



GOVT.D.B.GIRLS' P.G. (AUTONOMOUS) COLLEGE

CPE CAPITAL 31  
Guest Lecture

Submitted by:

Dr. Madhu Shrivastava  
Head  
Department of Mathematics

Mrs. Rashmi Sengupta  
Asstt. Professor  
Department of Mathematics

# CONTENTS

S.No.	TITLE	PAGE No.
1.	COVER PAGE	1
2.	CONTENTS	2
3.	EXECUTIVE SUMMARY	3
4.	GRAPH DIAGRAM	6
5.	ANNEXURES	7

## EXECUTIVE SUMMARY

A Guest Lecture by Devendra Chaphekar, Assistant Professor & Head of PG Department of Computer Science, Seth Phoolchnd Agrawal College on "Introduction to Operating System and its Type " was delivered on March 30th ,2016 for the students of M.Sc. (Mathematics) IV-sem. He initiated his lecture session with overview of Operating System. The session was made interactive by thought provoking questions posed by speaker to the student audience for example what is use of operating system in computer ? For which convincing answers were given by the student audience. Later speaker has narrated his version of answer as follows that An Operating System is an interface between user and hardware of a computer system. It is system software which may be viewed as an organized collection of software consisting of procedures for operating a computer and providing an environment for execution of programs. The session went on by addressing the various Function of operating system like 1.Memory management 2.Process management 3.Device management 4.Information management 5. Protection 6.Error handling. In addition to above discussion he further discussed types of operating system with their Working Techniques he explained Batch Operating System, Time-Sharing Operating System, Real-Time Operating System, Distributed Operating System and Network Operating system. He concluded the session by presenting a image of different types operating system with their Working Techniques. He also clear doubt of student in related topic. The lecture has proven to be very inspiring and informative for the students.

A Guest Lecture by Dr.P.Jha, Assistant Professor in Department of Mathematics, Govt.Chhattishgarh College on "HAMILTON JACOBI EQUATION" was delivered on March 31th ,2016 for the students of M.Sc. (Mathematics) IV-sem. It is a topic related to mechanics. It is a necessary condition describing external geometry in generalizations of problems from the calculus of variations. Particularly useful in identifying conserved quantities for mechanical systems.

A Guest Lecture by Dr.B.P.Tripathi , Professor in Department of Mathematics, Govt. N.P.G. Science College on "ANALYTIC,HARMONIC FUNCTION AND SINGULARITY" was delivered on March 31th ,2016 for the students of M.Sc. (Mathematics) II-sem. In complex analysis analytic function ,harmonic function, poles, principal parts ,types of singularity, zeros of an analytic function...all these topics are useful in convergent power series and well known theorems.

A Guest Lecture by Dr.Pushpa Kausik, Professor & Head in Department of Mathematics, Govt. Chhattishgarh College on "NILPOTENT TRANSFORMATION & JORDAN FORM" was delivered on April 1<sup>ST</sup> ,2016 for the students of M.Sc. (Mathematics) II-sem. This is about a type of element in a ring. The nilpotent elements form a commutative ring from an ideal, this is a consequence of the

binomial theorem. In linear algebra Jordan form of a linear operator is an upper triangular matrix of a particular form.

A Guest Lecture by Dr.P.Jha, Assistant Professor in Department of Mathematics, Govt. Chhattishgarh College on "POWER SERIES" was delivered on April 1<sup>ST</sup> ,2016 for the students of M.Sc. (Mathematics) IV-sem. It is a beneficial topic of real analysis and complex analysis also. This series usually arises as the Taylor series of some known functions.

A Guest Lecture by Dr. VARSHA KARANJGAONKAR, Assistant Professor in Department of Mathematics, Govt. N.P.G. Science College on "INDUSTRIAL APPLICATION OF OPERATION RESEARCH" was delivered on April 4<sup>th</sup> ,2016 for the students of M.Sc. (Mathematics) IV-sem. An exciting area of applied mathematics called operation research combines maths, engineering, statistics, computer science etc to solve real world business problems numerous companies in industry require operation research professionals to apply mathematical techniques to a wide range of challenging questions.

A Guest Lecture by Dr. VINOD PATLE, Assistant Professor in Department of Computer Science, PTRSU on "NORMALIZATION" was delivered on April 4<sup>th</sup> ,2016 for the students of M.Sc. (Mathematics) IV-sem. This topic introduces a formal approach to relational database design based on the notion of functional dependencies. Then speaker define normal forms in term of functional dependencies and other type of data dependencies. Topic is concluded by clear doubt of student related to relational database design. The lecture has proven to be very inspiring and informative for the students.

A Guest Lecture by Devendra Chaphekar, Assistant Professor & Head of PG Department of Computer Science, Seth Phoolchnd Agrawal College on "CPU Scheduling" was delivered on April 5<sup>th</sup> ,2016 for the students of M.Sc. (Mathematics) IV-sem. Lecture session has initiated with overview of CPU scheduling. Scheduling Criteria is discussed by concept of CPU utilization, Throughput, Response time, Waiting time and Turnaround time. Scheduling Algorithms Multiple-Processor Scheduling Thread Scheduling are describe

A Guest Lecture by Dr.P.Jha, Assistant Professor in Department of Mathematics, Govt. Chhattishgarh College on "NET & FILTER, CONVEREGENCE" was delivered on April 5<sup>Th</sup> ,2016 for the students of M.Sc. (Mathematics) II-sem. A filter is another idea in topology that allows for a general

definition of convergence and net is a generalization of the notion of a sequence. Both are useful in geometry and topology.

