FUNDAMENTALS

OF

INFORMATION SECURITY

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PREFACE

Now a day's Information Security is plays vital role in our technical world, everyone must need to know about it, in this way this book fully supports and doubt clearances of various fields.

In this book we learn need for Security through various strategies, planning for security, design principles of network architecture, how to information security provides more ways during transmission in safely manner without any consumptions, other chapters we learn briefly on IP security, Web security, Data communication system, Information Security and Cyber security. In this way detailed elaborates every concepts with valid examples and its applications.

✍ *Mr.Bosubabu Sambana*

ACKNOWLEDGEMENT

This Book is heartily dedicated to beloved

my Father and God

Sri.S. DANDASI

He completely scarifies entire his life for me.
Thanking you for giving birth from your soul.

AND

My Life inspirer **Sri.Dr.A.P.J.Abdul Kalam**

About the Book

This book on Fundamentals of Information Security is designed to focus on the basics of information transmitted in various fields, in during transmission protect more security through layer by layer, and knowledge seeker much understand various security platforms during data transmission. It may be helpful for various universities prescribed syllabus covered in existing streams.

Apart from course specific learning, this book is meant for a wide range of readers who intend to learn the basics of Information Security and its applications. This book lays emphasis on various security development strategies, and fully clarification about web and IP security through cyber security awareness helpful of Real time applications.

Organization of the Book

This book consists of Six (6) chapters. It starts with the Planning for security and end with Cyber security.

Chapter 1 gives an introduction to planning for security, the basic building blocks Fundamentals of Information Security, Information Security policies, Cryptography analysis through proven one algorithm and attacks, Public key management and S/MIME etc.

Chapter 2 enhances the basic concepts studied in chapter 1 and gives an introduction to IP Security. It covers the aspects of IP Security and detailed explains IP Security Architecture, and domain of inter connections.

Chapter 3 is dedicated to Web Security development environment and explains the issues faced by an unauthorized owner/user access to developing methods in the existing resources.

Chapter 4 introduces the basic concepts of Data

communication system and it's Network Architecture, various types of computer Networks and its topologies. Discussed in detailed for ease in application approach on digital transmission, wireless communication system and transmission media.

Chapter 5 discusses on the various requirements and procedure to develop few applications of information security with protection methods and cryptography aligned various topics, Email security, The SDLC.

Chapter 6 enhances the basic concepts studied in cyber security with digital forensics related concepts, cyber crimes and its categories with problem solving issues, cyber law, E-Governances.

Salient Features of the Book

The salient features of the book include:

- Detailed explanation on the basics of Information security
- Study on various building blocks of an information security applications.
- Description of computer networking concepts.
- Detailed study on the models of data transmission and transmission media with suitable examples.
- Introduction to Real time operation in information systems and Cryptography algorithms with related concepts.
- Study on Data communication system and used in Real- time platform.
- Implementation of Information security to real life applications.
- Easy to understand Public key algorithm and Email Security.
- Basic concepts of Cyber security with related issues.
- Description of Cyber Law, Intellectual Property Rights and Information Security Act.

✍ *Bosubabu Sambana*

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