# Staff Profile

NAME (FR./DR./MR./MRS./MS.) :Dr.I.FRANCINA NISHANDHI

**GENDER** : FEMALE

**DEPARTMENT** :MATHEMATICS

EDUCATIONAL QUALIFICATION: M.Sc.,M.Phil.,B.Ed.,Ph.D.



| S. No. | Degree /<br>Diploma | Subject / Main | Name of the<br>College / University           |
|--------|---------------------|----------------|---|
| 1.     | U.G.                | MATHEMATICS    | HOLY CROSS COLLEGE<br>(AUTONOMOUS), TRICHY-2  |
| 2.     | B.Ed.               | MATHEMATICS    | HOLY CROSS COLLEGE OF<br>EDUCATION, TRICHY-2  |
| 3.     | P.G.                | MATHEMATICS    | ST.JOSEPH'S COLLEGE<br>(AUTONOMOUS), TRICHY-2 |
| 4.     | M.Phil.             | MATHEMATICS    | ST.JOSEPH'S COLLEGE<br>(AUTONOMOUS), TRICHY-2 |
| 5.     | Ph.D.               | MATHEMATICS    | HOLY CROSS COLLEGE<br>(AUTONOMOUS), TRICHY-2  |

## **Technical qualification:**

| S. No. | Degree /<br>Diploma | Subject / Main | Name of the College / University | 9 |
|--------|---------------------|----------------|----------------------------------|---|
| 1.     |                     |                |                                  |   |
| 2.     |                     |                |                                  |   |

| Aided | Management | : SHIFT I | $\sqrt{}$ | SHIFT II |
|-------|------------|-----------|-----------|----------|
|       |            |           |           |          |

**Total Teaching Experience at Holy Cross College:** 7 Years

UG: 7 Years PG: 5 Years

**Positions Held** (VP / Dean/ HOD / Director/ Overall Coordinator etc.)

| S. No. | Name of the Position | Period |
|--------|----------------------|--------|
| 1.     |                      |        |

### **E-lessons developed:**

| S. No. | Title of E-Lessons   |
|--------|--|
| 1.     | Three Dimensions – The Plane   |
| 2.     | Measures of Dispersion   |
| 3.     | Non Linear Programming Problem – Lagrange Multiplier method with one equality Constraints. |

| Research | 1: |
|----------|----|
|          |    |

Guiding:

Ph.D.

Guided:

### **NPTEL Swayam Course:**

➤ Completed an online course on "Introduction to Operations Research" through NPTEL Swayam in May 2023.

#### **Books Published:**

| S.  | Title | Year | Publisher | Place |
|-----|-------|------|-----------|-------|
| No. |       |      |           |       |
| 1.  |       |      |           |       |
|     |       |      |           |       |
| 2.  |       |      |           |       |
|     |       |      |           |       |

### Journal / Articles Published: (Attach the list using the format given below)

- Ritha.W.,FrancinaNishandhi,I., (2015). Economic Order Quantity Models With Repair And Buy Options Using Backorder, International Journal of Applied Computational Science & Mathematics (IJACSM) Volume 5, Number 1,pp. 58-68, ISSN 2249-3042
- 2. Ritha.W., FrancinaNishandhi,I., (2015).The Impact of Cap and Trade Scheme on Inventory Policies, Applied Mathematics Elixir Appl. Math. 83, pp.33054-33058
- Ritha.W.,FrancinaNishandhi,I., (2015).Optimization of two stage supply chain Inventory models sales decision with advertising, International Journal of Research in Engineering and Applied Sciences, Ijreas Volume 5, Issue 9, (ISSN 2249-3905),pp.7-14.

- Ritha.W.,FrancinaNishandhi,I., (2015).Single vendor- Multi buyer's integrated inventory model with rejection of defective supply batches. International Journal of Mathematics and Computer Research, volume 3 issue 10, pp. 1182-1187 ISSN 2320-7167
- Ritha.W.,FrancinaNishandhi,I.,(2015). Optimal trade credit and lot size policies in economic production quantity models with deterioration and shortages, International Journal of Advanced and Innovative Research (2278-7844) / # 130 / Volume 4 Issue 12,pp.130-134
- Ritha.W.,FrancinaNishandhi,I., (2016). Sustainable consideration in a continuous review inventory model with integrated transportation decisions under the Carbon Emission Regulations Policies, International Journal of Research in Engineering and Applied Sciences VOLUME 6, ISSUE 3,(ISSN 2249-3905),pp.401-410
- 7. Ritha.W.,FrancinaNishandhi,I., (2016).An inventory model with haulage sharing approach and line haul cost for freight transportation, Aryabhatta Journal of Mathematics and informatics, vol.8,No.1,pp.35-43
- Ritha, W., Francina Nishandhi, I., (2016). A Consignment stock inventory model with the imperfect production process and energy usage for transportation and Production, Journal of Computing Technologies (2278 – 3814) / # 101 / Volume 5 Issue 4,pp.101-105
- Ritha.W., FrancinaNishandhi,I.,(2016).Reverse Logistics Model: A closed loop Supply Chain system with energy, transportation and waste disposal costs,International Journal of Research and Scientific Innovations, Vol.III,Issue VII,ISSN 2321 -2705, pp.59-63
- 10. Ritha.W.,FrancinaNishandhi,I.,(2016).Effects of fuel charges in a three echelon Inventory model with, variable transportation and carbon emissions, International Journal of Latest Research and Technology, Vol-2,Issue 10, ISSN 2454-5031, pp ,1-9

