



# R. J. COLLEGE of Arts, Science & Commerce (AUTONOMOUS)

(Hindi Vidya Prachar Samiti's RAMNIRANJAN JHUNJHUNWALA COLLEGE of Arts, Science & Commerce)

Opposite Ghatkopar Railway Station, Ghatkopar (West), Mumbai 400086, Maharashtra, INDIA.

Website: [www.rjcollege.edu.in](http://www.rjcollege.edu.in)

Email: [rjcollege@rjcollege.edu.in](mailto:rjcollege@rjcollege.edu.in)

Tel No: +91 22 25151763

Fax No: +91 22 25150957

College is recognized under Section 2(f) & 12(B) of the UGC Act, 1956

Affiliated to UNIVERSITY OF MUMBAI || NAAC Re-Accredited 'A' Grade (CGPA: 3.50)

## NOTICE

Department of Mathematics is organising online guest talk on "An Introduction to the Theory of Partitions" by Dr. Atul Dixit, IIT Gandhinagar, Gujarat on 31<sup>st</sup> October 2020 at 10:30 am. The detail of the event is as follows.

Event Platform: ZOOM

Meeting ID: 837 3642 1545

Passcode: ramanujan

SD/- 

Head,

Department of Mathematics



  
I/C PRINCIPAL  
RAMNIRANJAN JHUNJHUNWALA COLLEGE  
OF ARTS, SCIENCE & COMMERCE (AUTONOMOUS)  
Ghatkopar (W), Mumbai-400 086, Maharashtra, INDIA

2019: Star College Status by DBT

2008: Best College by University of Mumbai 2010: IMC RBNQ Award 'Performance Excellence' for the year 2009

2011: 'Best Teacher Award' by Government of Maharashtra 2013: DST-FIST 2014: DBT STAR College

2013 & 2014: 'Jagar Jaanivancha Award' by Govt. of Maharashtra 2016: ISO 14001:2015 2016: ISO 9001:2015 2017: ISO 27001:2013

2018: Autonomous Status by University Grants Commission (No. F. 22-1/2018(AC) - 28.05.2018) & by University of Mumbai (No.Aff./ICD/18-19/440 - 08.06.2018)



# R. J. COLLEGE of Arts, Science & Commerce (AUTONOMOUS)

(Hindi Vidya Prachar Samiti's RAMNIRANJAN JHUNJHUNWALA COLLEGE of Arts, Science & Commerce)

Opposite Ghatkopar Railway Station, Ghatkopar (West), Mumbai 400086, Maharashtra, INDIA.

Website: [www.rjcollege.edu.in](http://www.rjcollege.edu.in)

Email: [rjcollege@rjcollege.edu.in](mailto:rjcollege@rjcollege.edu.in)

Tel No: +91 22 25151763

Fax No: +91 22 25150957

College is recognized under Section 2(f) & 12(B) of the UGC Act, 1956

Affiliated to UNIVERSITY OF MUMBAI II NAAC Re-Accredited 'A' Grade (CGPA: 3.50)



Hindi Vidya Prachar Samiti's  
Ramniranjan Jhunjhunwala College  
(Autonomous), Ghatkopar, Mumbai

## Department of Mathematics

ORGANIZES A TALK ON  
AN INTRODUCTION TO THE  
THEORY OF PARTITIONS  
(Under DBT Star College Activity)

DATE: October 31, 2020  
TIME: 10:30 a.m. - 11:30 a.m.

EVENT PLATFORM: Online ZOOM

Meeting ID: 837 3642 1545

Passcode: ramanujan

### GUESTSPEAKER

Dr Atul Dixit

Discipline of Mathematics,  
Indian Institute of Technology,  
Gandhinagar, Gujrat.



Talk on: *AN INTRODUCTION TO THE  
THEORY OF PARTITIONS*

**Abstract:** The Theory of Partitions is an active branch of number theory and combinatorics. It was initiated by Euler and later, many people such as J. J. Sylvester, S. Ramanujan, G. H. Hardy made important contributions to it. Ramanujan's stunning advances in this field, either by himself or in collaboration with Hardy, opened the doors for many of the current areas within number theory. This talk will be an introduction to this beautiful area of mathematics mainly concentrating on the partition function  $p(n)$  and the congruences satisfied by it. The talk will be accessible to everyone.



