–12.30
		*Also attend Pharmacy Course–Physics					

	PREL. PROFESSIONAL: PHARMACY, DENTAL, MEDICAL, DISP						
12	T Chemistry, Org. (Theory) ..	R. H. Jones	2—3	..	..	..	..
13	T Chemistry, Inorg. (Theory) ..	R. H. Jones	..	..	9.30–10.30	11.15–12.15	9.45–10.45
14	T Chemistry, Inorg. (Practical)..	R. H. Jones,..	..	..	10.30–12.30 and 2.30–4	..	10.45–12.30
15	T Physics	F. B. Landolt	3.15–5	9.30–11.15	..	9.30–11	..
16	T Botany, Theory	H. W. Edmunds	10.30–11.30	11.30–12.30	..	..	..
17	T Botany, Practical	H. W. Edmunds	..	2—4	..	2–4	..
17a	T Elementary Biology ..	H. W. Edmunds	..	..	10—12	..	..
	PART TIME DAY COMMERCIAL CLASSES.						
18	T Typewriting—Instruction and	J. Jones	9.15–11.15	..	11.15–12.15	9.15–11.15	..
19	T Shorthand .. (Practical)	J. Jones	9.15–11.15	9.15–11.0	..	9.15–11.15	10.15–12.15
20	T Bookkeeping	W. Webster	..	..	9.15–11.15	..	..
21	T Office Routine	J. Jones	11.15–12.15	..	..	..	..
22	T Commercial Correspondence ..	R. Cross	..	..	..	11.15–12.15	..
	PART TIME DAY ENGINEERING. (National Certificate Course).						
	S1						
23	T Mathematics	G. E. Hall	..	..	9–10 & 2–3	..	..
24	T Mechanics and Heat Engines	G. E. Hall	..	..	10–12	..	..
25	T Engineering drawing	H. W. Venning	..	..	3—5	..	..
26	T Electrical Science	W. A. Creasy	..	..	7.15–9.15	..	..
27	T Elec. Equipment (Motor Eng.)	W. E. Bamber	..	..	..	7.15–9-15	..
	S2		11.15-12.15				
28	T Mathematics	H. W. Venning	and 4–5	..	..	..	..
29	T Mechanics and Heat Engines	F. W. Walker	2—4	..	..	..	..
30	T Engineering Drawing	H. W. Venning	9.15–11.15	..	..	..	..
31	T Electrical Science, ...	A. Woods	..	..	7.15–9.15	..	..
	T Elec. Equipment (Motor Eng.)	W. E. Bamber	..	..	7.15–9.15	..	..

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	MECHANICAL ENGINEERING.						
	S3 (National Certificate)						
33	T Mathematics	G. E. Hall	7.15-9.15	..	..	..	..
34	T Mechanics	F. W. Walker	..	..	9.15–12	..	..
35	T Heat Engines	F. W. Walker	..	..	2—4.30	..	..
	A1						
36	T Machine Design	H. W. Venning	..	..	9.30–12	..	..
37	T Strength of Materials	T. M. Naylor	..	..	2-4.30	..	..
38	T Mathematics	J. Walmsley	..	..	..	..	7.15–9.15
	A2.						
39	T Elec. Eng. for Mech. Engrs ..	J. H. Hulse	..	..	..	7.15–9.15	..
40	T Theory of Machines	.. ..	..	..	7·15–9.15	..	..
41	T Heat Engines	T. M. Naylor	2.0–4.30	..	..	..	..
42	T Physics	F. B. Landolt	..	..	..	..	10–11.30
42a	T French	F. W. Jackson	..	..	..	..	9–10
	ELECTRICAL ENGINEERING.						
	S3 (National Certificate)						
43	T Mathematics	G. E. Hall	7.15–9.15	..	..	..	..
44	T Electro-Technics	A. Woods	..	..	..	9.30–11.30	..
45	T Electrical Laboratory ..	A. Woods	..	2—4.30	..	..	..
	TEXTILE CLASSES.						
	(Cotton Spinning and Weaving).						
46	T Spinning Mechanism	D. Atkinson..	..	..	..	9.30–10.45	..
47	T Spinning (Practical)	D. Atkinson..	..	..	..	10 45–12.0	..
48	T Weaving Mechanism	D. Atkinson..	9.30–10.45	..	..	..	..
49	T Weaving Practical	W. Jackson	10.45–12.0	..	..	..	10.45–12.0
50	T Weaving Calculations ..	D. Atkinson..	..	..	9.30–10.45	..	..
51	T Cloth, Dissection, Analysis ..	D. Atkinson..	..	..	10.45–12.0	..	..
52	T Fabric Structure	D. Atkinson..	..	9.30–10.45	..	..	..
53	T Practical Designing	D. Atkinson..	..	10.45–12.0	..	..	..
54	T Yarn Preparation	D. Atkinson..	..	..	..	..	9.30–10.45

