DEPARTMENTAL REPORT PROFORMA

Report for the Department of Mathematics Year 2017 – 2018

 Name of the Teacher Incharge of the Department: 	Ms. Sunita Narain_
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2. Attendance 2017 - 2018

				N	No. of studen	ts in different	attendance cat	egories	
Teacher	Class	No. and Topic of Paper	No. of Lectures Delivered	85% & above	80% & above but less than 85%	75% & above but less than 80%	70% above but less than 75%	66.6% & above but less than 70%	Less than 66.6%
Ms. Sunita Narain	B.Sc(H) Math 1st year	Differential Equations	18	21	6	0	6	3	4
	B.A.(Hons.) Economics 2 nd year	Elements of Analysis	61	20	2	4	0	1	4
	B.A.(P) 3 rd year	Statistics	15	10	4	0	5	3	6

Teacher	Class	No. and Topic of Paper	No. of Lectures Delivered	No. of students in different attendance categories					
				>= 85%	>=80% but <85%	>=75% but <80%	>=70% But <75%	>=66.6% But <70%	<66.6%
Dr Rashmi Sehgal	B.Sc. (Hons) Mathematics III YEAR(Sec A)	Probability Theory and Statistics	56	8	8	3	4	2	11
Thukral	B.Sc. (Hons) Mathematics I YEAR	Differential Equations I(Practicals)	32	20	4	2	3	3	8

	Class	No. and Topic of Paper	No. of Lectures	No. of s	tudents in	different att	endance ca	ategories	
		T apoi	Delivered	85% & above	80% & above but less than 85%	75% & above but less than 80%	70% above but less than 75%	66.6% & above but less than 70%	Less than 66.6%
	B.Sc(H) Maths III- section B	Probability and Statistics	66	6	7	7	0	3	11
Shruti Tohan	B.Sc(H) Maths III- section A(Group A)	Complex Analysis, Practicals	24	5	3	1	4	5	10
	B.Sc(H) Maths III- section A(Group B)	Complex Analysis Practicals	33	9	8	2	1	2	3
	B.Sc(H) Maths III- section B	Numer Theory Tutorial	9	6	0	1	0	0	0

Teacher	Class	No. and	No. of	No. of students in different attendance categories

		Topic of Paper	Lectures Delivered						
	B.Sc(H)		39	85% & above	80% & above but less than 85%	75% & above but less than 80%	70% above but less than 75%	66.6% & above but less than 70%	Less than 66.6%
	Mathematics 1st year	Differential Equations		12	3	10	6	2	9
Prakriti Saxena	B.Sc(H) Mathematics 2nd year	Partial Differential Equation	62	18	0	_		5	19
			35		9	5	3		
	B.Sc(H) Mathematics 2nd year	Partial Differential Equation Practical PR 1		6	4	2	2	1	5
	B.Sc(H) Mathematics 2nd year	Partial Differential Equation Practical PR 2	42	2	1	2	0	1	13
	B.Sc(H) Mathematics 2nd year	Partial Differential Equation Practical PR 3	30	11	2	1	0	2	4

Teacher	Class	No. and	No. of	No. of students in different attendance categories	
		Topic of	Lectures		
		Paper	Delivered		

				>= 85%	>=80% but <85%	>=75% but <80%	>=70% But <75%	>=66.6% But <70%	<66.6%
Dr. Shikha	B.Sc. (Hons) Mathematics II YEAR	Lectures Computer Algebra Systems and Related Software Practicals	22	34	04	06	03	06	06
	B.Sc. (Hons) Mathematics II YEAR	Computer Algebra Systems and Related Software	Group 1 - 19 Group 2 - 21	01 00 05	09 00 04	02 00 04	01 01 01	00 00 05	07 18 01
	Generic Elective , 1st Year, 2nd Sem	Linear Algebra	Group 3 - 18	13	06	03	03	01	04
	B.Sc. (Hons) Mathematics III YEAR	Number Theory	65	00	01	00	01	03	02
	B.El. Ed, 2nd Year	Mathematics 1 (0 2.3)	22	03	01	04	01	00	00

3. College Society for which teachers in the Department are responsible:

Name of Teacher	Society	Indicate Convenor/Member	No. of students participated	Venue	Date
Rashmi Sehgal Thukral	NCC Convenor (Care Taker)till January 2017.				
	Member of English Debating Society July				
	2017 onwards.				
	JMC Website	Convener			
Shruti Tohan	Choreography	Convener	16		

- 4. Co-curricular programmes arranged by the Department:
 - Science Academies Lecture Workshop on Game Theory and Graph Theory (10th August 12th August, 2017)
 - Freshers 2017 (30th August, 2017)

 - Teacher's Day (5th September,2017) Matharena (8th and 9th of January 2018)
 - A three month certificate program on Artificial Intelligence was organised by TIC, Ms. Sunita Narain conducted by Flarrio.