  
PRINCIPAL  
RAMNIRANJAN JHUNJHUNWALA COLLEGE  
OF ARTS, SCIENCE & COMMERCE (AUTONOMOUS)  
Ghatkopar (W), Mumbai-400 086, Maharashtra, INDIA

2019: Star College Status by DBT

2008: Best College by University of Mumbai 2010: IMC RBNQ Award 'Performance Excellence' for the year 2009

2011: 'Best Teacher Award' by Government of Maharashtra 2013: DST-FIST 2014: DBT STAR College

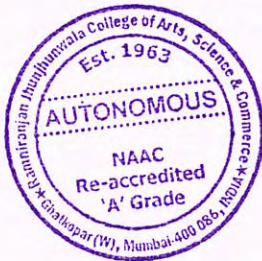
2013 & 2014: 'Jagar Jaanivancha Award' by Govt. of Maharashtra 2016: ISO 14001:2015 2016: ISO 9001:2015 2017: ISO 27001:2013

2018: Autonomous Status by University Grants Commission (No. F. 22-1/2018(AC) - 28.05.2018) & by University of Mumbai (No.Aff./ICD/18-19/440 - 08.06.2018)



## Short Profile of Atul Dixit

1. Name: Dr Atul Dixit
2. Current Position: Assistant Professor of Mathematics at the Indian Institute of Technology, Gandhinagar, Gujarat. (From 2015)
3. Education:
  - Bachelors in Computer Engineering from University of Mumbai in 2004
  - Masters in Mathematics from Texas Tech University, USA, in 2006
  - PhD in Mathematics from University of Illinois at Urbana-Champaign, USA, in 2012
  - Postdoctoral Study at Tulane University, USA, from 2012-2015
4. Research area: Analytic Number Theory, Special Functions, Theory of Partitions, q-series and Modular Forms.
5. Research articles: 55
6. Invited talks delivered in conferences and seminars: 80
7. Awards and Honors received:
  - Excellence in Teaching Award from IIT Gandhinagar.
  - SPARC grant from MHRD, Govt. of India.
  - SERB MARTICS grant from MHRD, Govt. of India.
  - Hansraj Gupta Memorial Award by Indian Mathematical Society.
  - SERB-DST Early Career Research Award from MHRD, Govt. of India.



*Dr* PRINCIPAL  
RAMNIRANJAN JHUNJHUNWALA COLLEGE  
OF ARTS, SCIENCE & COMMERCE (AUTONOMOUS)  
Ghatkopar (W), Mumbai-400 086, Maharashtra, INDIA



# R. J. COLLEGE of Arts, Science & Commerce (AUTONOMOUS)

(Hindi Vidya Prachar Samiti's RAMNIRANJAN JHUNJHUNWALA COLLEGE of Arts, Science & Commerce)

Opposite Ghatkopar Railway Station, Ghatkopar (West), Mumbai 400086, Maharashtra, INDIA.

Website: www.rjcollege.edu.in Email: rjcollege@rjcollege.edu.in Tel No: +91 22 25151763 Fax No: +91 22 25150957

College is recognized under Section 2(f) & 12(B) of the UGC Act, 1956

Affiliated to UNIVERSITY OF MUMBAI II NAAC Re-Accredited 'A' Grade (CGPA: 3.50)

## Capacity development and skills enhancement activity

(Awareness of trends in technology)

### REPORT

**Name of the Activity :** Guest lecture on 'An Introduction to the Theory of Partitions'

(Under DBT Star College Activity)

**Resource Person:** Dr Atul Dixit, Indian Institute of Technology, Gandhinagar, Gujrat.

**Brief report:** Dr Atul Dixit delivered a talk on the Theory of Partitions. He began the talk with partitions of the first few natural numbers. Then he introduced the concept of Euler's generating function for partitions. He narrated very nicely historical development of the subject right from L. Euler to F. Dyson. He also focused on Ramanujan's contribution in Number Theory. The talk ends with various applications of Partition theory in several other areas.

The talk was very interactive and inspirational, students and faculties are very much impressed by his way of delivery.

