Resume (as on 15.09.2023)

1. Name : M.S. AFYA FARHANA

2. Sex : Female

3. Date of Birth : 17.04.1987

4. Designation : Assistant Professor of Mathematics (SF)

5. Date of Entry in the Service:

Assistant Professor of Mathematics (SF) from 16-06-2010 at Jamal Mohamed College (Autonomous), Tiruchirappalli -620020, Tamilnadu.

6. Address :

Residence Office

3/3, 77-D Venkateshwara Nagar, Jamal Mohamed College (Autonomous),

East Ambikapuram, Race Course Road,

Trichy-620 004. TVS Tollgate, Trichy – 620 020.

Email : <u>afyafarhana@gmail.com</u> & <u>msafya@jmc.edu</u>

Mobile : 98428 23281

7. Educational Qualifications

S.No.	Examination Passed	University / College	Year of Passing
1.	B.Sc., (Mathematics)	Jamal Mohamed College, Trichy.	2007
2.	M.Sc., (Mathematics)	Jamal Mohamed College, Trichy.	2009
3.	M.Phil., (Mathematics)	Jamal Mohamed College, Trichy.	2010

8. Languages known : Tamil, English.

9. **Teaching Experience**

Under Graduate: 12 Years

Post Graduate : 12 Years

10. **Area of Specialization:** Graph Theory, Fuzzy Graph Theory, Fuzzy Coloring.

11. Subjects Taught:

Undergraduate: Laplace Transform and Fourier series, Programming in C,

Differential Equations, Numerical Methods, Graph Theory,

Matlab.

Postgraduate: Measure Theory and Integration, Classical Dynamics, Ordinary

Differential Equations, Complex Analysis.

12. Seminars / Conferences / Workshops Attended

1. Seminar on "Creating competitiveness to excel in higher education- a TQM approach", Jamal Mohamed College (Autonomous), Tiruchirappalli-20, 8th December 2010.

- 2. Workshop on "Mathematical Modeling" Jamal Mohamed College (Autonomous), Tiruchirappalli 19th to 25th January 2011.
- 3 .UGC sponsored one day National seminar on "Applications of Mathematics", Jamal Mohamed College (Autonomous), Tiruchirappalli-20, 22nd February 2012.
- 4. UGC sponsored National seminar on "Examination Reforms", Jamal Mohamed College (Autonomous), Tiruchirappalli-20, 24th February 2012.
- 5. UGC sponsored one day seminar on "Teaching, Learning and Research in Higher Education Excellence and Beyond Excellence" Jamal Mohamed College (Autonomous), Tiruchirappalli-20, 7th March 2012.
- 6. UGC sponsored one day National seminar on "Discrete Mathematics and its Applications", Jamal Mohamed College (Autonomous), Tiruchirappalli-20, 09th March 2013.
- 7. Four days Workshop on "LATEX and SPSS", Jamal Mohamed College (Autonomous), Tiruchirappalli-20 from 20.09.2014 to 25.09.2014.
- 8. Two days International Conference on "Mathematical methods and Computation", Jamal Mohamed College (Autonomous), Tiruchirappalli-20, 22nd and 23rd January 2015.
- UGC Sponsored National Conference on "Graph Theory, Fuzzy Graph Theory and their Applications", Jamal Mohamed College(Autonomous), Tiruchirappalli-20, 10th and 11th February 2016.
- 10. One day workshop on "The role of a Teacher in the present scenario", Jamal Mohamed

