



THE ASSAM  
ROYAL GLOBAL UNIVERSITY  
GUWAHATI

# CRITERION 1

## CURRICULAR ASPECTS

METRIC NO.  
1.3.3

# B.Sc. (H) Mathematics

Field Work / Research Project / Internship



Guwahati, Assam, India  
4P6F+QH7, Royal Path, Betkuchi, AHOM GAON, Guwahati, Assam  
781040, India  
Lat 26.112206°  
Long 91.72404°  
29/12/22 10:22 AM GMT +05:30

**A DISSERTATION**  
**ON**  
**A COMPARATIVE STUDY ON CLASSICAL AND FRACTIONAL SIS MODEL**

*In partial fulfillment of the award of the degree of*

**BACHELOR OF SCIENCE**  
**in**  
**MATHEMATICS**

**Under**



THE ASSAM

**ROYAL GLOBAL UNIVERSITY**

**Offered by**  
**ROYAL SCHOOL OF APPLIED & PURE SCIENCES**

**Submitted by-**

**Name: SWEETA SINGHA**  
**Registration No.: 1190032**  
**Roll No.: 192011005**

**Academic Project Guide**  
**Name: H. IMO MANI SINGHA**  
**Designation: Assistant Professor**  
**Department & School: Mathematics, RSAPS**

*Anuradha Devi*

Dean, RSAPS  
The Assam Royal Global University

**YEAR: 2022**



ROYAL GLOBAL UNIVERSITY  
GUWAHATI

ROYAL SCHOOL OF APPLIED & PURE SCIENCES  
DEPARTMENT OF MATHEMATICS

DECLARATION

I, Sweeta Singha, bearing Roll No. 192011005, a student of Mathematics under RSAPS, hereby declare that this Final Semester Project report entitled "*A Comparative study of classical and fractional SIS model*" is a bona fide project work undertaken by me, during the period of January, 2022 to July, 2022, as partial fulfillment of the requirements of the degree of Bachelors of Science in Mathematics of The Assam Royal Global University, Guwahati. Further, I declare that this report has not been submitted by me elsewhere for the award of any degree/diploma/certificate and not linked to any other qualification.

Date: 30-07-22  
Place: Guwahati

*Sweeta Singha*  
(SWEETA SINGHA)  
Registration No.: 1190032  
Roll No.: 192011005

*Anuradha Devi*

Dean, RSAPS  
The Assam Royal Global University



ROYAL GLOBAL UNIVERSITY  
GUWAHATI

ROYAL SCHOOL OF APPLIED & PURE SCIENCES  
DEPARTMENT OF MATHEMATICS

CERTIFICATE

This is to certify that the project report entitled "*A Comparative study of classical and fractional SIS model*" submitted by Sweeta Singha, a student of B.Sc. Mathematics bearing Roll No. 192011005 and Registration No. 1190032 to The Assam Royal Global University, Guwahati in partial fulfillment for the award of the degree of Bachelors of Science in Mathematics is a bona fide record of project work carried out by her under my supervision and guidance.

The contents of this report, in full or in parts, have not been submitted to any other Institution or University for the award of any degree or diploma.

Date: 30-07.22  
Place: Guwahati

*Kamal Deb Nath*  
04/08/2022  
Head Department of Mathematics  
The Assam Royal Global University

(HIMANI SINGHA)  
Assistant Professor  
Department of Mathematics  
RSAPS  
Royal Global University

*Anuradha Devi*

Dean, RSAPS  
The Assam Royal Global University

**Application of Fuzzy Sets in Decision Making Process Using Max-Min  
Method and Minimization of Regret Method**

*A Project Report Submitted  
in partial fulfillment of requirements for the degree of Bachelor of Science in  
Mathematics*

Under



THE ASSAM

ROYAL GLOBAL UNIVERSITY

**Submitted by-**

**Name: Souravjeet Sonowal**

**Registration No.: 1190031**

**Roll No. 192011004**

**Academic Project Guide-**

**Name: Dr. Dhiman Dutta**

**Designation: Assistant Professor**

**Department & School: Mathematics, RSAPS**

*Anandha Devi*

Dean, RSAPS  
The Assam Royal Global University



ROYAL GLOBAL UNIVERSITY  
GUWAHATI

**ROYAL SCHOOL OF APPLIED & PURE SCIENCES  
DEPARTMENT OF MATHEMATICS**

**DECLARATION**

I, Souravjeet Sonowal, bearing Roll No. 192011004, a student of Department of Mathematics under Royal School of Applied & Pure Sciences, hereby declare that this final semester project report entitled “**Application of Fuzzy Sets in Decision Making Process Using Max-Min Method and Minimization of Regret Method**” is a bona fide project work undertaken by me under the supervision of Dr. Dhiman Dutta, during the period of February, 2022 to July, 2022, as partial fulfilment of the requirements of the degree of Bachelor of Science in Mathematics of The Assam Royal Global University, Guwahati.

