

Aryabhatta College

Department of Mathematics

(Annual Report for the Academic session 2017 to 2018)

1) Name of Teacher in Charge: Dr. Naveen Kumar Jain

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	23 Year 9 month	Permanent
Dr. Naveen Kumar Jain	Ph.D.	Assistant Professor	Complex Analysis and Functional Analysis	6	Permanent
Dr. Yogender Singh	Ph.D.	Assistant Professor	Optimal Control Theory	6	Permanent
Mrs. Aakanksha Singh	M.Sc.	Assistant Professor	Pure Mathematics	6	Permanent
Mr. Gufran malik	M.Tech.	Assistant Professor	Pure Mathematics	6	Permanent
Dr. Chandrashekhar Nishad	Ph.D.	Assistant Professor	Fluid Dynamics	3	Permanent

3) Student Strength

First Year	Second Year	Third Year
51	62	0

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.	Narender Kumar	Multi-Switching Synchronization of Non-identical Chaotic Systems	<i>International Journal of Applied Mathematics and Physics</i>	9(1) 2017 69-80		Yes
2.	Naveen Kumar Jain	Starlike functions associated with a cardioids	Afrika Mathematica	27(5) 2016 923-939	2190-7668	Yes
3.	Naveen Kumar Jain	Radius problems for product and convolution of univalent functions	Honam Journal of Mathematics	38(4) 2016 701-724	2288-6176	Yes
4.	Naveen Kumar Jain	Convex combination of analytic functions with identity functions	Open Mathematics	15(1) 2017 331-339	2391-5455	Yes

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

- (a) **Dr. Naveen Kumar Jain** participated in Special Winter School in Computational Mathematics organized by the SavitriBai Phule Pune University, Pune, India, November 6 to November 26, 2017.
- (b) **Aakanksha Singh** participated in an Orientation Program organized by UGC-HRDC Jamia Millia Islamia, New Delhi from 23.5.17 - 19.6.17.

- (c) **Aakanksha Singh** participated in an International Conference on “Technological Empowerment of Women” organised by National Academy of Sciences, India (NASI) from 8.3.21-9.3.21.
- (d) **Aakanksha Singh** participated in a National Workshop on “STRESS MANAGEMENT AND EMOTIONAL INTELLIGENCE IN TEACHING-LEARNING ENVIRONMENT” organised by Guru Angad Dev TLC of MHRD, SGTB Khalsa College, University of Delhi, from 17.3.18 - 17.3.18.
- (d) **Mr. Gufran Malik** completed “UGC Sponsored Orientation Programme” organized by HRD Centre, Jamia Millia Islamia, New Delhi from 13 Nov 2017 to 11 Dec 2017.
- (e) **Mr. Gufran Malik** participated in “Science Academies Lecture Workshop on Essence of Partial Differential Equation” organized by IIT Mandi from 02 Apr 2018 to 04 Apr 2018.
- (f) **Dr. Chandrashekhar Nishad** Participated in 4weeks UGC-SPONSORED ORIENTATION PROGRAMME organized by UGC-HRDC Human Resource Development Centre, University of Delhi, from August 24, 2017 to September 21, 2017.
- (g) **Dr. Chandrashekhar Nishad** Participated in one day FACULTY DEVELOPMENT PROGRAMME ON EMERGING TRENDS IN MATHEMATICS organized by Department of Mathematics, ARSD College, February 1, 2018

- 6) Achievement of Students including their participation in various societies:
In the mathematical Fest Σ igma organized by the department of Mathematics on 21st Feb.,2018. Some of our students won prizes.
- 7) Co-curricular Programmes conducted by the Department:
 - (a) Organized a seminar on Mathematics on 27th sept., 20 17
 - (b) Organized the mathematical Fest Σ igma in which a talk was delivered by Honorable Vice chancellor, Prof. Dinesh Singh, on Mathematics and culture on 21st Feb.,2018.
- 8) Library Budget sanctioned for the Department; Rs Rs 120000/-
- 9) (Strength ,Weakness , Opportunities, Challenges) SWOC Analysis of the Department:

Strength :

- (a) Vibrant, enthusiastic and creative student community.
- (b) Qualified, Efficient and Dedicated Faculty with high research potential (Four Faculties with Ph.D and other two have already registered for Ph.D).
- (c) Appropriate infrastructural facilities.

Weakness :

- (a) Absence of collaboration with reputed institutions
- (b) The department has not offered any certificate course

Opportunity :

- (a) Vast opportunities after B. Sc. Mathematics.
- (b) Wide higher education option.

Challenges :

- (a) Students lack thorough knowledge about basic concepts
- (b) Low attention span of students
- (c) Need for more involvement in the department
- (d) Upgrading the Department as PG department.

10) Future Plans of the Department

- (a) Introduction of new and interdisciplinary courses
 - (b) Invited talks by Eminent Professors
 - (c) International conferences and seminars
 - (d) Workshops for College teachers
 - (e) Training programs
 - (f) Advanced study center
 - (g) Collaborative research programs
 - (h) Organization of refresher course.
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