

CURRICULUM VITAE

Name: Shem Peter Mutua Mutuiiri
Date of Birth: 09-NOV-1985
Sex: Male
Marital Status: Single
ID No: 24123006
Nationality: Kenyan

CONTACTS

Professional Address:

Tropical Infectious Diseases Department
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Personal Address:

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CAREER ASPIRATION

To carry out research whose upshot would be generation of knowledge and skills that would advance humanity and provide solutions to current and future challenges in Science, more so, Medicine and Biological sciences

EDUCATIONAL BACKGROUND

- 2009-F** **PhD Medical Microbiology**, University of Nairobi (UoN)
Dissertation: **The Effect Of Maternal & Childhood Protozoa & Helminth Infections On Vaccine Induced Immune Responses To Poliovirus.**
Mentors: Dr. Thomas Kariuki; Prof. Omu Anzala; Dr. Gerald Chege; Dr. Dufton Mwaengo
- 2007 –2009** **MSc. Medical Virology**, Institute of Tropical and infectious Diseases, Jomo Kenyatta University of Agriculture and Technology, Nairobi-Kenya
Dissertation: **Molecular characterization of RANTES gene polymorphisms in HIV positive and HIV negative persons in Nairobi province.**
Mentors: Dr. Samoel Khamadi; Dr. Helen Kutima.
- 2003 – 2007** **BSc. Medical Microbiology, 2nd Class Honors; Upper Division**, Department of Medical microbiology, Jomo Kenyatta University of Agriculture and Technology, Nairobi-Kenya.
- 1999 – 2002** **KCSE Certificate**, Nkubu High School.
- 1996-1998** **KCPE Certificate**, Ntharene Primary School

OTHERS

- Certificate in HIV/AIDS management-KPEN-NACC
- Trainer of Trainers (Community-based First Aid)-Red Cross Society
- International Life Saver- St. John Ambulance
- Trainer of Trainers-Early Infant Diagnosis Curriculum and PMTCT program- APHIA II
- Trainer -Early Infant Diagnosis Curriculum and PMTCT program-Pathfinder International.
- Certificate in Good Clinical Laboratory Practice (GCLP)-ReMox CLINICAL TRIAL.
- Certificate of Training in Proposal and scientific writing.
- Certificate of Training in Scientific Writing and Communication-TCC.
- Certificate in Advanced Immunology-IUIS/AAI Course

PROFESSIONAL EXPERIENCE

- September 2009-Date** **PhD Research Training Fellow/Research Scientist,
Institute of Primate Research (IPR).**
Duties: Development of proposals and project management for Impairment of vaccination responses to HIV, select childhood infections and malaria. Implementation of several protocols in Medical Microbiology/Immunology in various techniques; Parasite and Viral isolations. Molecular Biology techniques, Cell Culture techniques, Monitoring and Evaluation. Training and supervision of laboratory technologists/technicians, students on industrial attachments and other scientists.
- Sep 2014- Date** **Part time Lecturer Department of Biochemistry &
Biotechnology, Kenyatta University, Main & Kitui
Campus.**
**Duties: Biochemistry of Tumours & Applied Microbial
Biochemistry** Lecturer, Undergraduate Students.
- May 2011- Date** **Lecturer Department of Applied Sciences, Karen
Campus, JKUAT, Nairobi-Kenya**
**Duties: Virology, Health Management and Economics,
Medical Bacteriology; Medical Techniques** Lecturer,
Undergraduate Students (BSc. Medical Microbiology)
- January 2013- May 2013** **Lecturer Department of Plant & Microbial Sciences,
K.U., Nairobi-Kenya**
Duties: Introduction to Virology & Diagnostic Virology
Lecturer, Undergraduate Students (BSc. Microbiology)
- January 2010- May 2010** **Lecturer Department of Biological Sciences, Chepkoilel
Campus, Moi University, Eldoret-Kenya**
Duties: Virology Lecturer, Postgraduate Students (MSc.
Microbiology)

January 2007- August 2009 Research Scientist Consultant, REMox TB Clinical trial, Kenya Medical Research Institute (KEMRI), Kenya.

Duties: Advisor on the clinical trial on the Rapid Evaluation of Moxifloxacin (REMox). Implementation of protocol and recruitment of patients.