	MECHANICAL ENGINEERING. (National Certificate Courses)						
	S1						
55	T Mathematics	R. H. Wignall	..	..	..	7.15–9.15	..
55a	T Mathematics	W. R. Tuson	..	..	..	7.15–9.15	..
56	T Engineering Drawing	J. H. Binfield, T. C. Nicholson, F. Maddock ..	..	7.15–9.15	..	..	..
57	T Mechanics and Heat Engines	F. W. Walker, C. Turner ..	7.15–9.15	..	..	..	..
	S2						
58	T Mathematics	H. Venning, C. Turner ..	..	7.15–9.15	..	..	..
59	T Engineering Drawing	J. H. Binfield, T. C. Nicholson, G. Oliver	..	..	7.15–9.15	..	..
60	T Mechanics and Heat Engines	G. E. Hall	..	..	..	..	7.15–9.15
	S3						
61	T Mathematics	H. W. Venning	..	..	..	..	7.15–9.15
62	T Mechanics	F. W. Walker	..	..	7.15–9.15	..	..
63	T Heat Engines	F. W. Walker	..	..	..	7.15–9.15	..
	A1						
64	T Mathematics	J. Walmsley	..	..	..	..	7.15–9.15
65	T Machine Design	H. W. Venning	7.15–9.15	..	..	..	..
66	T Strength of Materials	H. W. Venning	..	..	7.15–9.15	..	..
	A2						
67	T Heat Engines	T. M. Naylor	7.15–9.15	..	..	..	..
68	T Theory of Machines	.. ..	..	..	7.15–9.15	..	..
69	T Electrical Engineering for Mechanical Engineers	J. H. Hulse	..	..	..	7.15–9.15	..
	ELECTRICAL ENGINEERING (National Certificate Course)						
	S1(A)						
70	T Mathematics	R. H. Wignall	7.15–9.15	..	..	..	..
71	T Electrical Drawing	F. Callow, J. Morley ..	..	..	..	7.15–9.15	..
72	T Electrical Science	W. A. Creasy	..	..	7.15–9.15	..	..
	S1(B)						
70a	T Mathematics	W. R. Tuson	7.15–9.15	..	..	..	..
71a	T Electrical Drawing	F. Callow, J. Morley ..	..	..	..	..	7.15–9.15
72a	T Electrical Science	W. A. Creasy	..	..	..	7.15–9.15	..

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	S2						
73	T Mathematics	H. W. Venning, C. Turner ..	..	7.15-9.15	..	..	..
74	T Mechanics	F. B. Landolt	..	..	..	7.15-9.15	..
75	T Electrical Science	A. Woods	..	..	7.15-9.15	..	..
	S3						
76	T Mathematics	H. W. Venning	..	..	..	..	7.15-9.15
77	T Electro-Technics	A. Woods	..	..	..	7.15-9.15	..
78	T Electrical Laboratory ..	A. Woods	..	7.15-9.15	..	..	..
	A1						
79	T Mathematics	J. Walmsley	..	..	..	..	7.15-9.15
80	T Electrical Engineering ..	J. Etock	..	..	..	7.15-9.15	..
81	T Electrical Laboratory ..	J. Etock	7.15-9.15	..	..	..	..
	A2						
82	T Electrical Transmission and Distribution	G. Pimley	..	..	..	7.15-9.15	..
83	T Electrical Laboratory ..	G. Pimley	..	..	7.15-9.15	..	..
84	T Mechanical Engineering for Electrical Engineers ..	T. M. Naylor	..	7.15-9.15	..	..	..
	BUILDING TRADES.						
	S1 (A)						
85	T Mathematics and Science ..	W. Taylor, ..	..	7.15-9.15	..	..	..
86	T Building Construction ..	H. Howarth,	..	..	7.15-9.15	..	..
87	T Geometry	J. N. Walker,	..	..	..	..	7.15-9.15
	S1 (B)						
88	T Mathematics and Science ..	F. W. Steele ..	..	..	..	..	7.15-9.15
89	T Building Construction ..	H. Howarth, H. Allen ..	7.15-9.15	..	..	..	..
90	T Geometry	J. N. Walker, J. Spiby ..	..	7.15-9.15	..	..	..

	S2						
91	T Mathematics and Geometry ..	W. Taylor, J. Spiby, and H. Fisher	..	..	..	7.15–9.15	..
92	T Building Construction ..	G. H. Broadbent, junr., H. Yeadon & P. Stirzacker ..	..	7.15–9.15	..	..	..
93	T Building Science	E. M. Pearson, J. Spiby ..	7.15–9.15	..	..	..	..
	S3						
94	T Building Construction ..	H. Howarth and H. Yeadon	..	..	..	7.15–9.15	..
95	T Quantities	J. T. Higginson	..	7.15–9.15	..	..	..
96	T Geometry	J. N. Walker & H. Walters .	7.15–9.15	..	..	..	..
97	T Brickwork and Concreting ..	T. Croft	..	..	7.15–9.15	..	..
98	T Carpentry	H. Allen	..	..	..	..	7.15–9.15
99	T Mathematics	G. E. Hall	7.15–9.15	..	..	..	..
100	T Building Science	W. Taylor	..	7.15–9.15	..	..	..
	A1 and A2						
	Group 1.						
101	T Building Construction (A or B)	E. M. Pearson	..	..	..	7.15–9.15	..
102	T Builders Quantities	J. T. Higginson	..	7.15–9.15	..	..	..
103	T Bldrs. Quantities and Pricing .	J. T. Higginson	7.15–9.15	..	..	..	..
104	T Structural Work	E. M. Pearson	..	..	..	..	7.15–9.15
	Group 2						
105	T Carpentry and Joinery ..	G. H. Broadbent, junr. ..	..	..	..	..	7.15–9.15
106	A–Architectural and Building History (See Art School)						
107	T Building Equipment	E. M. Pearson	..	..	..	..	7.15–9.15
	Group 3, Practice Class						
111	T Building Construction A or B .	G. H. Broadbent, senr. ..	..	..	7.15–9.15	..	..
112	T Carpentry and Joinery ..						
113	T Structural Work						
	S1 CARPENTRY AND JOINERY (TRADE COURSES.)						
108	T Carpentry and Joinery (Theory) ..		7.15–9.15	..	..	..	..
109	T Carpentry and Joinery (Practical) ..		..	..	7.15–9.15	..	..
110	T Geometry		..	..	..	..	7.15–9.15