- college (Autonomous), Tiruchirappalli-20, 3rd December, 2016.
- 11. Three days "NLP Based faculty Empowerment Programme", Jamal Mohamed college (Autonomous), Tiruchirappalli-20, 17th,18th and 20th June 2017.
- 12. One day International Conference on "Mathematical methods and computations" Jamal Mohamed College (Autonomous), Tiruchirappalli-20, 11th December, 2017.
- 13. UGC CPE sponsored Two Day workshop on "Professional Development for Academic Leadership in curriculum Design", Jamal Mohamed college (Autonomous), Tiruchirappalli-20, 18th and 19th January, 2019.
- 14. UGC sponsored Two days International Conference on "Mathematical methods and Computation", Jamal Mohamed College (Autonomous), Tiruchirappalli-20, 20th and 21st February 2019.
- 15. One day workshop on "Algebra and its Applications", Jamal Mohamed College (Autonomous), Tiruchirappalli-20, 28th September, 2019.
- 16. A special Lecture on "Intellectual Property Rights and Prior Art search for Research Development", Jamal Mohamed College (Autonomous), Tiruchirappalli 20, 5th Febraury, 2020.
- 17. One day International Workshop on "Python Programming", Jamal Mohamed college(Autonomous), Tiruchirappalli-20, 18th Febraury, 2020.
- 18. UGC Sponsored International Conference on "Mathematical Methods and Computations", Jamal Mohamed College (Autonomous), Tiruchirappalli-20, 19th Febraury, 2020.
- 19. One day Virtual International Workshop on "Effective usage of ICT tools for Higher Education", Servite Arts and Science College for Women, Karur Dt, Tamil Nadu, 3rd June, 2020.
- 20. Two days Virtual National Workshop on "Free ICT tools for E-content Development and Online Teaching", Gojan School of Business and Technology, Chennai, 6th and 7th June, 2020.
- 21. Two Days National Webinar on "Explore Mathematics to New Dimension in Pandemic Covid -19", Mohanlal Sukadhiya University, Udaipur (RAJ), India, 12th and 13th June 2020.
- 22. International Webinar on "Successful Preparation of Research Proposal", 26th June 2020.
- 23. National Webinar on "Coloring of Graphs", Tirumala Engineering College, A.P, 27th June 2020.
- 24. National Webinar on "Graph Coloring Problems", V.O. Chidambaram College, Thoothukudi, 8th July,2020.
- 25. Online webinar on "National Education Policy-2020", Jamal Mohamed College (Autonomous), Trichy-20, 08.08.2020.
- 26. Two Days Virtual International Conference on "Recent Trends in Applied and Mathematical

- Computations (ICRTACM-2020)", Bengaluru, India, 4th and 5th December 2020.
- 27. Three Days Virtual Conference on "6th Biennial International Group Theory Conference 2021", Vellore Institute of Technology, Vellore, 4th, 5th and 6th March 2021.
- 28. Two Days Virtual International Conference on "Dynamical System and Soft Computing (ICDSSC-2021)", Gobi Arts and Science College, Gobi-638453, 5th and 6th March 2021.
- 29. One day Virtual Conference on "Heber International Conference on Applied Mathematics", Bishop Heber College, Trichy-17, 26th April 2021.
- 30. Two Days International Virtual Conference on "Mathematical Modelling, Analysis and Computing (MMAC 2021)", Thiruvalluvar University, Vellore, 8th and 9th July 2021.
- 31. Two Days International Conference on "Mathematical Sciences and Applications (Virtual) ICMSA 2022" St. Joseph College, Trichy, 9 11, March 2022.
- 32. Two days International Conference on "Present Trends in Applications of Mathematics", Holy Cross College, Trichy, 19th and 20th April 2022.
- 33. Two days International Conference on "Mathematical Methods and Computation (ICOMAC 2022)", Jamal Mohamed College, Trichy, 21st and 22nd December 2022.
- 34. One Day International Worshop on "Big Data Analytics using Distributed Computing", Jamal Mohamed College, Trichy, 23rd December 2022.
- 35. Two Days Science Academies' Lecture Workshop on "Differntial Equations and Their Applications in Mathematical Modelling" Jamal Mohamed College, Trichy, 6th and 7th January 2023.

13. Faculty Development Programme Attended

- 1. International online FDP on "Recent Trends in Mathematics" SNS College of Technology (Autonomous), Coimbatore, 02.06.2020 05.06.2020.
- 2. Online FDP in "Pure and Applied Mathematics", Jamal Mohamed College (Autonomous), Trichy –20, 11.06.2020 17.06.2020.
- National Level IQAC Sponsored online FDP, KMG College of Arts and Science College, Vellore, 8th And 9th July, 2020.
- 4. Online FDP on "E-Content Development", Jamal Mohamed College (Autonomous), Trichy-20, 30.06.2020 04.07.2020.
- 5. Five Days Online International FDP on "New Epoch on Software Learning", Holy Cross College (Autonomous), Trichy, 16.08.2021- 20.08.2021.