- 11. Ritha.W.,FrancinaNishandhi,I.,(2018) A Joint Economic Lot Size Model with Screening Errors and Investment Opportunity for Quality Improvement of the Production, International Journal of Pure and Applied Mathematics, Volume 118, No. 6, pp.509-517,ISSN: 1311-8080 (printed version) ISSN: 1314-3395 (on-line version)
- 12. Francina Nishandhi.I.,Ritha.W.,LillyRobert,AntonitteVinoline.I.,andEveline.J.C.,(2019) A Study on an Integrated Three Echelon Inventory Model with Quality Improvement along with the Screening Errors and SSMD policy in the transportation, International Journal of Management, IT & Engineering, ISSN No: 2249-0558, pp.209-215.
- 13. Francina Nishandhi.I.,Ritha.W.,LillyRobert,AntonitteVinoline.I.,andEveline.J.C., (2019). A Study on an Integrated Inventory Model with Transportation cost along with the comparison of carbon regulations parameters such as carbon tax and cap and trade, International Journal of Research in Advent Technology, ISSN No:2321-9637,pp,145-149.
- 14. Francina Nishandhi.I.,Ritha.W.,LillyRobert, and PoongodiSathya.S.,(2019). A Study on JELS Inventory Model of Delay in Payments along with different mode of Road transportation under the carbon emission reduction, Journal of Physical Sciences, Vol. 24, , 31-38 ISSN: 2350-0352 (print),pp. 31-38.
- 15. Francina Nishandhi.I ,Saranya.A,Josephine.F.S and Swetha.P., (2020) Integrated Three Echelon Inventory Model with Finite Manufacturing And Remanufacturing rates Along With The Transportation Cost And Packaging Cost, European Journal of Molecular & Clinical Medicine ISSN 2515-8260 Volume 07, Issue 09, 3125-3134.
- 16. Francina Nishandhi.I, (2020)A production vendor buyer inventory model with imperfect quality items considering the screening errors, budget capacity constraint along with a Karush Khun Tucker approach, Solid State Technology, Volume: 63 Issue: 6, 7840 7851. **Scopus Indexed Journal.**
- 17. Francina Nishandhi.I, (2020) An economic order quantity model for growing items with imperfect quality and Budget capacity constraint to limit the purchase, Solid State Technology, Volume: 63 Issue: 6, 7852 -7858. **Scopus Indexed Journal.**
- 18. A.Saranya, I.Francina Nishandhi, and F.S.Josephine, An Algorithm For Solving Hesitant Fuzzy Quadratic Fractional Transportation Problem. European Journal of Molecular & Clinical Medicine, ISSN 2515-8260, Volume 07, Issue 09, 2020, Scopus Indexed Journal.

- 19. F.S.Josephine, A.Saranya, and I.Francina Nishandhi, A Dynamic method for solving intuitionistic fuzzy transportation problem. European Journal of Molecular & Clinical Medicine, ISSN 2515-8260, Volume 07, Issue 09, 2020, **Scopus Indexed Journal.**
- 20. I.Francina Nishandhi, A.Saranya, and F.S.Josephine, Integrated inventory model with freight costs and two types of quantity discounts along with the carbon regulations parameters such as carbon tax and cap and trade. Nat. Volatiles & Essent. Oils, 2021; 8(4): 10041-10048 **Scopus Indexed Journal.**
- 21. A.Saranya, I.Francina Nishandhi, and F.S.Josephine, An Algorithm For Solving Quadratic Hesitant Fuzzy Transportation Problem. Nat. Volatiles & Essent. Oils, 2021; 8(4):10041-10048. **Scopus Indexed Journal.**
- 22. I.Francina Nishandhi, A Study on Pricing For Product Service System Under Dual Channel Supply Chain in a Three Echelon Inventory Model, Tuijin Jishu/ Journal of Propulsion Technology, ISSN:1001-4055, Vol.44, No.4.(2023). Scopus Indexed Journal.