**Number of beneficiary:** 39 participants from RJ College and IIT Gandhinagar.

**Date:** 31<sup>st</sup> Oct. 2020

**Time:** 10:30 am to 11:45am

**Event Platform:** Online ZOOM

*Mary Jossy*  
Head,

Department of Mathematics



*[Signature]*  
The PRINCIPAL  
RAMNIRANJAN JHUNJHUNWALA COLLEGE  
OF ARTS, SCIENCE & COMMERCE (AUTONOMOUS)  
Ghatkopar (W), Mumbai-400 086, Maharashtra, INDIA

2019: Star College Status by DBT

2008: Best College by University of Mumbai 2010: IMC RBNQ Award 'Performance Excellence' for the year 2009

2011: 'Best Teacher Award' by Government of Maharashtra 2013: DST-FIST 2014: DBT STAR College

2013 & 2014: 'Jagar Jaanivancha Award' by Govt. of Maharashtra 2016: ISO 14001:2015 2016: ISO 9001:2015 2017: ISO 27001:2013

2018: Autonomous Status by University Grants Commission (No. F. 22-1/2018(AC) - 28.05.2018) & by University of Mumbai (No.Aff./ICD/18-19/440 - 08.06.2018)





# R. J. COLLEGE of Arts, Science & Commerce (AUTONOMOUS)

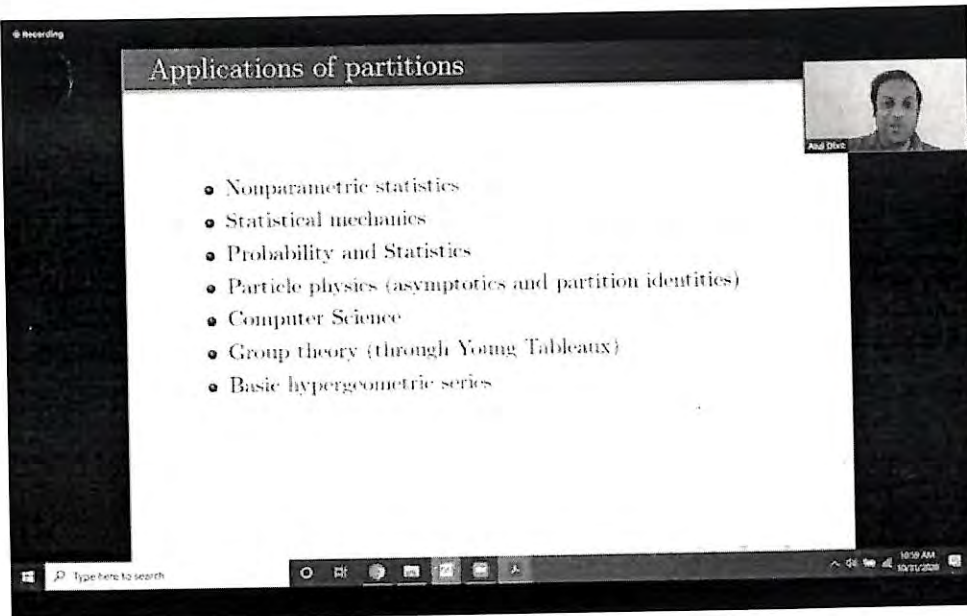
(Hindi Vidya Prachar Samiti's RAMNIRANJAN JHUNJHUNWALA COLLEGE of Arts, Science & Commerce)

Opposite Ghatkopar Railway Station, Ghatkopar (West), Mumbai 400086, Maharashtra, INDIA.

Website: www.rjcollege.edu.in Email: rjcollege@rjcollege.edu.in Tel No: +91 22 25151763 Fax No: +91 22 25150957

College is recognized under Section 2(f) & 12(B) of the UGC Act, 1956

Affiliated to UNIVERSITY OF MUMBAI || NAAC Re-Accredited 'A' Grade (CGPA: 3.50)



Snap Shot: Introduction to the Theory of Partitions ( Awareness of trends in Technology)



*[Signature]*  
**PRINCIPAL**  
 RAMNIRANJAN JHUNJHUNWALA COLLEGE  
 OF ARTS, SCIENCE & COMMERCE (AUTONOMOUS)  
 Ghatkopar (W), Mumbai-400086, Maharashtra, INDIA

2019: Star College Status by DBT

2008: Best College by University of Mumbai 2010: IMC RBNQ Award 'Performance Excellence' for the year 2009

2011: 'Best Teacher Award' by Government of Maharashtra 2013: DST-FIST 2014: DBT STAR College

2013 & 2014: 'Jagar Jaanivancha Award' by Govt. of Maharashtra 2016: ISO 14001:2015 2016: ISO 9001:2015 2017: ISO 27001:2013

2018: Autonomous Status by University Grants Commission (No. F. 22-1/2018(AC) - 28.05.2018) & by University of Mumbai (No.Aff./ICD/18-19/440 - 08.06.2018)





# R. J. COLLEGE of Arts, Science & Commerce (AUTONOMOUS)

(Hindi Vidya Prachar Samiti's RAMNIRANJAN JHUNJHUNWALA COLLEGE of Arts, Science & Commerce)

Opposite Ghatkopar Railway Station, Ghatkopar (West), Mumbai 400086, Maharashtra, INDIA.

