## $171=2$

WELCOME TO
THFW WORTD
OF


## MATHEMATICS DEPARTMENT

\& Mathematics as a subject was initiated in 1965 in B.A (P) with only
one faculty member Dr Nisha Gupta.

为.A(H) was introduced in !978. with two faculty members Dr.Nisha

Gupta and Mrs. Indira R.Menon.

* Now the department has ten permanent Faculty.


## FACULTY OF DEPARTMENT OF MATHEMATICS

\% Ms Chitra Sharma
\& 2 Dr Sudha Gupta
\& 3 Dr Anu Chhabra
\$4 Ms Laxmi Bhati
\& Dr Poonam Sarohe

* 6 Ms Anu Jain
\& 7 Dr Guneet Bhatia
\& 8 Dr Nisha Gupta
\& Dr Talat Sultana
\$10 Ms Poonam Jorwal


## -Structure of B.Sc. (Hons.) Mathematics

The B.Sc. (Hons.) Mathematics programme is a three-year, six-semesters course. A student is required to complete 148 credits for completion of the course.

Semester Semester

| Part - I | First Year | Semester I: 22 | Semester II: 22 |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Part - II | Second Year | Semester III: 28 | Semester IV: 28 |
| Part - III | Third Year | Semester V: 24 | Semester VI: 24 |

Semester wise Details of B.Sc. (Hons.) Mathematics Course \& Credit Scheme

| Semester | $\begin{array}{c}\text { Core Course(14) }\end{array}$ | $\begin{array}{c}\text { Ability Enhancement } \\ \text { Compulsory Course } \\ \text { (AECC)(2) }\end{array}$ | $\begin{array}{c}\text { Skill } \\ \text { Enhancement } \\ \text { Course } \\ \text { (SEC)(2) }\end{array}$ | $\begin{array}{l}\text { Discipline } \\ \text { Specific } \\ \text { Elective } \\ \text { (DSE)(4) }\end{array}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\begin{array}{l}\text { Generic } \\ \text { Elective } \\ \text { (GE)(4) }\end{array}$ |  |  |  |
| Credits |  |  |  |  |$\}$


| HII | BMATHI3OS: Theory of Real Functions <br> BMATH3OG: Group Theory-I <br> BMATH3O7: <br> Multivariate Calculus (including practicals) |  | $\begin{aligned} & \text { SEC-1 } \\ & \text { IaTeX and } \\ & \text { HTTMI } \end{aligned}$ |  | GE-3 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{L}+\mathbf{T} / \mathbf{P}$ | $\begin{aligned} & 5+1=6 ; 5+1=6 \\ & 4+2=6 \end{aligned}$ |  | 4 |  | $5+1=6$ | 28 |
| IV | BMATH4O8: Partial Differential Equations (including practicals) <br> BMATH4O9: <br> Riemann Integration and Series of <br> Functions <br> BMATII41O: Ring Theory and I inear A1gebra-I |  | SEC-2 <br> Computer <br> Algebra <br> Systems and <br> Related <br> Software |  | GE-4 |  |
| $\mathbf{L}+\mathbf{T} / \mathbf{P}$ | $\begin{gathered} 4+2=6 ; 5+1=6 ; \\ 5+1=6 \end{gathered}$ |  | 4 |  | $5+1=6$ | 28 |
| $\mathbf{I}+\mathbf{T} / \mathbf{P}$ | BMATHIS11: Metric Spaces <br> BMATHE5 2: Group Theory-II $\begin{aligned} & 5+1=6 \\ & 5+1=6 \end{aligned}$ |  |  | $\begin{gathered} \text { DSE-1 } \\ \text { (including } \\ \text { practicals) } \\ \text { DSE-2 } \\ 4+2=6 \\ 5+1=6 \end{gathered}$ |  | 24 |
| Semester | Core Course(14) | ```Ability Emhamcement Compulsory Course (AECC)(2)``` | Skill <br> Emhancement <br> Course <br> (SEC)(2) | Discipline Specific Elective (DSE)(4) | Gemeric Elective $(G E)(4)$ | $\begin{aligned} & \text { Cotal } \\ & \text { Credits } \end{aligned}$ |
| VI | BMATHE13: Complex Analysis (including practicals) <br> BMATIT614: Ring Theory and Linear Algebra-II |  |  | $\begin{aligned} & \text { DSE-3 } \\ & \text { DSE-4 } \end{aligned}$ |  |  |
| $\mathbf{L}+\mathbf{T} / \mathbf{P}$ | $4+2=6 ; 5+1=6$ |  |  | $5+1=6$ $5+1=6$ |  | $24$ <br> 6 |


| $\begin{aligned} & \text { SEME } \\ & \text {-STER } \end{aligned}$ | CORE COURSE <br> (12) | ABILITY ENHANCEMENT COMPULSORY COURSE (AEC) (2) | SKILL ENHANCEMENT COURSE (SEC) (4) | DISCIPLINE SPECIFIC ELECTIVE COURSE (DSE)(4) |
| :---: | :---: | :---: | :---: | :---: |
| I | CALCULUS |  |  |  |
|  | L+T- 5+1 |  |  |  |
| II | ALGEBRA |  |  |  |
|  | L+T-5+1 |  |  |  |
| III | ANALYTIC GEOMETRY AND APPLIED ALGEBRA <br> L+T- 5+1 |  | SEC-I COMPUTER ALGEBRA SYSTEMS $L+P / T-2+2$ |  |
| IV | ANALYSIS L+T- 5+1 |  | SEC-II <br> MATHEMATICAL TYPESETTING SYSTEMS <br> LaTeX L+T/P-2+2 |  |
| V |  |  | SEC-III (L+P/T-3+1) <br> TRANSPORTATION AND NETWORK FLOWS PROBLEMS L+T/P - 3+1 | $\begin{gathered} \text { DSE-I } \\ \text { STATISTICS } \\ \text { L+T/P - } 5+1 \end{gathered}$ |
| VI |  |  | SEC-IV STATISTICAL SOFTWARE R L/T+P -2+2 | DSE-II DIFFERENTIAL EQUATION L+T/P - $5+1$ |


