# Aryabhatta College

### **Department of Mathematics**

## (Annual Report for the Academic session 2018 to 2019)

- 1) Name of Teacher in Charge: Ms. Aakanksha Singh
- 2) Brief details of Faculty members:

Name	Qualific ation	Designation	Specialization	Teaching Experience (Years)	Permanent/ Temporary/ Ad-hoc /Guest
Dr. Narender Kumar	Ph.D.	Associate Professor	Mathematical Programming and Optimization	24 Year 9 month	Permanent
Dr. Naveen Kumar Jain	Ph.D.	Assistant Professor	Complex Analysis and Functional Analysis	7	Permanent
Dr. Yogender Singh	Ph.D.	Assistant Professor	Optimal Control Theory	7	Permanent
Mrs. Aakanksha Singh	M.Sc.	Assistant Professor	Pure Mathematics	7	Permanent
Mr. Gufran malik	M.Tech.	Assistant Professor	Pure Mathematics	7	Permanent
Dr. Chandrashekhar Nishad	Ph.D.	Assistant Professor	Fluid Dynamics	4	Permanent
Mr. Dheeraj Singh	M.Phil.	Assistant Professor	Valuation Theory (Algebra)	1	Ad-hoc

### 3) Student Strength

First Year	Second Year	Third Year
58	54	41

#### 4) Details of publication work by the faculty members

Serial	Author	Title	Journal	Volume,	Publisher/ISSN	Refereed
No.				Year,	No. / Int.	
				Page No.	Database	
					070 004 45	
1.	Naveen Kumar	Bohr Radius for Certain	Approximati		978-981-15-	Yes
	Jain	Analytic Functions, In: Deo	on Theory.	2018	1153-0	
		N., Gupta V., Acu A.,	ICRAPAM			
		Agrawal P. (eds)				
		Mathematical Analysis I				
2.	Yogender Singh	Managing Pollution –	International	Vol. 07,	ISSN: 2320-7132	Yes
		Emergent need in Urban	Journal of	lssue 01,		
		Cities (with special	360	рр. 457-		
		reference to NCR region)	Managemen	468, April		
			t Review	2019		

- Dr Naveen Kumar Jain presented paper 'Bohr's radius for certain classes of analytic functions' in a national conference on Mathematical Analysis and Computing (NCMAC-2018) held during 13-14 December 2018 organized by the Department of Mathematics, SSN College of Engineering, Chennai, Tamil Nadu, India.
- Supervised M.Phil dissertation titled 'Bohr's Radius For Classes of Analytic Functions'.
- 5) Participation of faculty members in seminars/workshops ,etc :
  - Mr. Gufran Malik completed "UGC Sponsored Refresher Course in Computational & Mathematical Studies" organized by HRD Centre, Jamia Millia Islamia from 29 Aug 2018 to 19 Sep 2018.
  - **Dr. Yogender Singh** presented a research paper: "A study of impact of relative humidity and temperature on Air Pollutants using Multiple Regression Analysis", at the International Conference on Sustainable Development and The World Economy,

organized by Department of Commerce, Janki Devi Memorial College, University of Delhi, Feb 4-5, 2019.

- **Dr. Chandrashekhar Nishad** participated in three days REGIONAL WORKSHOP ON RESEARCH BASED PEDAGOGICAL TOOL organized by Kumaun University, Nainital, Uttarakhand, 31st July to 2nd August, 2018.
- **Dr. Chandrashekhar Nishad** participate in one week FACULTY DEVELOPMENT PROGRAMME ON "SUSTAINABLE DEVELOPMENT" organized by Department of Mathematics, ARSD College, October 15-22, 2018.
- 6) Achievement of Students including their participation in various societies

Two students, Nitin Maurya and Diwakar Vikram Singh were awarded INSPIRE scholarship worth Rs 1,20,000 by the Ministry of Science and Technology, Government of India.

7) Co-curricular Programmes conducted by the Department: Carrying the thought of making young math majoring undergraduates understand the relevance of cryptography, Department of Mathematics, Aryabhatta College, organised its Annual Fest Σigma '19 on 15<sup>th</sup> Feb2019.

The events organised by the society received active participation from various colleges of Delhi University. Various activities were organized during the fest like Mathematical Tambola, Treasure Hunt, Mathematical Relay, Quiz and Paper presentation.

To enlighten the young undergraduates of Maths, **DRDO Scientist Dr.Dhananjoy Dey** was invited . He showcased the daily application of Cryptography and play side of Maths. Along with all these several minigames were organised. It was great exposure for all the students and participants.

- 8) Library Budget sanctioned for the Department: Rs 120000/-
- 9) (Strength, Weakness, Opportunities, Challenges) SWOC Analysis of the Department
  - Strength: Dedicated educators who are ready to help and mentor the students beyond the classrooms. Facilities include a well-maintained computer lab and good resourceful books in college library.
  - Weakness: The department does not offer any add-on / certificate course
  - Opportunities: Teachers feel that they can better utilize technology in the classroom to create an improved learning environment for their students.
  - Challenges: Student initially finds it difficult to handle abstract nature of the subject and sometimes don't push themselves to work hard or ask doubts from the teachers. Lack of peer-learning and unwillingness to study is another challenge faced by the teachers.

10) Future Plans of the Department

- To invite eminent speakers and alumnus to motivate students.
- To attend seminars and workshops to upgrade skills.

• To conduct training classes for students to take competitive examinations with confidence.