



Pwani
UNIVERSITY

This is to certify that

LUVAYI SOLOMON JOSEPH

having satisfied all the requirements

was awarded the Degree of

Master of Science in Physics

at a congregation

held at this University on the

Twenty First day of November

in the year Two Thousand and Nineteen

Vice Chancellor



Deputy Vice Chancellor
(Academic & Student Affairs)

SG23/PU/36054/16

11881



Postgraduate Academic Transcript

Name of Student: LUVAYI SOLOMON JOSEPH
School: Pure & Applied Sciences
Degree programme: Master of Science (PHYSICS)

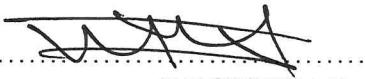
Registration No. SG23/PU/36054/16
Date of Admission September 2016
Year of Study: One.....
Academic year: ...2016/17.....

Serial Number	Course Code	Course Description	Academic Hours	Grade
1	SPH G801	EXPERIMENTAL METHODS IN PHYSICS	45	B
2	SPH G802	CLASSICAL MECHANICS	45	A
3	SPH G803	CLASSICAL ELECTRODYNAMICS I	45	B
4	SPH G804	CLASSICAL ELECTRODYNAMICS II	45	B
5	SPH G805	QUANTUM MECHANICS I	45	B
6	SPH G806	QUANTUM MECHANICS II	45	C
7	SPH G807	STATISTICAL MECHANICS	45	A
8	SPH G808	MATHEMATICAL PHYSICS	45	C
9	SPH G809	SOLID STATE PHYSICS I	45	C
10	SPH G814	LABORATORY CHARACTERIZATION TECHNIQUES AND METHODS	45	B

RECOMMENDATION: Pass: Proceed to the next year of study

KEY TO GRADING SYSTEM

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

Date issued: 12-01-2021, Signed: 

REGISTRAR





Postgraduate Academic Transcript

Name of Student: LUVAYI SOLOMON JOSEPH
School: Pure & Applied Sciences
Degree programme: Master of Science (Physics)

Registration No. SG23/PU/36054/16
Date of Admission September 2016
Year of Study: Two.....
Academic year: ...2017/18.....

Serial Number	Course Code	Course Description	Academic Hours	Grade
11	SPH B810	THESIS (EQUIVALENT OF TEN UNITS) THESIS TITLE: ‘Tuning the morphological formations and optoelectronic properties of reduced graphene oxide using chitosan bio-polymer for high power semiconductor applications.’	450	PASS

RECOMMENDATION: Pass: Graduated with Master of Science in Physics

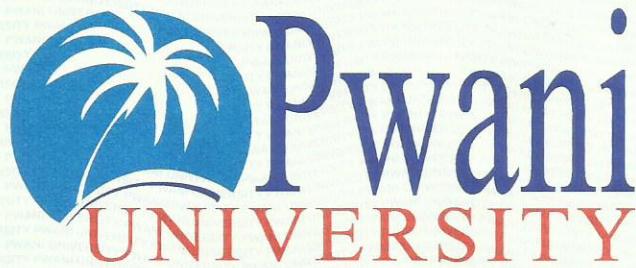
KEY TO GRADING SYSTEM

- 50% - 100% - Pass
49% and below - Fail

Date issued: 12-01-2021 Signed: [Signature]

REGISTRAR





This is to certify that

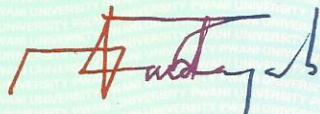
LUVAYI SOLOMON JOSEPH

having satisfied all the requirements
was awarded the Degree of

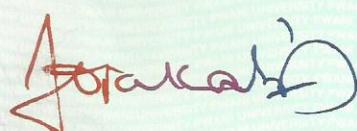
Bachelor of Science

Second Class Honours (Upper Division)

at a congregation
held at this University on the
Twenty Second day of September
in the year Two Thousand and Sixteen



Vice Chancellor



Deputy Vice Chancellor
(Academic & Student Affairs)





Undergraduate Academic Transcripts

Name of student: LUVAYI SOLOMON JOSEPH

School: Pure & Applied Sciences

Degree Programme: Bachelor of Science

Registration No.: I20/PUC/0137/12

Date of admission: September, 2012

Year of Study:One.....

Academic year: 2012/13.....

