



THE ROYAL COLLEGE NAIROBI

OPEN DAY

FACULTY OF SCIENCE

To our Visitors, Science comprises the Departments of
Geography, Mathematics, Meteorology, Physics

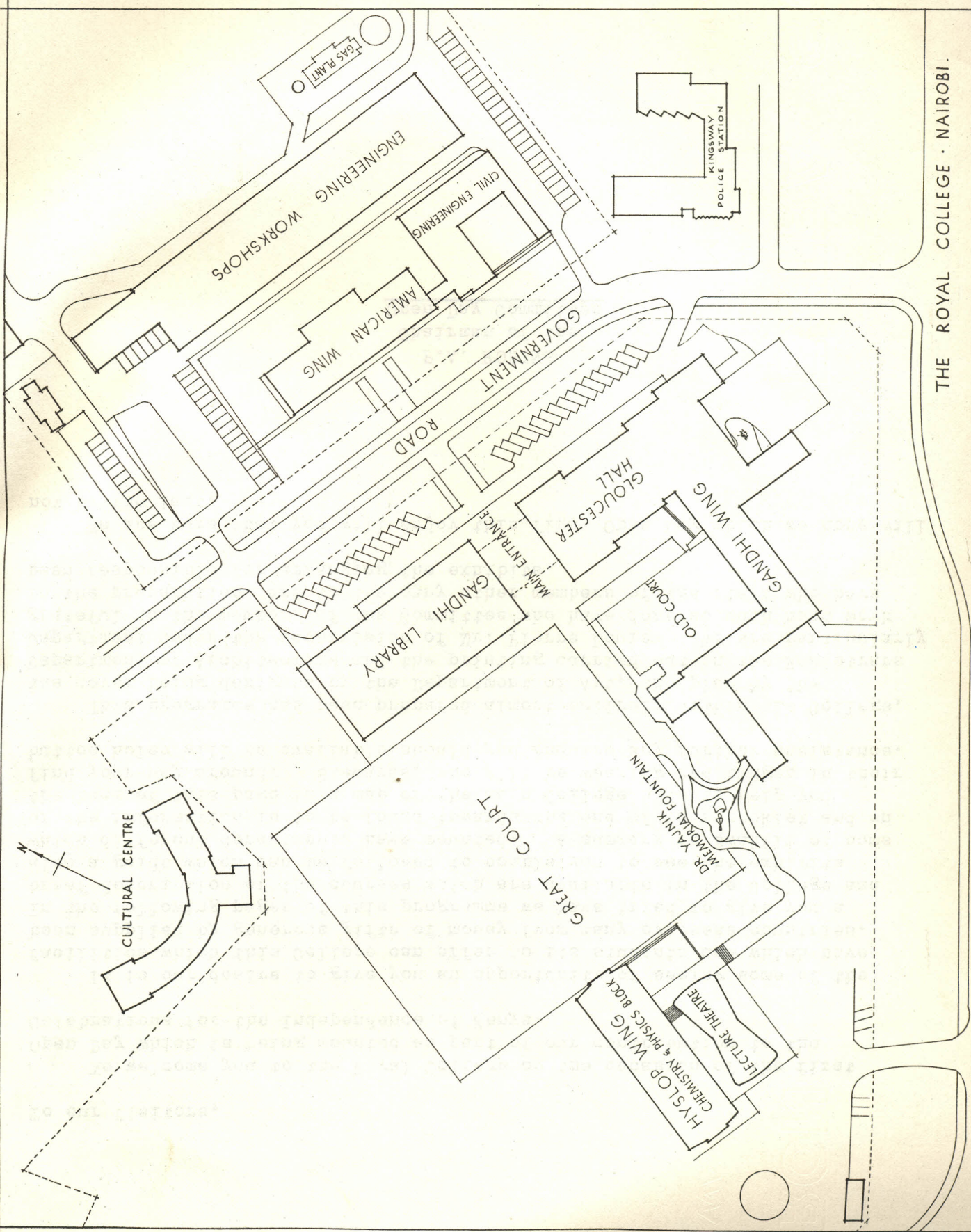
We welcome you to the Royal College on the occasion of the first Open Day which is being mounted as part of our contribution to the Celebrations for the Independence of Kenya.