# **Conference/Seminar/Workshop/ Training Programme attended** - Academic & General:

| Academic<br>Year | Name of the Conferences<br>/Seminars/<br>Symposia/workshops/<br>FDP   | National /<br>International | Online/<br>Offline | Details  |
|------------------|---|-----------------------------|--------------------|--|
| 2017-2018        | International Conference on<br>Mathematical Methods and<br>Computation. (2017)  | International               | Offline            | PG & Research Department of<br>Mathematics , Jamal Mohammed<br>College (Autonomous), Trichy-20                         |
| 2018-2019        | International conference on<br>Networking, Research and<br>Innovation in Higher<br>Education for a Sustainable<br>Society: Challenges and<br>Channels | International               | Offline            | Holy Cross College<br>(Autonomous), Trichy-2   |
| 2018-2019        | Heber International Conference on Applications of Actuarial Science, Mathematics, Management and Computer Science                                     | International               | Offline            | PG Department of Actuarial<br>Science, Bishop Heber College<br>(Autonomous)  |
| 2018-2019        | International Conference on<br>Applied Mathematics and<br>Bio- Inspired Computations  | International               | Offline            | PG and Research Department of<br>Mathematics (DST-FIST<br>Sponsored) Bishop Heber College<br>(Autonomous), Trichy -17. |

| 2018-2019 | National Conference on<br>Recent Trends in pure and<br>applied mathematics<br>Sponsored by council of<br>scientific and industrial<br>research (CSIR) | International | Offline | Bon Secours College For Women<br>Thanjavur  |
|-----------|---|---------------|---------|---|
| 2018-2019 | International Conference on<br>Mathematical Methods and<br>Computation. (2019)  | International | Offline | PG & Research Department of<br>Mathematics, Jamal Mohammed<br>College (Autonomous), Trichy-<br>20.  |
| 2018-2019 | International Workshop on<br>Machine Intelligence and<br>Data Science (MIDS 2019)   | International | Offline | Machine Intelligence Research<br>Labs, Kochi.   |
| 2019-2020 | Online Faculty Development<br>Program on Fuzzy Sets and<br>Systems  | -             | Online  | Organized by Patrician College of<br>Arts and science, Chennai  |
| 2019-2020 | Webinar on Interesting Features of Integral Equations.  | -             | Online  | Organized by PG and Research<br>Department of Mathematics, Holy<br>Cross College (Autonomous),<br>Trichy -2.  |
| 2019-2020 | Webinar on Doing Mathematics using Softwares.   | -             | Online  | Organized by PG and Research<br>Department of Mathematics, Holy<br>Cross College (Autonomous),<br>Trichy -2.  |
| 2019-2020 | Andragogy of Online Teaching.   | -             | Online  | Organized by Internal Quality Assurance Cell (IQAC), Holy Cross College (Autonomous), Trichy-2  |
| 2019-2020 | Remote Classrooms Digital<br>Technology in Teaching<br>Learning,  | -             | Online  | Organized by Internal Quality Assurance Cell (IQAC), Holy Cross College (Autonomous), Trichy-2  |
| 2020-2021 | Two Days Faculty Development programme on Research Methodology  | -             | Online  | Organized by Jeppiaar Institute of Technology Sriperumbudur   |
| 2020-2021 | National webinar on "Fractals via fixed point theory".  | National      | Online  | Organized by PG and Research<br>Department of Mathematics,<br>Jayaraj Annapackiyam College<br>for Women (Autonomous)<br>Periyakulam, Theni - District |
| 2020-2021 | Webinar on Optimization models using Fuzzy Number.  | -             | Online  | Organized by Holy Cross College (Autonomous), Trichy  |