April 2008-August 2009 Research Officer, Center for Virus Research (CVR), Kenya Medical Research Institute (KEMRI), Kenya.

Duties: Research Scientist-HIV Laboratory; Implementation of techniques like Polymerase Chain Reaction (PCR), Restriction Fragment Length Polymorphisms (RFLP), Early Infant Diagnosis Project, HIV/AIDS Rapid Test Kits Survey (Kenya), Immunological Techniques, Tutoring Postgraduate Students.

March-April, 2008 Research Officer, Center for Virus Research (CVR), Kenya Medical Research Institute (KEMRI), Kenya.

Duties: Research scientist-Measles, Polio, Hepatitis, Viral Haemorrhagic Fevers & Arboviruses laboratories. Viral isolations: preparation of cell cultures and isolation of Arboviruses, PCR, ELISA for Measles, Rubella virus, Poliovirus isolation & sub typing.

March-June, 2007 Assistant Research Officer, Center for Biotechnology Research and Development (CBRD), Kenya Medical Research Institute (KEMRI), Kenya.

Duties: Research intern- Malaria Laboratory, Experimental Animal House, Leishmaniasis, Schistosomiasis Laboratories. Parasite isolation and animal model experimentation, Antimalarial drug resistance patterns characterization, Laboratory Animal care.

February-December 2006 Research Assistant, Department of Biological Sciences, Kenyatta University (KU), Kenya.

Duties: Research Assistant to Mr. Dominic Kiogora who was undertaking a MSc. Medical Microbiology on the farming of Soya beans in Kenya (February 2006).

RESPONSIBILITIES HELD

- Inventory and Logistics Manager-HIV Laboratory-(CVR-KEMRI)
- Student Leader (Sports & Entertainment Sec.)-Jomo Kenyatta Alternative Degree Students' Association (JKUADSA)
- Advisor-Jomo Kenyatta University Medical Microbiology Students Association (JKUMMSA)
- Founder Chairman HIV/AIDS Awareness Club-Nkubu High School (2001)
- School Prefect (Music Room)- Nkubu High School (2002)
- Chairman wildlife club of Kenya (Nkubu High School chapter-2002)
- Chairman Music club (Nkubu High School-2000-2002)
- Chairman Drama club (Nkubu High School 2001-2002)

WRITTEN WORK, PUBLICATIONS & PRESENTATIONS

MSc thesis:

Molecular characterization of RANTES gene polymorphisms in HIV positive and HIV negative persons in Nairobi province.

Certificate in HIV/AIDS Management Project:

Awareness, Knowledge, Attitudes and Practices (AKAP) of Kibera Slum residents regarding condom use

BSc project:

Antimicrobial Resistance Patterns in Enteric pathogens found the wetlands of L. Victoria.

OTHERS PRESENTATIONS AND PUBLICATION AND THOSE IN PRESS:

1. **Muturi S. P. M.**, Chege G., Mwaengo D., Ochola L., and Kariuki T.M. (2011) Serial in Vivo Passage of CXCR4-Tropic Simian/Human Immunodeficiency Chimeric Virus (SHIV89.6P) in Papio Anubis; A Preclinical Disease Model. *Presented at The "International Scientific Conference (ISC): hosted by Institute of Primate Research (IPR) & Kenya Agricultural Research Institute-Trypanosomiasis Research Centre(KARI-TRC) from 11-13 September 2013 in Nairobi, Kenya.*