$v=v_{0}+a t$

$n^{2}-n^{2}$
Mathematics is universally spoken language

Mathematics is a key element of subject ranging from economics to physics

$$
\rho=\frac{m}{\stackrel{\rightharpoonup}{V}}
$$

## MATHEMATICS IS A KEY OF OPPURTUNITIES

$>$ THE QUALIFICATION IN THE SUBJECT OF MATHEMATICS CAN OPEN DOORS TO A WIDE RANGE OF PROFESSIONAL.
$>$ LEARNING MATHEMATICS CAN MADE LIFE EASIER AND SIMPLER.
> SUBJECTS LIKE MECHANICS ARE HELPFUL TO THE STUDENTS TO UNDERSTAND THE UNIVERSE BUILDING BLOCKS.


## WHY MATHEMATICS IN B.A.(PROG.)

- Become eligible for Indian Forest Services (IFoS) examination conducted by UPSC
- Learn statistical Software to perform data analysis
- Models of high accuracy can be constructed with humanities as another discipline which can be of utmost importance.
- Helps in building up analytical thinking.


## DEDARTMENTAL ACTIVITIES

Over the years, several seminars, talks, and workshops have been organized to encourage and promote research development.
Few of the recent events have been listed below :
$\square$ National Seminar on "Optimization and its Application".
$\square$ National Workshop on "Application of Mathematics in Industrial Research".
$\square$ Workshop on MAXIMA by Dr. Gurpreet Tuteja.
$\square$ Invited Talk by Prof. Ravichandran, Department of Mathematics, University of Delhi entitled "Fallacies in Mathematics".

# $+-$ <br> <br> THE ANNUAL DEPARTMENTAL FEST 

 <br> <br> THE ANNUAL DEPARTMENTAL FEST}


Besides the regular curriculum, the department engages its students in activities, aim to promote interdisciplinary learning so as to promote the enabling of critical roles in the multitude of learning along with mathematical learning. The annual departmental fest, HELIX is one of such activities organized by mathematics department.
The liveliness of campus during the festival has always attracted students from all over. Continuing with the legacy of youthful fun and intellectual vigor, we, make sure that the students enjoy the fullest. We organize many events like Paper Presentation, Treasure Hunt, Math-e-Meme, Poster Making, Rangoli Making, etc..


## SEMINARS

Every year many seminars are organized on various topic by eminent speakers and by various institutes as well. Some previous organized seminars were on the topics like From tricks to techniques in mathematics by Prof. Shobha Baghai, Algebra and Number Theory Cryptography by Sr. Scientist Indivar Gupta, DRDO, Dynamics by Prof. Riddhi Shah, Head, School of Physical Sciences, JNU and the chair of IWM (Indian Women and Mathematics) and many more.


## THE MATHEMATICS SOCIETY

Mathletes is the mathematics society of Lakshmibai College. Its has 1 teacher in charge
 and 6 student office bearers post, namely, President, Vice President, Treasurer, Secretary, Joint Secretary and Cultural Head. For these posts elections are conducted every year. We also have an Instagram page @mathletes_lbc where you can get to know about more events of the Mathematics Department.




## OEP.ARTMENTAL ACHIEVEMENTS

Over the years, under the able guidance of the teachers, our students have secured excellent results. Among many of the outstanding achievers, few have been listed below.

Ms. Poonam was awarded a GOLD MEDAL for attaining first position in B.A. (Hons) Mathematios at Universíty Level.

Ms. Sanchíta Míttal secured 100 percent marks in aggregate during Fifth semester. Her overall aggregate was 94.2 percent.

Monica Rathore secured go percent aggregate.
Ms.Renuka Chandna secured 94 percent marks in Fourth semester.

## DEPARTMENTAL ACHEVEMENTS

several of our students are pursuing, post graduate studies and research in reputed instítutions such as IIT Delhi, IIT Kanpur, IIT Gandhinagar, TFR, ISI, DRDO, Faculty of Mathematical Sciences (Mathematios, Operational Research and Statistics) Universíty of Delhi, indian instítute of Actuarial sciences.

Many of them have also been placed in corporate and banking organizations such as WIPRO, TCS, HDFC BANK, and AXIS BANK.

We are also proud to observe that many of our students have joined various colleges of universíty of Delhi as faculty members. Few of them are Ms. saríea Goyal, Ms. Preetí Gupta, Ms. Mamta Chaudhary, Ms. Reema Aggarwal.

Life is good for two things: Learning Mathematics and Teaching Mathematics!!


BY POISSON
(Great Mathematician)

THANKS A LOT !!