It is our desire to give you an opportunity of seeing some of the facilities which this College can offer to its students and which have been supplied by generous gifts of money from many overseas countries. In the following pages of this programme we have tried to give you a brief description of the courses which are available in the College and also a guide which can be followed to enable you to see the exhibits which different departments have mounted. A summary in Swahili of some of the information is to be found towards the end of this booklet and on the back of this page is a map of the main College site to help you find your way around. Stewards, who will be wearing red badges in their button holes will be available should you require any further assistance.

This programme has been prepared almost entirely within the College, the cover being designed by the Department of Art, the plan by the Department of Architecture and the printing carried out in the Registrars Department under the supervision of Mr. Pierre Louis. We are particularly grateful to the members of the Committee who have done so much hard work in the preparation, and to the many other members of the staff who have been responsible for arranging the exhibits.

We are sure that you will enjoy this first Open Day which we hope will not be the last.

P.A. ROBINS
Chairman of the
Open Day Committee



THE ROYAL COLLEGE · NAIROBI.

KINGSWAY

FACULTY OF SCIENCE

The Faculty of Science comprises the Departments of Botany, Chemistry, Geology, Geography, Mathematics, Meteorology, Physics and Zoology.

The Departments are situated in part in the Gandhi Wing and in part in the Hyslop Building. A new building for the Departments of Botany and Zoology is under construction on the Chiromo site.

Students are prepared for the B.Sc. degree of the University of East Africa, for which three of the above subjects (except Meteorology) are studied for one year, and two of these for the remaining two years of the course.

HYSLOP BUILDING

DEPARTMENT OF CHEMISTRY

The Department, besides preparing students for the B.Sc. degree, also teaches a three year course for students in the Department of Domestic Science.

Research projects in progress include an investigation into the surface properties of economically important East African minerals, such as diatomite and meerschaum, the examination of the leaf waxes of the aloes, free radical substitution of alephatic hydrocarbons and radio-chemical studies.

Exhibits

- | | | |
|--------------|-------|--|
| Room No. 104 | (i) | Sets of apparatus used by students in different classes. |
| | (ii) | Some uses of the apparatus |
| | (iii) | Some local industries making use of the knowledge of chemistry. |
| Room No. 203 | | Instrumentation plays a great part in modern chemical laboratories in teaching and in research. The instruments exhibited are used to train students and are also used by the members of staff for research. |
| Room No. 208 | | Gas chromatograph |
| Room No. 212 | | Apparatus used by a member of staff in his research work on surface properties of minerals. |
| Room No. 215 | (i) | Chromatography |
| | (ii) | electrophoresis |
| | (iii) | study of natural products. |

PHYSICS DEPARTMENT

TEACHING

In addition to University teaching the Physics Department has prepared large numbers of students for Sub-degree examinations such as the G.C.E. A level examinations and the R.I.C.S. examination.

RESEARCH

Research work in the Physics Department has been chosen to make use of East African material. As a result the emphasis is at present Geophysics. Two groups have been formed:-

Rock Magnetism Group

Research on the residual magnetism of rocks in East Africa with a view to a better understanding of the history of the earth's magnetic field and the theory of Continental Drift. Several expeditions have been made to collect specimens from all parts of East Africa.

Ionospheric Group

An ionospheric research observatory has been built near the Nairobi West Airport. The equipment has been provided by funds from the Rockefeller Foundation together with substantial help from The Royal Society, The East African Department of Meteorology and other sources.

The Station will be co-operating with work for the International Quiet Sun Year which begins in January 1964. The equipment includes:-

- La Cour 3 component magnetic variometers.
- Union Radio Ionosonde.
- Equipment for measuring of Faraday rotation of radio signal from satellites
- Equipment for measuring and analysis of horizontal drifts in the ionosphere.
- Thomas low frequency noise measuring set.
- Rapid fading recorder for radic signals.

The results will be of value to the understanding of the equatorial ionosphere and should be of practical application to improvements in radio communications in East Africa.

Exhibits

<u>Room</u>	G.C.E. 'A' 2nd Year teaching Laboratory showing typical teaching experiments.
312	Part I. B.Sc. teaching Laboratory

Exhibits (cont.)

Room

- 313 Part II. 1st Year teaching Laboratory
- 301 Rock Magnetism cutting room.
Demonstration of use of Blakett magnetometers for evaluating residual magnetism of rock specimens.
- G07 Workshop used for construction and repair of Chemistry and Physics apparatus for teaching and research.
- G01 Multilith and Xerox Room
Demonstration of the preparation of plates for offset lithography.