2. **Mutui S. P. M.**, Chege G., Mwaengo D., Ochola L., and Kariuki T.M. (2011) Adaptation of Simian/Human Immunodeficiency Chimeric Virus (SHIV) containing the Envelope Gene of the Human Immunodeficiency Virus Type 1, 89.6 (SHIV_{89.6P}) in *Papio anubis* model by *in vivo* serial passage. *Presented and published at The "Global Infectious Disease Research: a multidisciplinary approach" Course by the International Centre for Genetic Engineering and Biotechnology (ICGEB) from 04-10 September 2011 in Cape Town, South Africa.*
3. **Mutui S. P. M.**, Kutima H.L., Mwapagha L.M., and Khamadi S.A. (2010) Molecular Characterization of the RANTES gene polymorphisms in Nairobi province, Kenya. *Presented and published at The AIDS Vaccine Conference 28TH September-1st October, 2010 in Atlanta-Georgia, USA. AIDS Research and Human Retroviruses 26: 10, P21.04.*
4. Mwapagha L.M., Ng'ang'a Z., **Mutui S. P. M.**, Miheso B., and Khamadi S. Characterization of polymorphisms of the CX3CR1 co-receptor gene among HIV infected adults and infants in Nairobi province, Kenya. *Submitted and accepted at the second advanced summer school in Africa. Molecular Mechanisms of Viral Infection and Propagation conference 2010 Cape Town South Africa on March 6-1^{4th}, 2010*
5. **Mutui S. P. M.**, Kutima H.L., Mwapagha L.M., and Khamadi S.A. Molecular Genetic Survey of the RANTES gene polymorphisms in Nairobi province, Kenya; *Presented and published at inaugural Institute of tropical medicine and infectious diseases post graduate conference May 28-29th, 2009 at Jomo Kenyatta University of Agriculture and Technology*
6. **Mutui S. P. M.**, Kutima H.L., and Okemo P. A. Antimicrobial Resistance Patterns in Enteric pathogens found the wetlands of L. Victoria *Presented and published at, 3rd Scientific, Technological and Industrialization Conference October 25th-26th 2007, Jomo Kenyatta University of Agriculture and Technology*
7. Mwapagha L. M., Ng'ang'a Z., **Mutui S. P. M.**, Miheso B., and Khamadi S. Molecular Characterization of the CX3CR1 co-receptor gene among HIV infected adults and infants in Nairobi province, Kenya. *Presented and published at inaugural Institute of tropical medicine and infectious diseases post graduate*

conference May 28-29th, 2009 at Jomo Kenyatta University of Agriculture and Technology

8. **Mutui S. P. M.** & Koki M. Awareness, Knowledge, Attitudes and Practices (AKAP) of Kibera Slum residents (Nairobi-Kenya) regarding condom use. *Presented to and published by the Kenya People Empowerment Network (KPEN) and National AIDS Control Council (NACC) May 8th, 2008 for the award of the Certificate in HIV/AIDS Management.*

WORKSHOPS/ RESEARCH TRAINING AND SEMINARS ATTENDED

December 2014	EFIS-EJI Ceppellini Advanced School of Immunology course on Maternal Immunity 7 TH to 11 TH December, Castellammare di Stabia (Naples), Italy.
October 2014	HIV-R4P Conference, Cape Town South Africa.
October 2012	The ICGEB/IUBMB/IUIS course entitled “Non Communicable Disease Research: 15th to 19th October, Cape Town, South Africa.
September 2011	The ICGEB/IUBMB/IUIS course entitled “Global Infectious Disease Research: a multidisciplinary approach”, 4th to 10th September, Cape Town, South Africa.
31st-5th August 2011	IUIS/AAI Advanced Immunology Course, University of Minnesota, Minneapolis.
9th to 13 August 2010	Effective Scientific Communication and Publishing Course by The Training Centre for Communication (TCC)-Africa, Chiromo Campus, University of Nairobi.
6th to 9th April, 2010	Proposal and scientific writing workshop for NMK Researchers and Heritage Managers, Kenya Institute of Education, Nairobi.
26th June, 2009	Good Clinical and Laboratory Practice, Global Alliance for TB Drug Development, Olive Garden, Nairobi.
10th February, 2009	Roche Applied Science “Inspiring Discovery” workshop for Molecular and Cellular Sciences, KEMRI, Nairobi.

- 12th February, 2009** Roche “High Throughput Sequencing” workshop,
BecA/ILRI, Nairobi.
- 2nd October, 2008** Roche Applied Science “Inspiring Discovery” workshop
for Molecular and Cellular Sciences, University of Nairobi.