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	S1 1st Year Plumbing Students take S1 A or S1 B Building Trade Subjects—See Classes 85 to 90.						
	S2						
114	T Plumbing, Practical	J. Dixon and F. Coupe ..	7—9	..	..	..	..
115	T Plumbing, Theory	J. Dixon and F. Coupe ..	..	..	7—8.30	..	..
116	T Plumbing, Science	J. Dixon and F. Coupe ..	..	..	8.30–9.30	..	..
117	T Mathematics and Science ..	W. Taylor and J. Spiby ..	..	7.15–9.15	..	..	..
	S3						
118	T Plumbing, Practical	J. Dixon and F. Coupe ..	7—9	..	..	..	..
119	T Plumbing, Theory	J. Dixon and F. Coupe ..	..	..	7—8.30	..	..
119a	T Plumbing, Science	J. Dixon and F. Coupe ..	..	..	8.30–9.30	..	..
120	T Mathematics and Geometry ..	W. Taylor	..	..	..	7.15–9.15	..
121	T Or Building Construction ..	G. H. Broadbent	..	7.15–9.15	..	..	..
	A						
122	T Plumbing, Practical	J. Dixon	7—9	..	..	..	..
123	T Plumbing, Theory	J. Dixon	..	..	7–9.30	..	..
	COTTON SPINNING.	* Alternate weeks.					
	S1						
124	T Mathematics	P. Addison	7.15–9.15	..	..	..	..
125	T Textile Drawing	S. Jackson	..	..	7.15–9.15*	..	..
126	T Cotton Spinning, Practical ..	J. H. Harrison	..	..	..	7.15–9.15*	..
127	T Cotton Spinning, Theory ..	J. H. Harrison	..	7.15–9.15	..	..	..
	S2						
128	T Mathematics and Mechanics ..	R. Chatburn	..	7.15–9.15	..	..	..
129	T Textile Drawing	S. Jackson	..	..	7.15–9.15*	..	..
130	T Cotton Spinning, Practical ..	J. H. Harrison	..	..	..	7.15–9.15*	..
131	T Cotton Spinning, Theory ..	S. Jackson	7.15–9.15	..	..	..	..
	S3						
132	T Cotton Spinning, Theory ..	J. H. Harrison	..	..	7.15–9.15	..	..
133	T Cotton Spinning, Practical ..	J. Rathbone	7.15–9.15*	..	..	..	..
134	T Textile Drawing	S. Jackson	..	..	..	..	7.15–9.15*
135	T Textile Mechanics	J. Preston	..	7.15–9.15	..	..	..

	A1							
136	T Cotton Spinning, Theory ..	J. Rathbone	..	..	..	..	7.15-9.15
137	T Cotton Spinning, Practical ..	J. H. Harrison	..	..	..	7.15-9.15	..
138	T Textile Engineering	G. E. Hall	..	7.15-9.15	..	..	..
	A2						
139	T Cotton Spinning, Theory ..	J. Rathbone	..	..	..	7.15-9.15	..
140	T Cotton Spinning, Practical ..	J. Rathbone	7.15-9.15	..	..	..	..
141	T Textile Economics	W. Webster	..	..	7.15-9.15	..	..
	COTTON WEAVING.	* Alternate weeks.					
	S1						
142	T Mathematics	P. Addison, ...	..	..	7.15-9.15	..	..
143	T Textile Drawing	.. .. ..	..	..	..	..	7.15-9.15*
144	T Cotton Weaving, Practical ..	W. Jackson	..	..	..	..	7.15-9.15*
145	T Cotton Weaving, Theory ..	D. Atkinson, H. Richmond	..	..	..	7.15-9.15	..
	S2						
146	T Cotton Weaving, Theory ..	D. Atkinson, ...	7.15-9.15	..	..	..	..
147	T Cotton Weaving, Practical ..	W. Jackson	..	..	7.15-9.15*	..	..
		J. W. Blackhurst					
148	A Textile Design and Colour ..	S. A. Horsley	..	..	7—9*	..	..
149	T Textile Mechanics	J. Preston	..	..	..	7.15-9.15	..
	S3						
150	T Cotton Weaving, Theory ..	J. Martin	..	..	..	..	7.15-9.15
151	T Cotton Weaving, Practical ..	W. Jackson	..	..	7.15-9.15*	..	..
		J. W. Blackhurst ..					
152	T Textile Mechanics	J. Preston	..	7.15-9.15	..	..	..
153	T Textile Chemistry	R. H. Jones,	7—9.30	..	..	..	..
154	A Textile Design & Colour ..	S. A. Horsley	..	..	7—9*	..	..

