

Aryabhatta College

Department of Mathematics

(Annual Report for the Academic session 2019 to 2020)

1) Name of Teacher in Charge: Mr. GUFRAN MALIK

2) Brief details of Faculty members:

Name	Qualification	Designation	Specialization	Teaching Experience (Years)	Permanent/ Temporary/ Ad-hoc /Guest
Dr. Narender Kumar	Ph.D.	Associate Professor	Mathematical Programming and Optimization	25 Year 9 month	Permanent
Dr. Naveen Kumar Jain	Ph.D.	Assistant Professor	Complex Analysis and Functional Analysis	8	Permanent
Dr. Yogender Singh	Ph.D.	Assistant Professor	Optimal Control Theory	8	Permanent
Mrs. Aakanksha Singh	M.Sc.	Assistant Professor	Optimization Theory	8	Permanent
Mr. Gufran malik	M.Tech.	Assistant Professor	Pure Mathematics	8	Permanent
Dr. Chandrashekhar Nishad	Ph.D.	Assistant Professor	Fluid Dynamics	5	Permanent
Mr. Dheeraj Singh	M.Phil.	Assistant Professor	Valuation Theory (Algebra)	2	Ad-hoc
Ms. Ritu	M.Sc.	Assistant Professor	Pure Mathematics	1	Ad-hoc

3) Student Strength

First Year	Second Year	Third Year
47	56	52

4) Details of publication work by the faculty members:

Serial No.	Author	Title	Journal	Volume, Year, Page No.	Publisher/ISSN No. / Int. Database	Refereed
1.	Naveen Kumar Jain	Bohr radius for classes of analytic functions	Results in Mathematics	74(4) 2019	1420-9012	Yes
2.	Naveen Kumar Jain	Bohr Radius problems for some classes of analytic functions using quantum calculus approach	<i>Mathematics</i>	8(4) 2020	2227-7390	Yes
3.	Yogender Singh	On Exploration of Various Success Factors and Challenges for Handloom and Carpet Weaving Textile Sector in India	<i>International Journal of Computer Applications</i>	Volume 177 – No. 32, pp. 26-35, January 2020	ISSN: 0975 – 8887	Yes
4.	Yogender Singh	An Attempt to Explore the Spiritual Meditation Philosophy and Studying the Interrelationships amongst Various Challenges towards Adoption of Spiritual Metrics due to Nature of Spirituality	<i>International Journal of Computer Applications</i>	Volume 176 – No. 19, pp. 6-11, May 2020	ISSN: 0975 – 8887	Yes
5.	Yogender Singh	On Studying the Inter-relationships Amongst the Various Driving Criteria for Studying the Driving Behavior in India	<i>International Journal of Computer Applications</i>	Volume 176 – No. 20, pp. 42-45, May 2020	ISSN: 0975 – 8887	Yes
6.	Yogender Singh	An Attempt to Explore the Various Challenges and	<i>International Journal of</i>	Volume 176 – No.	ISSN: 0975 – 8887	Yes

		Success Factors in Performing Arts Sector in India	<i>Computer Applications</i>	25, pp. 1-6, May 2020		
7.	Yogender Singh	On an Attempt to Explore the Possible Challenges Faced by Upcoming and Established Photography Content Writers in India	<i>International Journal of Computer Applications</i>	Volume 176 – No. 25, pp. 7-11, May 2020	ISSN: 0975 – 8887	Yes
8.	Yogender Singh	Studying the Complex Inter-relationships amongst various SNA Metrics and SEA Metrics using ISM Methodology	<i>International Journal of Computer Applications</i>	Volume 176 – No. 30, pp. 28-35, June 2020	ISSN: 0975 – 8887	Yes

5) Participation of faculty members in seminars/workshops, etc

- a) **Mr. Gufran Malik** participated in a workshop, “CALCULUS: THE GEOMETRICAL WAY” from 19 Sep, 2019 to 20 Sep, 2019 organized by Miranda House, University of Delhi.
 - b) **Mr. Gufran Malik** completed a One week Faculty Development Program on "Open Source Tools for Research" organized by TLC Ramanujan College from 08 June 2020 to 14 June 2020.
 - c) **Mr. Gufran Malik** completed a Two week Faculty Development Program on "Advanced Concepts for Developing MOOCS" organized by TLC Ramanujan College from 02 July 2020 to 17 July 2020.
 - d) **Ms. Aakanksha Singh** participated in an International Conference on “Advances in Smart Material and Emerging Technologies” organised by Indira Gandhi Delhi Technical University for Women, Delhi from 22.1.20 to 23.1.20.
 - e) **Dr. Chandrashekhar Nishad** a resource person in a five days national workshop on “RECENT TRENDS IN ENGINEERING MATHEMATICS” organized by Department of Basic Science and Humanities, RAMGARH ENGINEERING COLLEGE, RAMGARH, JHARKHAND from 27th September, 2019 to 1st October, 2019.
 - f) **Dr. Chandrashekhar Nishad** participated in a two weeks Refresher Course in Computational & Mathematical Sciences organized by the UGC-HRDC, Jamia Millia Islamia, New Delhi from 7th February to 20th February, 2020.
- 6) Achievement of Students including their participation in various societies

7) Co-curricular Programmes conducted by the Department: Departmental Fest SIGMA' 2020.

The fest consisted of many events: -

Mathematical Relay- the team event where participants got to witness intense mental and physical pressure to solve a round of riddles and run to their respective team mates.

Tug of war – This event was a team game of 4 members. The team has to stretch a rope to its court.

Dodge ball- This event was also a team game of 4 members in each team. The team has to knock out the opponents by hitting them with Dodge ball.

Bolly quiz - This event was based on the 110 years of Indian Cinema. Around 20 teams participated in the event. The event started with a quiz and ended with a dumb charade round.

IPL Mock Auction – This event is for the cricket fan. Around 17 teams, from in and around colleges, participated in the event. The event began with Round 1 in which 10 questions were asked from the teams and out of which 10 teams made its way to the 2nd and final round.

Treasure hunt- the treasure hunt was based on Narnia theme which was quite indulging since childhood.

8) Library Budget sanctioned for the Department; Rs 90000+48500 = Rs138500/-

9) (Strength ,Weakness , Opportunities, Challenges) SWOC Analysis of the Department

- **Strength:** The faculty members are well qualified from renowned Institutes/Universities of India. All the faculty members are NET qualified. The designated computer lab for the department is fully operational and equipped with updated computers and software for practical classes purposes. Each year many students qualify various competitive exams.
- **Weakness:** The department has not organized any seminar during this academic session.
- **Opportunities:** The teacher can make use of various technologies and tools to impart their knowledge in a more effective manner.
- **Challenges:** Each year the department saw students from various boards and states. In the beginning, few of them feel difficulty in understanding the concepts because of their background and sometimes the medium issue.

10) Future Plans of the Department

- (i) To organize student centric programs to give them more exposure
- (ii) To invite eminent scholars to motivate students.
- (iii) To start special classes to help them qualify various competitive exams.
- (iv) To organize workshops/seminars.