RESEARCH AWARDS, GRANTS & SOCIETY MEMBERSHIP

- December 2014** Scholarship & Travel grant to attend EFIS-EJI Ceppellini Advanced School of Immunology course on Maternal Immunity 7TH to 11TH December, Castellammare di Stabia (Naples), Italy.
- October 2014** Scholarship Travel Grant to attend HIV-R4P Conference, Cape Town South Africa.
- October 2013** Scholarship & Travel Grant Award to attend *The EFIS-EJI Ceppellini Advanced School of Immunology course on Vaccination; Novel vaccination strategies against the three major killers-The latest news on Malaria, Tuberculosis, HIV/AIDS, and vaccine development in general 16th to 21st October, Castellammare di Stabia (Naples), Italy.*
- October 2012** Scholarship Award to attend *The ICGEB/IUBMB/IUIS course entitled “Non Communicable Disease Research: 15th to 19th October, Cape Town, South Africa.*
- September 2011** Scholarship Award to attend *The ICGEB/IUBMB/IUIS course entitled “Global Infectious Disease Research: a multidisciplinary approach”, 4th to 10th September, Cape Town, South Africa.*
- July 2011** Scholarship Award to attend *The IUIS/AAI Advanced Course in Immunology, July 31–August 5, 2011, in Minneapolis, USA.*
- 2011-F** Member International Union of Immunological Societies (IUIS)
- 2011-F** Member-Kenya Society of Immunology.
- September 2010** Scholarship Award to attend *The AIDS Vaccine Conference 28TH September-1ST October, 2010 in Atlanta-Georgia, USA.*
- September 2009** Consortium for National Health Research (CNHR) Grant
- 2006-F** Member-Kenya Society of Microbiology.

RESEARCH INTERESTS

- Applied Microbiology
- Neglected Tropical Diseases Research
- Biotechnology
- Genetics
- Environmental Microbiology
- Human Health
- Medical Microbiology; Bacteriology, Parasitology & Virology.
- Molecular Medicine
- Immunology
- Non-Communicable Diseases Research
- Pharmacognosy & Pharmacology

HOBBIES

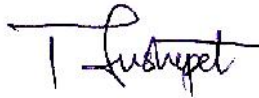
Swimming, Traveling, Singing and Composing Music, Acting, Reading educative journals and watching documentaries, watching and playing soccer.

REFEREES

Dr. Samoel A. Khamadi
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USAMRU/WALTER REED PROJECT-KERICHO/Kenya Medical Research Institute
(KEMRI)
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Director, Centre for Infectious and Parasitic Diseases Control and Research
Kenya Medical Research Institute
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Telephone: 254 728073633, 254 (55) 22410, 254 (20)3591432
E-mail: mmwau@kemri.org, matilu.mwau@gmail.com

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Tel: (020) 810901-19
Mobile: 0722942072
Okemo1967@yahoo.com; dean-graduate@ku.ac.ke



SIGNATURE: _____

DATE **16-MAR-2015** _____

ACADEMIC CREDENTIALS:





1178

**JOMO KENYATTA UNIVERSITY
OF
AGRICULTURE AND TECHNOLOGY**

POSTGRADUATE ACADEMIC TRANSCRIPT*

Name of Student: MUTUIRI Shem Peter Mutua **Reg. No.** TM303-0136/2007
 Surname Other Names

Faculty/Institute: Institute of Tropical Medicine and Infectious Diseases (ITROMID)

Course: Master of Science in Medical Virology

Date of Admission: May, 2007 **Academic Year:** 2007/2008

Year of Study: First

UNIT CODE	TITLE OF UNIT	UNIT(S)	GRADE
TMM 3100	Pathogenic Microbiology II	1	A
TMM 3112	Medical Virology I	1	B
TID 3101	Computer in Health Research	1	A
TID 3100	Research Methodology	1	A
TID 3103	Epidemiology	1	C
TID 3104	Biostatistics and Demography	1	C
TMM 3114	Retro-Virology, Viral Haemorrhagic Fevers and Unconventional Viruses	1	A
TMM 3113	Medical Virology II	1	B
TMM 3117	Vaccinology and Immunizations	1	B
TMM 3116	Laboratory Animal Care and Use	1	A
TMM 3115	Diagnostic Virology and Epidemic Surveillance and Emergencies	1	A

Recommendation:
PASS: Proceed to Second Year of study

NB: 1 Unit consists of 35 lecture hours or equivalent:
 (3 practical hours and 2 tutorial hours are
 Equivalent to 1 lecture hour)

Key to grading System:

- A=70-100% - Excellent
- B=60-69% - Good
- C=50-59% - Satisfactory
- D=49% and below

Signed:



Date Issued:

This transcript is issued without any erasures or alterations.