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	A1						
155	T Cotton Weaving, Hons. A. ..	T. Taylor	..	..	7.15–9.15	..	..
156	T Cotton Weaving, Practical ..	W. Jackson, W. T. Garner	7.15–9.15	..	..	..	..
157	A Design and Colour	W. T. Garnar	..	7—9	..	..	..
	A2						
158	T Cotton Weaving, Hons. B. ..	D. Atkinson..	..	..	..	..	7.15–9.15
159	T Cotton Weaving, Practical ..	W. Dagger	..	..	..	7.15–9.15	..
160	T Textile Engineering	G. E. Hall	..	7.15–9.15	..	..	..
161	T Economics of Cotton Industry	W. Webster	..	..	7.15–9.15	..	..
	COMMERCIAL COURSES.						
	S1						
162	C Arithmetic	E. Singleton	7.15–8.15	..	..	..	..
163	C Arithmetic	E. Singleton	8.15–9.15	..	..	..	..
164	A Arithmetic	F. R. Snalam	7.15–8.15	..	..	..	..
165	A Arithmetic	F. R. Snalam	8.15–9.15	..	..	..	..
166	T Book-keeping (Beginners) ..	G. R. Drysdale	..	..	7.15–8.15	..	..
167	T Book-keeping (Beginners) ..	G. R. Drysdale	..	..	8-15–9.15	..	..
168	C Book-keeping	J. Donaldson	..	..	7.15–8.15	..	..
169	C Book-keeping	J. Donaldson	..	..	8.15–9.15	..	..
170	T Book-keeping	H. Catterall..	..	..	..	..	..
171	T Commerce	W. Webster, F. V. Bradshaw, G. Richardson ..	..	7.15–8.15	..	7.15–8.15	..
172	T Commerce	W. Webster, ..	..	..	..	..	8.15–9.15
173	T English and Com. Corr. ..	H. W. Hughes	..	8.15–9.15	..	..	..
174	T English and Com. Corr. ..	H. W. Hughes	..	..	..	..	7.15–8.15
175	C Shorthand (More Adv. Theory)	H. W. Hughes	7.15–8.15	..	..	..	..
176	C Shorthand (Elementary) ..	H. W. Hughes	8.15–9.15	..	..	..	..

177	A Shorthand (Elementary) ..	J. Jones	7.15-8.15	..	..	..	..
178	A Shorthand (More Adv. Theory)	J. Jones	8.15-9.15	..	..	..	..
179	T Typewriting	J. Hilton	..	6.15-7.15	..	..	..
180	T Typewriting	J. Hilton	..	7.15-8.15	..	..	..
181	T Typewriting	J. Hilton	..	8.15-9.15	..	..	..
181a	T Typewriting	J. Hilton	..	..	7.15-8.15	..	..
182	T French	F. W. Jackson	..	8.15-9.15	..	..	..
183	A Spanish	J. Appleby	..	7.15-8.15	..	..	..
184	A Latin	F. W. Jackson	..	..	..	7.15-8.15	..
185	A Geography	H. C. Pye	7.15-8.15	..	..	..	..
	S2						
186	A Arithmetic	E. Singleton	..	..	..	..	7—8
187	A Book-keeping	P. Bridge	..	..	7.15-9.15	..	..
188	C Book-keeping	H. Catterall, S. M. Loxham	..	..	7.15-9.15	..	..
189	T Commerce	W. Webster, F. V. Bradshaw, G. Richardson ..	..	8.15-9.15	..	..	..
190	T Commerce	W. Webster	..	..	..	..	7.15-8.15
191	T English and Com. Corr. ..	H. W. Hughes	..	7.15-8.15	..	..	..
192	T English and Com. Corr. ..	H. W. Hughes	..	..	..	..	8.15-9.15
193a	A Shorthand (Initial Speed) ..	J. Jones	..	..	..	7.15-9.15	..
193	T Shorthand (60 to 80 words) ..	W. Hanson	..	..	..	7.15-9.15	..
194	T Shorthand (50 to 60 words) ..	T. Ashworth	..	..	..	7.15-9.15	..
195	T Typewriting	J. Hilton	..	..	..	..	6.15-7.15
196	T Typewriting	J. Hilton	..	..	..	..	7.15-8.15
197	T Typewriting	J. Hilton	..	..	..	..	8.15-9.15
198	T French	F. W. Jackson	..	7.15-8.15	..	..	..
199	A Geography	H. C. Pye	8.15-9.15	..	..	..	..