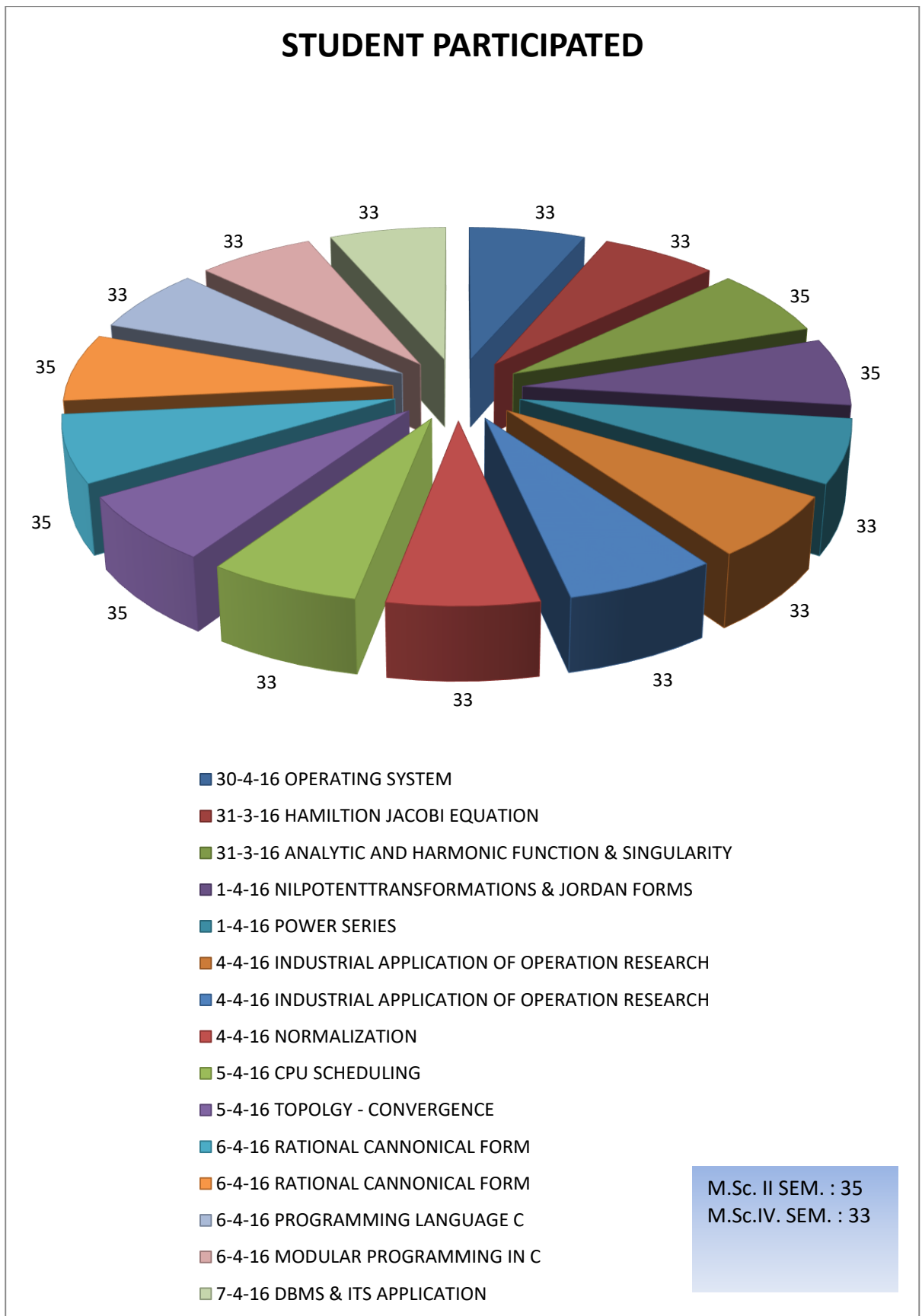
A Guest Lecture by Dr.Pushpa Kausik, Professor & Head in Department of Mathematics, Govt. Chhattisgarh College on "RATIONAL CANONICAL FORM" was delivered on April 6<sup>th</sup>, 2016 for the students of M.Sc. (Mathematics) II-sem. The rational canonical form is unique and shows the extent to which the minimal polynomial characterizes a matrix. The polynomials are called invariant factors.

A Guest Lecture by Dr.P.Mehta, Assistant Professor in Department of Mathematics, Govt. Chhattisgarh College on "PROGRAMING LANGUAGE C & MODULAR PROGRAMMING IN C" was delivered on April 6<sup>th</sup>, 2016 for the students of M.Sc. (Mathematics) IV-sem. This topic is based on need of programming. Speaker introduces the basics of modular programming. In this session Speaker told about programming common errors and how we resolve this. Session was interesting and helpful for students.

A Guest Lecture by Dr.M.S.Gupta, Assistant Professor in Department of Mathematics, Govt. N.P.G. Science College on "DBMS AND ITS APPLICATION" was delivered on April 7<sup>th</sup>, 2016 for the students of M.Sc. (Mathematics) IV-sem. This topic introduces the principles of database systems and it's applications. DBMS is a collection of interrelated data and a set of programs to access those data. Computer scientists have developed a large body of concept and techniques for managing data.

Overall all the lectures topic are quite informative for the student. Its clears various doubts and helpful for their exams.

## Graph Diagram Of Student Participated:



## ANNEXURES

1. PHOTOGRAPHS : ATTACHED
2. FEED BACK : ATTACHED
3. HANDOUTS : ATTACHED