ASSEMBLIES

- > 24th October 2017- World Polio Day
- > 16th January 2018 Reading out the report on Matharena held on '13th March 2018
- > 13th March 2018- 'There was never a night or problem which could defeat sunrise or hope'
- Students in the Department who participated in extra-mural, co-curricular activities within and outside College:
 Sakshi Mital, 2nd year, Research Intern, Outlier Research Solutions

- Aadya Agarwal, 2nd year, Member, Rotaract club of Capital City New Delhi (RCCND).
- 6. Number of students of the Department who have participated in Community Development programmes:

Year	NSS	JMCEP	WDC	NCC	Peace	Green	Any other
l Year							
II Year							
III Year							

- 7. University assignments undertaken by teachers of the Department. (Please do not disclose paper setting and Examination duties)
- 8. Publications

.Chapter in the book: Rashmi Sehgal Thukral, Image compression using linear algebra, Topics in Mathematical Sciences, CPDHE UGC-HRDC, University of Delhi,

ISBN: 978-81-934519-6-0, 2017

Shruti Kapoor, S. Dharmaraja and Viswanathan Arunachalam: Transient Solution of Fluid Queue modulated by two independent birth-death processes, To appear in *International Journal of Operational Research*, 2018.

Shruti Kapoor and S. Dharmaraja: Steady State Analysis of Fluid Queues Driven by Birth Death Processes with Rational Rates, To appear in *International Journal of Operational Research*, **2018**.

Rashmi Sehgal Thurkral:

Mentored five students of M.Sc Mathematics at Christ University, Bengaluru for a Summer research internship program(Compulsory part of their curriculum) on Optimizing Post-Demonetization Currency Disbursal in India in 2017.

Shruti Kapoor: Attended Orientation Program from Jamia Millia Islamia in May 2017.

9.

Name of the Teacher	Dept.	Name of Conference/ Seminar/Meeting/	Nature of Participation	Venue	Date

- 10. Honours received by faculty members at the international/national level
- 11. Talks and Seminars (National/International) organized by the Department
- 12. Outstanding visitors to the Department in the course of the academic year:
- Professor Dinesh Singh, Ex-Vice Chancellor, University of Delhi.
- Professor Arunava Sen, Indian Statistical Institute, Delhi.

- Professor S. Sivaramakrishnan, Indian Institute of Technology, Bombay.
- Professor R.B. Bapat, Indian Statistical Institute, Delhi.
- Professor Debasis Mishra, Indian Statistical Institute, Delhi.
- Professor T. Parthasarthy, Chennai Mathematical Institute, Chennai.
- Professor Riddhi Shah, Dean, School of Physical Sciences, JNU, Chairperson, Executive Committee, IWM (Indian Woman and Mathematics)
- 13. No. of Department meetings held in the course of the academic year: Documentation of meetings with proper Agenda and Minutes
- 14. Library: Budget for the year and its utilization
 - a) Total no. of books appertaining to the subject in the College Library
 - b) Amount of Library Budget available to the Department
 - c) No. of new books added to the library for the Department in the year 2017-18
- 15. Laboratory Budget for the year:
 - a) Indicate advantages experienced by the Department in the day to day work
 - b) Disadvantages experienced by the Department
 - c) Suggestions, if any
- 16. List of students who were awarded merit certificate
- 17. Alumni Day and other Alumni related activities/events held during the year
- 18. Review and Comparison with previous year's Department report.
- 19. SWOC Analysis

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- Highly qualified and experienced faculty
- Students get exposed to Advanced Mathematical softwares like Mathematica, Matlab and Excel.
- The annual department festival 'Matharena' where students from all over the University are invited to participate in various competitive activities.

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- Sharing of labs by all departments leads to increase in number of students per practical class thereby disturbing the student teacher ratio.
- The course content is more theoretical and thus reducing placement opportunities after graduation.

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- The college boasts of diversity of students on its roll where students from all strata are admitted and will continue to do so in order to propagate the concept of equal opportunity.
- To introduce more applied courses of mathematics like Statistics etc. thus making students more employable and competetive in the global market.

- A highly culturally diverse student population can be challenging in terms of communication and language barriers.
- Compulsion of course completion hampers the growth of thinking process.

20. Future Plans

- To organize workshops on Statistics, use of various Mathematical software's like python.
- Enhanced technology to fill up the gap between industry and academics.
- Encourage students to take up more and more research projects in IIT, ISI, TIFR and various other colleges and mentoring them.