Website: www.rjcollege.edu.in Email: rjcollege@rjcollege.edu.in Tel No: +91 22 25151763 Fax No: +91 22 25150957

College is recognized under Section 2(f) & 12(B) of the UGC Act, 1956

Affiliated to UNIVERSITY OF MUMBAI || NAAC Re-Accredited 'A' Grade (CGPA: 3.50)

## List of Participants (A talk by Atul Dixit, 31<sup>st</sup> Oct. 2020)

Sr. No.	Name of Participants
1	AGRAHARI DEEPAK RAKESH KIRAN (FYBSc A 01)
2	ANSARI ASHANA FAIYAZ SHABNAM (FYBSc A 02)
3	GUPTA RAJKUMAR JYOTI RANNO (FYBSc A 03)
5	BODAKE LAUKIK SANTOSH LATA LATA (FYBSc A 05)
6	CHOUDHARY RAKESH DILIP CHOUDHARY HEERA (FYBSc A 06)
7	DALVI SARVESH PRAKASH DALVI PRANALI (FYBSc A 07)
9	DHOBI MAYUR SHYAMDEV INDUMATI (FYBSc A 09)
10	JAIWAR SURAKSHA DINESH RITA (FYBSc A 21)
11	JHA PRERNA ANIL KUMAR RUBY (FYBSc A 22)
12	KANNOJIYA ABHISHEKKUMAR MANOJKUMAR SUNITA (FYBSc A 23)
13	KAPOOR BHUVANESHWAR MADANLAL SNEHALATA (FYBSc A 24)
14	KARALE PRERANA GANESH SUREKHA (FYBSc A 25)
15	KATE PRITHVIRAJ PANDIT RANI PANDIT KATE (FYBSc A 26)
16	KAWADE ABHISHEK SANTOSH SAVITA (FYBSc A 27)



  
I/c PRINCIPAL  
RAMNIRANJAN JHUNJHUNWALA COLLEGE  
OF ARTS, SCIENCE & COMMERCE (AUTONOMOUS)  
Ghatkopar (W), Mumbai-400086, Maharashtra, INDIA

2019: Star College Status by DBT

2008: Best College by University of Mumbai 2010: IMC RBNQ Award 'Performance Excellence' for the year 2009

2011: 'Best Teacher Award' by Government of Maharashtra 2013: DST-FIST 2014: DBT STAR College

2013 & 2014: 'Jagar Jaanivancha Award' by Govt. of Maharashtra 2016: ISO 14001:2015 2016: ISO 9001:2015 2017: ISO 27001:2013

2018: Autonomous Status by University Grants Commission (No. F. 22-1/2018(AC) - 28.05.2018) & by University of Mumbai (No.Aff./ICD/18-19/440 - 08.06.2018)



# R. J. COLLEGE of Arts, Science & Commerce (AUTONOMOUS)

(Hindi Vidya Prachar Samiti's RAMNIRANJAN JHUNJHUNWALA COLLEGE of Arts, Science & Commerce)

Opposite Ghatkopar Railway Station, Ghatkopar (West), Mumbai 400086, Maharashtra, INDIA.

Website: www.rjcollege.edu.in Email: rjcollege@rjcollege.edu.in Tel No: +91 22 25151763 Fax No: +91 22 25150957

College is recognized under Section 2(f) & 12(B) of the UGC Act, 1956

Affiliated to UNIVERSITY OF MUMBAI || NAAC Re-Accredited 'A' Grade (CGPA: 3.50)

List of Participants (A talk by Atul Dixit, 31 <sup>st</sup> Oct. 2020)	
17	BOBADE SHEETAL DATTATRAY KAVITA (TYBSc Maths 301)
18	DESAI SANCHITA SUDHIR SWATI SWATI (TYBSc Maths 302)
19	GUPTA ANIKET OMPRAKASH SEEMA (TYBSc Maths 303)
20	GUPTA PREM LALJI SHIVSUNDARI (TYBSc Maths 304)
21	JADHAV SNEHA SURESH VANDANA (TYBSc Maths 305)
22	KANEEZ FATIMA ABRAR ALI NASIBUNNISA (TYBSc Maths 306)
23	KEVAT RAJABABU RAJKUMAR MALTIDEVI (TYBSc Maths 307)
24	MAURYA POOJA JAGDISHCHANDRA JYOTSANA (TYBSc Maths 308)
25	PAL KRITI JAYPRAKASH GEETA (TYBSc Maths 309)
26	PANDEY NEHA SUNIL KUMAR GEETA (TYBSc Maths 310)
27	PARAB RAJ GANESH KRANTI (TYBSc Maths 311)
28	PATEL MANISH SANTOSH CHHAYA (TYBSc Maths 312)
29	RAI KISHAN JAIPRAKASH REEMA (TYBSc Maths 313)
30	SHAIKH TOOBA NADEEM AHMAD IZZAT (TYBSc Maths 314)
31	SHARMA VIKAS SANTOSH ANITA (TYBSc Maths 315)