Serial Number	Subject/ Course	Descriptive title course	Academic Hours	Grade
1	SMA 102	BASIC MATHEMATICS	35	B
2	SMA 103	ANALYTICAL GEOMETRY	35	A
3	SMA 190	INTRODUCTION TO COMPUTERS	35	B
4	SCH 100	FUNDAMENTALS OF INORGANIC CHEMISTRY	35	D
5	SCH 101	INTRODUCTION TO PHYSICAL CHEMISTRY	35	D
6	SPH 100	MECHANICS I	35	C
7	SPH 103	MATHEMATICS FOR PHYSICS	35	C
8	UCU 100	COMMUNICATION SKILLS	35	B
9	UCU 101	DEVELOPMENT STUDIES	35	B
10	SMA 104	CALCULUS I	35	A
11	SMA 160	INTRODUCTION PROBABILITY AND STATISTICS	35	A
12	SMA 191	INTRODUCTION TO COMPUTER PROGRAMMING	35	A
13	SCH 102	ORGANIC CHEMISTRY I	35	C
14	SCH 103	INTRODUCTION TO CLASS ANALYSIS & SEPARATION TECHNIQUES	35	A
15	SPH 101	ELECTRICITY AND MAGNETISM I	35	B
16	SPH 102	WAVES AND OPTICS	35	A
17	UCU 103	INTRODUCTION TO CREATIVE AND CRITICAL THINKING	35	B
18	UCU 105	HIV/AIDS AND DRUG ABUSE	35	B

RECOMMENDATION: PASS: Proceed to the next 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 |

Date issued: Signed: 

REGISTRAR





Undergraduate Academic Transcripts

Name of student: LUVAYI SOLOMON JOSEPH

School: Pure & Applied Sciences

Degree Programme: Bachelor of Science

Registration No.: I20/PUC/0137/12

Date of admission: September, 2012

Year of Study:Two.....

Academic year: 2013/14.....

Serial Number	Subject/ Course	Descriptive title course	Academic Hours	Grade
19	SMA 200	CALCULUS II	35	A
20	SMA 202	LINEAR ALGEBRA I	35	A
21	SMA 260	PROBABILITY & STATISTICS I	35	A
22	SCH 200	ATOMIC STRUCTURE AND CHEMICAL BONDING	35	B
23	SCH 201	CHEMICAL THERMODYNAMICS	35	B
24	SPH 200	MECHANICS II	35	A
25	SPH 201	ELECTRICITY & MAGNETISM II	35	C
26	SMA 201	CALCULUS III	35	B
27	SMA 203	LINEAR ALGEBRA II	35	A
28	SMA 230	VECTOR ANALYSIS	35	A
29	SMA 261	PROBABILITY & STATISTICS II	35	A
30	SCH 202	ORGANIC CHEMISTRY II	35	B
31	SCH 203	THEORY OF SPECTROSCOPIC METHODS	35	A
32	SPH 202	MODERN PHYSICS	35	B
33	SPH 203	THERMAL PHYSICS I	35	B

RECOMMENDATION: PASS: Proceed to the next year of study

KEY TO GRADING SYSTEM

A = 70% - 100% - Excellent

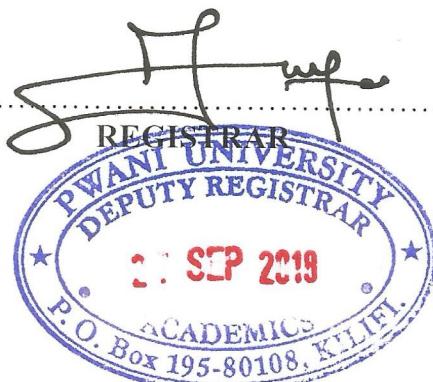
B = 60% - 69% - Good

C = 50% - 59% - Satisfactory

D = 40% - 49% - Pass

E = 39% and below - Fail

Date issued: Signed:





Undergraduate Academic Transcripts

Name of student: LUVAYI SOLOMON JOSEPH

School: Pure & Applied Sciences

Degree Programme: Bachelor of Science

Registration No.: I20/PUC/0137/12

Date of admission: September, 2012

Year of Study:Three.....

Academic year: 2014/15.....

Serial Number	Subject/ Course	Descriptive title course	Academic Hours	Grade
34	SMA 300	REAL ANALYSIS I	35	B
35	SMA 302	GROUP THEORY	35	A
36	SMA 306	COMPLEX ANALYSIS I	35	A
37	SMA 335	ORDINARY DIFFERENTIAL EQUATIONS I	35	A
38	SMA 336	ORDINARY DIFFERENTIAL EQUATIONS II	35	B
39	SPH 300	WAVE THEORY	35	A
40	SPH 301	QUANTUM MECHANICS	35	A
41	SPH 303	PRACTICAL PHYSICS I	35	A
42	SPH B303	STRUCTURE AND PROPERTIES OF MATTER	35	A
43	SPH 304	AC-CIRCUIT THEORY	35	A
44	SPH 305	RELATIVISTIC MECHANICS	35	A
45	SPH 306	PHYSICAL OPTICS	35	A
46	SPH 307	THERMAL PHYSICS II	35	A
47	SPH 308	PHYSICS OF MATERIALS AND POLYMERS	35	A
48	SPH 309	INTRODUCTION TO ASTROPHYSICS	35	A
49	SPH 311	IONOSPHERIC PHYSICS	35	B

RECOMMENDATION: PASS: Proceed to the next 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

Date issued: 27/09/2018 Signed: J. M. W.