Certificate Number/07

1233

**JOMO KENYATTA UNIVERSITY
OF
AGRICULTURE AND TECHNOLOGY**

This is to certify that

Shem Peter Mutua Mutuiri

*having satisfied all the requirements
for the award of the degree of*

**BACHELOR OF SCIENCE IN
MEDICAL MICROBIOLOGY**

Second Class Honours (Upper Division)

*was admitted to the degree at a congregation
held at this university
on Friday the Twenty Seventh of July
in the year
Two Thousand and Seven*

Vice Chancellor

Deputy Vice Chancellor
(Academic Affairs)



15518

**JOMO KENYATTA UNIVERSITY
OF
AGRICULTURE AND TECHNOLOGY**
*UNDERGRADUATE ACADEMIC TRANSCRIPT

Name of Student: MUTUIRI Shem Peter Mutua **Registration No.** S20-A04-0057/2003
Surname Other Names
Faculty: Science
Degree Programme: BSc Medical Microbiology
Date of Admission: April, 2003 **Academic Year:** 2006/2007
Year of Study: Fourth

UNIT CODE	TITLE OF UNIT	UNIT(S)	GRADE
HRD 2401	Entrepreneurship Skills	1	A
SBT 2401	Research Project	2	A
SZL 2406	Parasitology II	1	B
SZL 2408	Immunology II	1	B
SBT 2473	Medical Mycology	1	B
SBT 2470	Medical Bacteriology	1	C
SBT 2477	Health Management and Economics	1	B
SBT 2472	Pharmacognosy	1	A
SBT 2471	Medical Virology	1	B
SBT 2474	Microbial Food Toxicology	1	A
SBT 2475	Pharmacology	1	C
SBT 2476	Recent Advances in Medical Microbiology	1	A

Recommendation:
PASS; Awarded the Degree of BSc Medical Microbiology with SECOND CLASS HONOURS (UPPER DIVISION)

Key to Grading System.

- A = 70 - 100 % -Excellent
- B = 60 -69 % -Good
- C = 50 - 59% -Satisfactory
- D = 40 - 49% -Pass
- E = 39% and below -Fail

Signed **J.K.U.A.T.**
DEAN, FACULTY OF SCIENCE
Dean, Faculty of Science

Date Issued 26/6/07

NB: 1 Unit consists of 35 lecture hours equivalent
(3 Practical hours of 2 tutorial hours are equivalent
to 1 lecture hour)

Signed **J.K.U.A.T. SENIOR REGISTRAR**
Registrar

Date Issued 26/6/07

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10773

**JOMO KENYATTA UNIVERSITY
OF
AGRICULTURE AND TECHNOLOGY
UNDERGRADUATE DEGREE TRANSCRIPT***

Student Names: MUTUIRI Shem Peter Mutua **Reg. No:** S20-A04-0057/2003
Faculty: Faculty of Science
Degree Programme: BSc Medical Microbiology
Admission Date: April, 2003 **Academic Year** 2005/2006
Year of Study: Third

UNIT CODE	UNIT TITLE	UNIT(S)	GRADE
SBT 2304	Biostatistics	1	A
SBT 2309	Phytochemistry	1	B
SBT 2412	Fermentation	1	A
SBT 2415	Microbial Genetics	1	B
SZL 2405	Parasitology I	1	A
SZL 2407	Immunology I	1	A
SBT 2370	Diagnostic Medical Microbiology	1	A
SBT 2371	General Pathology	1	C
SBT 2374	Community Health	1	B
SBT 2332	Research Methodology	1	A
SBT 2372	Epidemiology	1	A
SBT 2373	Ethics and Risks in Medical Microbiology	1	A

Recommendation:
PASS: Proceed to Fourth Year of Study

Key To Grading System

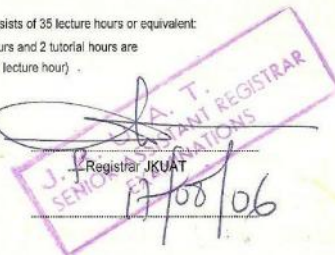
- A = 70 - 100 % - Excellent
- B = 60 - 69 % - Good
- C = 50 - 59 % - Satisfactory
- D = 40 - 50 % - Pass
- E = 40% and below - Fail