DEPARTMENT OF METEOROLOGY

The department prepares honours graduates (mathematics and physics) for the Diploma in Meteorology of the Royal College Nairobi. This is a course of one year's duration, to train Class I meteorological personnel, i.e. future research workers, senior forecasters and senior climatologists, heads of service or division.

The course of study includes:-

Synoptic and Physical meteorology; dynamic meteorology; tropical meteorology; statistical climatology; physical and dynamical climatology. Liaison is maintained with related research work going on in the East African Meteorological Department, Agricultural and Forestry Research Organisation, and Desert Locust Control Unit.

As soon as possible research in dynamic meteorology and applied meteorology and climatology will be started.

It is expected that students will next year be drawn from several regions of Africa.

DEPARTMENT OF ZOOLOGY

Small Chemistry Projection of animal colour transparencies at 10.30 and
Lecture Theatre 2.30 pm.

G A N D H I W I N G

(Ground Floor)

DEPARTMENT OF BOTANY

Research projects which are in hand include the study of marine algae of the coast and freshwater algae of local dams and reservoirs, study of the local flora, and of the fungi of our forests and crops. Research in Plant Physiology is concerned with the effects of light on plants.

Exhibits

<u>Laboratory I</u>	"Exhibits of Local Flowers".
Ground floor	
Room No. G10	"Plant Life under the Microscope."
<u>Laboratory II</u>	"Experiments with Plants".
Ground floor	
Room No. G 9	
(<u>Laboratory III</u>)	
3rd floor	
Room No. 310)	("Fungi and Diseases caused by them.")

FACULTY OF COMMERCE

Comprising Departments of Accountancy, Business Administration and Law and Government

The work of the Departments of Accountancy, Business Administration and Law and Government in the Faculty of Commerce consists in providing a degree (Bachelor of Commerce) which enables students interested in the vital field of commerce and industrial administration to pursue a course of study which will enable them to fit into the organisational structure in these fields as either business administrators or accountants.

The B.Com. degree course provided by the College covers a wide field of studies in Economics, Law, Business Administration, Accountancy, Costing, Taxation and Auditing, and the study is spread in such a manner that approximately one third of the time is devoted to Economics, one third to Accountancy and Law and one third to Business Administration.

The pattern of the degree offers the student a choice in his third and final year according to whether his inclinations lie solely in Business Administration or solely in Accountancy. For the former course, he will study only Business Administration and allied subjects and the latter course he will study only Accountancy and allied subjects, in his final year. If a student elects to take up Accountancy in his third and final year he will,

on qualifygin as B.Com of the University of East Africa, be granted complete exemption from the Intermediate Examination of the Association of Certified and Corporate Accountants.

The Department of Law and Government, in addition to providing almost one third of the B.Com. degree, services the Departments of Land Registration and Land Survey in legal subjects and, at the request of the Kenya Government participates in courses for Government servants.

Exhibits

Departments of the faculty have an exhibition in Room G09 of Commercial balance sheets, accounts and income tax computations, and of text-books used by the students.

Students from the Faculty will be available to give information and answer questions.

GANDHI WING

(First Floor)

DEPARTMENT OF ZOOLOGY

Students taking the Degree Course get a broad general education in Zoology, including courses in the structure and classification of the members of the animal kingdom, Comparative Physiology, Ecology, Animal behaviour, Cell Biology, and Genetics. The laboratory courses are supplemented by field courses in each year of study. In the first year the students attend a general Ecological field course and in the second year do a special Marine Biology Course at the laboratories of the E.A. Marine Fisheries Research Organisation at Zanzibar, while in the third year, a more detailed course is given in Terrestrial Ecology.

In addition,^a more general two year course is given to the students taking the Domestic Science Diploma of the University of Manchester.

Research work at present in progress in the Department is directed almost entirely to work on East African problems. Most of these are concerned with Wild Life Ecology, Entomology and Parasitology. Problems which are being investigated at present include:-

- (i) The Biology of the Rock Hyrax,
- (ii) The Ecology of the Alpine Zones of Tropical Mountains,
- (iii) The Feeding habits of Wild Ungulates, (in cooperation with the Kenya Game Department),
- (iv) The Behaviour of Mammals in the National Parks and Game Reserves,
- (v) The Endocrine Control of Reproduction in Tilapia,
- (vi) The Biting Habits of Insects Vectors of Human and Animal Disease,
- (vii) The Development of Trypanosomes in the Tsetse Fly (Glossina)

Exhibits

Room 108 Demonstration of work in progress in the Department:-
First Floor Exhibits by: Prof. Kettle, Mr. Coe, Dr. Hyder, Mr. Sale,
and Dr. Schenkel.