REGISTRAR





Undergraduate Academic Transcripts

Name of student: LUVAYI SOLOMON JOSEPH

School: Pure & Applied Sciences

Degree Programme: Bachelor of Science

Registration No.: I20/PUC/0137/12

Date of admission: September, 2012

Year of Study:Four.....

Academic year: 2015/16.....

Serial Number	Subject/ Course	Descriptive title course	Academic Hours	Grade
52	SPH B401	CLASSICAL MECHANICS	35	A
53	SPB B403	QUANTUM MECHANICS II	35	A
54	SPH B405	SOLID STATE PHYSICS I	35	B
55	SPH B407	NUCLEAR PHYSICS	35	B
56	SPH B414	PLASMA PHYSICS	35	B
57	SPH B415	ATOMIC PHYSICS	35	B
58	SMA B404	COMPLEX ANALYSIS II	35	B
59	SMA B432	PARTIAL DIFFERENTIAL EQUATIONS I	35	B
60	SPH B402	ELECTRODYNAMICS	35	A
61	SPH B404	PRACTICAL PHYSICS II	35	A
62	SPH B406	CONDENSED MATTER PHYSICS	35	B
63	SPH B408	STATISTICAL MECHANICS	35	A
64	SPH B409	SPACE PHYSICS	35	B
65	SPH B410	QUANTUM MECHANICS III	35	D
66	SPH B412	ATMOSPHERIC PHYSICS	35	B
67	SPH 490	PROJECT WORK	35	B

RECOMMENDATION: PASS: Graduated with Second Class Honours (Upper Division)

KEY TO GRADING SYSTEM

A = 70% - 100% - Excellent

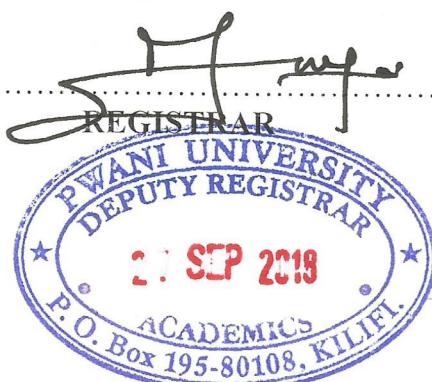
B = 60% - 69% - Good

C = 50% - 59% - Satisfactory

D = 40% - 49% - Pass

E = 39% and below - Fail

Date issued: Signed: 





Kenya Bureau of
Standards

Standards for Quality life

KEBS/MET/TR/2021/134

Certificate of Completion

This is to certify that

SOLOMON JOSEPH

Has successfully completed the

UNCERTAINTY OF MEASUREMENT COURSE

Organized by

Kenya Bureau of Standards (KEBS)

on

23rd – 27th August 2021

Conducted at Astorian Grand Hotel, Naivasha

The following topics were covered:

- Concepts and methodology of uncertainty of measurement
- Analysis of the basic contributors to uncertainty of measurement
- Estimating the uncertainty of measurement
- Evaluation and reporting of uncertainty of measurement
- Introduction to decision rule and statement of conformity

H.K.Rotich

Dr. Henry K. Rotich
Director – Metrology and Testing



**Kenya Bureau of
Standards**

Cert Number: 217/NQI/2021

Certificate

Information Security Management Systems

This is to certify that

Solomon Joseph

has attended the

ISO/IEC 27001:2013 Implementation Course

Venue:

Nairobi

Start Date:

22nd Feb 2021

End Date:

24th Feb 2021

NQI@kebs.org | CB@kebs.org



KENYA BUREAU OF STANDARDS

www.kebs.org

NQI
National Quality
Institute
Embracing a culture of quality in the Kenyan Society



**Kenya Bureau of
Standards**
Standards for quality life

Cert Number: 449/NQI/2021

Certificate

Information Security Management Systems

This is to certify that

Solomon Joseph

has successfully completed the course,
assessment and examination for the

ISO/IEC 27001:2013 Training Of Trainers

Venue:
Nairobi

Start Date: 25th Feb 2021
End Date: 26th Feb 2021

National Quality
Institute
KENYA BUREAU OF STANDARDS
Managing Director



Certificate

QUALITY MANAGEMENT

SYSTEMS

This is to certify that

Solomon Luvayi Joseph

has attended the

ISO 9001:2015 Implementation Course

conducted in NAIROBI

from 13th August 2019 **to** 16th August 2019

Date 16th August 2019

H. Kiprono
MANAGING DIRECTOR
Kenya Bureau of Standards