Further, I declare that this report or a part of it has not been submitted by me elsewhere for the award of any degree or diploma and not linked to any other qualification.

*Souravjeet Sonowal*

(SOURAVJEET SONOWAL)

Date: 30/07/2022

Registration No.: 1190031

Place: Guwahati

Roll No.: 192011004

*Arumudha Devi*

Dean, RSAPS  
The Assam Royal Global University



**ROYAL SCHOOL OF APPLIED & PURE SCIENCES  
DEPARTMENT OF MATHEMATICS**

**CERTIFICATE**

This is to certify that the project report entitled "Application of Fuzzy Sets in Decision Making Process Using Max-Min Method and Minimization of Regret Method" submitted by Souravjeet Sonowal, a student of B.Sc. Mathematics bearing Roll No. 192011004 and Registration No. 1190031 to The Assam Royal Global University, Guwahati in partial fulfillment for the award of the degree of Bachelor of Science in Mathematics is a bona fide record of project work carried out by him under my supervision and guidance.

The contents of this report, in full or in parts, have not been submitted to any other Institution or University for the award of any degree or diploma.

*Anusreekha Devi*

Dean, RSAPS

The Assam Royal Global University

Place: Guwahati  
Date: 30/07/2022

*Kamal Deb Nath*  
04/08/2022  
Head Department of Mathematics  
The Assam Royal Global University

*Dhiman Dutta*

(Dr. Dhiman Dutta)

Assistant Professor,

Department of Mathematics,

Royal School of Applied & Pure Sciences,

The Assam Royal Global University,

Guwahati-781035.

**A STUDY ON SOME POSITIVE OPERATORS**

*A Project Report Submitted  
in partial fulfillment of requirements for the degree of Bachelor of Science in  
Mathematics*

Under



THE ASSAM

ROYAL GLOBAL UNIVERSITY

**Submitted by-**

**Name: Sayanika Biswas**

**Registration No.: 1190030**

**Roll No. 192011003**

**Academic Project Guide-**

**Name: Dr. Bimalendu Kalita**

**Designation: Assistant Professor**

**Department & School: Mathematics, RSAPS**

*Anuradha Devi*

Dean, RSAPS  
The Assam Royal Global University





ROYAL GLOBAL UNIVERSITY  
GUWAHATI

**ROYAL SCHOOL OF APPLIED & PURE SCIENCES  
DEPARTMENT OF MATHEMATICS**

**DECLARATION**

I, Sayanika Biswas, bearing Roll no 192011003, a student of B.Sc. Mathematics under Royal School of Applied and Pure Sciences, hereby declare that this Semester project report entitled *A Study on Some Positive Operators* is a bona fide project work undertaken by me, during the period of February 2022 to July 2022, as partial fulfilment of the requirements of the degree of B.Sc. Mathematics of The Assam Royal Global University, Guwahati.

Further, I declare that this report has not been submitted by me elsewhere for the award of any degree/diploma/certificate and not linked to any other qualification.

Date: 30/07/2022

Place: Guwahati

*Sayanika Biswas*

(SAYANIKA BISWAS)

REGISTRATION NO:1190030

ROLL NO.:192011003

*Anuradha Devi*

Dean, RSAPS  
The Assam Royal Global University



ROYAL GLOBAL UNIVERSITY  
GUWAHATI

**ROYAL SCHOOL OF APPLIED & PURE SCIENCES  
DEPARTMENT OF MATHEMATICS**

**CERTIFICATE**

Ref.....

Date: 30/07/2022

This is to certify that the undergraduate project work on the topic entitled "A STUDY ON SOME POSITIVE OPERATORS" carried out by SAYANIKA BISWAS, student of B.Sc. 6<sup>th</sup> semester having Roll No. 192011003, Department of Mathematics, Royal Global University has been successfully completed her project work under my supervision. She has followed all the established rules and regulation for her literature review survey and also completed her project study sincerely.

*Bimalendu Kalita*  
Dr. Bimalendu Kalita,  
Department of Mathematics,  
Royal Global University.

*Kamal Debbari*  
04/08/2022  
Head Department of Mathematics  
The Assam Royal Global University

*Anuradha Devi*  
Dean, RSAPS  
The Assam Royal Global University

**A COMPARATIVE STUDY OF HEAT AND PARTIAL SLIP IMPACT  
ON BOUNDARY LAYER NEWTONIAN AND NON-NEWTONIAN  
FLUIDS PAST A FLAT PERMEABLE PLATE**

*A Project Report submitted  
in partial fulfillment of requirements for the Degree of  
Bachelor of Science in Mathematics*