Room 110 An exhibition of living animals.

(Small Chemistry
Lecture Theatre) Projection of animal colour transparencies at
Hyslop Building. 10.30 and 2.30.

DEPARTMENT OF DOMESTIC SCIENCE

There will be a demonstration at 3 o'clock in Room 112

GANDHI WING
(Second Floor)

DEPARTMENT OF GEOGRAPHY

The Department of Geography prepares students for the degrees of B.A. and B.Sc. of the University of East Africa. In the first year students study the Nairobi region to obtain detailed understanding of the geographical approach. This highly varied region including the Rift Valley from Suswa to Lake Magadi, Kiambu, Machakos and the Athi and Kapiti Plains. This is contrasted with a World Survey course which brings some understanding of the scale variety of environments and the possibilities for human action presented by the earth. Students travel on day visits into the Nairobi Region and the practical work in the laboratory is related to the area. In the second and third years, courses are given on the principles of physical and human geography and the regions of Africa (with special reference to East Africa) and North America. Before graduating the student must attend a residential field course and present a satisfactory note book of observations and original studies of a limited area.

Each member of staff is conducting research in an East African context and the Department has published a population map of Kenya in two sheets which it is hoped is the first of many maps to be produced in the future.

Exhibits

Room 212

- (a) The Nairobi Region. A special feature of the first year course is the study of the Nairobi Region (between 36°E to 30°E to 1°S to 2°S).
- (b) Air Photographs and Geography. Air photography is an essential tool in modern geography: some examples are given of what can be seen and learned from them.

Room 204

This room summarises the course of a student's studies in geography over three years: the world survey, physical geography, human geography, the regional geography of Africa and of North America.

GANDHI WING
(Third Floor)

DEPARTMENT OF DOMESTIC SCIENCE.

The Department conducts a three year Course for the Teacher's Certificate of the School of Education, Manchester University.

The main subjects are:

Food and Nutrition
Clothing and Textiles
General Housecraft
Home Management
Art related to Housecraft
Science related to Housecraft
Education

The Head of the Department is carrying out research on Nutrition Education in East Africa.

Exhibits

Room 304

TEXTILES AND CLOTHING

The study of Textiles

- (a) Basic fibres
- (b) Textile processes
- (c) Textiles in use
- (d) The Care of Textiles

Room 304

ART APPLIED TO HOUSECRAFT

A display of students' work showing the correlation of Art with Education, Home Management and Needlework.

Room 301

FOODS AND NUTRITION

1. Microorganism and Food
2. Balanced Meals using Local Foods
3. Food Trays and Teaching Equipment on Nutrition
4. Nutrition Experiments on Rats

Room 301

HOME MANAGEMENT

1. Living in an Urban Community
2. Care of Children
3. Family Expenditure
4. Adapting to Teaching Conditions
5. Special Studies

Room 302

6. Home Decorating and Entertainment

Room 306

EDUCATION

1. Role of Domestic Education in Social Reconstruction

2. Visual Aids in Teaching Domestic Science
3. Child Study

Room 306 SCIENCE APPLIED TO HOUSECRAFT

(First Floor Room 112

At 3 p.m. DEMONSTRATIONS by second Year Students to illustrate one method used in teaching Domestic subjects.)

DEPARTMENT OF GEOLOGY

The Department offers courses for the B.Sc. and, in addition, conducts ancillary geology courses for the Departments of Civil Engineering and Architecture. The main degree course comprises the subjects of Mineralogy, Petrology, Economic Geology, Physical Geology, Palaeontology, Stratigraphy, Structural Geology and Maps.

Plans are being made to mount a two-year course leading to M.Sc. degree in August 1964 the purpose of which will be to train geologists to professional standard.

The Department is equipped with all necessary apparatus and collections for advance level teaching. In addition it runs an X-ray diffraction laboratory, a gem-cutting and testing laboratory and a world-wide standardised seismograph station which is situated at Chiromo.