PRINCIPAL  
RAMNIRANJAN JHUNJHUNWALA COLLEGE  
OF ARTS, SCIENCE & COMMERCE (AUTONOMOUS)  
Ghatkopar (W), Mumbai-400086, Maharashtra, INDIA

2019: Star College Status by DBT

2008: Best College by University of Mumbai 2010: IMC RBNQ Award 'Performance Excellence' for the year 2009

2011: 'Best Teacher Award' by Government of Maharashtra 2013: DST-FIST 2014: DBT STAR College

2013 & 2014: 'Jagar Jaanivancha Award' by Govt. of Maharashtra 2016: ISO 14001:2015 2016: ISO 9001:2015 2017: ISO 27001:2013

2018: Autonomous Status by University Grants Commission (No. F. 22-1/2018(AC) - 28.05.2018) & by University of Mumbai (No. Aff./ICD/18-19/440 - 08.06.2018)





# R. J. COLLEGE of Arts, Science & Commerce (AUTONOMOUS)

(Hindi Vidya Prachar Samiti's RAMNIRANJAN JHUNJHUNWALA COLLEGE of Arts, Science & Commerce)

Opposite Ghatkopar Railway Station, Ghatkopar (West), Mumbai 400086, Maharashtra, INDIA.

Website: www.rjcollege.edu.in

Email: rjcollege@rjcollege.edu.in

Tel No: +91 22 25151763

Fax No: +91 22 25150957

College is recognized under Section 2(f) & 12(B) of the UGC Act, 1956

Affiliated to UNIVERSITY OF MUMBAI || NAAC Re-Accredited 'A' Grade (CGPA: 3.50)

List of Participants (A talk by Atul Dixit, 31 <sup>st</sup> Oct. 2020)	
32	SHETE ASHWINI LAWOO SHAMAL (TYBSc Maths 316)
33	SINGH AMISHA LALLAN SHANTI DEVI (TYBSc Maths 317)
34	MARY JOSSY (teacher)
35	INDRASINGH SAUD (teacher)
36	SANKET TIKARE (teacher)
37	AJAYKUMAR SHUKLA (teacher)
38	Rahul Kumar Sharma (IIT Gandhinagar)
39	Pravin Bardol (other college)

  
Head,

Department of Mathematics



  
PRINCIPAL  
RAMNIRANJAN JHUNJHUNWALA COLLEGE  
OF ARTS, SCIENCE & COMMERCE (AUTONOMOUS)  
Ghatkopar (W), Mumbai-400086, Maharashtra, INDIA

2019: Star College Status by DBT

2008: Best College by University of Mumbai 2010: IMC RBNQ Award 'Performance Excellence' for the year 2009

2011: 'Best Teacher Award' by Government of Maharashtra 2013: DST-FIST 2014: DBT STAR College

2013 & 2014: 'Jagar Jaanivancha Award' by Govt. of Maharashtra 2016: ISO 14001:2015 2016: ISO 9001:2015 2017: ISO 27001:2013

2018: Autonomous Status by University Grants Commission (No. F. 22-1/2018(AC) - 28.05.2018) & by University of Mumbai (No.Aff./ICD/18-19/440 - 08.06.2018)





# R. J. COLLEGE of Arts, Science & Commerce (AUTONOMOUS)

(Hindi Vidya Prachar Samiti's RAMNIRANJAN JHUNJHUNWALA COLLEGE of Arts, Science & Commerce)

Opposite Ghatkopar Railway Station, Ghatkopar (West), Mumbai 400086, Maharashtra, INDIA.