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	S3						
200	A Arithmetic	E. Singleton	..	..	..	..	8—9
201	T Book-keeping	N. Hindley	..	..	7.15-9.15	..	..
203	A Commerce	S. J. Williams	7.15-9.15	..	..	..	..
204	A English Language & Literature	F. R. Snalam	..	..	..	..	7—8
205	A Shorthand (From 80 words) ..	H. W. Hughes	..	..	..	7.15-9.15	..
206	A French	F. W. Jackson	..	..	..	8.15-9.15	..
207	T Cotton Spinning, Theory ..	J. H. Harrison	..	7.15-9.15	..	..	..
208	T Cotton Weaving, Theory ..	T. Taylor	..	..	..	7.15-9.15	..
208a	T Typewriting	J. Hilton	..	..	8.15-9.15	..	..
	A1 and 2						
209	T Accounting and Auditing ..	J. Donaldson	..	7.15-9.15	..	..	..
210	T Company Law	H. Catterall	..	..	..	8.15-9.15	..
211	T Banking	W. Webster	7.15-8.15	..	..	..	..
212	T Economics (includ. Banking) .	W. Webster	7.15-9.15	..	..	..	..
213	T German	..	..	..	8.15-9.15	..	..
214	T French	F. W. Jackson	..	..	..	..	7.15-8.15
	CHEMISTRY. (National Certificate Course) **S1**						
215	T Mathematics	F. B. Landolt	7—9	..	..	..	..
216	T Physics	J. Slater	..	..	..	7—9.30	..
217	T Inorganic Chemistry	R. H. Jones	..	..	..	..	7—9.30
	S2						
218	T Physical Chemistry	C. C. Marginson	..	..	8—9	..	..
219	T Organic Chemistry	E. Taylor	..	7—9.30	..	..	..
220	T Inorganic Chemistry	E. Taylor	..	..	7—8	..	..
221	T Inorganic Chemistry(Practical)	R. H. Jones, ...	..	..	..	7—9.30	..

	S3						
222	T **Organic Chemistry** (Practical)	J. N. Aldington	8—9.30	..	..	..	..
222a	T Organic Chemistry Theory) ..	J. N. Aldington	..	..	8—9.30	..	..
223	T Inorganic Chemistry (Theory)	F. Jackson	..	..	..	7—8	..
224	T Inorganic Chemistry(Practical)	R. H. Jones	7—8	..	..	8—9.30	..
225	T Physical Chemistry	C. C. Marginson	..	..	7—8	..	..
	A1						
226	T Organic Chemistry (Theory) ..	J. N. Aldington	7—8	..	..	..	..
226a	T Organic Chemistry (Practical)–	J. N. Aldington	..	..	7—9.30	..	..
227	T Inorganic (including Physical)	E. Taylor & F. Jackson ..	8—9.30	..	.	..	..
227a	T Inorganic Chemistry (Practical)	R. H. Jones & F. Jackson	..	..	..	..	7—9.30
	A2						
227b	T Organic Chemistry (Theory) ..	C. C. Marginson	..	7—8	..	..	..
227c	T Organic Chemistry (Practical)	E. Taylor & J. N. Aldington.	..	..	7—9.30	..	..
227d	T Inorganic Chemistry (Theory)	C. C. Marginson	..	8—9	..	..	..
227e	T Inorganic Chemistry(Practical)	R. H. Jones & F. Jackson ..	..	..	..	..	7—9.30
	PHARMACY.						
	S1						
228	T Botany	H. W. Edmunds	7—9	..	..	..	..
229	T Physics	H. W. Edmunds	..	7—9.30	..	..	..
230	T Chemistry	R. H. Jones	..	..	..	..	7—9.30
	S2						
231	T Botany	H. W. Edmunds	7—9	..	..	7—9	..
232	T Organic Chemistry, or ..	E. Taylor	..	7—9.30	..	..	..
233	T Physics	H. W. Edmunds	..	7—9.30	..	..	..
234	T Inorganic Chemistry (Theory)	E. Taylor	..	..	7—8	..	..
235	T Inorganic Chemistry(Practical)	E. Taylor	..	..	8—9.30	..	..
	S3						
236	T Organic Chemistry	E. Taylor		7—9.30	..	..	..
237	T Inorganic Chemistry (Theory)	E. Taylor		..	7—8	..	..
238	T Inorganic Chemistry(Practical)	E. Taylor	..	..	8—9.30	..	..
	INTER. B.Sc. COURSE						
239	T Inorganic Chemistry (Theory)	F. Jackson	7—8	..	..	..	..
239a	T Inorganic Chemistry(Practical)	R. H. Jones & F. Jackson..	..	..	..	..	7—9.30
240	T Physics	F. B. Landolt	..	7—9.30	..	..	..
241	T Mathematics	J. Slater	8—9.30	..	7—9.30	..	..