The research work of the department covers investigation of mineral resources in East Africa and the geological and geographical investigations of the Kenya Rift Valley.

Exhibits

Room 313

Economic Minerals from East Africa
Local Rocks under the Polarizing Microscope
Some Ornamental Stones from East Africa.

Room 315

Fossils from East Africa.
Stereophotographs of Mt. Kenya.
Recent earthquakes recorded by the Seimological Station.

DEPARTMENT OF BOTANY

Room 310

"Fungi and Diseases caused by them"

G H A N D H I W I N G

(Fourth Floor)

DEPARTMENT OF ART

The Department of Art at present awards the Diploma in Fine Arts (E.A.). This Diploma is awarded after successful study in one of the following subjects:-

- (a) General Studies
- (b) Graphic Design
- (c) Painting

Degree courses in Fine Art may soon begin and they would replace the Diploma in Fine Art.

Exhibits

There will be a number of exhibits on the fourth floor.

DEPARTMENT OF ARCHITECTURE

1. Courses offered in the Department

- (a) A five to six years full-time Course (depending on the Candidate Entry Qualifications) leading to the Intermediate and Final Examinations of the Royal Institute of British Architects modified for local conditions. These Examinations are organized and supervised by the East Africa Institute of Architects and monitored at all stages by R.I.B.A. Examiners in London.
- (b) In September 1963 a five year full-time Course was instituted leading to the Award of a Bachelor of Architecture Degree of the University of East Africa. (Students will no longer be admitted to the first year of the R.I.B.A. course).

After successful completion of the full-time Courses both R.I.B.A. and Degree Students must acquire two years full-time practical experience and successfully sit a Professional Practice Examination before becoming eligible for Registration in East Africa.

Exhibits

1st Year

Basic Design and Spatial Studies with typical 1st Year Portfolios
Design of Buildings for Agriculture.

2nd and 3rd Year

Swamp Development as shown in the 7th Congress Projects of the International Union of Architects at Cuba, September 1963.

4th Year

Drawings from Students Portfolios.

5th Year

Thesis Material based on a Regional Plan for the Embu District.

DEPARTMENT OF LAND DEVELOPMENT

This Department provides courses for those wishing to take up a career, either in a professional or administrative capacity, as adviser upon the proper use of land, its valuation and its development.

Students in the Department take the professional examinations of the Royal Institution of Chartered Surveyors in one of two sections, viz:-

- (a) Quantity Surveying Section: OR (b) General Section.

Quantity Surveying

The professional Quantity Surveyor is an independent adviser upon financial matters connected with the building and civil engineering industries. The bills of quantities prepared by him form the basis for competitive tendering in these industries, but at the same time he is consulted at all stages of a development scheme, from preliminary planning until the final cost is agreed upon completion of the project.

General Section

Those who qualify in this section specialize in one or more of the following branches of land development and management.

- (i) Valuation of land and buildings, and interests therein, for all purposes including taxation.
- (ii) Town and Country Planning, both practice and administration.
- (iii) Housing Management.
- (iv) Building Surveying.

Subjects taken by students in these courses include the following:-

Principles of Law
Town and Country Planning
Theory of Structures
Law of Arbitrations
Valuation of Land and Buildings
Economics
Quantity Surveying
Construction of Buildings
Easements and Property Law.
Administrative Law.

Exhibits

There will be no exhibits on display from this Department owing to staffing difficulties.

* * * * *

LIBRARY BUILDING

DEPARTMENT OF EXTRA-MURAL STUDIES

This Department conducts a wide range of courses for external adult students, with the assistance of qualified graduate tutors. Subjects include:-

Law	Internal Relations
Economics	Management
Politics	English Language
Government	English Literature
International Affairs	General Science.
History	

These classes are held, usually on week-nights, in approximately thirty centres throughout Kenya. They are supplemented by:

- (a) One Day and Residential Weekend Schools
- (b) The Residential Ten-day Annual Study Vacation, held in rotation at each of the three East African University Colleges, and attended by adult students from all parts of East Africa.

The Department works in co-operation with the residential College of Social Studies at Kikuyu.

While there is at present no degree or diploma attached to Extra-Mural Studies, a satisfactory period of attendance at Extra-Mural Classes is one condition of admission to the Mature Age Entry Examination of the University of East Africa.