| 2020-2021 | One week online International Faculty Development Program on Artificial Intelligence and IoT – Heuristic Transdisciplinary perspectives.           | International | Online  | Organized by CICRSD, Holy<br>Cross College (Autonomous),<br>Trichy  |
|-----------|--|---------------|---------|---|
| 2020-2021 | State Level webinar on<br>Applications of various<br>divisions of Mathematics in<br>Graph Theory"  | -             | Online  | Organized by PG and Research<br>Department of Mathematics, Holy<br>Cross College (Autonomous),<br>Trichy -2.    |
| 2020-2021 | International Conference on "Present Trends in Applications of Mathematics"  | International | Online  | Organized by PG and Research<br>Department of Mathematics, Holy<br>Cross College (Autonomous),<br>Trichy -2.    |
| 2021-2022 | Five Days Online International Faculty Development Programme on "New Epoch In Software Learning"   | International | Online  | Organized by PG and Research<br>Department of Mathematics, Holy<br>Cross College (Autonomous),<br>Trichy -2.    |
| 2021-2022 | Five Days Online International Faculty Development Programme on "Blended and Inclusive strategies in Artificial Intelligence and Machine Learning" | International | Online  | Organized by PG Department of<br>Computer Science,<br>Holy Cross College<br>(Autonomous), Trichy -2.            |
| 2021-2022 | International Conference on "Present Trends in Applications of Mathematics"  | International | Online  | Organized by PG and Research<br>Department of Mathematics, Holy<br>Cross College (Autonomous),<br>Trichy -2.    |
| 2022-2023 | National webinar on Academic Writing and Research Publication in indexed journals.   | National      | Online  | Organized by centre for applied research, The Gandhigram Rural Institute (Deemed to be University), Gandhigram. |
| 2022-2023 | Two days In Service Faculty workshop on "Python & R programming"   | -             | Offline | Organized by PG and Research<br>Department of Mathematics, Holy<br>Cross College (Autonomous),<br>Trichy -2.    |
| 2022-2023 | International Conference on<br>Mathematical Methods and<br>Computation. (2022)   | International | Offline | PG & Research Department of<br>Mathematics, Jamal Mohammed<br>College (Autonomous), Trichy-<br>20.              |
| 2022-2023 | International Conference on<br>Recent Trends in<br>Applications of Mathematics   | International | Offline | Organized by PG and Research<br>Department of Mathematics, Holy<br>Cross College (Autonomous),<br>Trichy -2.    |
| 2023-2024 | One Day In service Faculty Workshop on Manipulation & Analysis of Data in SPSS 14 <sup>th</sup> July 2023  | -             | Offline | PG and Research Department of<br>Mathematics, Holy Cross College,<br>Trichy-2                                   |

| 2023-2024 | International Conference on<br>Recent trends in Applications<br>of Mathematics.<br>4 <sup>th</sup> August 2023                                       | International | Offline | PG and Research Department of<br>Mathematics, Holy Cross College,<br>Trichy-2  |
|-----------|--|---------------|---------|--|
| 2023-2024 | International Conference on<br>Navigating Research and<br>Impact: Metrics, Strategies,<br>Ethical considerations.<br>23 <sup>rd</sup> September 2023 | International | Offline | Centre for Research, Central<br>Library and PG Department of<br>Library and Information Science,<br>Holy Cross College, Trichy-2 |
| 2023-2024 | National conference on "The Evolving Landscape: Exploring Possibilities and Challenges for the Girl Child in a Dynamic World" 24th January 2024      | National      | Offline | Organized by PG and Research<br>Department of Mathematics, Holy<br>Cross College (Autonomous),<br>Trichy -2.                     |
| 2023-2024 | One day National seminar on "Integrating Artificial intelligence for cyber security in the digital era" 22nd February 2024                           | National      | Offline | Organized by PG and Research<br>Department of Computer Science,<br>Holy Cross College<br>(Autonomous), Trichy -2.                |
| 2023-2024 | International Symposium on collaborative online interactive learning (Coil) on Mathematical Research. 1st March 2024.                                | International | Online  | Organized by PG and Research<br>Department of Mathematics, Holy<br>Cross College (Autonomous),<br>Trichy -2.                     |
| 2024-2025 | One day National seminar on "Mechanics of Scholarly writing" 6th July 2024   | National      | Offline | Organized by HCC Research<br>Colloquium, Holy Cross<br>College(Autonomous), Trichy -2.   |
| 2024-2025 | "One day in service faculty<br>workshop on Geogebra"<br>16 <sup>th</sup> July 2024   | -             | Offline | Organized by PG and Research<br>Department of Mathematics, Holy<br>Cross College (Autonomous),<br>Trichy -2.                     |
| 2024-2025 | One day seminar on "Mastering in Writing and Publishing articles in Scopus & Web of science Journals"  | -             | Offline | Organized by HCC Research<br>Colloquium, Holy Cross<br>College(Autonomous), Trichy -2.   |

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TIRUCHIRAPPALLI.

**Pincode:** 620 001 **Mobile:**6381296172

Email – ID: <a href="mailto:francinajude@gmail.com">francinajude@gmail.com</a>

# **Declaration**

| I hereby state that above    | mentioned | qualification | and state | ements | are tru | ıe |
|------------------------------|-----------|---------------|-----------|--------|---------|----|
| to the best of my knowledge. |           |               |           |        |         |    |

| Place: Trichy | Yours Faithfully       |
|---------------|------------------------|
| Date:         | (I.Francina Nishandhi) |