NB: 1 Unit consists of 35 lecture hours or equivalent:
 (3 practical hours and 2 tutorial hours are equivalent to 1 lecture hour)

Signed: [Signature]
 Date: 15/08/06



Signed: [Signature]
 Date: 17/08/06





JOMO KENYATTA UNIVERSITY
OF
AGRICULTURE AND TECHNOLOGY
UNDERGRADUATE ACADEMIC TRANSCRIPT*

4947

Name of Student MUTUIRI Shem Mutua **Registration No.** S20-A04-0057/2003
 Surname Other Names

Faculty Science **Degree Programme** BSc. Medical Microbiology

Date of Admission April 2003 **Academic Year** 2004/05

Year of Study Second Year

Unit Code	Title of Unit	Unit(s)	Grade
ICS 2240	Introduction to Computer and Data Processing	1	B
SBH 2402	Biochemistry of Micro-organisms	1	A
SBT 2270	Bacteriology	1	A
SBT 2271	Medical Techniques	1	A
SBT 2272	Microbial Physiology	1	A
SBT 2273	Principles of Disease Control	1	A
SBT 2305	Mycology	1	A
SBT 2409	Applied Microbiology	1	A
SBT 2410	Environmental Microbiology	1	A
SBT 2419	Virology	1	B
SMA 2250	Mathematics for Biologists	1	B
SZL 2203	Comparative Animal Physiology	1	A

Recommendation

Pass: Proceed to the Third Year of Study

Key to grading System

A = 70 - 100% - Excellent

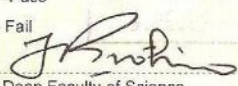
B = 60 - 69% - Good

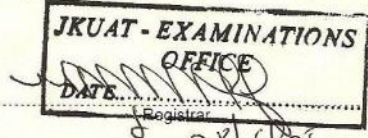
C = 50 - 59% - Satisfactory

D = 40 - 49% - Pass

E = 39% and Below - Fail

NB: 1 Unit consists of 35 lecture hours or equivalent:
(3 Practical hours or 2 tutorial hours are equivalent to 1 lecture hour)

Signed 
Dean Faculty of Science
Date 13/6/05

Signed 
Registrar
Date 24/6/05

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1309

**JOMO KENYATTA UNIVERSITY
OF
AGRICULTURE AND TECHNOLOGY
UNDERGRADUATE ACADEMIC TRANSCRIPT***

Name of Student **MUTUIRI** Shem Mutua Registration No. **S20-A04-0057/2003**
Surname Other Names
Faculty **Science** Degree Programme **BSc. Medical Microbiology**
Date of Admission **April 2003** Academic Year **2003/04**
Year of Study **First Year**

Unit Code	Title of Unit	Unit(s)	Grade
HRD 2101	Communication Skills	1	B
HRD 2102	Development Studies	1	A
SBH 2150	Introduction to Biochemistry	1	A
SBT 2100	Survey of Plant Kingdom I	1	A
SBT 2101	Survey of Plant Kingdom II	1	B
SBT 2103	Cellular Basis of Life	1	B
SBT 2170	Medical Instrumentation	1	B
SBT 2303	General Microbiology	1	B
SCH 2100	Atomic Structure	1	B
SCH 2101	Chemical Bonding and Structure	1	B
SCH 2102	Physical Chemistry I	1	A
SCH 2103	Organic Chemistry I	1	D
SMA 2104	Mathematics for Sciences	1	C
SZL 2100	Invertebrate Zoology	1	D
SZL 2102	Introduction to Animal Physiology	1	B
SZL 2111	HIV/AIDS	1	B

Recommendation
Pass: Proceed to the Second Year of Study

Key to grading System

- A = 70 - 100% - Excellent
- B = 60 - 69% - Good
- C = 50 - 59% - Satisfactory
- D = 40 - 49% - Pass
- E = 39% and Below - Fail

NB: 1 Unit consists of 35 lecture hours or equivalent;
(3 Practical hours or 2 tutorial hours are equivalent to 1 lecture hour)

Signed _____
Dean Faculty of Science

Signed **J. K. U. A. S.**
SENIOR ASSISTANT REGISTRAR
EXAMINATIONS

Date **8/9/04**

Date **9/9/04**

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