The Department is also concerned with the general fostering of adult Education in Kenya. Its full-time and part-time staff are at the disposal of Central and Local Government, Trade Unions, Business, etc., for tuition-work, in connection with In-training and 'Sandwich Classes'.

Exhibits

The Department is combining forces with the College of Social Studies to mount a joint display. This will be on view on the ground floor, to the right-hand of the entrance arch.

THE GHANDHI MEMORIAL LIBRARY

Stock: 50,000 books and pamphlets, 30,000 periodical parts.

Readers: Including members of associated professional bodies, etc. 1,000.
Seating is provided for 250 readers.

Use; During terms about 3,000 readers each week.

An information and advisory service is given by personal visit, letter or telephone to all in need of such assistance as may be expected from a learned library.

There is a microphotography and microtext reading service for the library readers.

Exhibits

The Library will be open and will contain a number of exhibits illustrating its work.

THE FACULTY OF ARTS

The Faculty of Arts comprises the Departments of English, History, Economics, Mathematics and Geography. Students are prepared for the B.A. Degree of the University of East Africa.

With the exception of the Department of Geography these Departments have exhibits on the top floor of the Library.

DEPARTMENT OF ENGLISH

In our new degree syllabus we are paying particular attention to African literature and certain set texts by African authors are included in the syllabus. We emphasise the importance of language both spoken and written but both the teaching and the research in this field is hampered by the lack of specialists in the linguistic field.

Exhibits

There will be an exhibition of African and other literature.

THE DEPARTMENT OF HISTORY

Courses for the B.A. (East Africa) include papers in European and African History with particular reference to the History of East Africa. Research projects are being undertaken by members of the Department into various aspects of the History of East Africa.

Exhibits

An exhibition will be mounted illustrating the courses taught with particular reference to the History of East Africa. If possible it is hoped to exhibit books, photographs and maps relating to East Africa, and the equipment used in the collection and recording material.

DEPARTMENT OF ECONOMICS

The Department of Economics provides courses for the degree of B.A. and for the degree of B. Com. The first year courses provide a general introduction to the theory of Economics and its application to African problems. In the second and third years a thorough grasp of basic economic principles is obtained and a study of their application in detail is made. Particular attention is given to the problems of economic development and to those of agriculture. Elementary statistical methods are taught, and the statistical information available about East Africa is examined. In addition a special course on the economics of modern industry is provided. This is of particular interest to B. Com. students.

Several optional papers are offered for second and third year students and it is possible for a student to spend this period specialising in economics.

Courses on advanced economic statistics and their application will be provided, thus producing economic statisticians. Other students can supplement the basic courses with work on social economies, economic organisation, and extra study of economic development, thus obtaining a full training as applied economists.

The Economic Research Centre

Research in the social sciences is urgently needed to deal with the problems the Governments and countries of East Africa are encountering in their drive for rapid improvement in the social and economic condition of the people. In the immediate future the Royal College will specialise in economic research in this field. An Economic Research Centre has therefore been established with the Professor of Economics, Professor Robson, as Director. A grant of 80,000 dollars from the Rockefeller Foundation for teaching and economic research is gratefully recorded. The services of the centre will also be available to visiting research workers.

An advisory committee of leaders in government and the business community, is being set up and this will ensure that the work of the centre is of direct relevance to current needs, and that the research staff are in close and continuous contact with the persons responsible for the economic life of the country.

Research projects are in progress in agriculture, national incomes, trade, African enterprises, Federation and indications of social and economic levels, and other fields. Members of the Department have recently published

papers in the East African Economics Review, the Banker etc., and have prepared papers for the recent conference in Nairobi on Federation. Work is currently in progress on the Oxford History of East Africa, and a book on economic policy in Africa.

Exhibits

There will be an exhibition of books etc.

* * * * *

FACULTY OF ENGINEERING

The Faculty of Engineering comprises the Departments of Civil Engineering, Mechanical Engineering, Electrical Engineering and Land Surveying. These are situated in the two buildings on the North side of College Road adjacent to the Kenya Police Station. Students are prepared for the B.Sc. (Engineering) Degree of the University of East Africa.

A M E R I C A N W I N G

DEPARTMENT OF MECHANICAL ENGINEERING

The Department of Mechanical Engineering is responsible for Mechanical Engineering subjects in the course for the B.Sc. degree in Engineering.