Ref. No.	Course, Subject and Stage.	Teachers.	Day and Time of Class.				
			Monday.	Tuesday.	Wednesday	Thursday.	Friday.
	TYPOGRAPHY. *Alternate	Weeks.					
242	A Theory, Grade 1	J. Taylor	..	7—8	..	..	..
243	A Composing, Grade 2	J. Taylor	..	8—9	..	..	..
244	A Theory, Final	J. Taylor	..	..	7—8	..	..
245	A Machines, Grade 2	J. Taylor	..	..	8—9	..	..
246	A Machines, Final	J. Taylor	..	..	8—9	..	..
	MOTOR BODY BUILDING						
248	T Technical Drawing	H. Lavery	7.20–9.20	..	..	..	..
249	T Body Building	H. Lavery	..	..	..	..	7.20–9.20

ART SCHOOL (AVENHAM INSTITUTE)

Day.	Room.	Times of Classes.	Subjects.	Teachers.
Monday ..	1	10.0—12.30	General Drawing, Lettering, Animals	G. A. Clucas
	3 and 4	2.30—4.30	Painting Still Life, Drawing Life, Etching, Woodcuts, &c.	W. Rathbone
	3	2.30—4.30	Design, General Drawing, Memory Drawing	& G. A. Clucas
	1	7.0—9.0	Drawing (Industrial and Crafts), ...	M. Duckett.
	2	7.0—9.0	Industrial Art Drawing (Lettering, Nature, &c.)	G. A. Clucas & A. Bann.
	3	7.0—9.0	Elementary Teachers Class, Illustration, Painting Course ..	W. Rathbone & B. Eckersley
	4	7.0—9.0	Drawing from Life	W. Rathbone.
Tuesday ..	1	10.0—12.30	Perspective	G. A. Clucas
	2	10.0—12.30	History and Methods of Art—Design	W. Rathbone
	1	2.30—4.30	Crafts—Decoration applied to objects, Lino Cuts, ..	B. Eckersley
	9	2.30—4.30	Design and Fabric Printing	W. Rathbone
	C	7.0—9.0	Textile Design, 4th year, ...	W. Garnar.
	1	7.0—9.0	Design—Industrial, Commercial and Crafts	W. Rathbone & M. Duckett
	2	7.0—9.0	Design (Industrial Students)	G. A. Clucas & A. Bann.
	3	7.0—9.0	Painting Still Life, Illustration	W. Rathbone
		7.0—9.0	Decoration applied to Objects. Lino Cuts	& B. Eckersley
Wednesday..	2	9.30—10.0	General knowledge and Principles of Art	W. Rathbone
	3	10.0—12.30	Design, Nature Drawing and General Drawing, etc...	G. A. Clunas
	2	2.30—4.30	Practice or Games, Modelling and Casting	W. Rathbone. & A. Bann
	3	.. ..	Crafts—Leatherwork, Embroidery, &c.	M. Duckett
	3	.. ..	General Drawing—Poster Design	W. Rathbone
	1	7.0—9.0	Textile Design, 2nd and 3rd years	S. A. Horsley
	2	7.0—9.0	Junior Course—Form & Colour	B. Eckersley
	5	7.0—9.0	Modelling and Casting, Plaster and Wood Carving,	W. Rathbone
	3	7.0—9.0	Leatherwork, Embroidery Craft Course	M. Duckett
	6	7.0—7.30	Painting and Decorating (Theoretical)*	F. W. Sharples
	6	7.30—9.0	Painting and Decorating (Practical)*	F. W. Sharples
	4	7.0—9.0	Etching, Anatomy	G. A. Clucas
	8	7.0—9.0	Commercial Art Course	A. Bann

Day.	Room.	Times of Classes.	Subjects.	Teachers.
Thursday ..	1	10.0—12.30	Anatomy	G. A. Clucas
	3	10.30-12.30	Painting Still Life Course	W. Rathbone
	3	2.30—4.30	Painting Still Life, Illustration, Posters, Drawing frpm Life	W. Rathbone
	2	7.0—9.0	Junior Course (Design & Colour)	B. Eckersley
	3	7.0—9.0	Illustration, Teachers' Class, Antique	W. Rathbone & A. Bann
	4	7.0—9.0	Drawing from Life	W. Rathbone.
	5	7.0—7.30	Painting and Decorating (Theoretical), 2nd year*	E. Catterall
	5	7.0—9.0	Painting and Decorating (Practical), 2nd year*	E. Catterall
	6	7.0—7.30	Painting and Decorating, Theoretical, 3rd and 4th years* ..	F. Sharples
	6	7.0—9.0	Painting and Decorating, Practical, 3rd and 4th year* ..	F. Sharples
Friday ..	1	10.0—12.30	Architecture, ...	G. A. Clucas
	2	10.0—12.30	Object and Memory Drawing, Illustration—Design	W. Rathbone & G. A Clucas
	9	10.0—12.30	Fabric Printing	W. Rathbone
	3	2.30—4.30	Crafts—Embroidery, Leatherwork, Theory and Practice ..	M. Duckett
	4	2.30—4.30	Drawing from Life	W. Rathbone
	2	2.30—4.30	Memory Drawing—Illustration and Figure Composition ..	W. Rathbone & A. Bann
	2	7.0—9.0	Architecture	G. A. Clucas
	3	7.0—9.0	Crafts—Various	M. Duckett
	C	....	English and Arithmetic, 1st and 2nd years Junior Art* ..	F. Allen

* These Classes will terminate after the U.L.C.I. Examination.

DAY JUNIOR TECHNICAL SCHOOL.

TIME TABLE.