14. Orientation/Refresher Course

1. A 4-week induction/ Orientation Programme for "Faculty in Universities/ Colleges/ Institutes of Higher Education" from 20 December, 2021- 19 January, 2022, Organized by Teaching learning centre, Ramanujan College, University of Delhi.

15. List of Papers Presented in National and International Conferences

- 1. Presented a paper entitled "Fuzzy Chromatic Number of Fuzzy Soft Graphs" in the International Conference ICOMAC-2020 held at Jamal Mohamed College (Autonomous), Trichy 20, 19 February 2020.
- 2. Presented a Paper entitled "Fuzzy Chromatic Number of Fuzzy Soft Cycle and Complete Fuzzy Soft Graphs" in the International Virtual Conference ICRTACM-2020, Reva University, Bengaluru, India, 4th and 5th December 2020.
- 3. Presented a Paper entitled "On Fuzzy Chromatic Number of Line, Middle and Total Graphs of Complete Fuzzy Soft Graphs" in 6th Biennial International Group Theory Conference 2021(Virtual), Vellore Institute of Technology, Vellore, 04th to 06th March 2021.
- 4. Presented a Paper entitled "Fuzzy Dominator Chromatic Number of Fuzzy Soft Graphs" in the International Virtual Conference on Dynamical System and Soft Computing ICDSSC-2021, Gobi Arts and Science College, Gobi, 5th and 6th March 2021.
- 5. Presented a Paper entitled "On Fuzzy Dominator Chromatic Number of Middle, Subdivision and Total Fuzzy Soft Graphs" in Heber International Conference on Applied Mathematics (Virtual), Bishop Heber college (Autonomous), Trichy, 26th April 2021.
- 6. Presented a Paper entitled "Bounds on Fuzzy Dominator Chromatic Number of Fuzzy Soft Bipartite Graphs" in International Virtual Conference on Mathematical Modelling, Analysis and Computations MMAC-2021, Thiruvalluvar University, Vellore, 8th and 9th July 2021.
- 7. Presented a Paper entitled "Fuzzy Chromatic Number of Middle, Subdivision and Total Fuzzy Soft Graphs" in International Conference on "Mathematical Sciences and Applications (Virtual) ICMSA 2022" St. Joseph College, Trichy, 9 11, March 2022.
- 8. Presented a Paper entitled "Fuzzy Edge Coloring on Fuzzy Soft Graphs" in "Mathematical Methods and Computation (ICOMAC 2022)", Jamal Mohamed College, Trichy, 21st and 22nd December 2022.

16. List of Publications in National and International Journals

- 1. Jahir Hussain,R. and Afya Farhana, M.S., Fuzzy Chromatic Number of Fuzzy Soft Graphs, "Advances and Applications in Mathematical Sciences" (ISSN: 0974-6803), Vol. 19, Issue 11, p.1125-1131 September (2020). [Web of Science]
- Jahir Hussain, R. and Afya Farhana, M.S., On Fuzzy Dominator Chromatic Number of Middle, Subdivision and Total Fuzzy Soft Graphs, "International Journal of Aquatic Science" (ISSN: 2008-8019), Vol.12, Issue 02, p. 104-111, (2021). [Web of Science]
- 3. Jahir Hussain,R. and Afya Farhana, M.S., Bounds on Fuzzy Dominator Chromatic number on Fuzzy Soft Bipartite Graphs, "Ratio Mathematica" (ISSN: 1592-7415), Vol. 46 (2023), p.109-116. [UGC Care- Group-I]
- 4. Jahir Hussain, R. and Afya Farhana, M.S., Fuzzy Chromatic Number fuzzy soft cycle and Complete fuzzy soft graphs, "AIP Conference Proceedings" (ISSN: 0094-243X), Vol. 2649 June (2023), p.020003-1 020003-5. [Scopus].

17. Details of Online Certification Course Completed

8 weeks Online NPTEL – AICTE Faculty Development Programme on "Enhancing Soft Skills and Personality" on the SWAYAM platform during Jan – Apr 2020.

18. Details of Other Position

- 1. Department Library Incharge, Department of Mathematics (SF-Women), JMC, 2012-2015.
- 1. Placement Officer, Department of Mathematics (SF-Women), JMC, 2015-2020.
- 2. Web Admin, Department of Mathematics (SF-Women), JMC, 2018-2021.
- 3. Mathematics Association-Vice President, Department of Mathematics, JMC, 2022 onwards.