The first year is common to the three branches of Engineering, but students specialise in the second and third years. In the case of Mechanical Engineering students attend a broadly based degree course suited to the requirements of East Africa, although in the final year they may study various optional subjects of a specialised nature.

The Department is doing work in connection with Agricultural Engineering, and it is hoped to mount a two year post graduate course in this subject in conjunction with the Faculty of Agriculture at Makerere College. This course is planned to suit the specialised needs of East Africa.

Exhibits

The following-
ing- laboratories will be open to the public:-

Strength of Materials
Applied Mechanics, and
Internal Combustion Engines.

DEPARTMENT OF ELECTRICAL ENGINEERING

The course has been planned with particular reference to the requirements of electrical engineering graduates in East Africa, and involves study in the

important fields of generation, transmission, distribution and utilization of electrical power, telecommunications and electronics.

The Department is equipped with laboratories for electrical power system analysis, electronics, machines, telecommunications, measurements and applied electricity. Research projects currently under investigation are directed towards methods of obtaining a visual display of electrical machine characteristics and applications of semiconductors. The Department operates a station for the reception of very-low-frequency signals, in collaboration with the Royal Aeronautical Establishment of the United Kingdom.

Exhibits

The Electrical Power and Machines Laboratory will be open.

DEPARTMENT OF LAND SURVEYING

The department conducts courses for the professional examinations of the Royal Institution of Chartered Surveyors in the Land Surveying Sub-Division. These courses are of five years duration.

Lecture courses in Surveying for degree students in Civil Engineering and R.I.C.S. Quantity Surveying students are also the responsibility of the Land Surveying Department.

The Department specialises in the geodetic sciences, viz. geodesy, photogrammetry, astronomy, surveying as such, and certain aspects of geophysics.

Research topics in which members of staff are currently interested are:-

- (a) Data processing in connection with analytical aerial photogrammetry.
- (b) Application of electronic distance measuring techniques to the measurement of short distances.
- (c) Determination of the shape of the local geoid.

* * * * *

C I V I L E N G I N E E R I N G B L O C K

DEPARTMENT OF CIVIL ENGINEERING

The Department provides teaching for the B.Sc. Degree in the Theory of Structures, Fluids Mechanics, Soil Mechanics, Civil Engineering Materials, Highway Engineering, Public Health Engineering and Hydrology.

The Department has laboratories for Fluids Mechanics (hydraulics), Soil Mechanics, Concrete, while temporary provision is made for Structures in the Mechanical Engineering Workshops.

1. Fluid Mechanics Laboratory

The Fluid Mechanics (Hydraulics) Laboratory is equipped to deal with problems which arise in relation to river flow, irrigation, harbour works and hydro-electric schemes. In particular a large tilting flume is used on work on the movement of river bed material etc.

2. Soil Mechanics Laboratory

Equipment for testing the shear strength of soils, comprising an unconfined compression machine, indirect shear box and tri-axial machine. These are used for testing the shearing resistance of soils, a problem of great importance in foundation engineering and other earthwork stability problems. In addition there is apparatus for the classification of tests of soils utilising Atterberg limits and grain size distribution. All these tests are of importance to be able, in a cheap way, to establish identities of various soils and assess in a preliminary fashion their likely properties with respect to certain engineering problems. There is also a permeability apparatus which measures the water flow through soils, a problem of great importance in connection with wells, underground seepage "piping" and similar problems.

3. Concrete Laboratory

The Concrete Laboratory is equipped to undertake routine testing of cement and aggregates. There are also facilities for casting and testing concrete cubes, beams and slabs and testing of a cube crusher and an Avery Testing machine. The test frame arrangement, temporarily housed in the Mechanical Engineering Workshop, is to be used for testing slabs and beams and columns under various loading conditions.

Exhibits

1. Fluid Mechanics Laboratory

- (i) Open Channel with Venturi flume and Hydraulic Jump
- (ii) Kaplan Turbine
- (iii) Pelton Wheel
- (iv) Reciprocating Pump
- (v) Open Channel
- (vi) Centrifugal pumps
- (vii) Forced Vortex Apparatus
- (viii) Floating Body Apparatus
- (ix) Miniature flume
- (x) Model Surge Tank.