Monday—	9.15—11.15.	11.15—12.15.	1.45—2.45.			2.45—4.45
1A.	Workshop	Mathematics	Geography			Science
1B.	Science	Mathematics	Geography			Workshop
	9.15—11.15.	11.15—12.15.	1.45—3.15.	3.15—3.45.		3.45—4.45.
2A.	Science	Mathematics	Mathematics	Drill		History
2B.	Geometry	Mathematics	Mathematics	Drill		History
Tuesday—	9.15—10.15.	10.15—12.15.	1.45—2-45.	2.45—4.15.		4.15—4.45.
1A.	History	Workshop	Mathematics	Art		Drill
1B.	History	Geometry	Mathematics	Art		Drill
	9.15—11.15.	11.15—12.15.	1.45—3-45.	2.45—4.45		
2A.	Geometry	Geography	Mathematics	Workshop		
2B.	Science	Geography	Mathematics	Mechanics		
Wednesday	9.15—11.15.	11.15—12.15.	1.45—2.45.	2—4.		
1A.	Science	English	Mathematics	Games, weather permitting, or Mathematics (2—3).		
1B.	Workshop	English	Mathematics			
	9.15—10.15.	10.15—12.15.	1.45—2.45.			
2A.	Geography	Science	Mathematics	Games, weather permitting, or Workshop (2—3).		
2B.	Geography	Workshop	English			
Thursday—	9.15—11.15.	11.15—12.15.		1.45—2.45		2.45—4.45
1A.	Geometry	Mathematics		Mathematics		Workshop
1B.	Workshop	Mathematics		Mathematics		Science
	9.15—10.15.	10.15—10.45	10.45—12.15.	1.45—2.45	2.45—3.45.	3.45—4.45
2A.	Mathematics	Drill	Tech. Drawing	Mathematics	English	Art
2B.	Mathematics	Drill	Tech. Drawing	Mathematics	English	Art
Friday—	9.15—10.15.	10.15—12.15.	1.45—3.15.	3.15—3.45.		3.45—4.45
1A.	English	Tech. Drawing	Mathematics	Drill		English
1B.	English	Tech. Drawing	Mathematics	Drill		English
	9.15—10.15.	10.15—12.15.	1.45—3.45.			3.45—4.45.
2A.	English	Mechanics	Workshop			Workshop
2B.	English	Workshop	Science			Workshop

DAY JUNIOR TECHNICAL SCHOOL.

TIME TABLE ANALYSIS (FIRST YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
Mathematics ..	G. E. Hall	11.15–12.15	1.45–2.45	....	1.45–2.45 11.15–12.15	1.45 3.15
English ..	R. S. Cross .. .. G. E. Hall	....	....	11.15 -12.15	....	9.15–10.15 3.45–4.45
History ..	R. S. Cross	....	9.15–10.15	....	....	....
Geography ..	F. W. Jackson	1.45–2.45	....	....	....	....
Science	E. M. Pearson	2.45–4.45 (A) 9.15–11.15 (B)	....	9.15–11.15 (A)	.... 2.45–4.45(B)	....
Workshop ..	J. H. Hulse	9.15–11.15 (A) 2.45–4.45 (B)	10.15–12.15 (A)	.... 9.15–11.15 (B)	2.45–4.45(A) 9.15–11.15 (B)	....
Geometry ..	G. E. Hall	....	10.15–12.15 (B)	....	9.15–11.15 (A)	....
Technical Drawing ..	E. M. Pearson ; H. W. Venning ..	....	....	....	....	10.15–12.15 10.15-12.15
Art	G. A. Clucas	....	2.45–4.15	....	....	....
Organised Games	A. Woods	....	....	2.0–4.0	....	....
Drill	E. H. Trinder	....	4.15–4.45	.....	.....	3.15–3.45

DAY JUNIOR TECHNICAL SCHOOL.
(SECOND YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
Mathematics ..	F. W. Walker	1.45–3.15	....	....	....	....
	F. B. Landolt	11.15–12.15			1.45–2.30	
	H. W. Venning		1.45–2.45		9.15–10.15	....
English ..	J. Nickeas	....	....	....	2.30–3.30	9.15–10.15
		....	....	....		....
History ..	R. S. Cross	3.45–4.45	....	....	....	....
Geography ..	F. W. Jackson	....	11-15–12.15	9.15–10.15	....	....
Science	A. Woods	9.15–11.15 (A)	9.15–11.15 (B)	10.15–12.15 (A)	....	1.45–3.45 (B)
Applied Mechs. .	F. W. Walker	....	2.45–4.45 (B)	....	....	10.15–12.15 (A)
Workshop ..	J. H. Hulse	....	2.45–4.45 (B)	10.15–12.15 (A)	....	1.45–3.45 (A) 10.15–12.15 (B) 3.45–4.45
Geometry ..	H. W. Venning	10.15–12.15 (B)	9.15–11.15 (A)	....	....	....
Tech. Drawing	H, W. Venning	....	....	....	10.45–12.15	....
Art	G. A. Clucas	....	....	....	3.30–4.45	....
Organised Games	A. Woods	.....	....	2.0–4.0	....	....
Drill ..	E. H. Trinder	3.15–4.15	.....	.....	10.15–10.45	.....