Website: www.rjcollege.edu.in Email: rjcollege@rjcollege.edu.in Tel No: +91 22 25151763 Fax No: +91 22 25150957

College is recognized under Section 2(f) & 12(B) of the UGC Act, 1956

Affiliated to UNIVERSITY OF MUMBAI || NAAC Re-Accredited 'A' Grade (CGPA: 3.50)



Hindi Vidya Prachar Samiti's

## R. J. COLLEGE OF ARTS, SCIENCE & COMMERCE (AUTONOMOUS)

Opposite Ghatkopar Railway Station, Ghatkopar (W), Mumbai 400 086.

(Affiliated to University of Mumbai)

### Certificate

This is to certify that

MS. JAISWAR SURAKSHA DINESH

of class FYBSC Roll No. A 21

has participated in an event on "An Introduction to the Theory of Partitions" organized by the Department of Mathematics of Ramniranjan Jhunjunwala College of Art's, Science and Commerce on 31<sup>st</sup> October 2020.

*Marry Jossy*

Mrs. Marry Jossy  
HoD Mathematics

*Himanshu Dawda*

Dr. Himanshu Dawda  
In-charge Principal



*Himanshu Dawda*

PRINCIPAL  
RAMNIRANJAN JHUNJHUNWALA COLLEGE  
OF ARTS, SCIENCE & COMMERCE (AUTONOMOUS)  
Ghatkopar (W), Mumbai-400 086, Maharashtra, INDIA

2019: Star College Status by DBT

2008: Best College by University of Mumbai 2010: IMC RBNQ Award 'Performance Excellence' for the year 2009

2011: 'Best Teacher Award' by Government of Maharashtra 2013: DST-FIST 2014: DBT STAR College

2013 & 2014: 'Jagar Jaanivancha Award' by Govt. of Maharashtra 2016: ISO 14001:2015 2016: ISO 9001:2015 2017: ISO 27001:2013

2018: Autonomous Status by University Grants Commission (No. F. 22-1/2018(AC) - 28.05.2018) & by University of Mumbai (No.Aff./ICD/18-19/440 - 08.06.2018)



# R. J. COLLEGE of Arts, Science & Commerce (AUTONOMOUS)

(Hindi Vidya Prachar Samiti's RAMNIRANJAN JHUNJHUNWALA COLLEGE of Arts, Science & Commerce)

Opposite Ghatkopar Railway Station, Ghatkopar (West), Mumbai 400086, Maharashtra, INDIA.

Website: www.rjcollege.edu.in Email: rjcollege@rjcollege.edu.in Tel No: +91 22 25151763 Fax No: +91 22 25150957

College is recognized under Section 2(f) & 12(B) of the UGC Act, 1956

Affiliated to UNIVERSITY OF MUMBAI || NAAC Re-Accredited 'A' Grade (CGPA: 3.50)



Hindi Vidya Prachar Samiti's

## R. J. COLLEGE OF ARTS, SCIENCE & COMMERCE (AUTONOMOUS)

Opposite Ghatkopar Railway Station, Ghatkopar (W), Mumbai 400 086.

(Affiliated to University of Mumbai)

### Certificate

This is to certify that

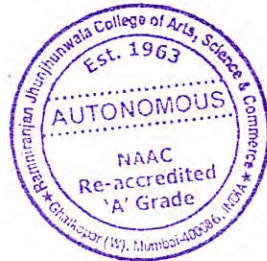
MR. GUPTA RAJKUMAR JYOTI

of class FYBSC Roll No. 03

has participated in an event on "An Introduction to the Theory of Partitions" organized by the Department of Mathematics of Ramniranjan Jhunjunwala College of Art's, Science and Commerce on 31<sup>st</sup> October 2020.

Mrs. Marry Jossy  
HoD Mathematics

Dr. Himanshu Dawda  
In-charge Principal



I/c PRINCIPAL  
RAMNIRANJAN JHUNJHUNWALA COLLEGE  
OF ARTS, SCIENCE & COMMERCE (AUTONOMOUS)  
Ghatkopar (W), Mumbai-400 086, Maharashtra, INDIA

2019: Star College Status by DBT

2008: Best College by University of Mumbai 2010: IMC RBNQ Award 'Performance Excellence' for the year 2009

2011: 'Best Teacher Award' by Government of Maharashtra 2013: DST-FIST 2014: DBT STAR College

2013 & 2014: 'Jagar Jaanivancha Award' by Govt, of Maharashtra 2016: ISO 14001:2015 2016: ISO 9001:2015 2017: ISO 27001:2013

2018: Autonomous Status by University Grants Commission (No. F. 22-1/2018(AC) - 28.05.2018) & by University of Mumbai (No. Aff./ICD/18-19/440 - 08.06.2018)