2. Soil Mechanics Laboratory

FACULTY OF VETERINARY SCIENCE

The Faculty of Veterinary Science comprises the Departments of Veterinary Anatomy, Veterinary Physiology and Biochemistry which have recently occupied the new building on the Chiromo extension of the Royal College site, and the Departments of Microbiology and pathology, Animal Husbandry and Clinical Studies which are situated at Kabete where there is also the College Farm.

Students attend a four year course with three Professional Examinations leading to the B.Vet.Sci. Degree of the University of East Africa.

OWING TO AN OPENING CEREMONY FOR THE COLLEGE FARM, WHICH INVITED GUESTS ONLY WILL BE ABLE TO ATTEND, EXHIBITS MOUNTED BY THE FACULTY OF VETERINARY SCIENCE WILL BE OPEN TO THE PUBLIC ONLY DURING THE AFTERNOON FROM 2pm to 5 pm.

A bus service will be running from the Main College site to Chiromo and Kabete during the afternoon to enable visitors without their own transport to see the exhibits and demonstrations.

C H I R O M O

DEPARTMENT OF VETERINARY ANATOMY

The Department of Anatomy is training Veterinary students during the first and second year of the degree course. Lectures and practicals in gross anatomy, histology and microscopic anatomy and embryology of the domestic animals are included. The students are informed about the normal structure, form and function of the developing and adult animal body and its organ systems in order to give him the basic knowledge to be applied during the following paraclinical and clinical studies. Lectures are supported by demonstrations of living and dead animals and by visual aids.

Research projects of the Anatomy Department comprise topographic and functional anatomy of wild ruminants (antelopes etc.) of East Africa, including studies on the blood-vascular system (corrosion-anatomy), in comparison with domestic ruminants.

Exhibits

There will be an exhibition of 6-8 domestic animals of various species, fixed in a natural standing position and dissected topographically. One of the animals will be used to show the method applied for this instructive way of fixation. Frozen sections of various animals will be on display, as well as museum specimens of the animals, casts of the blood-vascular system, visual aids and skeletons. The specimens will be labelled and the various methods explained by diagrams, photographs etc.

Several microscopes will be put up with histological slides. Diagrams and photographs will explain the process of preparing histological specimens and visual aids will be on display.

DEPARTMENT OF PHYSIOLOGY AND BIOCHEMISTRY

This department prepares students for the first professional examination in Physiology and Biochemistry and for the second professional examination in Applied Physiology, Clinical Biochemistry and in Pharmacology.

The Research programme at present in hand is as follows:-

- (a) The physiology of wild as compared to domesticated animals, with especial relation to temperature control and adaption to environment.
- (b) The reproductive physiology of the hoofed wild animals, with particular reference to the role of skin-glands in the reproductive cycle.
- (c) The blood components of range cattle in relation to climatic and nutritional variation.
- (d) Anaesthesia and "neuroleptic narcosis" in the larger animals.

Exhibits

The exhibition will illustrate electrophoresis and some biochemical estimations.

K A B E T E

DEPARTMENT OF MICROBIOLOGY AND PATHOLOGY

The Department of Microbiology prepares students for the 3rd Professional examination for the degree of Bachelor of Veterinary Science. The subjects are introduced in the students' second year and taught throughout the third year.

Microbiology consists of three sections:-

Bacteriology,
Virology,
Parasitology,

which subjects cover the causal organisms and vectors of animal infectious and contagious disease.

Research in this Department consists of:-

- (i) experiments in the use of simultaneous vaccines
- (ii) the problem of infertility in certain areas of Kenya
- (iii) a survey of helminths of sheep with special reference to fascioliasis and stilesia sp.

Exhibits

There will be a pictorial display of micro-organisms and some of their vectors in the museum space of the new administration-science block.

DEPARTMENT OF ANIMAL HUSBANDRY

The Department of Animal Husbandry instructs students in the husbandry of the production of animal products, and in the general principles of preventative medicine, during their studies for the degree of the Bachelor of Veterinary Science of the University of East Africa.

Exhibits

The farm will be open to the public and farm staff will be available for explanations.

DEPARTMENT OF CLINICAL STUDIES

The Department of Clinical Studies instructs in medicine, surgery and the diseases of reproduction in preparation for the third Professional Examination of the Bachelor of Veterinary Science of the University of East Africa. This year it is offering a diploma-degree conversion course to approximately thirty old diplomates of this school who are studying for the final examinations of the above degree.

Exhibits

The wards and surgery will be open to the public.

* * * * *