DAY JUNIOR COMMERCIAL SCHOOL.

TIME TABLE.

Monday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—2.45.	2.45—3.45.	3.45—4.15
1A.	English	French	Interval	History	Arithmetic	Com. Corr.	Drill
1B.	French	English	Interval	History	Shorthand	Typing	Drill
2A.	Shorthand	Commerce	Interval	English	History	Geography	
2B.	Shorthand	Commerce	Interval	English	History	Geography	

Tuesday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—2.45.	2.45—3.45.	3.45—4.15
1A.	Geography	Mathematics	Interval	French	Shorthand	English	
1B.	Geography	Mathematics	Interval	Shorthand	Arithmetic	English	
2A.	Shorthand	Book-keeping	Interval	Mathematics	Typing	Com. Corr.	Drill
2B.	Typing	Book-keeping	Interval	Mathematics	Com. Corr.	Typing	Drill

Wednesday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—2.45.	2.45—3.45.
1A.	Typing	Shorthand	Interval	Arithmetic	Shorthand	French
1B.	Com. Corr.	French	Interval	Arithmetic	French	Shorthand
2A.	Arithmetic	English	Interval	French	Book-keeping	Book-keeping
2B.	Arithmetic	English	Interval	French	Book-keeping	Book-keeping

Thursday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	2.0—4.0
1A.	Mathematics	History	Interval	Arithmetic	Games or Preparation
1B.	Mathematics	History	Interval	Arithmetic	Games or Preparation
2A.	Shorthand	Arithmetic	Interval	French	Games or Preparation
2B.	Shorthand	Arithmetic	Interval	French	Games or Preparation

Friday—	9.15—10.15.	10.15—11.	11—11.15.	11.15—12.15	1.45—2.45.	2.45—3.45.
1A.	Shorthand	Arithmetic	Interval	Commerce	Drawing	English
1B.	Shorthand	Arithmetic	Interval	Commerce	Drawing	English
2A.	Arithmetic	Commerce	Interval	French	English	Drawing
2B.	Arithmetic	Commerce	Interval	French	English	Drawing

DAY JUNIOR COMMERCIAL SCHOOL.

TIME TABLE ANALYSIS (FIRST YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
English ..	A. Ellison	9.15-10.15 (A) 10.15-11.0 (B)	2.45-3.45	....	....	.... 2.45-3.45
French	J. Nickeas	9.15-10.15 (B) 10.15-11.0 (A)	11.15-12.15(A)	10.15-11.0 (B) 2.45-3.45 (A) 1.45-2.45 (B)	....	....
History ..	R. S. Cross	11.15-12.15	....	....	10.15-11.0	....
Geography ..	A. Ellison	....	9.15-10.15	....	....	....
Com. Corr. ..	R. S. Cross	2.45-3.45 (A)	....	9.15-10.15 (B)	....	....
Commerce ..	R. S. Cross	....	....	....	....	11.15-12.15
Arithmetic ..	A. Ellison	1.45-2.45 (A)	1-45-2-45 (B)	11.15-12.15	11.15-12.15	10.15-11.0
Mathematics ..	R. S. Cross	....	10.15-11.0	....	9.15-10.15	....
Typewriting ..	J. Jones	2.45-3.45 (B)	....	9.15-10.15 (A)	....	....
Shorthand ..	J. Jones	1.45-2.45 (B)	1.45-2.45 (A) 11.15-12.15 (B)	10.15-11-0 (A) 1.45-2.45 (A) 2.45-3.45 (B)	....	9.15-10.15
Drawing ..	G. A. Clucas	....	....	....	....	1.45-2.45
Drill & Games ..	A. Ellison	3.45-4.15	....	....	2.0-4.0	....
Intervals ..		11-11.15	11-11.15	11-11.15	11-11.15	11-11.15

DAY JUNIOR COMMERCIAL SCHOOL.

(SECOND YEAR).

Subject.	Teachers.	Day and Time of Classes.				
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
English ..	A. Ellison	11.15-12.15	....	10.15-11.0	....	1.45-2.45
French	J. Nickeas..	....	....	11.15-12.15	11.15-12.15	11.15-12.15
History ..	R. S. Cross	1.45-2.45	....	....	....	....
Geography ..	A. Ellison	2.45-3.45	....	....	....	....
Com. Corr. ..	R. S. Cross	....	2.45-3.45 (A) 1.45-2.45 (B)	....	....	....
Commerce ..	R. S. Cross	10.15-11.0	....	....	....	10.15-11.0
Arithmetic ..	A. Ellison	....	....	9.15-10.15	10.15-11.0	9.15-10.15
Mathematics ..	R. S. Cross	10.15-11.0	11.15-12.15	....	....	....
Book-keeping ..	W. Webster	....	10.15-11.0	1.45-3.45	....	....
Typewriting ..	W. Webster	....	1.45-2.45 (A) 9.15-10.15 (B or A) 2.45-3.45 (B)	....	....	....
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July, 1931.

C. W. WHITEHEAD, LTD., PRINTERS, PRESTON.