**Under**



THE ASSAM

ROYAL GLOBAL UNIVERSITY

**Submitted by-**

**NAME: KARISMITA MEDHI**

**SCHOOL: ROYAL SCHOOL OF APPLIED & PURE SCIENCES**

**DEPARTMENT: MATHEMATICS**

**PROGRAMME: B.Sc. MATHEMATICS**

**REGISTRATION NO.: 1180008**

**ROLL NO. 182011003**

*Anusudha Devi*

Dean, RSAPS

The Assam Royal Global University

**YEAR: 2021**



ROYAL SCHOOL OF APPLIED & PURE SCIENCES  
DEPARTMENT OF MATHEMATICS

DECLARATION

I, Karismita Medhi, bearing Roll No. 182011003, a student of Department of Mathematics under Royal School of Applied & Pure Sciences, hereby declare that this final semester project report entitled "A COMPARATIVE STUDY OF HEAT AND PARTIAL SLIP IMPACT ON BOUNDARY LAYER NEWTONIAN AND NON-NEWTONIAN FLUIDS PAST A FLAT PERMEABLE PLATE" is a bona fide project work undertaken by me under the supervision of Dr. Kamal Debnath, during the period of February, 2021 to June, 2021, as partial fulfilment of the requirements of the degree of Bachelor of Science in Mathematics of The Assam Royal Global University, Guwahati.

Further, I declare that this report or a part of it has not been submitted by me elsewhere for the award of any degree or diploma and not linked to any other qualification.

Karismita Medhi  
(KARISMITA MEDHI)

Registration No.: 1180008

Roll No.: 182011003

Date: 13.08.2021

Place: Guwahati

Anuradha Devi

Dean, RSAPS  
The Assam Royal Global University



ROYAL SCHOOL OF APPLIED & PURE SCIENCES  
DEPARTMENT OF MATHEMATICS

CERTIFICATE

This is to certify that the project report entitled "A COMPARATIVE STUDY OF HEAT AND PARTIAL SLIP IMPACT ON BOUNDARY LAYER NEWTONIAN AND NON-NEWTONIAN FLUIDS PAST A FLAT PERMEABLE PLATE" submitted by Karismita Medhi, a student of B.Sc. Mathematics bearing Roll No. 182011003 and Registration No. 1180008 to The Assam Royal Global University, Guwahati in partial fulfillment for the award of the degree of Bachelor of Science in Mathematics is a bona fide record of project work carried out by her under my supervision and guidance.

The contents of this report, in full or in parts, have not been submitted to any other Institution or University for the award of any degree or diploma.

Place: Guwahati  
Date: 13.08.2021

*Kamal Debnath*  
(Kamal Debnath)  
Assistant Professor & HoD  
Department of Mathematics,  
Royal School of applied & Pure Sciences,  
The Assam Royal Global University,  
Guwahati-781014.

*Anumda*  
*Debnath*  
Dean, RSAPS  
The Assam Royal Global University

# A STATISTICAL ANALYSIS OF COVID-19 IN INDIA

A Report submitted in partial fulfillment of the requirements for the degree of  
B.Sc. Mathematics

Under



THE ASSAM  
ROYAL GLOBAL UNIVERSITY

Submitted by:

Name: Jayshree Bhargab

School: Royal School of Applied And Pure Sciences

Department: Mathematics

Programme: Bachelor's of Science

Registration No.: 1180007

Roll No.: 182011002

*Anumaha Devi*

Dean, RSAPS  
The Assam Royal Global University

# A STATISTICAL ANALYSIS OF COVID-19 IN INDIA

A Report submitted in partial fulfillment of the requirements for the degree of  
**B.Sc Mathematics**

Offered by

**ROYAL SCHOOL OF APPLIED AND PURE SCIENCES**

Submitted by:

Name: Jaysree Bhargab

RegistrationNo.: 1180007

RollNo.: 182011002

Academic project guide:

Name: Professor Dr. Anuradha Devi , Dean, RSAPS

&

Assistant professor Dr. Bapan Kalita

Anuradha Devi

Dean, RSAPS  
The Assam Royal Global University



ROYAL GLOBAL UNIVERSITY  
GUWAHATI

**CERTIFICATE**

Ref.....

Date: 09-08-2021.

*This is to certify that the graduate seminar study and research paper entitled "A STATISTICAL ANALYSIS OF COVID-19 IN INDIA" carried out by JAYSHREE BHARGAB, student of B.Sc. 6<sup>th</sup> semester having Roll No. 182011002, Department of Mathematics, Royal Global University has been successfully completed in his graduate seminar study and research paper under our supervision. She has followed all the established rules and regulation for his literature review survey. She has done her graduate seminar study and research paper sincerely.*

Signature of supervisor

Anuradha Devi  
9/8/2021

Dr. ANURADHA DEVI


Bapan Kalita  
9/8/2021

Dr. BAPAN KALITA

Department of Mathematics

The Assam Royal Global University

Guwahati-781035

  
Head Department of Mathematics  
The Assam Royal Global University

Anuradha Devi  
Dean, RSAPS  
The Assam Royal Global University